

RECORD DRAWINGS
WORK AS CONSTRUCTED

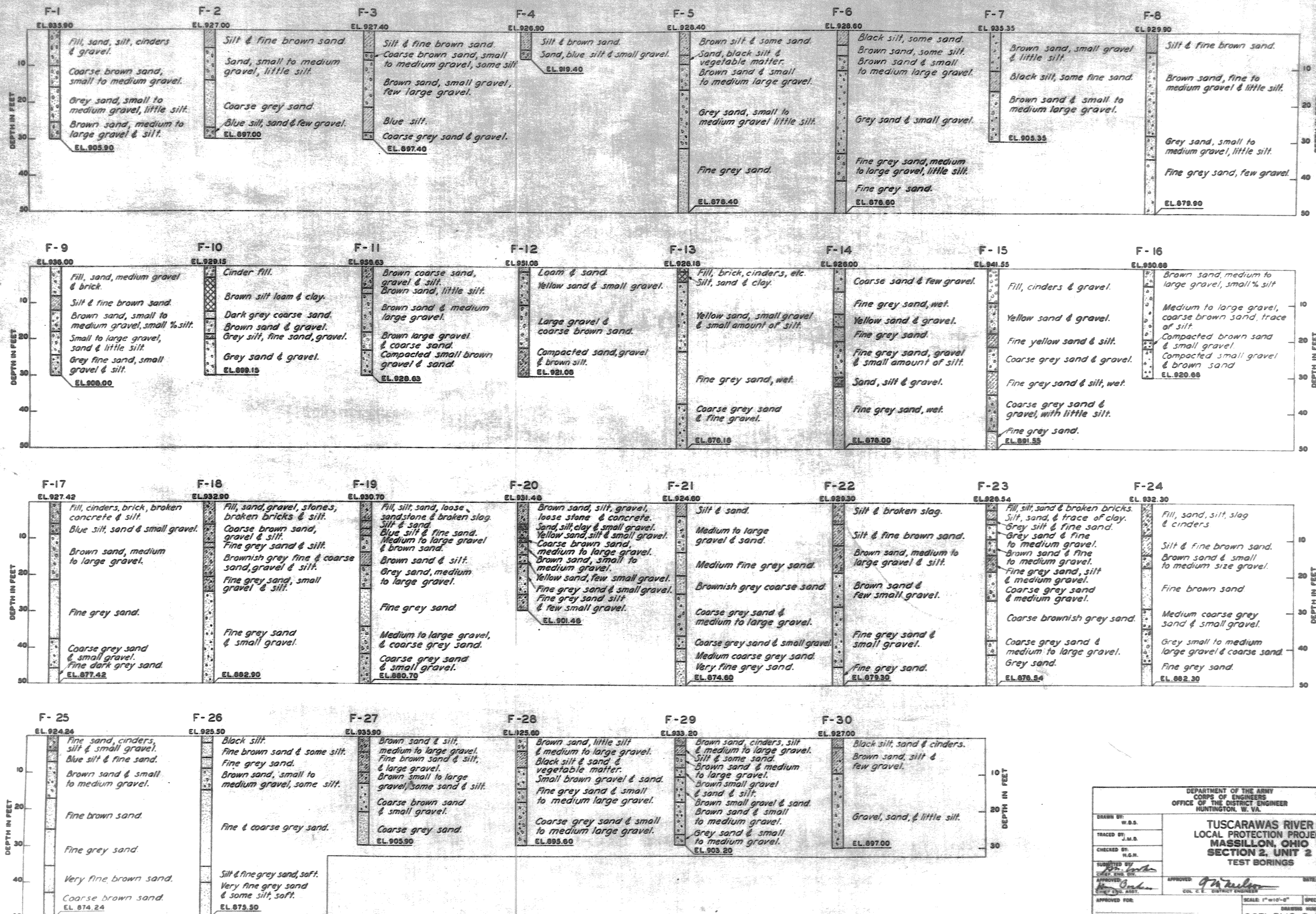
MASSILLON, OHIO
CONSTRUCTION OF LOCAL PROTECTION PROJECT
SECTION 2, UNIT 2

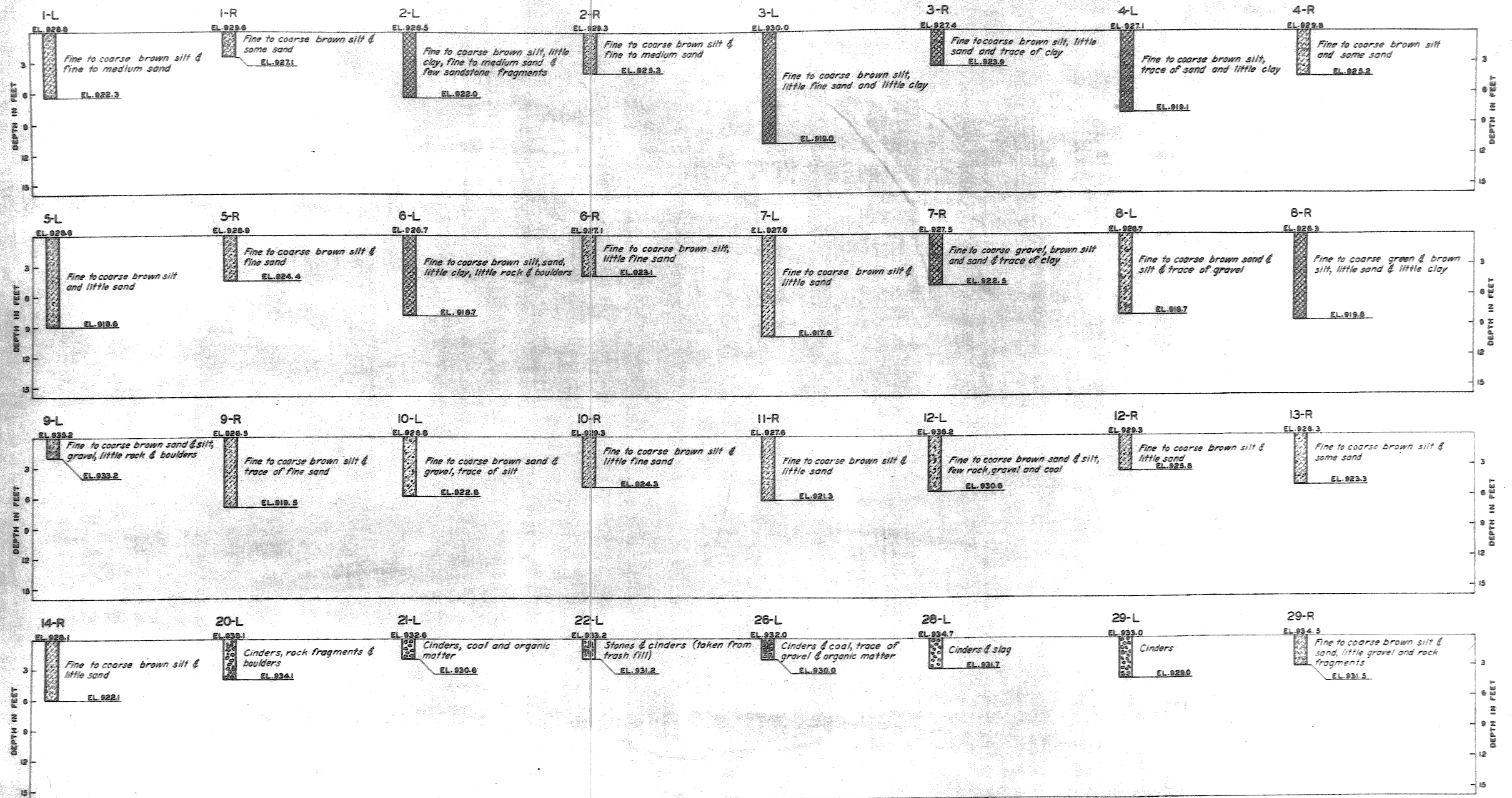
CORPS OF ENGINEERS

U. S. ARMY

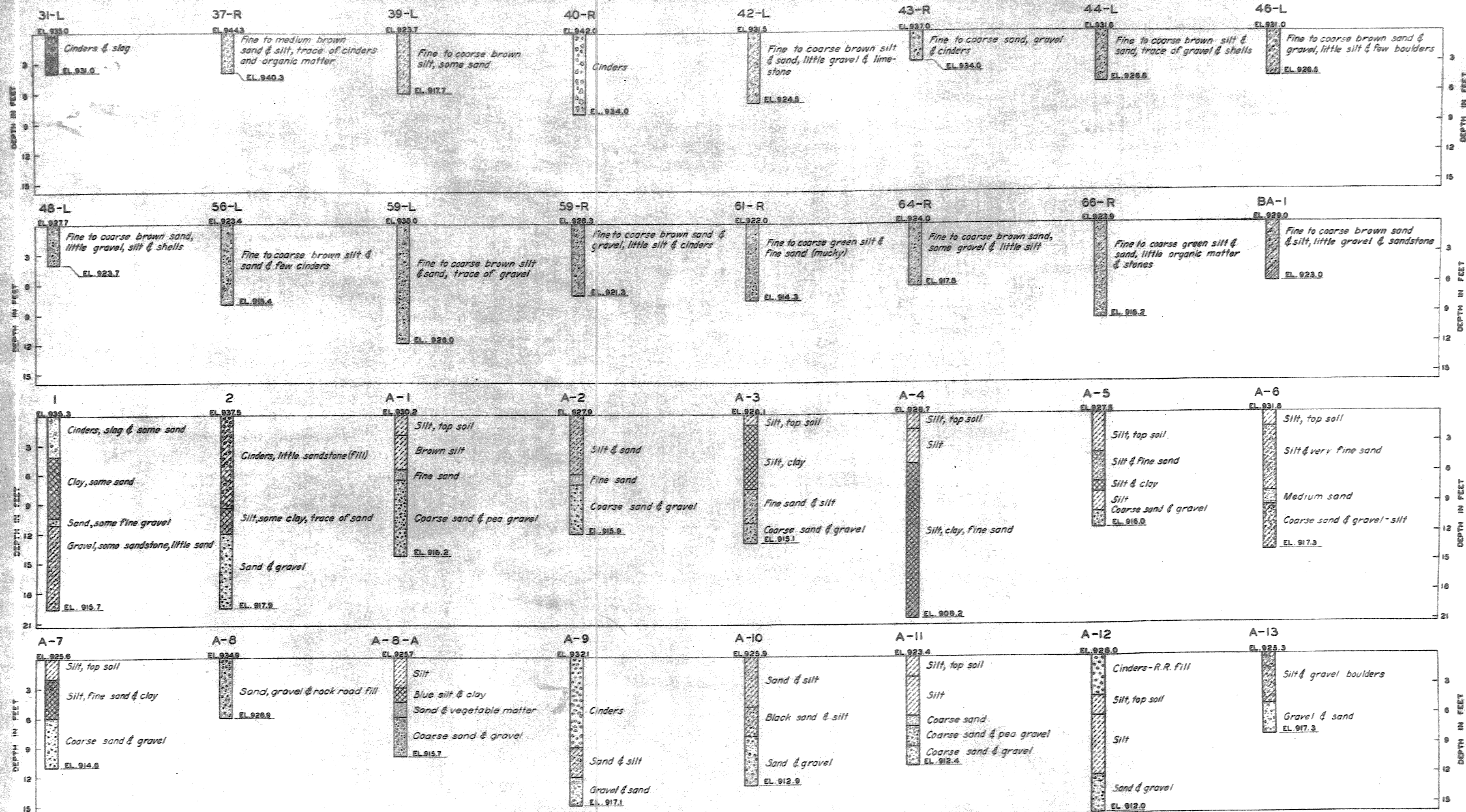
HUNTINGTON DISTRICT

2





DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 TEST BORINGS	
DRAWN BY: T.F.C.	DATE: OCT. 1948
TRACED BY: A.R.M.	
CHECKED BY: D.G.J.	
SUBMITTED BY: [Signature]	
APPROVED: [Signature] CHIEF ENG. ASST.	APPROVED: [Signature] COL. E. E. DISTRICT ENGINEER
APPROVED FOR:	SCALE: 1/4" = 1'-0"
DATE:	DRAWING NUMBER: 0271-PM2-2-10/4 SHEET 1-3 OF 4



DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 TEST BORINGS	
DRAWN BY: T.E.D.	TRACED BY: A.R.M.-G.H.H.	CHECKED BY: D.G.J.	DATE: OCT. 1948
APPROVED BY: <i>[Signature]</i> DISTRICT ENGINEER		APPROVED BY: <i>[Signature]</i> DISTRICT ENGINEER	
APPROVED FOR:		SCALE: 1" = 10'	
DATE:		DRAWING NUMBER 0271-PM2-2-10/5 SHEET 1-4 OF 6	



(TIES REMOVED)

12 0 2 4 6 8 10
SCALE 1/2-1-0



BLOCKING FOR SILL



3- REQUIRED
SCALE: $\frac{3}{4}'' = 1'-0''$

NOTES

Securely spike steel stringers to blocking with track spikes, and timber stringers to caps and blocking with 3" dia drift bolts. Fasten blocking to blocking, blocking to caps and caps to piling with 3" dia drift bolts.

Guard rail to be spiked to every other tie with 3" x 10" boat spikes, driven in staggered lines. Extra boat spike in each side of splice.




All timber dimensions shown are nominal dimensions.



SECTION C-C



SECTION B-B

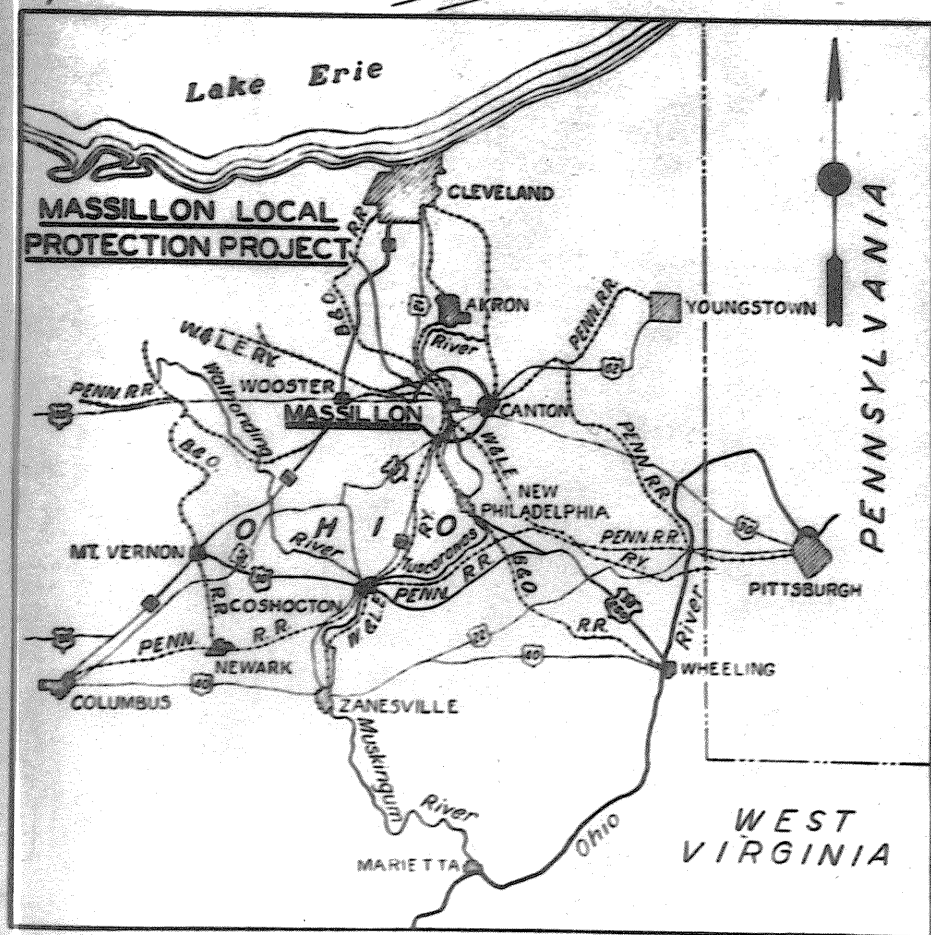
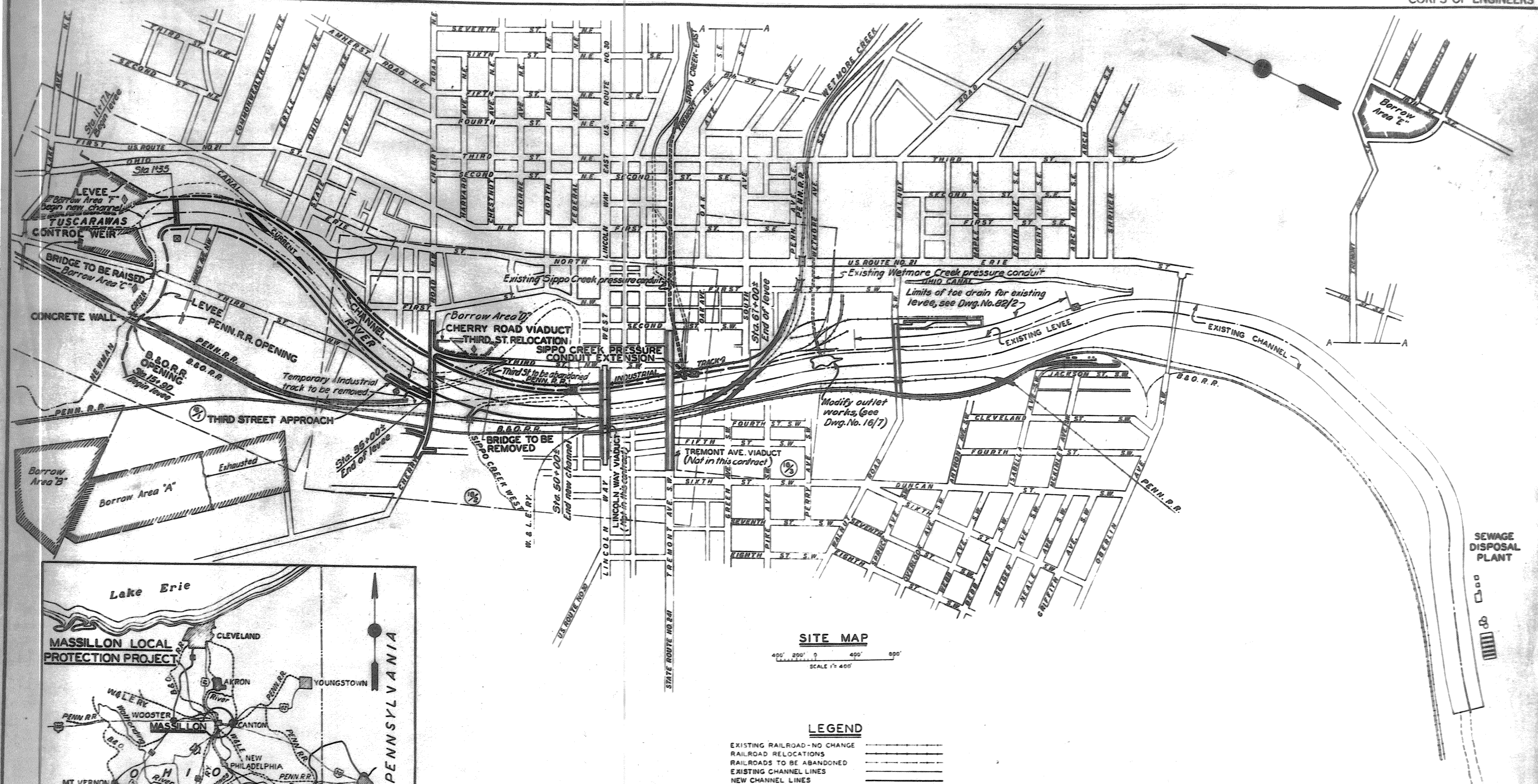
CORPS OF ENGINEERS U S ARMY OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: AAG S TCG	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT
TRACED BY:	MASSILLON, OHIO SECTION 2, UNIT 2
CHECKED BY: N.W.D. & S.B.	PENNA. R.R. OPENING TRACK SHORING
SUPERVISOR  CHIEF ENG. DIV.	APPROVED  COL. C. C. DWYER, DISTRICT ENGINEER
APPROVED  CHIEF ENG. ASST.	DATE MARCH 8-19
APPROVED FOR:	SCALE 1"=1' 0" DRAWING NUMBER 027-PM2-2-20/16J SHEET 18 OF 5

I N D E X

SHEET NO.	DRAWING NO.	DESCRIPTION	SHEET NO.	DRAWING NO.	DESCRIPTION
GENERAL			CHERRY ROAD VIADUCT		
1	0271-PM2-2-0/1	Index	26	0271-PM2-68/1	General Plan and Profile
2	10/1	Site Map	27	68/2	Abutment No. 1
I-1*	10/2	Plan of Foundation Explorations	28	68/3	Piers Nos. 2, 3 and 4
I-2*	10/3	Test Borings	29	68/4	Abutment No. 5
I-3*	10/4	Test Borings	30	68/5	Abutment No. 6
I-4*	10/5	Test Borings	31	68/6	Piers Nos. 7, 8 and 9
			32	68/7	Abutment No. 10
3	0271-PM2-16/1	General Plan	33	68/8	Approach Sections and Details
4	16/2	General Plan	34	68/9	Steel Plan and Design Data
5	16/3	General Plan and Profiles	35	68/10	Anchor Bolt Plan and Erection Data
6	16/4	Typical Channel and Levee Sections	36	68/11	Floor Plan and Details
7	16/5	Grading Distribution	37	68/12	Typical Sections and Details
8	16/6	Payment Lines for Excavation and Embankment	38	68/13	Railing Details
9	16/7	Modification of Wetmore Pressure Conduit Outlet	39	68/14	Castings and Splices
	16/8	Plan, Profile of Misc Details - Penna R.R. Industrial Track			
10	0271-PM2-20/1	Control Weir	MISCELLANEOUS		
11	20/2	42" Siphon at Control Weir	40	68/15	Third St. at Cherry Road and Newman Creek - Plan and Profile
12	20/3	66" Culvert and Gate Well - Sta. 1+74.08 - Masonry Details	41	68/16	Raising Third Street Bridge over Newman Creek
13	20/4	66" Culvert and Gate Well - Sta. 1+74.08 - Reinforcing Details	42	68/17	Access Roads - Levee Arm A and Third St. N.W.
14	20/5	42" Culvert and Gate Well - Sta. 25+70 - Masonry Details	43	68/18	Pipe Culvert Details
15	20/6	42" Culvert and Gate Well - Sta. 25+70 - Reinforcing Details		68/19	Remedial Work - West Sipco Creek
16	20/7	Gate Wells and 42" Siphon - Miscellaneous Metal Details	44	0271-PM2-82/1	Profile and Details
17	20/8	Typical Wall Section and Stop Log Storage House	45	82/2	Plan, Profile and Details
18	20/9	Typical Wall Sections and Miscellaneous Wall Details	46	82/3	Flume at Sta. 8+35
19	20/10	B & O R.R. and Penna R.R. Openings - Masonry Details	47	82/4	Flume at Sta. 94+83
20	20/11	B & O R.R. Opening - Reinforcing Details	48	82/5	Unwatched Weir at Sta. 33+00 Deleted
21	20/12	Penna R.R. Opening - Reinforcing Details	49	82/6	Recorder House - Miscellaneous Details
22	20/13	B & O R.R. and Penna R.R. Openings - Trestle and Misc Details	50	82/7	Miscellaneous Metal Details
23	20/14	B & O R.R. and Penna R.R. Openings - Miscellaneous Details			
I-5*	20/15	B & O R.R. Opening - Track Shoring	51	82/8	Public Utilities Location Plan
I-6*	20/16	Penna R.R. Opening - Track Shoring	52	82/9	Public Utilities Location Plan
			53	82/10	Sewer Changes - Cherry Road and Warwick Ave.
24	0271-PM2-66/1	Penna R.R. Industrial Track - Details and Roadbed Section	54	82/11	Sewer Changes - Commonwealth Ave. to Burton Ave.
25	66/2	Penna R.R. Industrial Track - Temporary Trestle	55	82/12	Sewer changes - Goose Ave. to Tuscarawas River and at Newman Cr.
				82/30.1A	Cherry Road Siphon - Inlet Structure
				82/30.1B	Cherry Road Siphon - Outlet Structure
			57	82/32	Pressure Conduit - Sipco Creek - Plan, Profile and Details
			58	82/36	Miscellaneous Sewer Details
			59	82/37	Ohio Water Service Co. Changes - Goose Ave. and Newman Cr.
			60	82/38	Ohio Water Service Co. Changes - Cherry Road

* FOR INFORMATION PURPOSES ONLY (Attached after sheet No. 60)

REVISION	DATE	REVISOR	AS CONSTRUCTED
DESCRIPTION DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: E. N. H. L.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 INDEX	
CHECKED BY: E. N. H. L.		DATE: OCT. 1943	
SUBMITTED BY: J. M. L.		APPROVED: J. M. L.	
APPROVED FOR: J. M. L.		SCALE: AS SHOWN	
DATE: OCT. 1943		DRAWING NUMBER: 0271-PM2-2-0/1	
WORK AS CONSTRUCTED			



SITE MAP

SCALE 1" = 400'

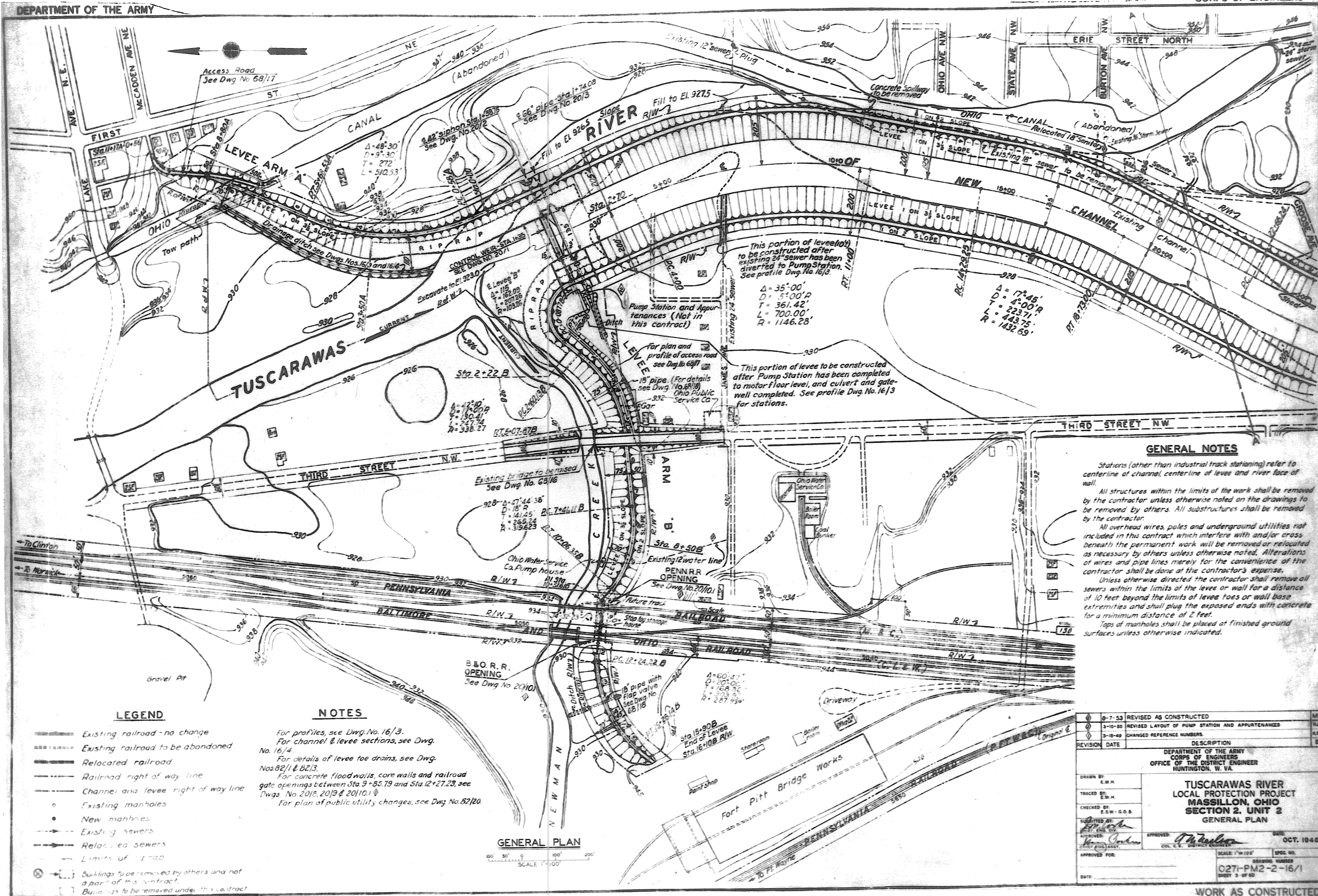
LEGEND

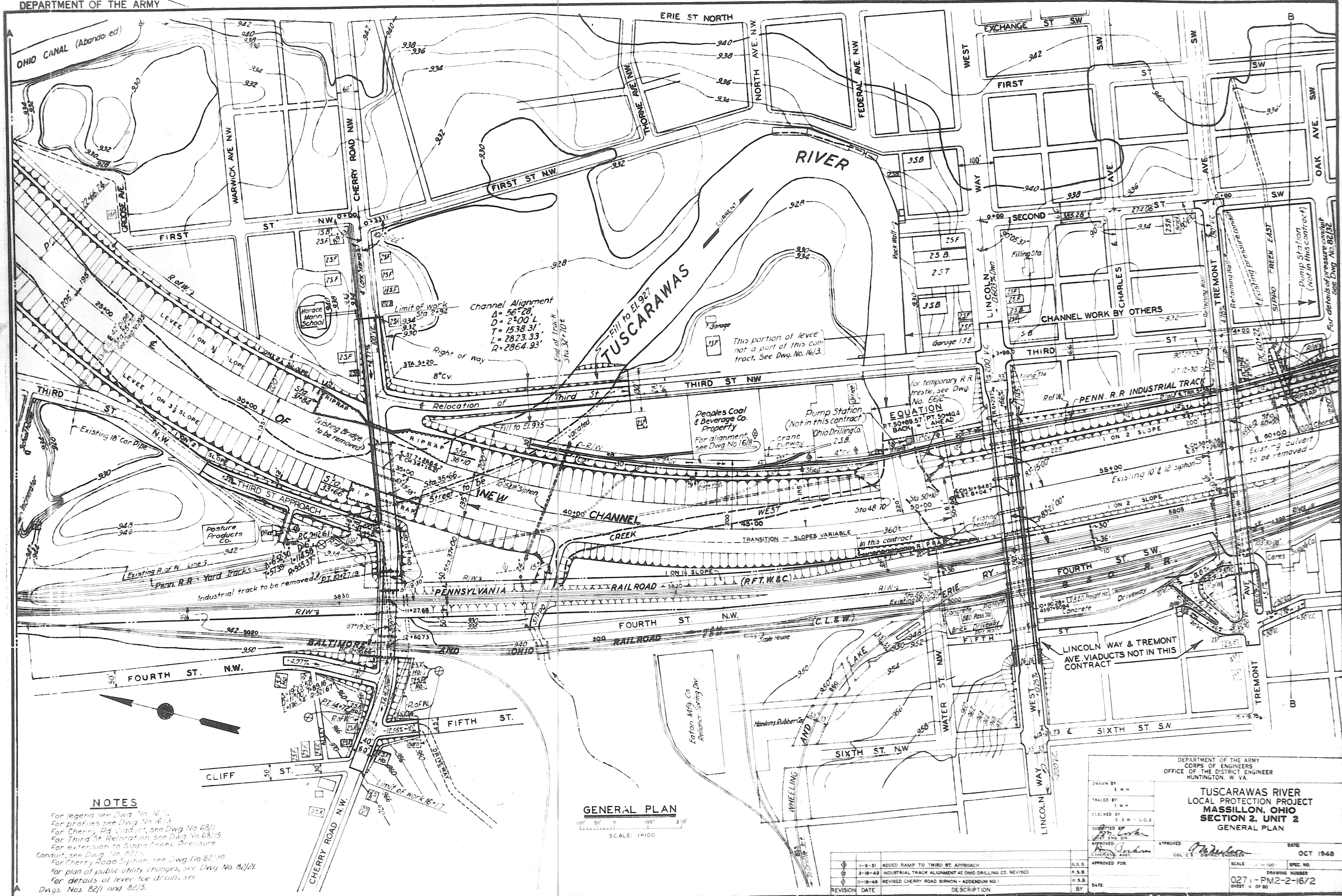
- EXISTING RAILROAD - NO CHANGE
- RAILROAD RELOCATIONS
- RAILROADS TO BE ABANDONED
- EXISTING CHANNEL LINES
- NEW CHANNEL LINES
- EXISTING LEVEE LINES
- NEW LEVEE LINES
- EXISTING RIVER
- PUMPING STATION (NOT IN THIS CONTRACT)

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 SITE MAP	
DRAWN BY: A.W.M.	DATE: OCT. 1948
TRACED BY: R.A.E.-J.B.P.	
CHECKED BY: C.M.-S.O.S.	
APPROVED BY: [Signature]	
APPROVED FOR: [Signature]	
SCALE: 1" = 400' SHEET NO. 0271-PM2-2-10/1 SHEET 2 OF 60	

REVISION	DATE	DESCRIPTION	BY
1-56		ADDED RAMP TO THIRD ST APPROACH	K.S.B.
11-24-48		ADDED BORROW AREA "C" - REVISED BORROW AREAS "C" & "D" - ADDENDUM NO. 2	K.S.B.

WORK AS CONSTRUCTED





NOTES

For legend see Dwg. No. 16/1.
 For profiles see Dwg. No. 16/3.
 For Cherry Rd. Viaduct, see Dwg. No. 68/1.
 For Third St. Relocation, see Dwg. No. 68/15.
 For extension to Sippo Creek Pressure Conduit, see Dwg. No. 82/14.
 For Cherry Road Siphon, see Dwg. No. 82/30.
 For plan of public utility changes, see Dwg. No. 82/21.
 For details of levee toe drain, see Dwg. Nos. 82/1 and 82/5.

GENERAL PLAN

SCALE: 1"=100'

REVISION	DATE	DESCRIPTION	BY
1-9-51		ADDED RAMP TO THIRD ST. APPROACH	K.S.B.
3-10-49		INDUSTRIAL TRACK ALIGNMENT AT OHIO DRILLING CO. REVISED	K.S.B.
11-10-48		REVISED CHERRY ROAD SIPHON - ADDENDUM NO. 1	K.S.B.

DEPARTMENT OF THE ARMY
 CORPS OF ENGINEERS
 OFFICE OF THE DISTRICT ENGINEER
 HUNTINGTON, W. VA.

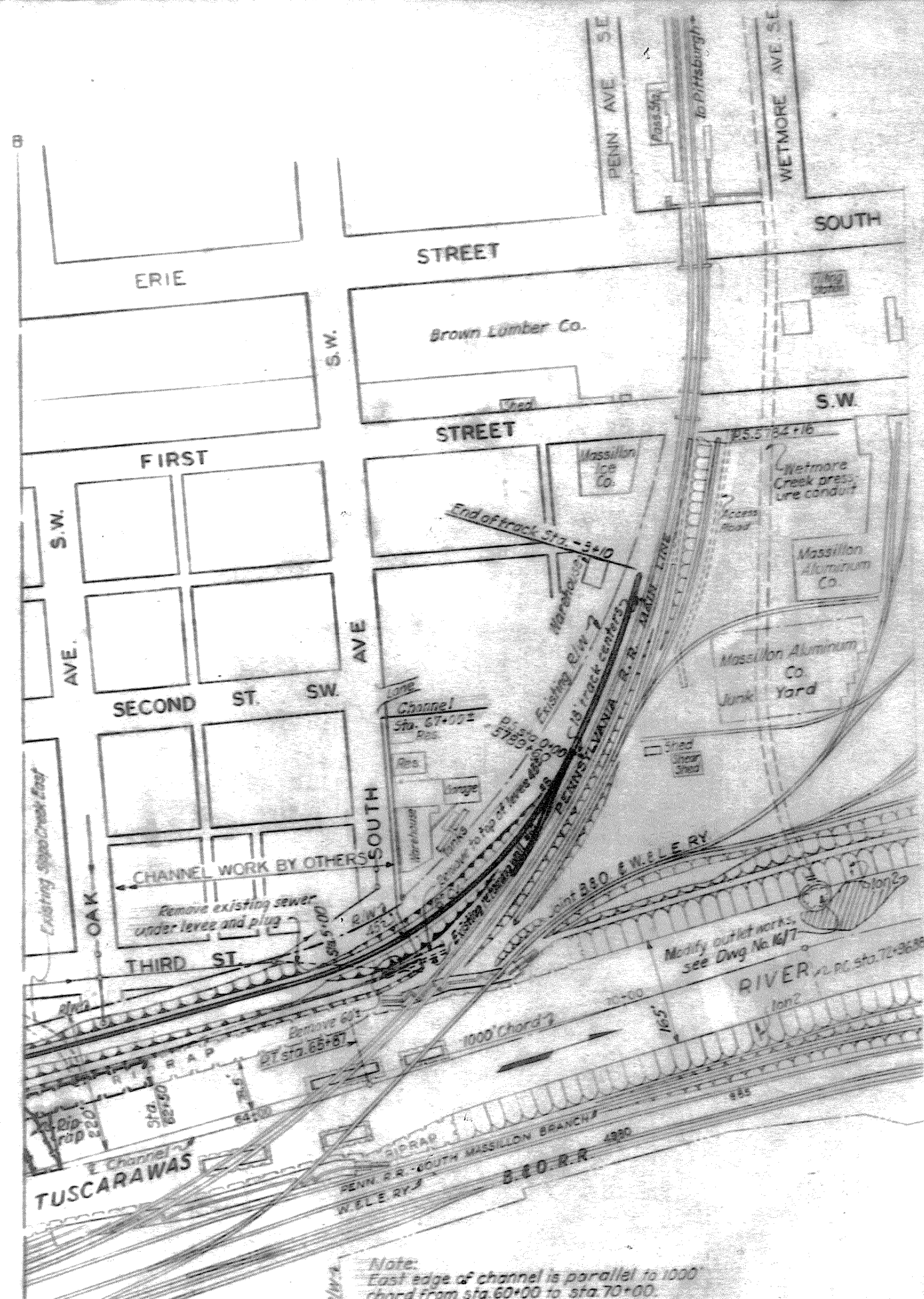
**TUSCARAWAS RIVER
 LOCAL PROTECTION PROJECT
 MASSILLON, OHIO
 SECTION 2, UNIT 2
 GENERAL PLAN**

DRAWN BY: E.W.H.
 TRACED BY: E.W.H.
 CHECKED BY: E.S.W.-G.O.S.
 SUBMITTED BY: [Signature]
 APPROVED: [Signature]
 CHIEF OF DISTRICT ENGINEER

DATE: OCT 1948

SCALE: 1"=100' SPEC. NO.
 DRAWING NUMBER
 0271-PM2-2-16/2
 SHEET 4 OF 60

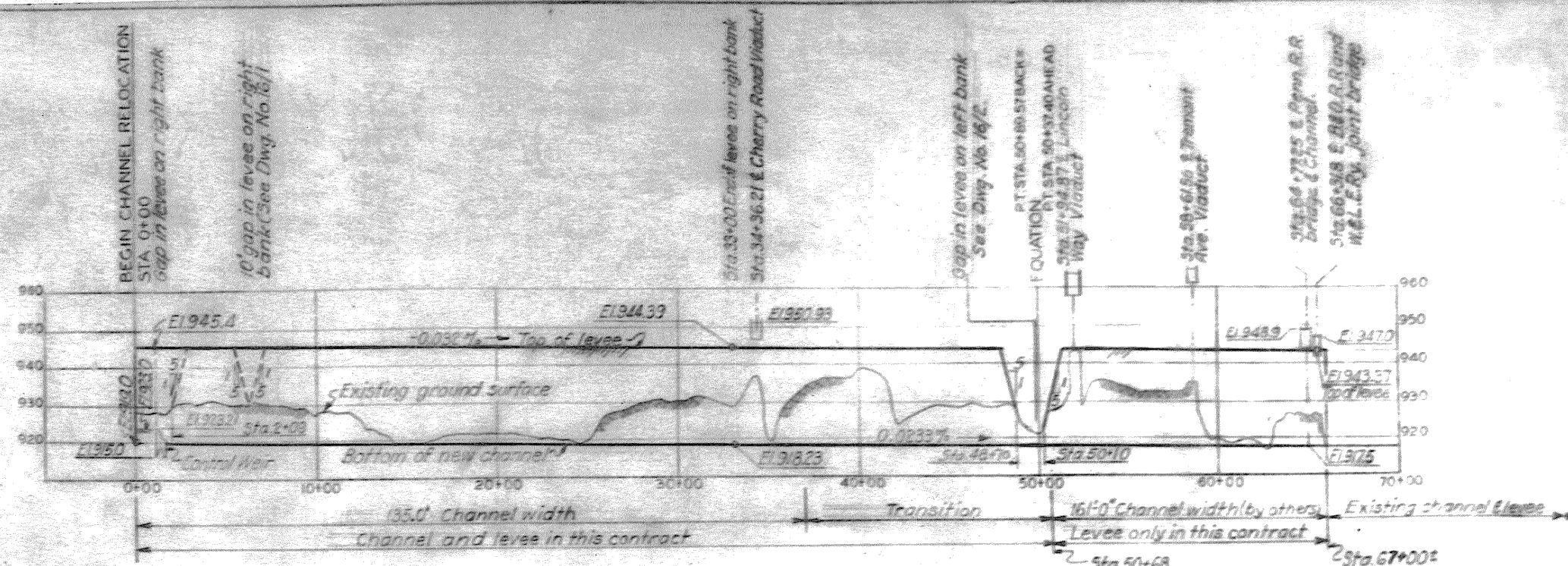
WORK AS CONSTRUCTED



Channel Alignment
 $\Delta = 5^\circ 39'$
 $D = 1700'$
 $T = 282.73'$
 $L = 965.00'$
 $R = 5729.65'$

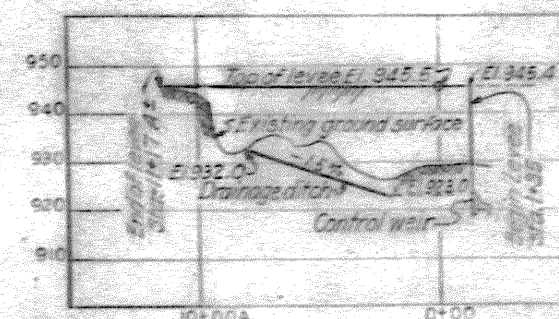
GENERAL PLAN

SCALE: 1"=100'



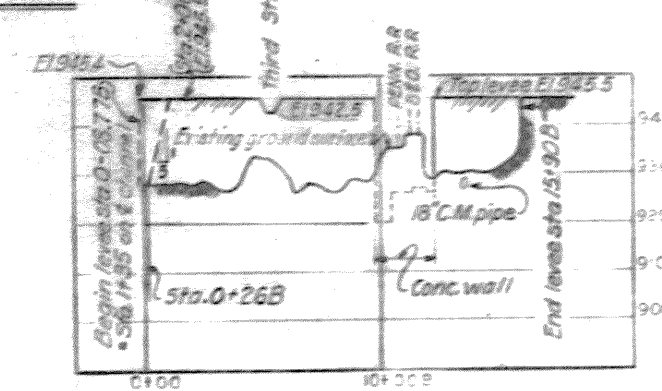
PROFILE ON E. OF NEW CHANNEL

SCALE: HOR. 1"=400' VERT. 1"=20'



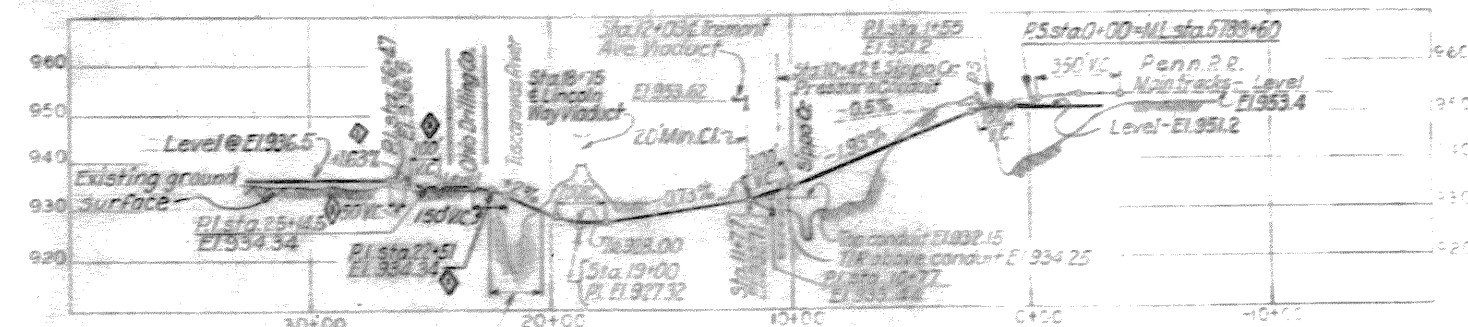
PROFILE ON E. OF LEVEE ARM A

SCALE: HOR. 1"=400' VERT. 1"=20'



PROFILE ON E. OF LEVEE ARM B

SCALE: HOR. 1"=400' VERT. 1"=20'



PROFILE ON E. OF PENN. R.R. INDUSTRIAL TRACK

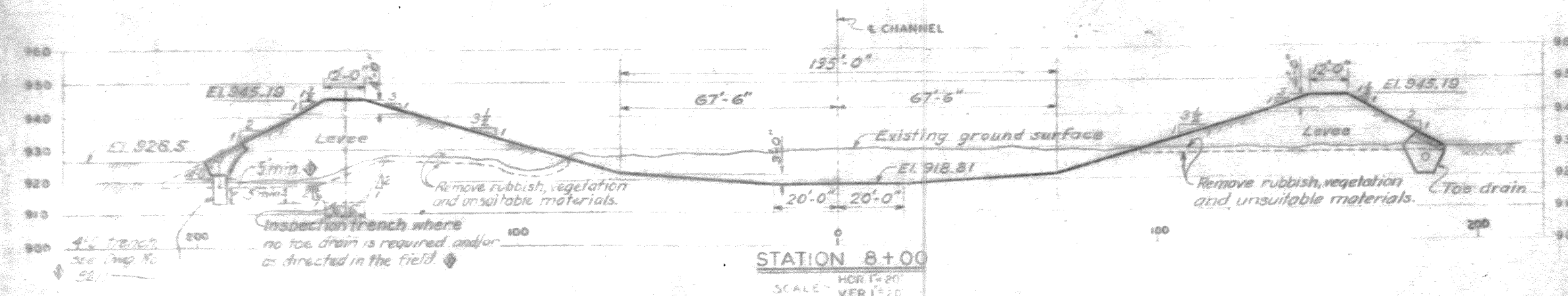
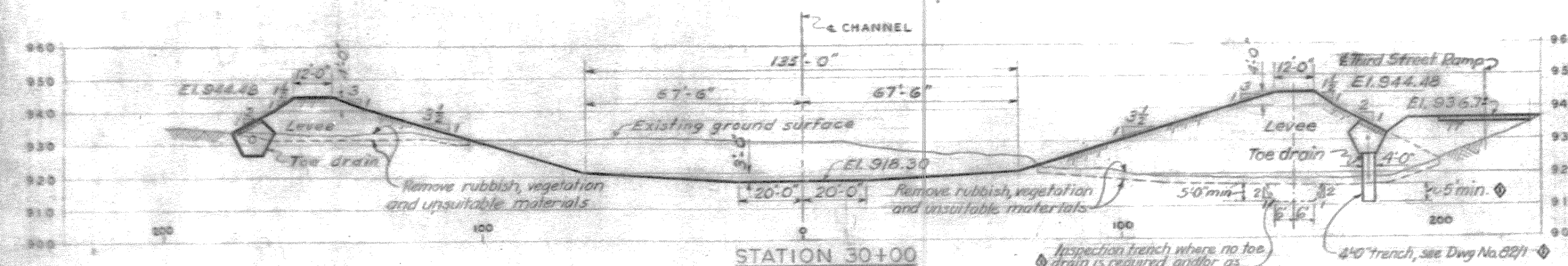
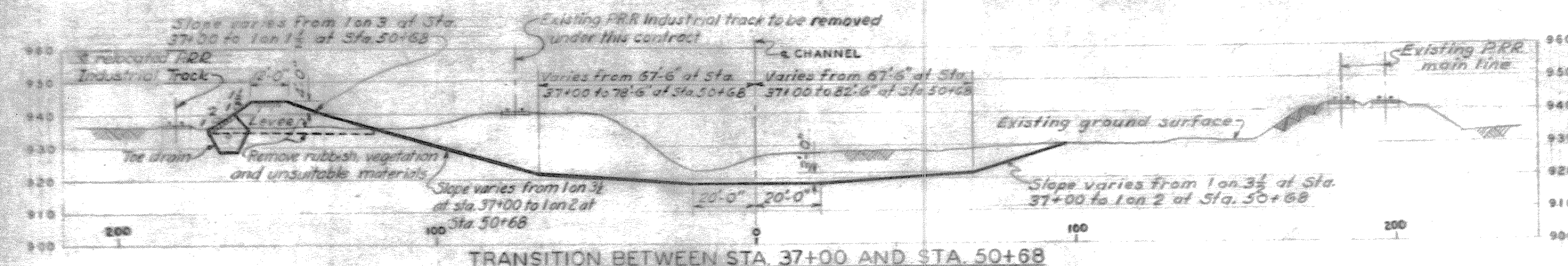
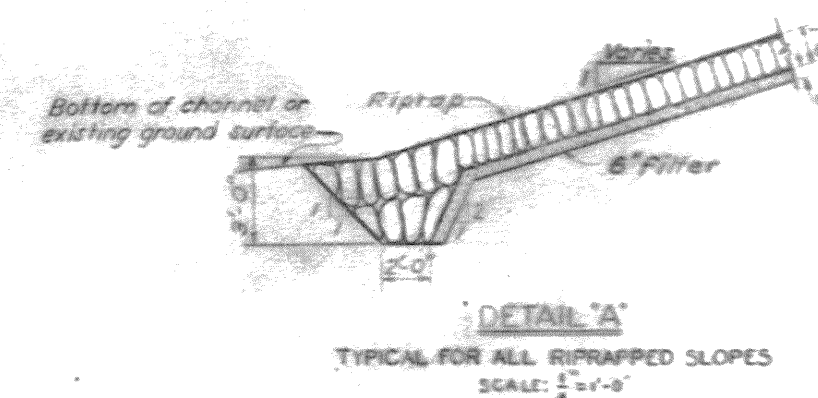
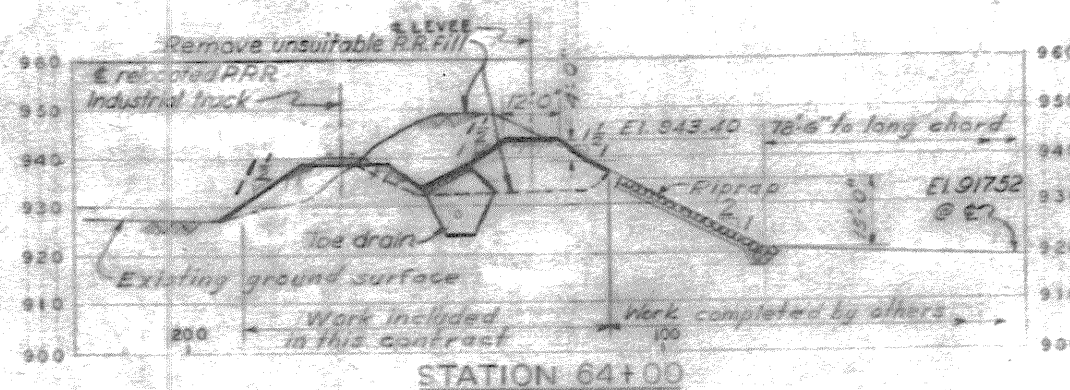
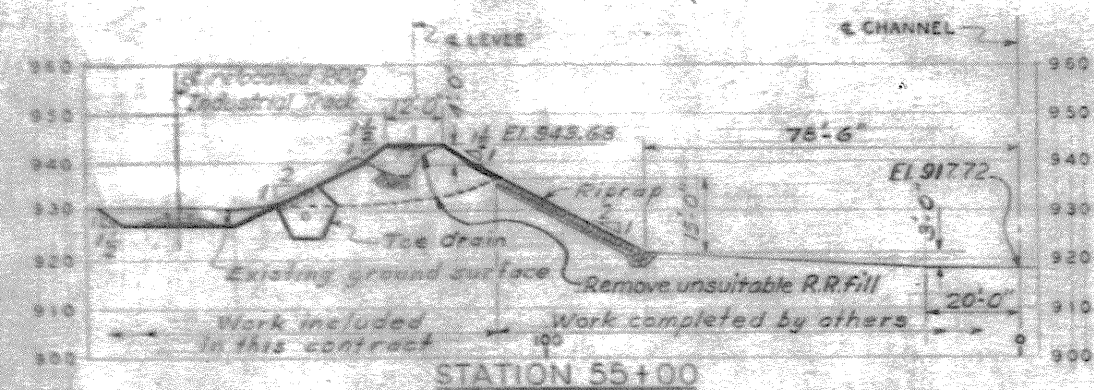
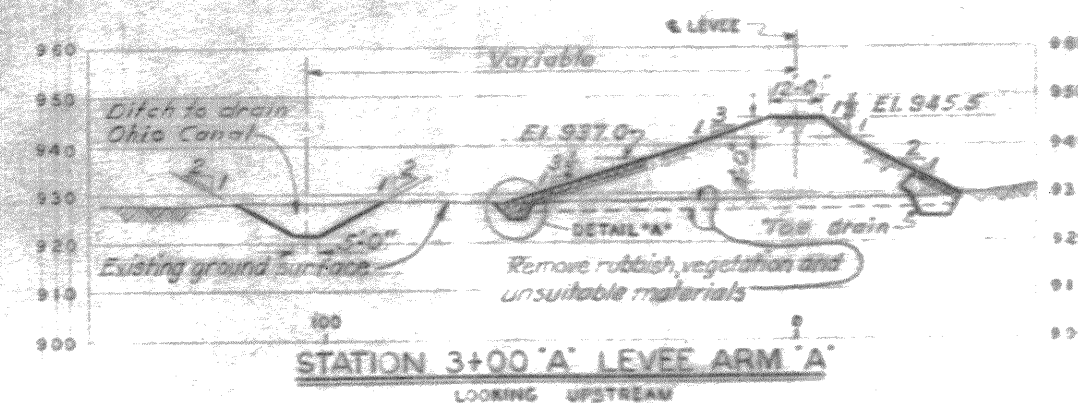
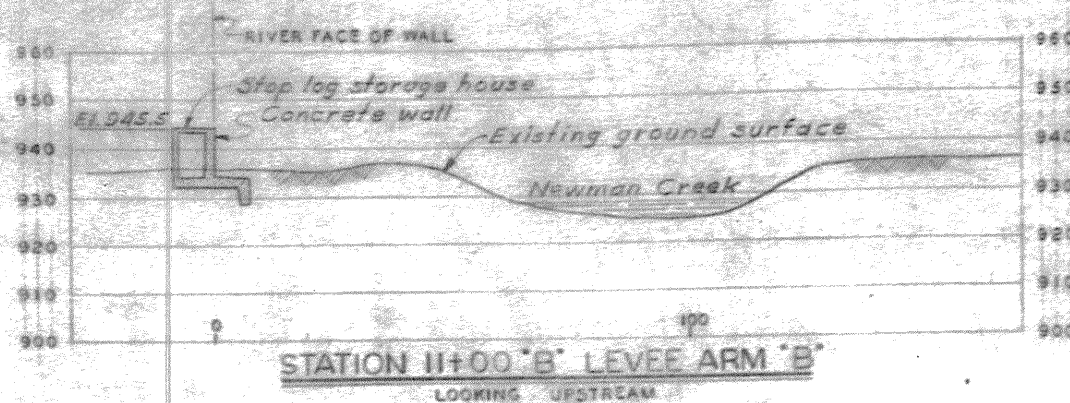
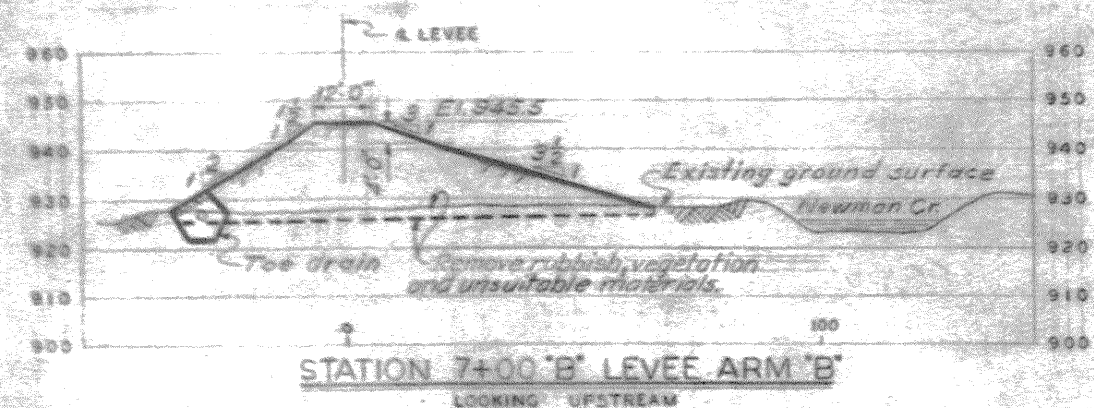
SCALE: HOR. 1"=400' VERT. 1"=20'

NOTES

- For legend, see Dwg. No. 16/1.
- For details of levee toe drain, see Dwg. No. 16/2.
- Temporary gaps in levees are to be provided until work by others is completed in that area.
- For Ohio Drilling Co. spur track profile, see Dwg. 16/3.

3 16-49 REVISED INDUSTRIAL TRACK PROFILE AND ADDED REFERENCE NOTES	
REVISION DATE	DESCRIPTION
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 GENERAL PLAN & PROFILES	
DRAWN BY: E.W.H.	DATE: OCT. 1949
TRACED BY: E.W.H.	SCALE: 1"=100'
CHECKED BY: E.W.H.-G.O.S.	SPEC. NO.
SUBMITTED BY: [Signature]	DRAWING NUMBER
APPROVED BY: [Signature]	0271-PM2-2-16/3
APPROVED FOR: [Signature]	SHEET 5 OF 60

WORK AS CONSTRUCTED

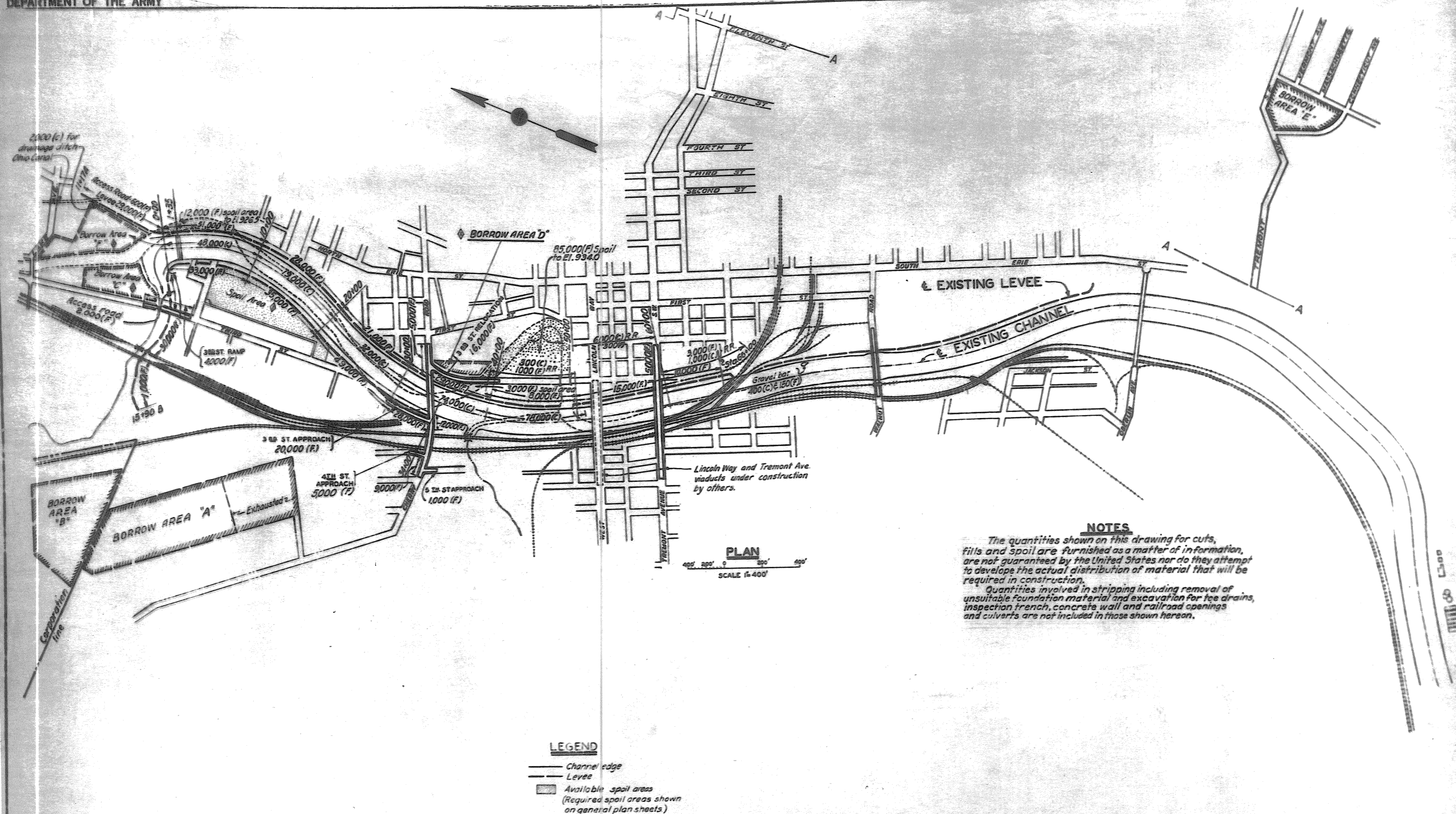


NOTES

Sections looking downstream unless otherwise noted.
Payment lines not shown, see Dwg. No. 82/6
For profiles and details of toe drains, see Dwg. No. 82/1

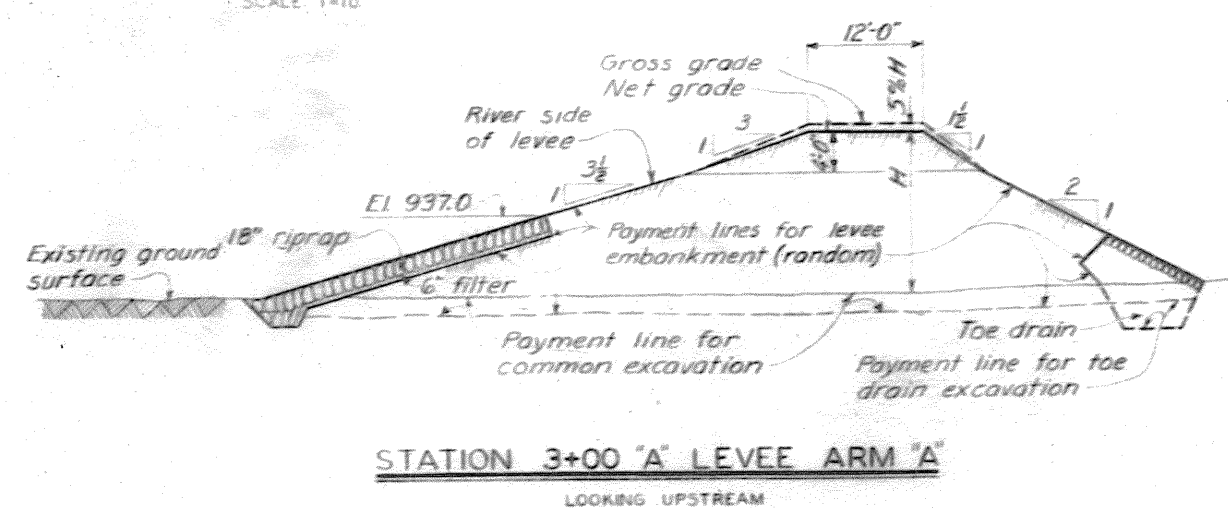
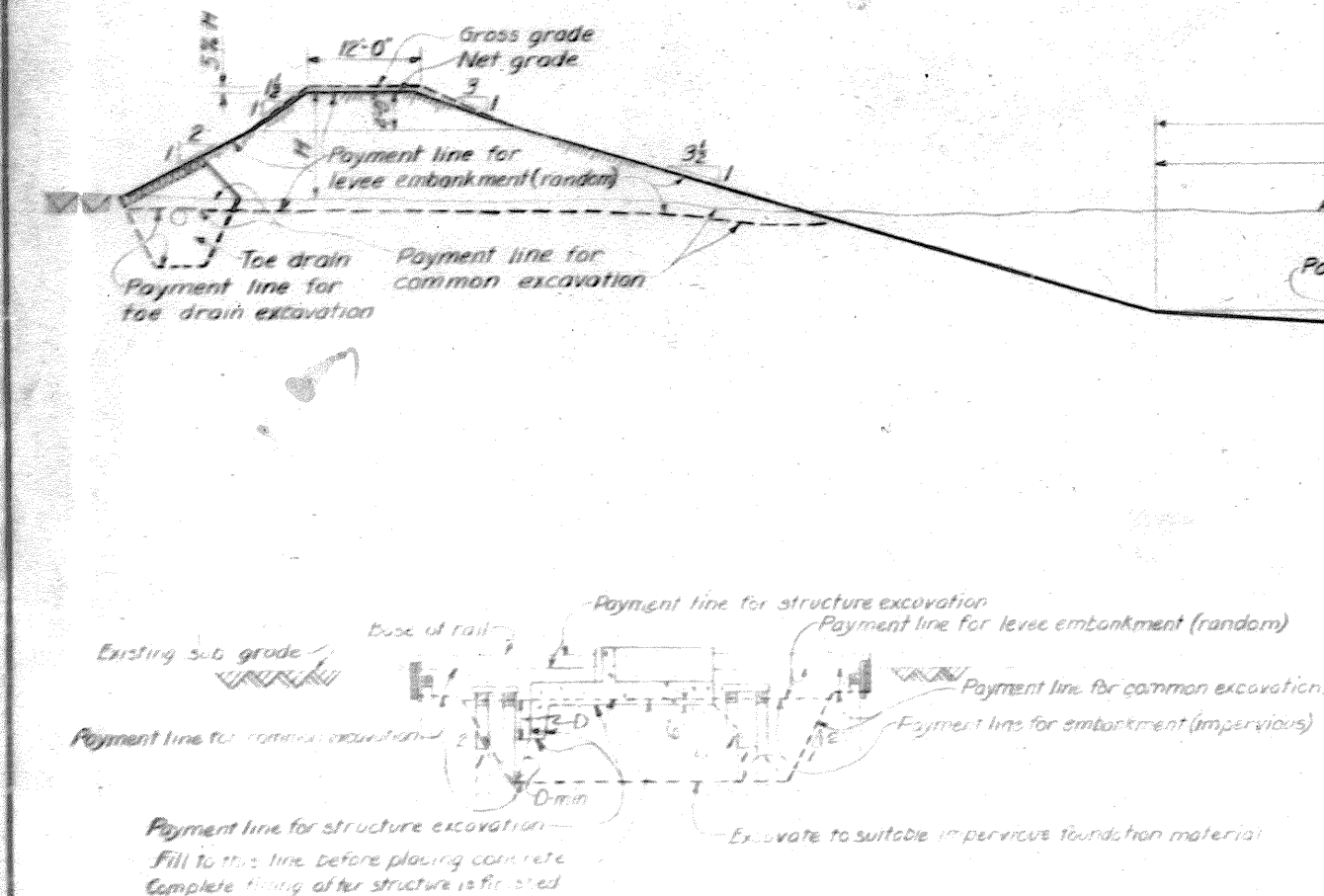
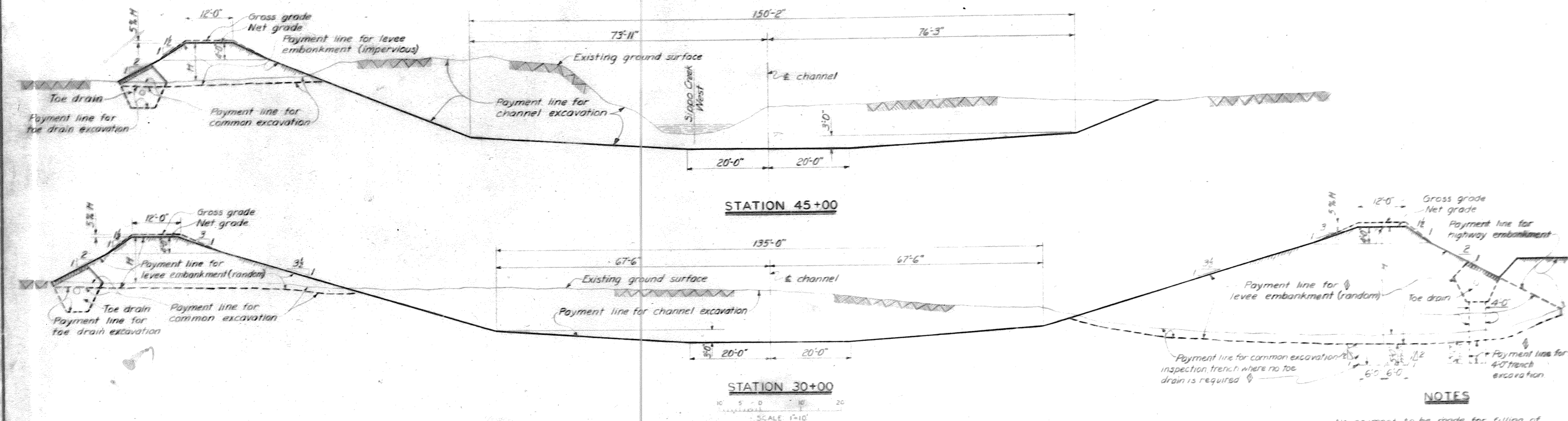
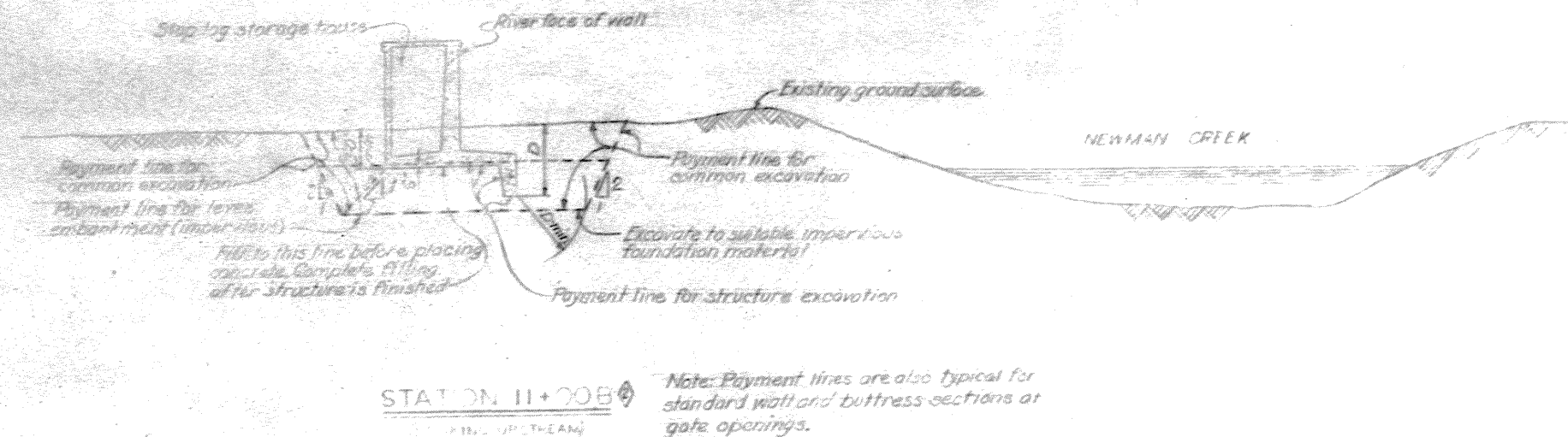
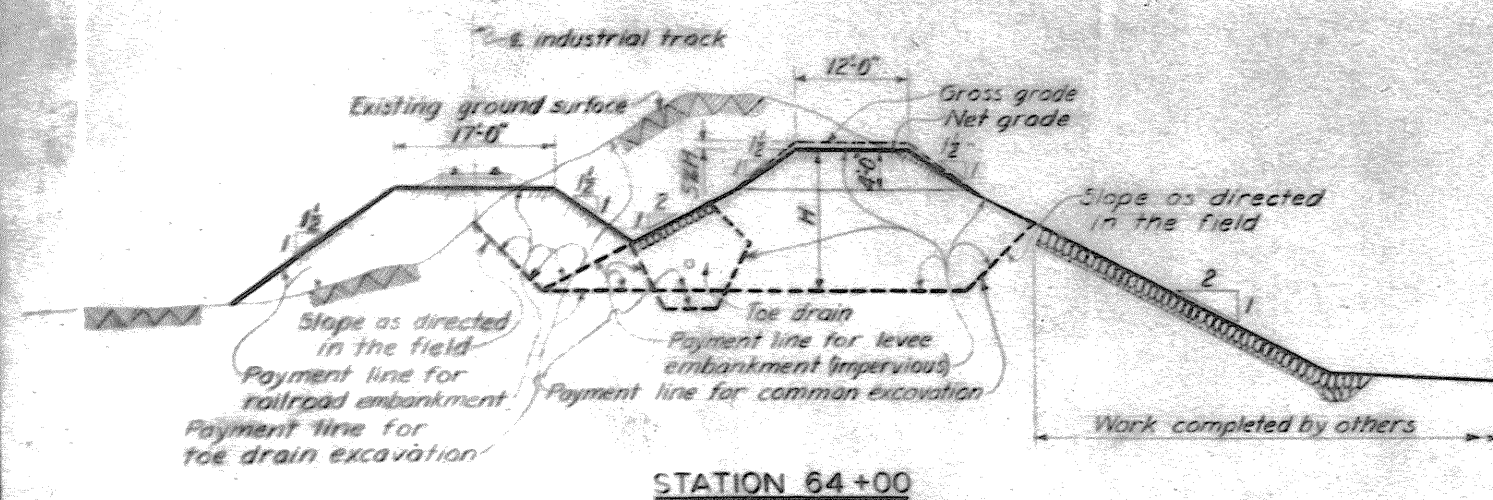
REVISION	DATE	DESCRIPTION	BY
1	3-18-48	CHANGED 2" DRILLED HOLES TO 4"-0" TRENCH AND REVISED INDICATIONS	W.S.B.
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: C.A.T.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 TYPICAL CHANNEL & LEVEE SECTIONS	
CHECKED BY: E.S.M.-C.E.M.		APPROVED: <i>[Signature]</i> DISTRICT ENGINEER	
SUBMITTED BY: <i>[Signature]</i>		DATE: OCT. 1948	
APPROVED FOR: <i>[Signature]</i>		SCALE: 1" = 20' HOR. 1" = 10' VER. DRAWING NUMBER: 0271-PM2-2-16/4 SHEET 5 OF 80	

WORK AS CONSTRUCTED



DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: W.B.S. - R.G.P.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 GRADING DISTRIBUTION	
TRACED BY: D.L. - R.G.P.		DATE: OCT. 1948	
CHECKED BY: C.M. - G.O.S.		APPROVED: <i>[Signature]</i> COL. C.E. DISTRICT ENGINEER	
SUBMITTED BY: <i>[Signature]</i>		APPROVED FOR: <i>[Signature]</i>	
REVISION		DATE	
1-24-48	ADDED BORROW AREA "Y" - REVISED BORROW AREAS "C" & "D" - ADD. NO. 2	BY: S.S.B.	
11-18-48	ADDED SPOIL AREA - ADDENDUM NO. 1	BY: S.S.B.	

SCALE 1"=400' SHEET NO. 0271-PM2-2-16/5
DRAWING NUMBER
PAGE 7 OF 80
WORK AS CONSTRUCTED



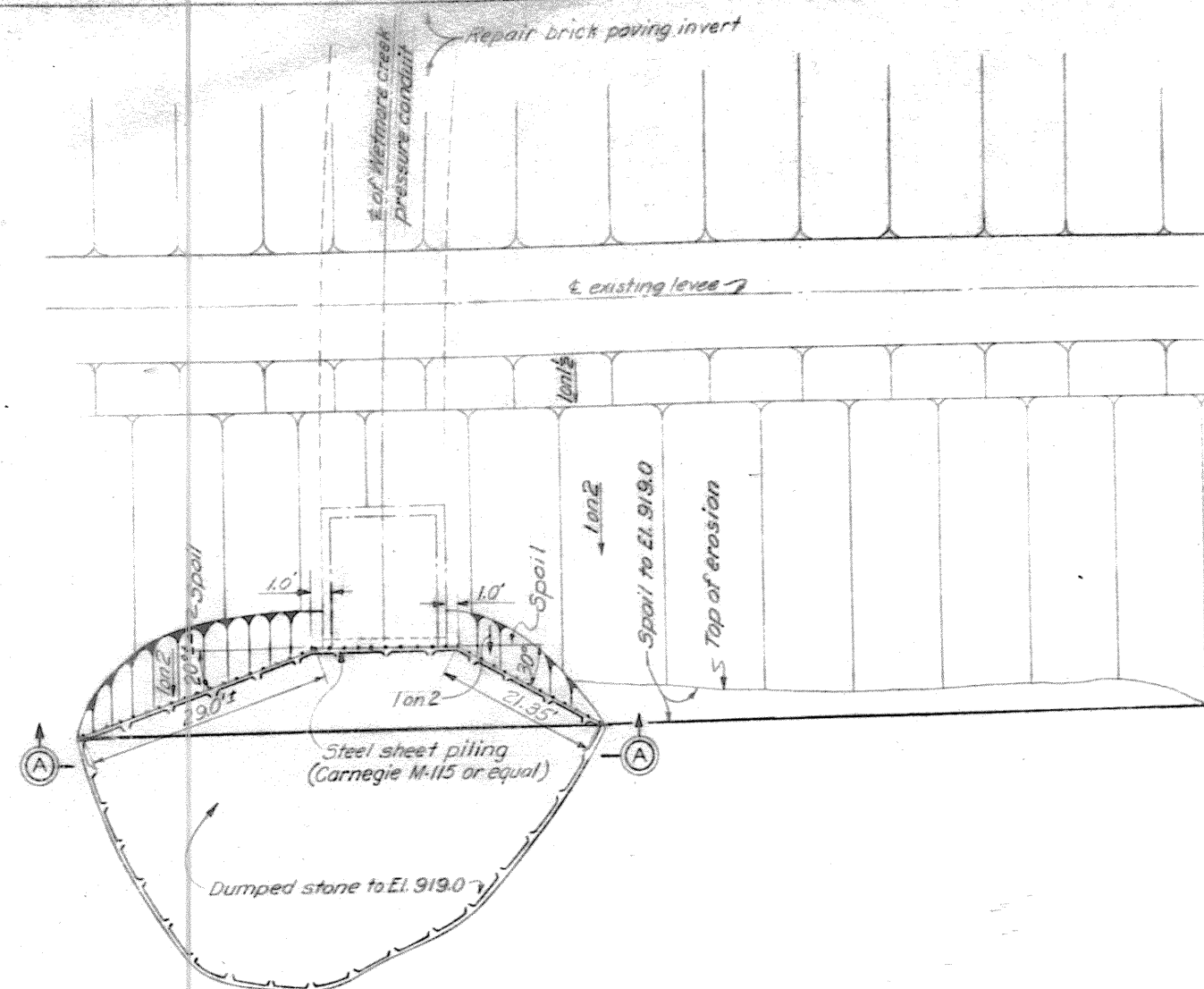
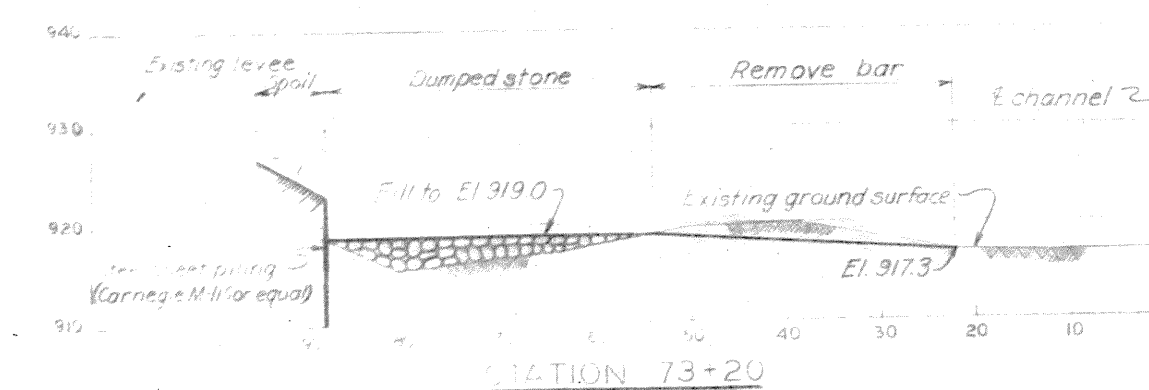
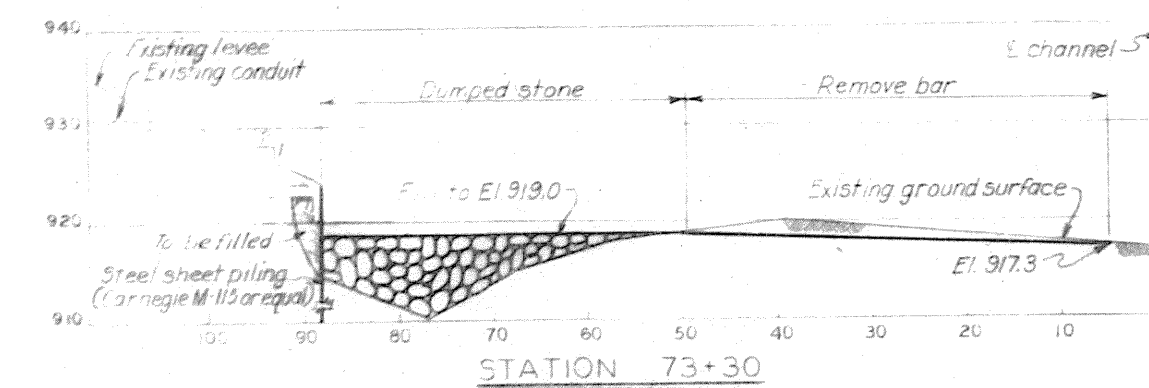
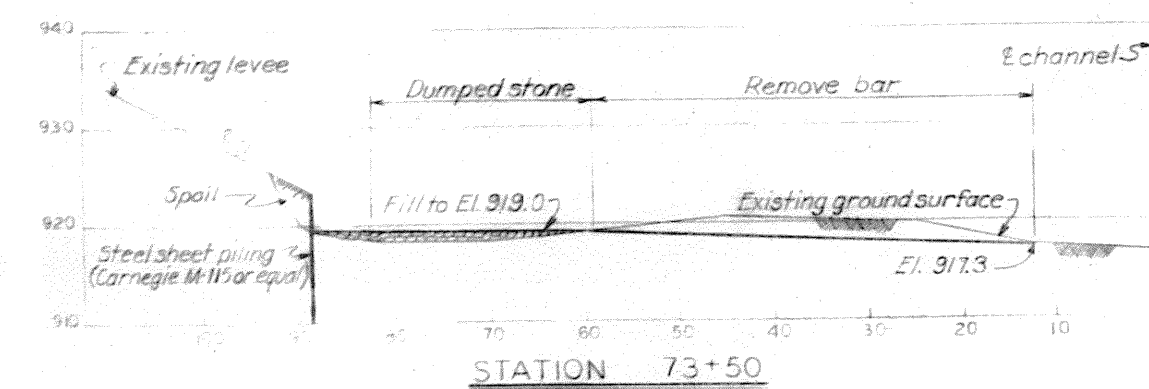
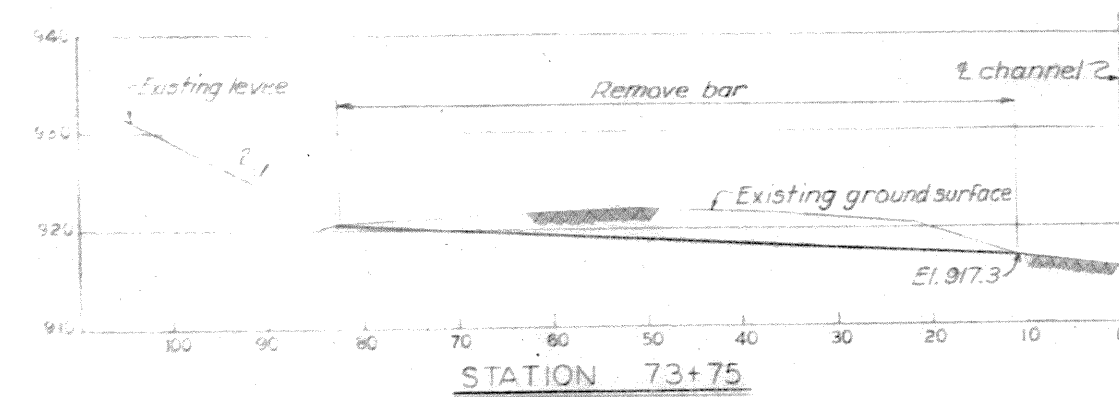
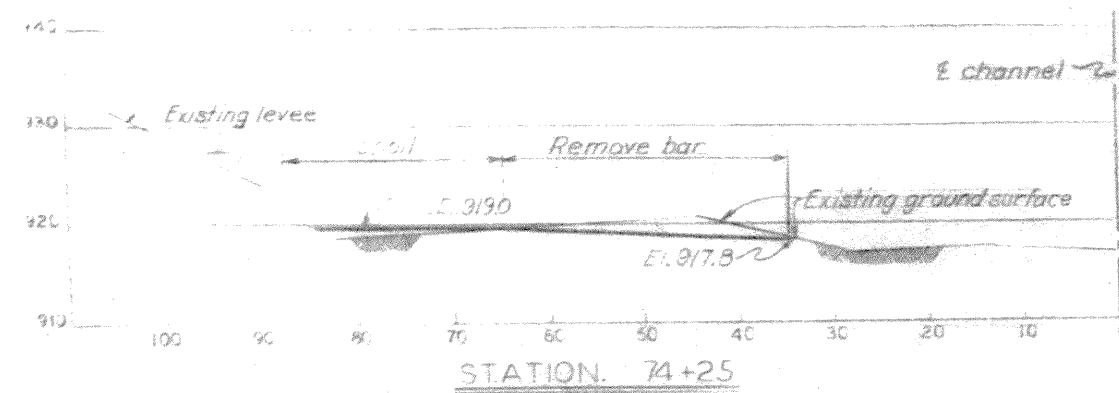
NOTES

- No payment to be made for filling of low places in new channel to conform to specified line and grade.
- Sections looking downstream unless otherwise noted.
- For profiles and details of toe drains, see Dwg. No. 82/1.
- For recommended track shoring, see Dwg. Nos. 20/15 and 20/16.
- For spoil areas, see Dwg. No. 16/5.

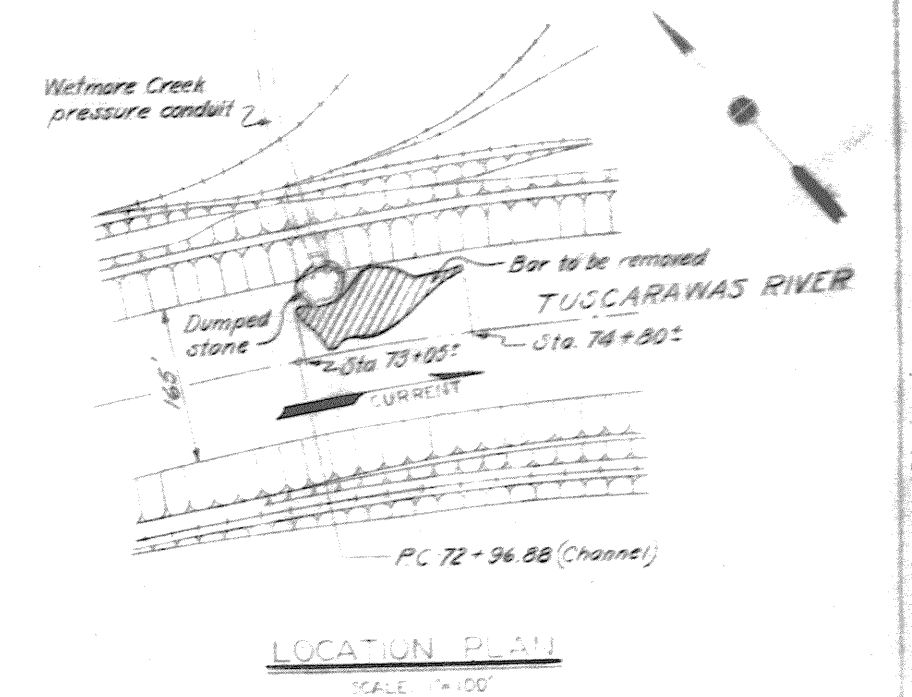
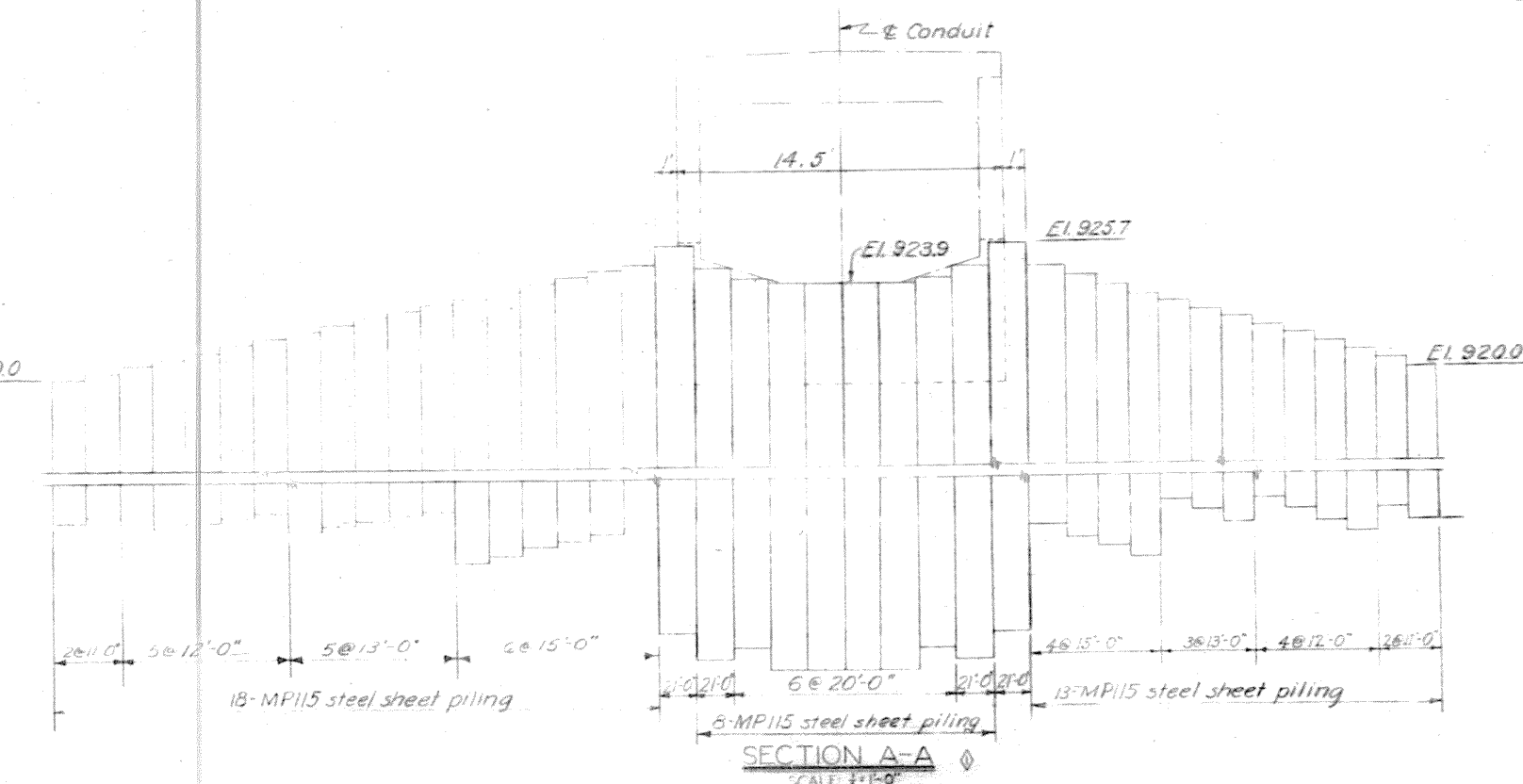
REVISION	DATE	DESCRIPTION	BY
1	3-15-40	REVISED SECTION AT STA 3+00	R.E.B.
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: R.C.P. TRACED BY: CHECKED BY: C.C.M.-G.O.S. SUBMITTED BY: <i>R. C. P.</i> APPROVED: <i>R. C. P.</i> CHIEF ENGINEER: <i>R. C. P.</i>		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PAYMENT LINES FOR EXCAVATION & EMBANKMENT	
APPROVED FOR: <i>R. C. P.</i> DATE: OCT. 1945		SCALE: 1" = 10'-0" SPEC. NO. DRAWING NUMBER 0271-PM2-2-16/6 SHEET 6 OF 6	

WORK AS CONSTRUCTED

DEPARTMENT OF THE ARMY



PLAN
SCALE 1" = 10'



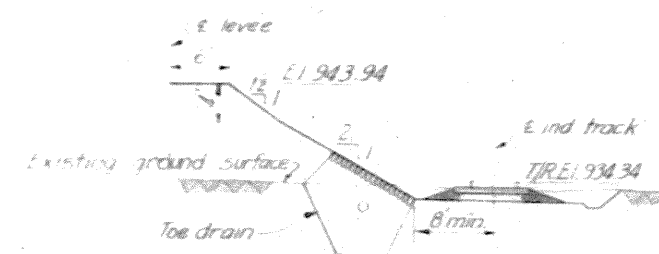
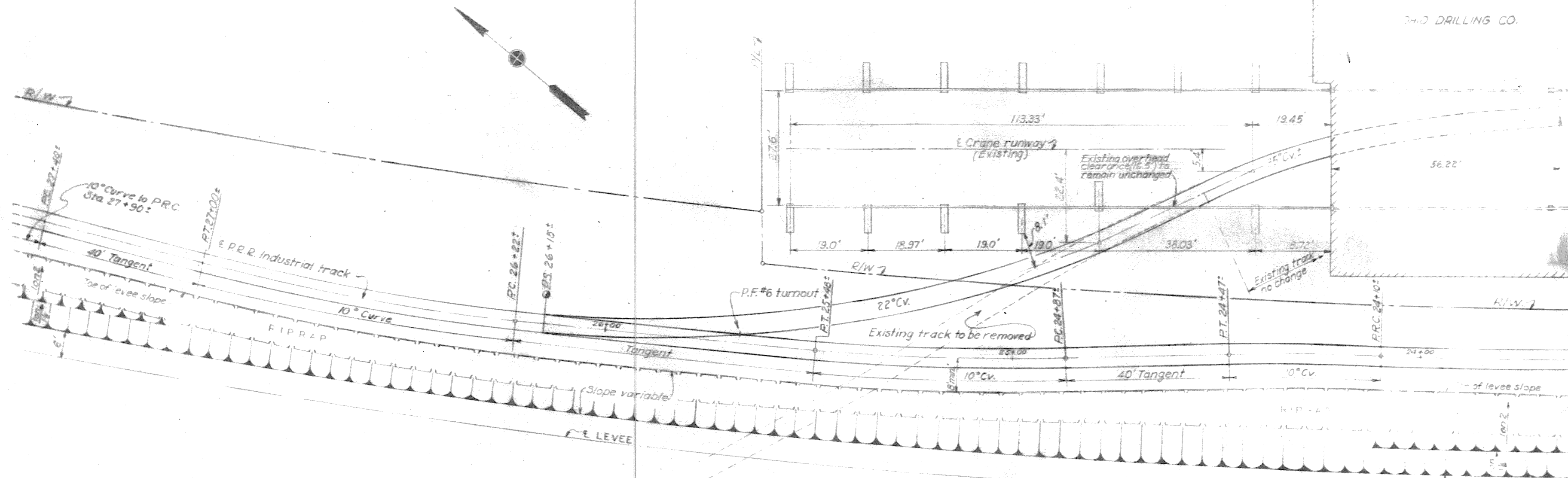
LOCATION PLAN
SCALE 1" = 100'

NOTES

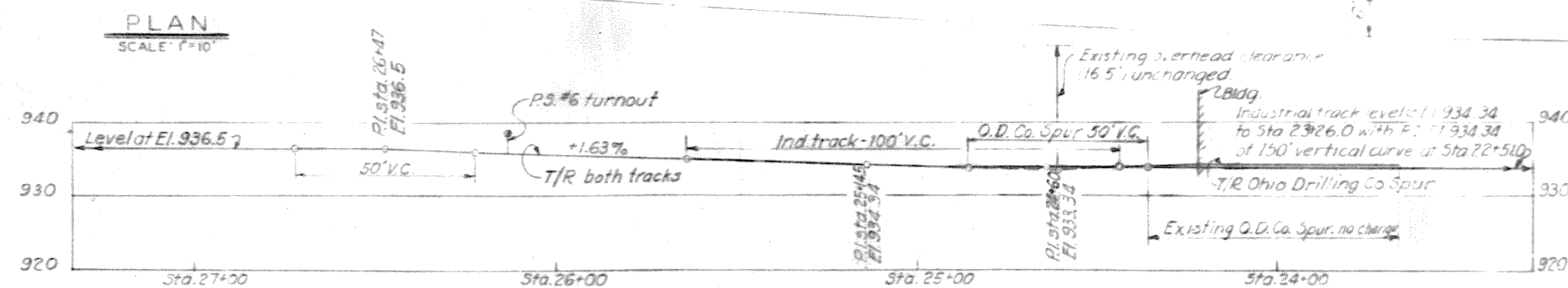
For general plan, see Dwg. No. 16/3

REVISION	DATE	REVISION	DATE	REVISION	DATE
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.					
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 MODIFICATION OF WETMORE PRESSURE CONDUIT OUTLET					
DRAWN BY: N.M.G.-E.W.H.		CHECKED BY: C.C.M.-E.S.W.		DATE: OCT. 1948	
TRACED BY:		SUBMITTED BY:		APPROVED BY:	
APPROVED FOR:		APPROVED FOR:		APPROVED FOR:	
DATE:		DATE:		DATE:	
SCALE: 1" = 10'-0"		SPEC. NO.:		DRAWING NUMBER:	
SHEET 9 OF 60		0 271-PM2-2-16/7		WORK AS CONSTRUCTED	

OHIO DRILLING CO.



SECTION AT STA 24+10

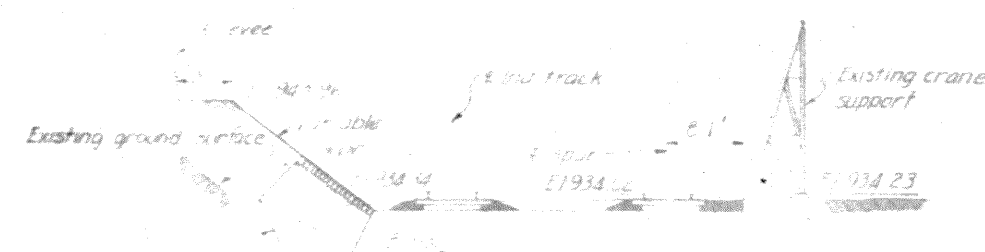


PROFILE ON E OF INDUSTRIAL TRACK AND OHIO DRILLING CO. SPUR

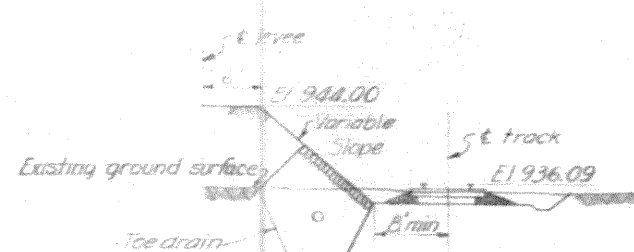
SCALE HOR 1"=20'
VER 1"=10'

NOTES

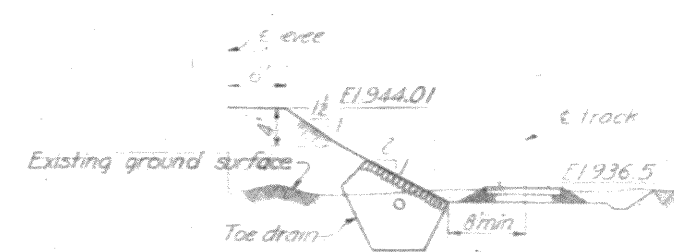
1. River side slopes of levee to be changed for details see Dwg No 16/4.
 2. For general plan see Dwg No 16/1.
 3. For additional details of track see Dwg No 16/3.
 4. For details of toe drain see Dwg No 86/1.
 5. For railroad roadbed details see Dwg No 66/1.



SECTION AT STA 24+10



SECTION AT STA 26+22



SECTION AT STA 27+30

CORPS OF ENGINEERS U. S. ARMY OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: EWH	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PLAN, PROFILE & MISCL DETAILS PENNA. R.R. IND. TRK. STA. 24+10 TO STA 27+90
TRACED BY: EWH	
CHECKED BY: GOS	
SUBMITTED BY:	
CHIEF ENG. DIV. APPROVED:	
CHIEF ENG. ASST. APPROVED:	DATE: MARCH 1949
APPROVED FOR:	SCALE: 1"=10'
DATE:	DRAWING NUMBER: 0271-PM2-2-16/8
	SHEET OF

WORK AS CONSTRUCTED

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO.	LAST WT.	TOTAL WT.
514A	#4	9'-6"		28	3.65	102
518A	#4	4'-6"		100	4.69	469
520	#4	5'-0"		28	5.22	146
537A	#4	9'-3"		106	9.68	1023
549A	#4	10'-9"		46	11.21	516
542	#4	10'-6"		106	10.98	1161
553	#4	13'-3"		8	13.82	111
562	#4	15'-6"		80	16.17	1294
576	#4	19'-0"		28	19.82	476
578	#4	19'-6"		104	20.34	2116
582	#4	20'-6"		114	21.38	2437
					Total	9890

REINFORCING STEEL CODE

Bar numbers indicate the size and lengths thus: The first digit indicates the size in eighths of an inch (except 1/4 & 1/2); the next 2 or 3 digits indicate the length in fourths of a foot. Thus a bar marked 043 means #4 and 3/4 or 10.75 or 10'-9" long. If a letter is suffixed a bent bar is indicated and is detailed in the bending diagram and schedule.

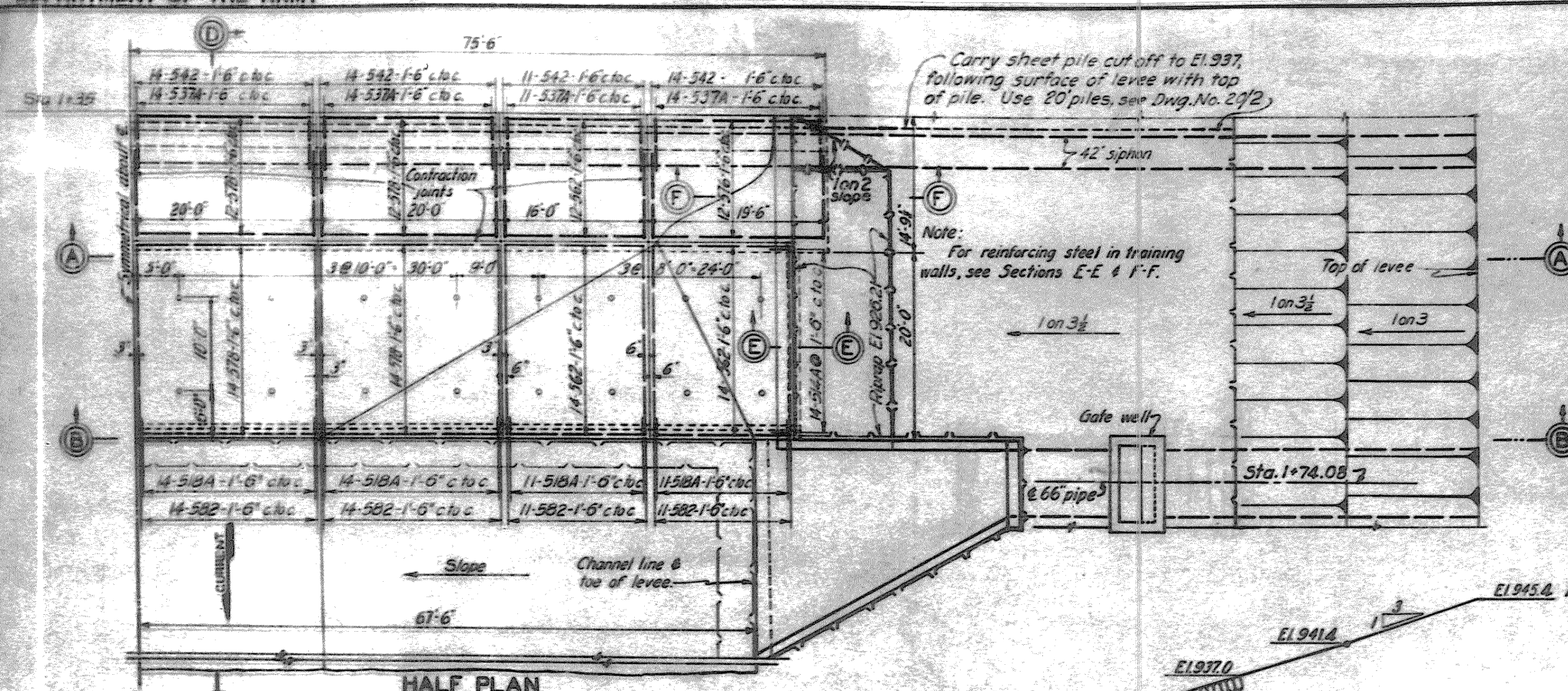
1 for 1" a 5 for 5" 8 for 1" 0
3 for 3" 6 for 6" 9 for 1" 0
4 for 4" 7 for 7" 0 for 1" 0
Symbols used for abbreviations are as follows:
F.S. for Far Side O.S. for Outside
N.S. for Near Side I.S. for Inside
E.F. for Each Face B.S. for Both Sides

MASONRY NOTES

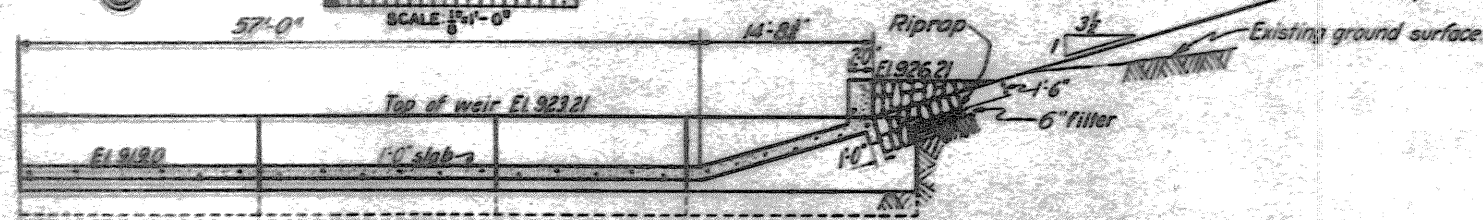
Unless otherwise shown or noted provide 1" chamfer on all exposed concrete corners.
All reinforcing steel shall be spaced a clear distance from concrete surfaces as shown or noted.
All bends in reinforcing steel shall be made to a radius of 4 bar diameters (inside) unless otherwise noted.
All hooked reinforcing bars extending from base slabs into walls shall be hooked around horizontal bars in bottom of base.

NOTES

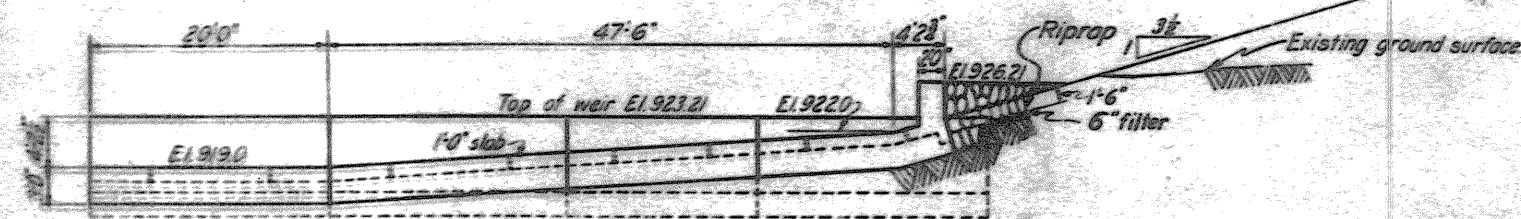
All steel unless otherwise indicated to be bent in field to suit conditions.
Omit 6" filter where underlying material is free draining.
For general plan, see Drawing No. 18/1.
For details of gatewell and 66" pipe culvert, see Drawing No. 20/3.
For details of siphon, see Drawing No. 20/2.



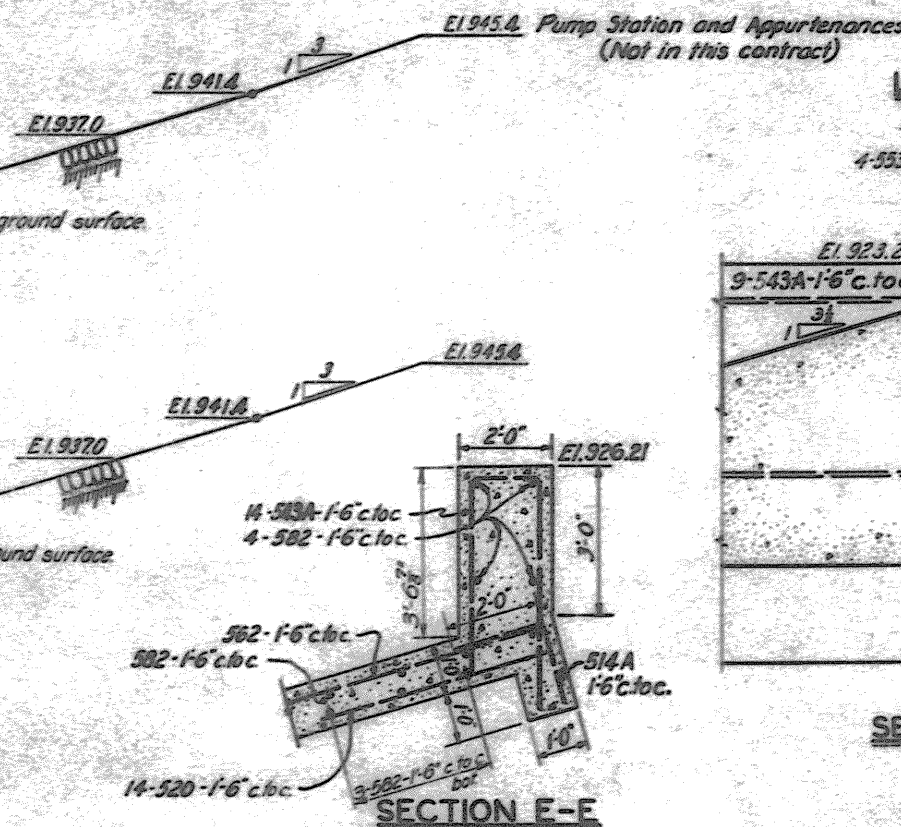
HALF PLAN



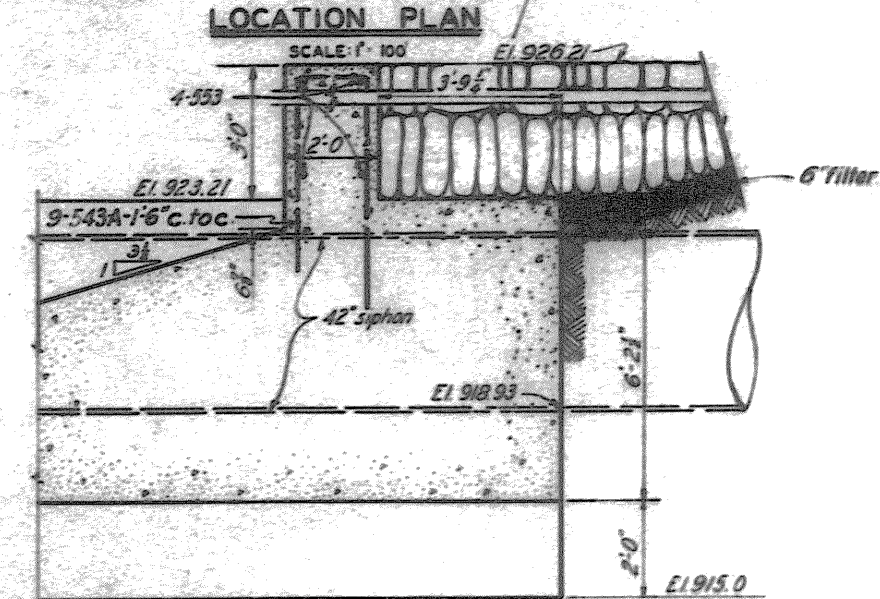
SECTION A-A



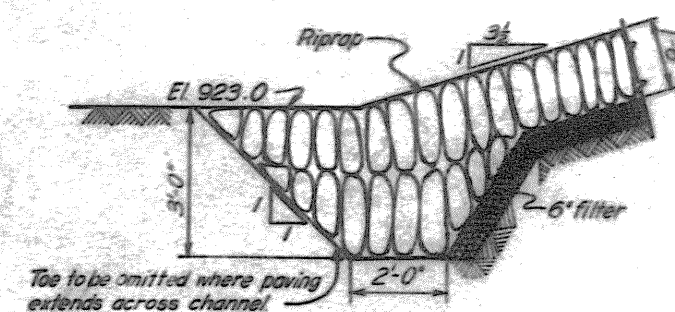
SECTION B-B



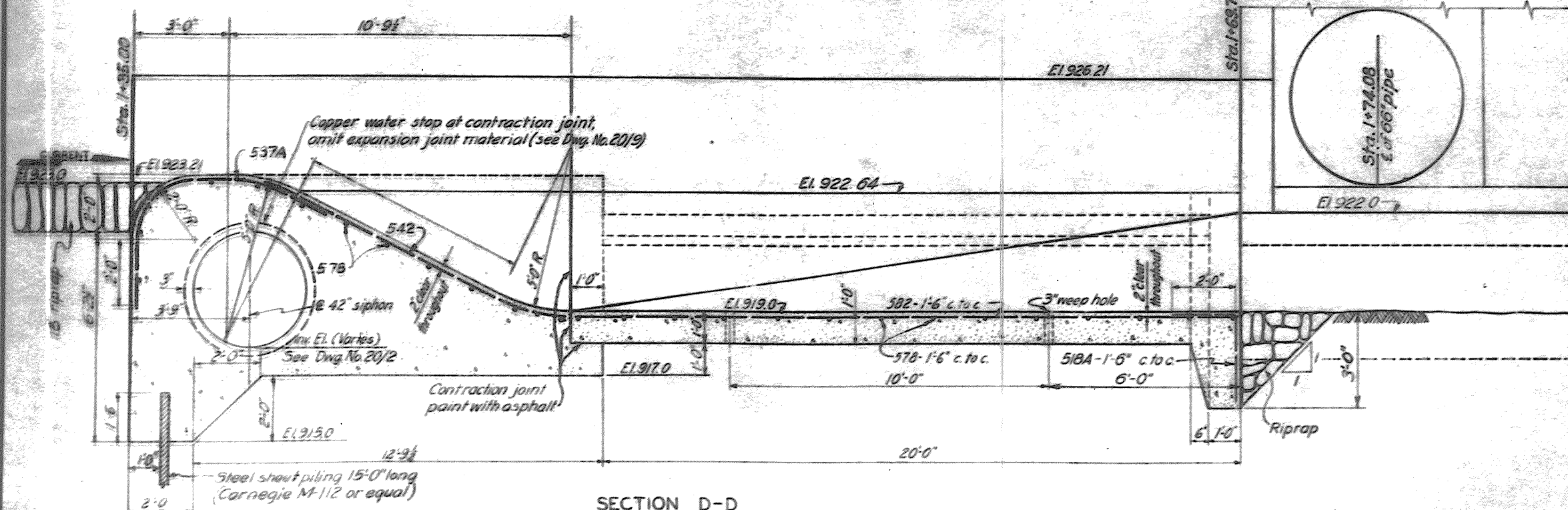
SECTION E-E



SECTION F-F



SECTION G-G



SECTION D-D

SCALE 1/4"=1'-0"

3-10-50	REVISED LAYOUT OF PUMP STATION & APPURTENANCES	K.S.B.
REVISION	DATE	BY
DESCRIPTION		
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
DRAWN BY: R.M.C.-R.G.R.		
CHECKED BY: R.M.C.-R.G.R.		
APPROVED BY: R.M.C.-R.G.R.		
DATE: OCT. 1948		
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CONTROL WEIR		
DRAWING NUMBER 0271-PM2-2-20/1 SHEET 10 OF 20		

WORK AS CONSTRUCTED

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO.	UNIT WT.	TOTAL WT.
514A	#4	3'-6"		28	3.65	102
518A	#4	4'-6"		100	4.69	469
520	#4	5'-0"		28	5.22	146
537A	#4	9'-3"		106	9.68	1023
548A	#4	10'-9"		86	11.21	964
542	#4	10'-6"		106	10.98	1161
553	#4	13'-3"		8	13.02	111
562	#4	15'-6"		80	16.17	1294
576	#4	19'-0"		26	19.82	476
578	#4	19'-6"		104	20.34	2118
582	#4	20'-6"		114	21.38	2447
					Total	9890

REINFORCING STEEL CODE

Bar numbers indicate the size and lengths thus: The first digit indicates the size in eighths of an inch (except 1/2 & 3/4); the next 2 or 3 digits indicate the length in fourths of a foot. Thus a bar marked 043 means #4 3/8" and 3'-0" long. If a letter is suffixed a bent bar is indicated and is detailed in the bending diagram and schedule.

1 for 1" 5 for 5" 8 for 1" 0
3 for 3" 6 for 6" 9 for 1 1/2"
4 for 4" 7 for 7" 0 for 1 1/2"

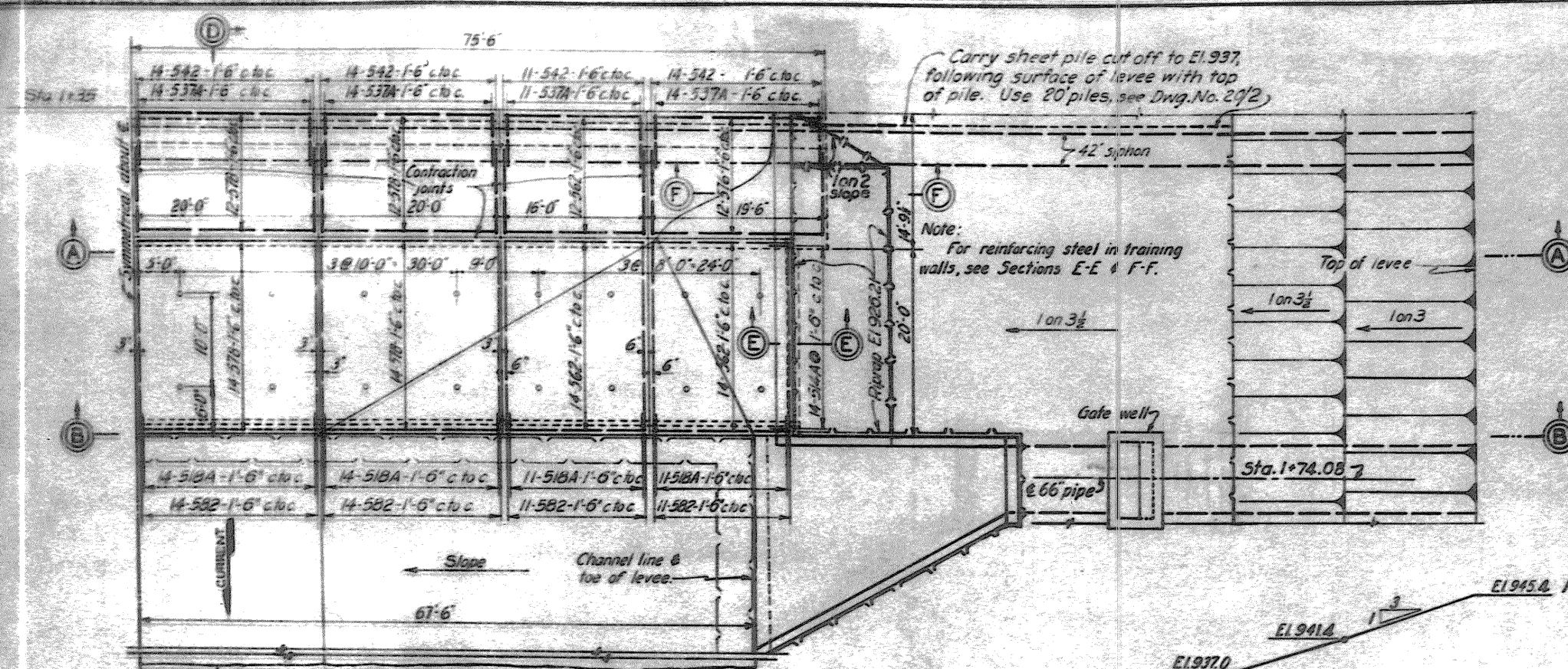
Symbols used for abbreviations are as follows:
F.S. for Far Side O.S. for Outside
N.S. for Near Side I.S. for Inside
E.F. for Each Face B.S. for Both Sides

MASONRY NOTES

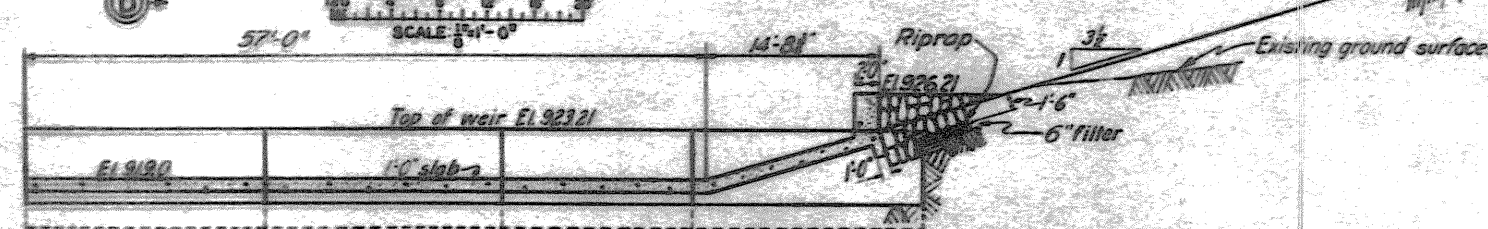
Unless otherwise shown or noted provide 1" chamfer on all exposed concrete corners.
All reinforcing steel shall be spaced a clear distance from concrete surfaces as shown or noted.
All bends in reinforcing steel shall be made to a radius of 4 bar diameters (inside) unless otherwise noted.
All hooked reinforcing bars extending from base slabs into walls shall be hooked around horizontal bars in bottom of base.

NOTES

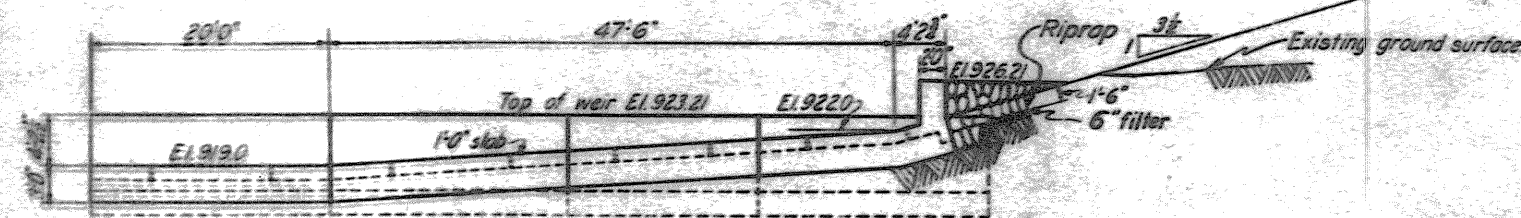
All steel unless otherwise indicated to be bent in field to suit conditions.
Omit 6" filter where underlying material is free draining.
For general plan, see Drawing No. 18/1.
For details of gate well and 66" pipe culvert, see Drawing No. 20/3.
For details of siphon, see Drawing No. 20/2.



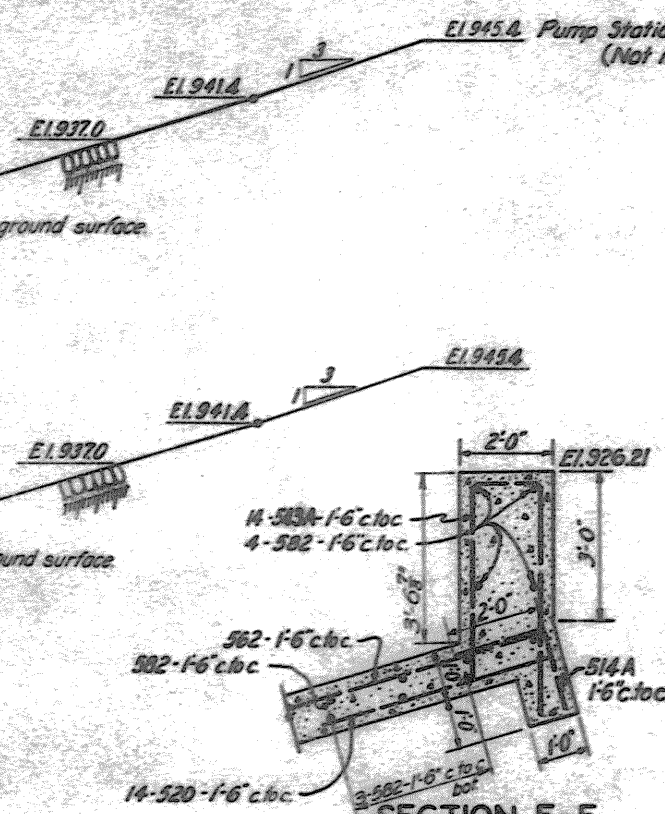
HALF PLAN



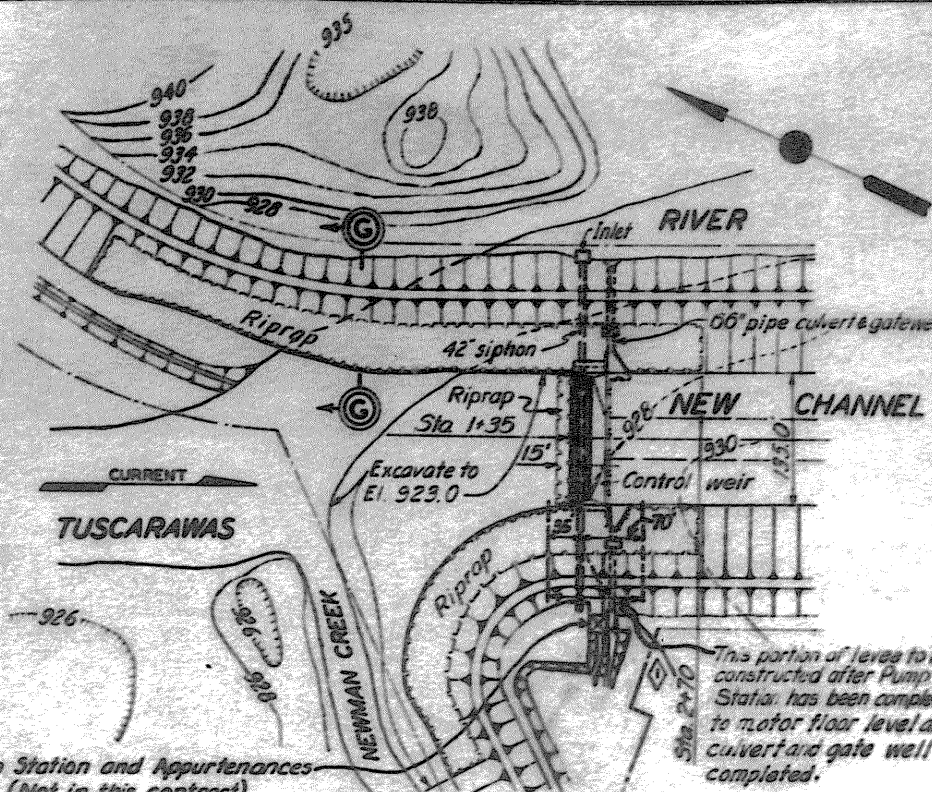
SECTION A-A



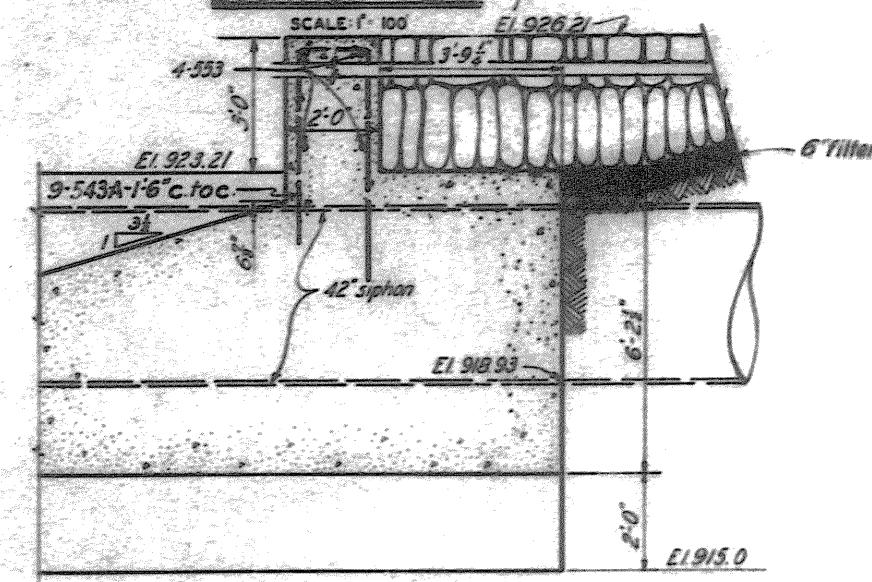
SECTION B-B



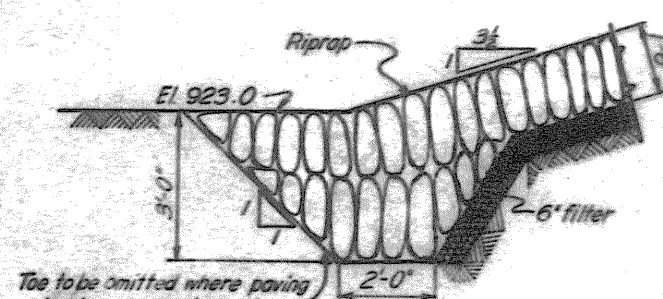
SECTION E-E



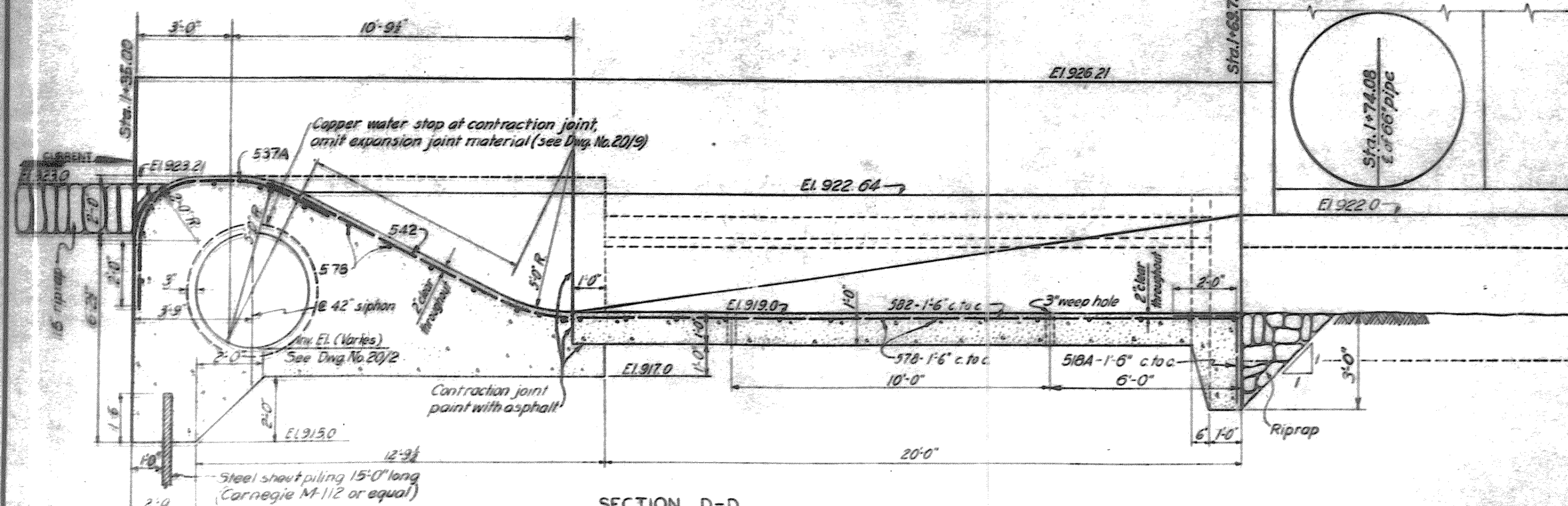
LOCATION PLAN



SECTION F-F



SECTION G-G



SECTION D-D

3-10-50	REVISED LAYOUT OF PUMP STATION & APPURTENANCES	A.S.B.
REVISION	DATE	BY
DESCRIPTION		
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
DRAWN BY: R.M.C.-R.G.P.		
TRACED BY: W.E.C.-R.G.P.		
CHECKED BY: E.S.M.-C.E.M.		
SUPPORTED BY: [Signature]		
APPROVED: [Signature]		
DATE: OCT. 1948		
SCALE: 1/8" = 1'-0"		
DRAWING NUMBER: 0271-PM2-2-20/1		
SHEET 15 OF 20		

WORK AS CONSTRUCTED

REINFORCING SCHEDULE

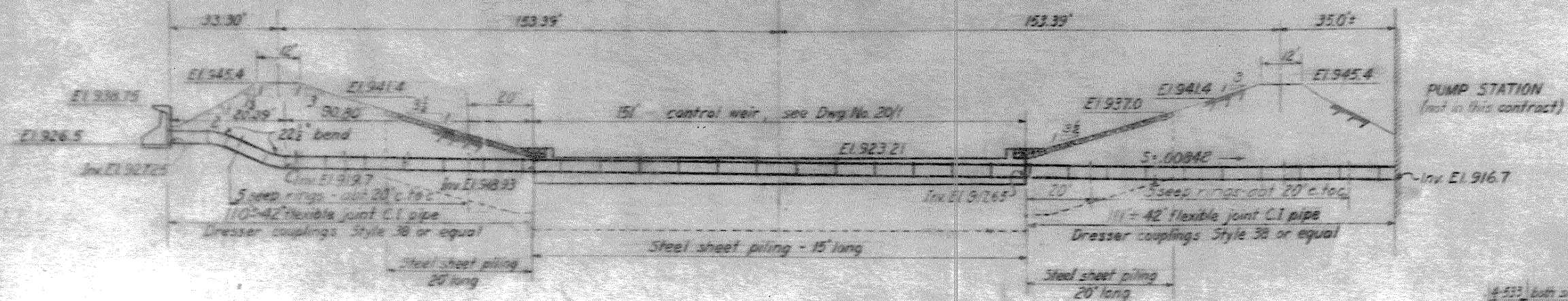
MARK	SIZE	LGTH	BENEFIC. DIAGRAM	NO.	UNIT WT.	TOTAL WT.
322A	8"	5'-6"	1'-5"	4	2.07	8
324A	8"	6'-0"	2'-8"	6	2.26	14
326A	8"	6'-6"	2'-11"	4	2.44	10
410A	8"	2'-8"	1'-9"	4	1.67	7
412A	8"	3'-3"	2'-0"	4	2.17	9
414	8"	3'-6"	2'-5"	4	2.34	9
416A	8"	4'-0"	2'-9"	4	2.67	11
418A	8"	5'-3"	1'-8"	4	2.51	10
419A	8"	4'-3"	2'-6"	4	3.17	13
420	8"	5'-0"	3'-3"	4	3.34	13
426	8"	6'-6"	3'-0"	4	4.54	17
430A	8"	7'-6"	4'-0"	6	5.01	30
428	8"	7'-0"	8'-3"	12	4.68	56
428A	8"	7'-0"	8'-0"	12	4.69	56
430	8"	7'-6"	5'-4"	27	5.01	135
432	8"	8'-0"	5'-1"	4	5.54	21
434A	8"	8'-9"	5'-0"	9	5.85	53
436A	8"	9'-9"	5'-5"	5	6.51	33
446A	8"	11'-6"	5'-0"	9	7.68	69
433	8"	8'-3"	5'-1"	18	3.60	65
540A	8"	10'-0"	5'-0"	4	0.43	42
617A	8"	4'-3"	7'-5"	2	6.39	13
630	8"	7'-6"	7'-5"	2	11.27	23
630A	8"	7'-6"	7'-5"	4	11.27	45
634B	8"	8'-6"	7'-5"	2	12.77	26
636A	8"	9'-0"	5'-10"	5	13.52	68
650A	8"	12'-6"	7'-5"	2	18.79	38
737A	8"	9'-3"	7'-5"	8	18.91	151
837A	8"	9'-3"	6'-0"	18	24.70	247
439A	8"	8'-0"	6'-0"	18	24.70	247
540A	8"	10'-0"	6'-0"	18	24.70	247
Total						1365

NOTES

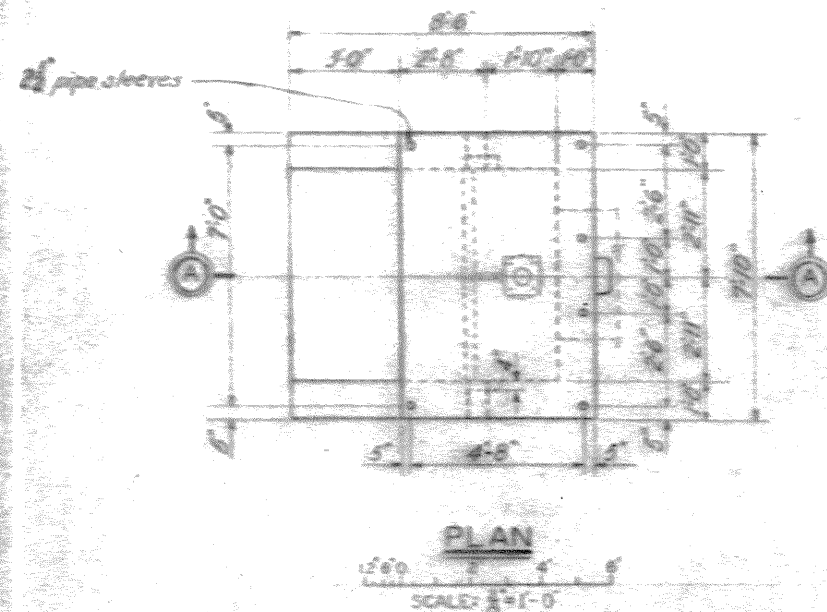
For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1.
 For general plan, see Dwg. No. 16/1.
 For structural steel details, see Dwg. No. 20/7.
 For details of seep rings, see Dwg. No. 68/12.

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 42" SIPHON AT CONTROL WEIR	
DESIGN BY: R.G.P.	CHECKED BY: CCM-ESM	APPROVED BY: [Signature]	DATE: OCT. 1948
APPROVED FOR: [Signature]		DRAWING NUMBER: 0271-PM2-2-20/2	

WORK AS CONSTRUCTED

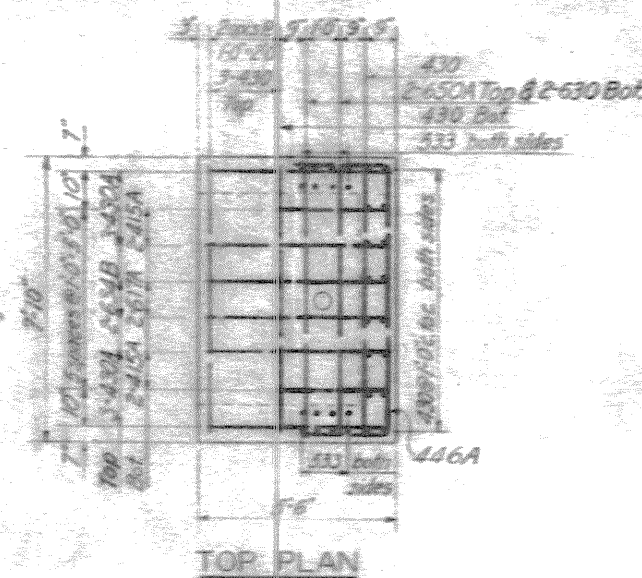


PROFILE OF SIPHON - STA 1+38.75

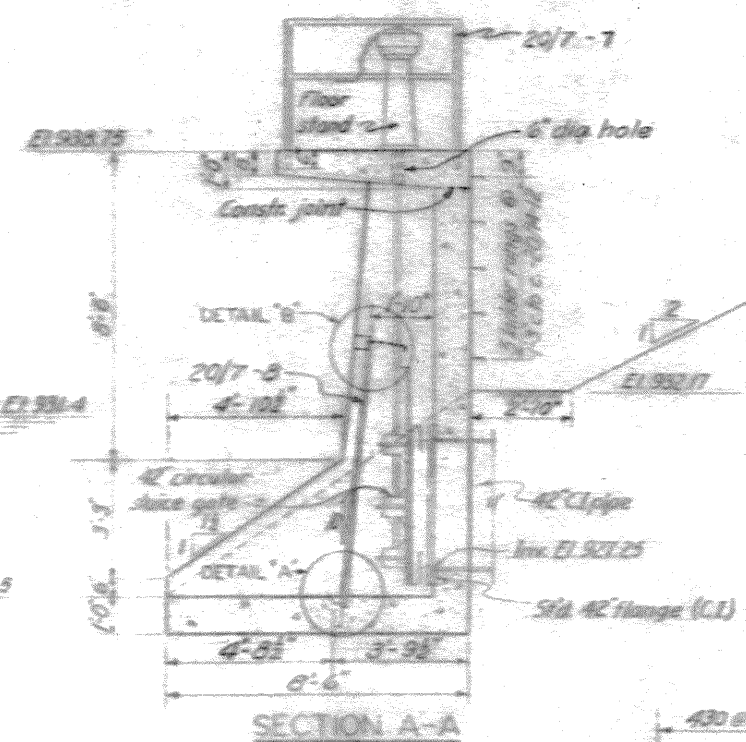
LOOKING DOWNSTREAM
SCALE: 1"=20'

PLAN

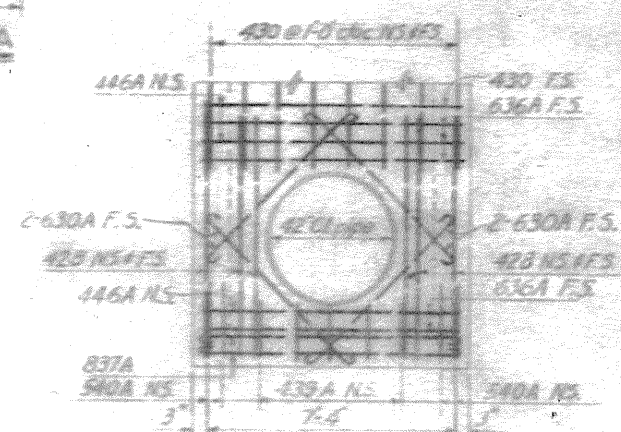
SCALE: 1"=10'



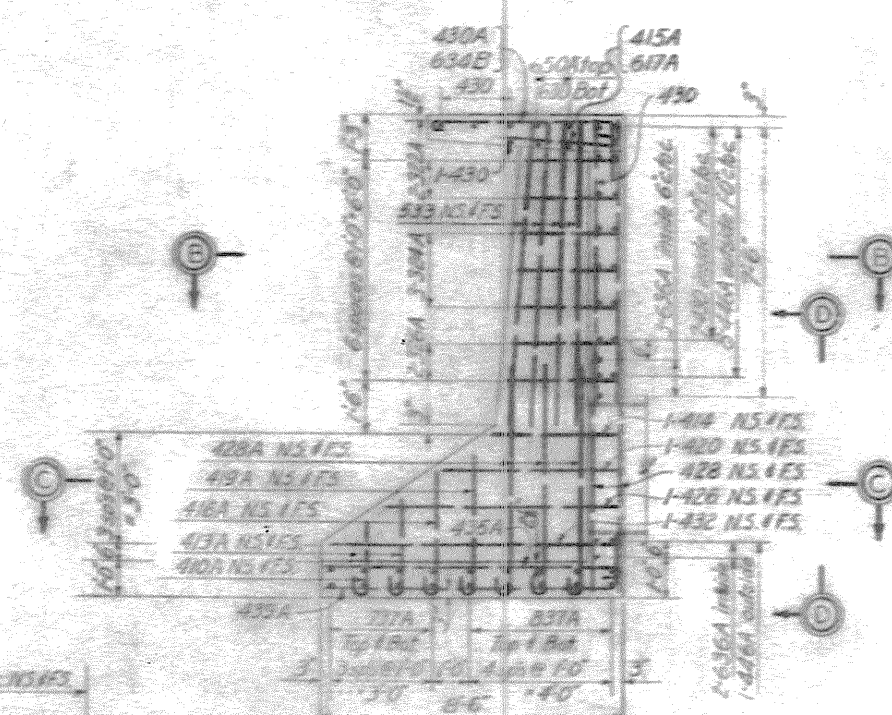
TOP PLAN



SECTION A-A

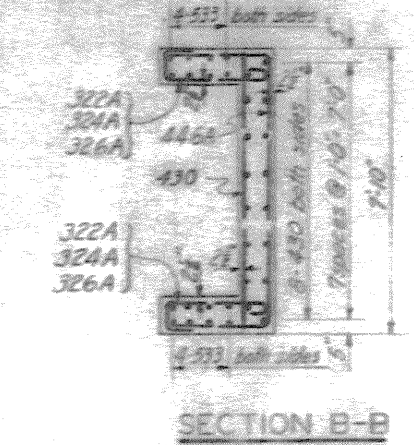


ELEVATION D-D

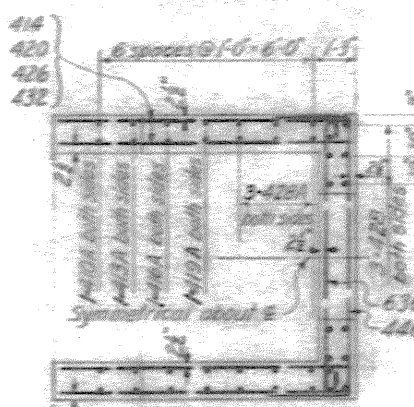


SECTIONAL ELEVATION

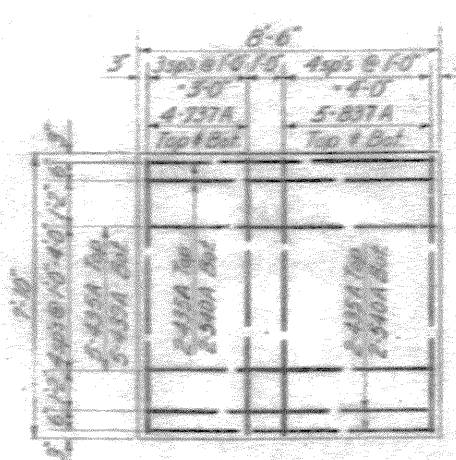
(OPPOSITE WALL SIMILAR)



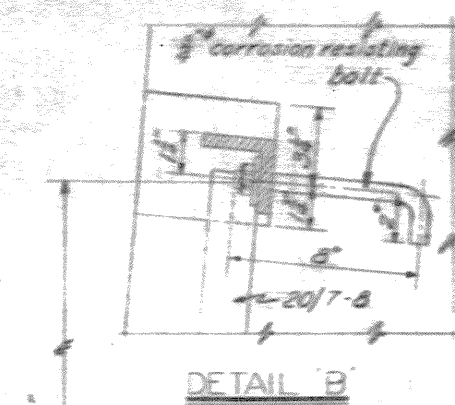
SECTION B-B



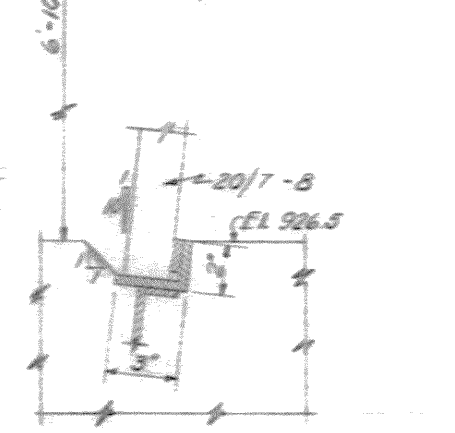
SECTION C-C



PLAN AT BASE

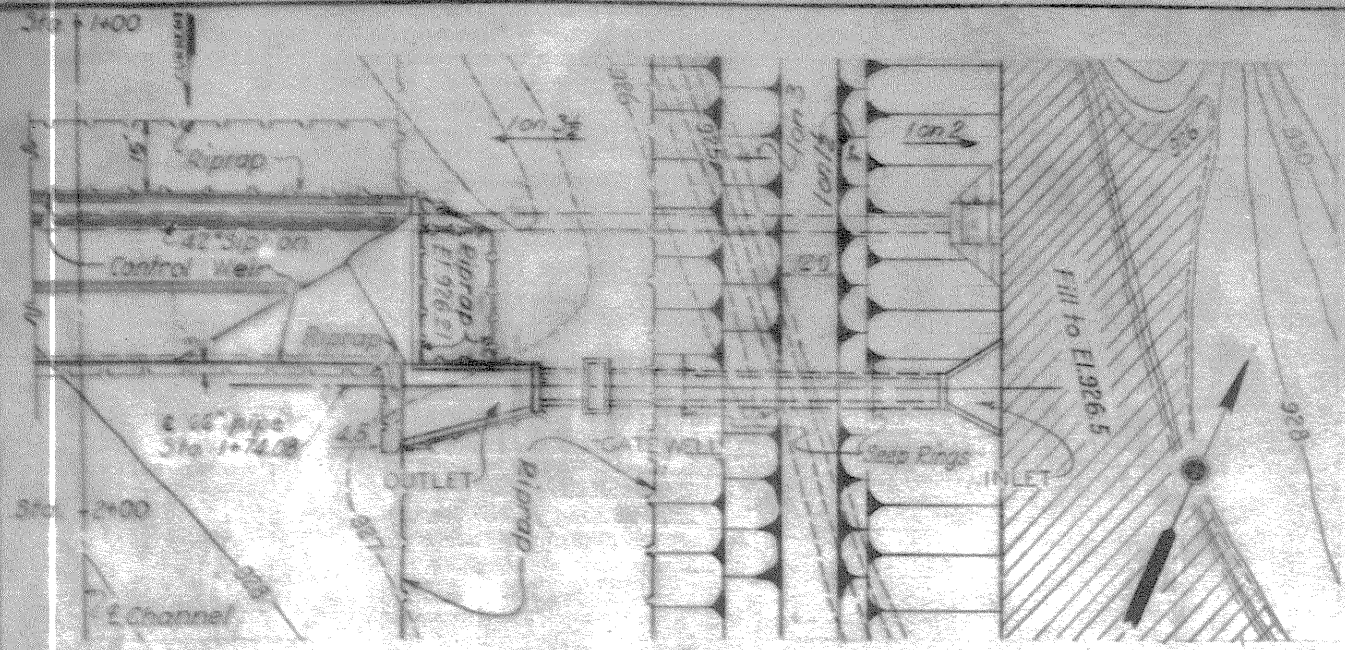


DETAIL B

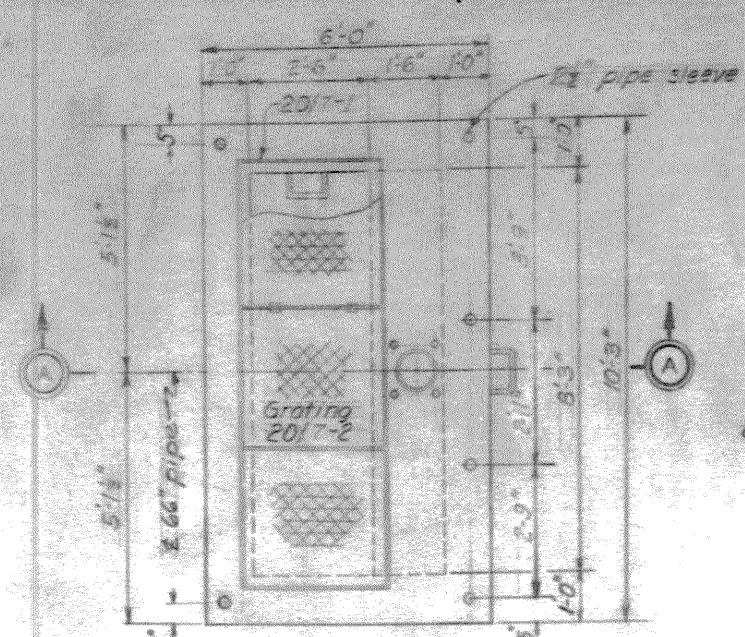


DETAIL A

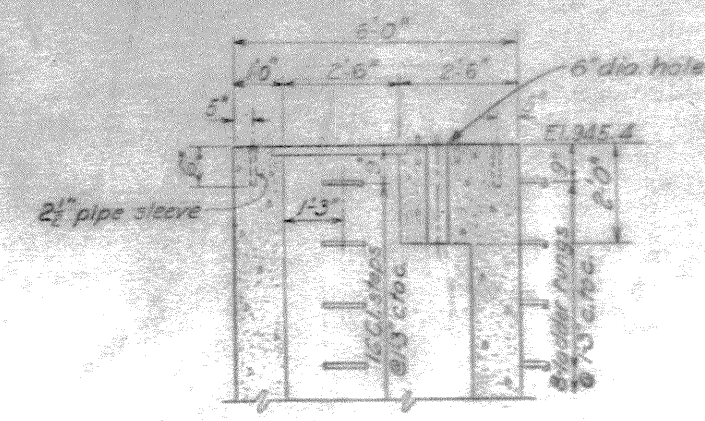
SCALE: 3"=1'-0"



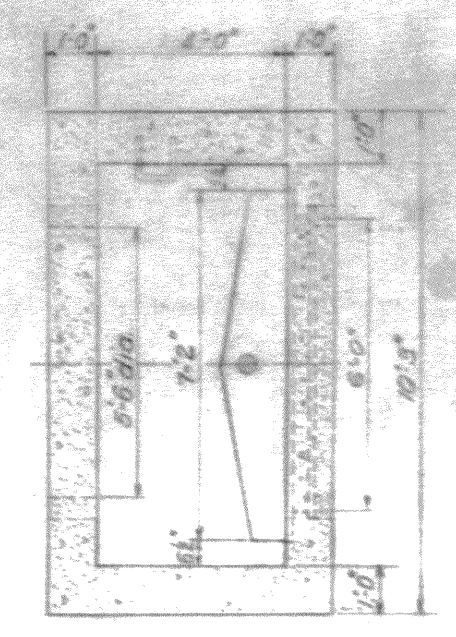
PLAN
SCALE: 1/4\"/>



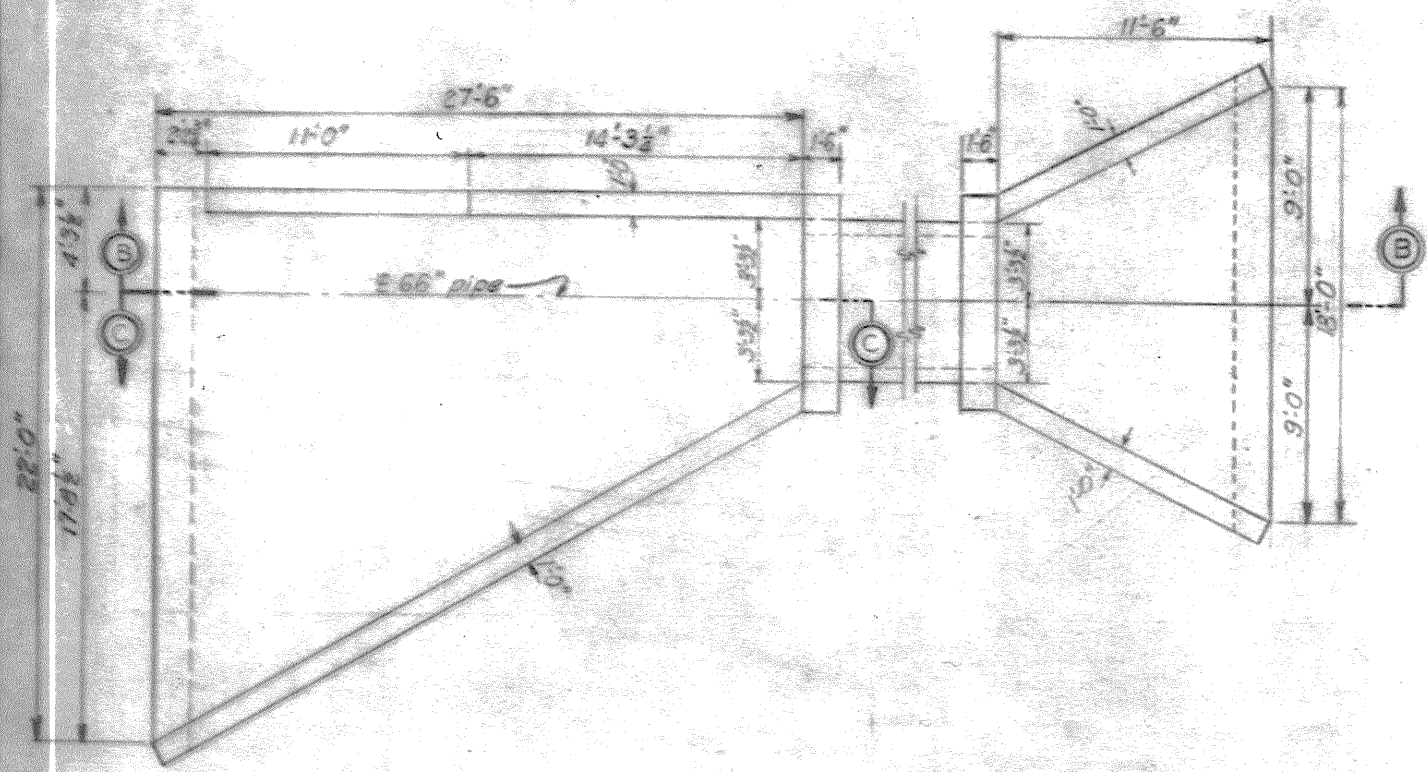
GATEWELL PLAN AT ELEV 945.4
SCALE: 1/4\"/>



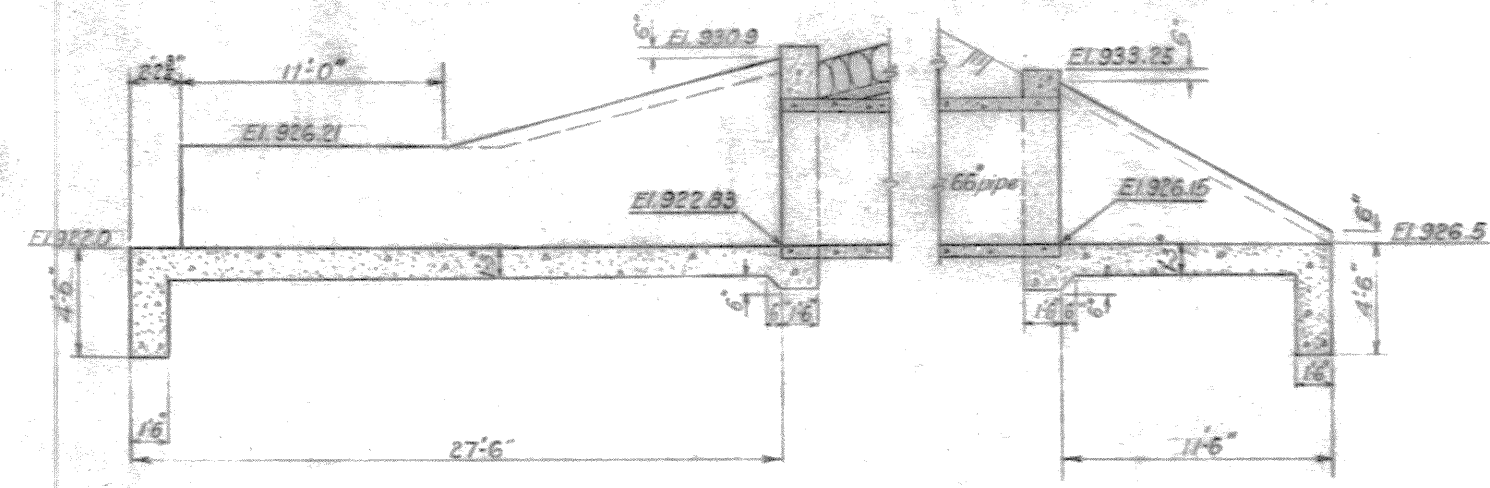
SECTION A-A
SCALE: 1/4\"/>



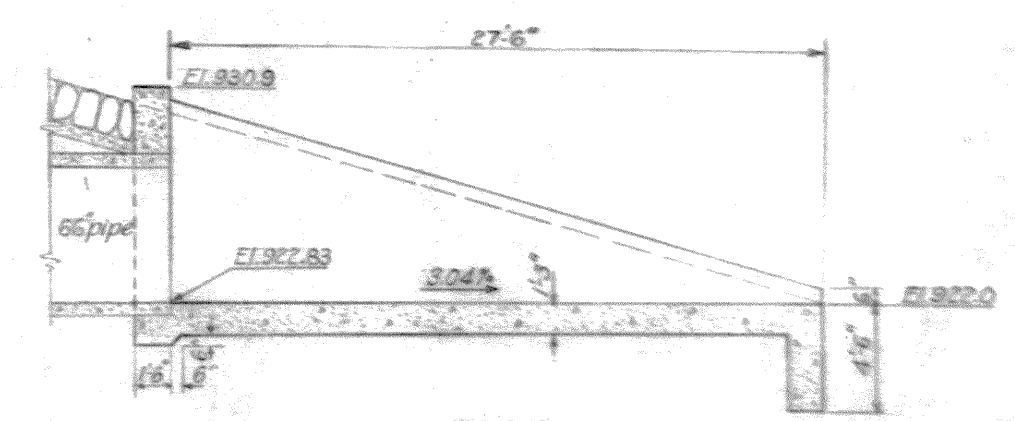
GATEWELL PLAN AT ELEV 932.0
SCALE: 1/4\"/>



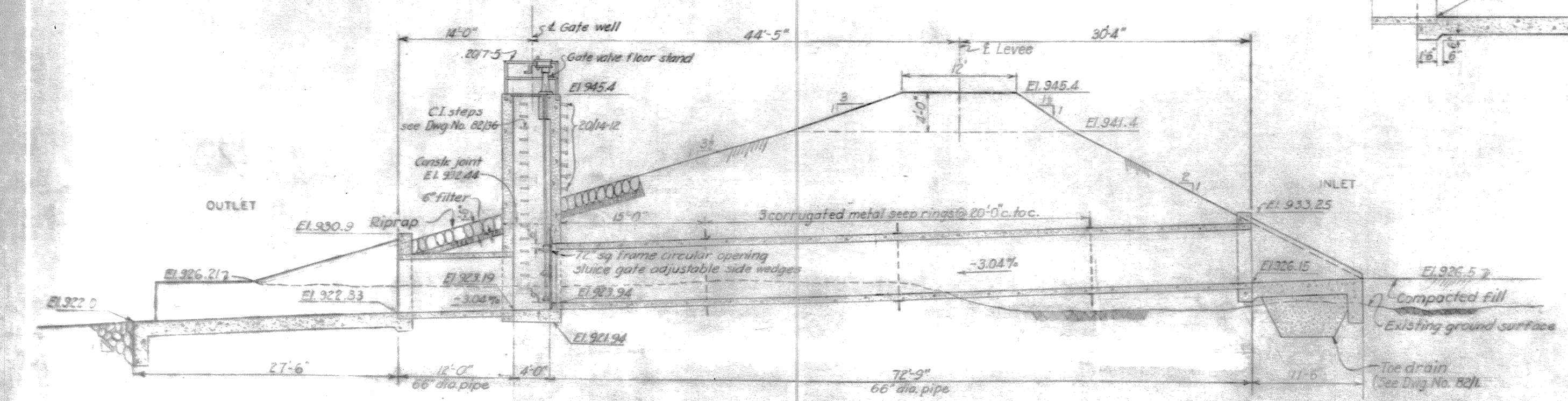
PLAN OF INLET AND OUTLET STRUCTURES
SCALE: 1/4\"/>



SECTION B-B
SCALE: 1/4\"/>



SECTION C-C
SCALE: 1/4\"/>



SECTION ON E OF PIPE CULVERT
SCALE: 1/4\"/>

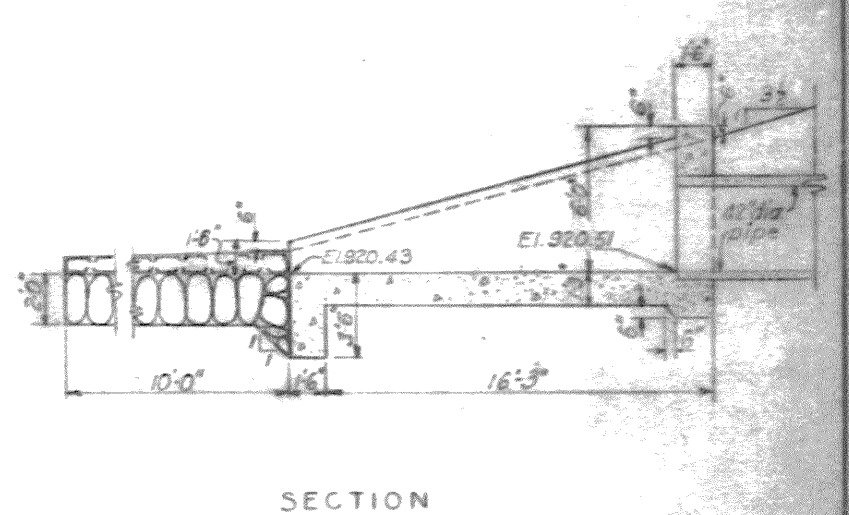
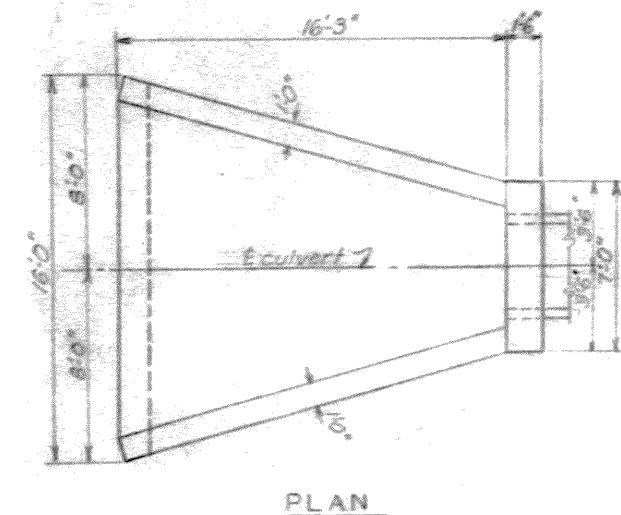
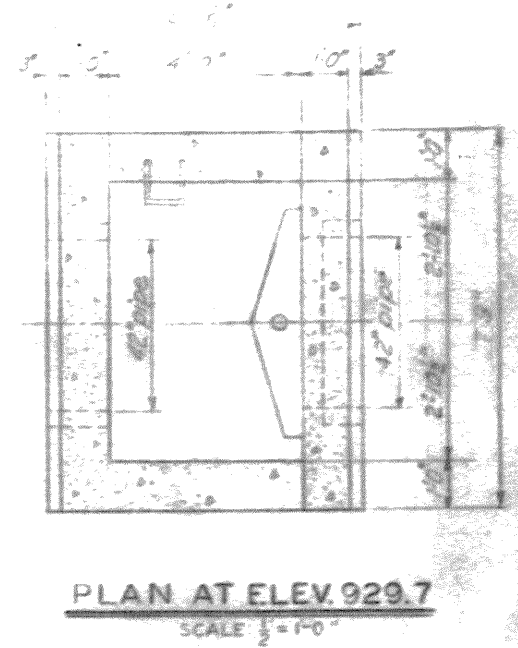
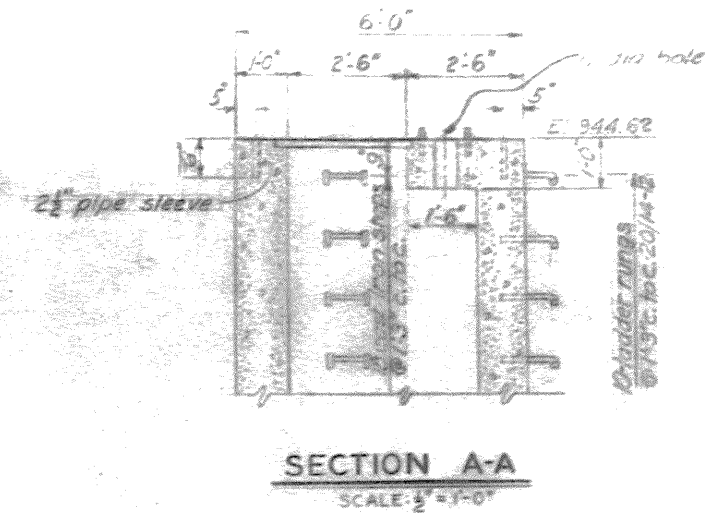
NOTES

- For masonry notes, see Dwg. No. 2011.
- For general plan, see Dwg. No. 1611.
- For details of control weir, see Dwg. No. 2011.
- For reinforcing details, see Dwg. No. 2011.
- For details of seep rings, see Dwg. No. 6011.
- For structural steel details, see Dwg. No. 2017.
- For details of 42\"/>

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: E.W.H.	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 66\"/>
TRACED BY:	
CHECKED BY: N.A.B. & C.E.R.	
APPROVED BY: <i>[Signature]</i> CHIEF ENGINEER	
DATE: OCT. 1948	
SCALE: 1/4\"/>	

WORK AS CONSTRUCTED

WORK AS CONSTRUCTED



For masonry notes, see Dwg. No. 20/j.
For general plan, see Dwg. No. 16/2.
For reinforcing details, see Dwg. No. 20/c.
For details of sleepers and head wall,
see Dwg. No. 20/i.
For structural steel details, see Dwg. No. 20/7.



DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: E. W. M. TRACED BY: CHECKED BY: R. J. B. & S. S. SUBMITTED BY: <i>[Signature]</i> CIVIL ENG. DIV.	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 42' CULVERT & GATE WELL - STA. 25+70 MASONRY DETAILS
APPROVED: <i>[Signature]</i> CIVIL ENG. ASST.	APPROVED: <i>[Signature]</i> COL. C. E. DISTRICT ENGINEER
APPROVED FOR: _____ DATE: _____	DATE: OCT. 1946 SCALE: 1" = 1'-0" SPEC. NO. _____ DRAWING NUMBER 0271-PM2-2-20/5 SHEET 14 OF 60

REINFORCING SCHEDULE

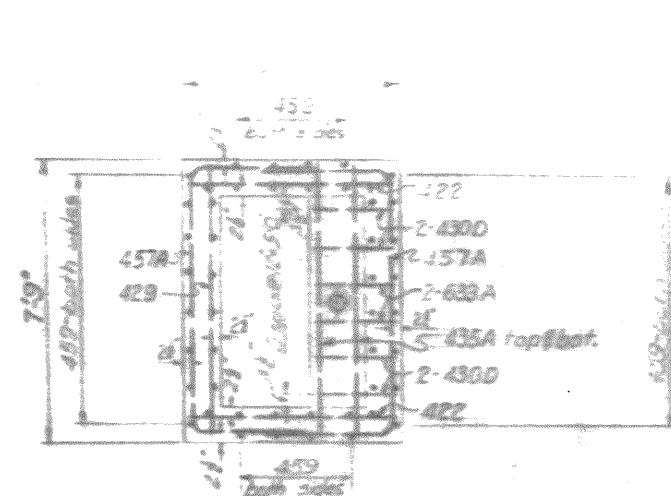
MARK	SECTION	LENGTH IN	DIAGRAM	N	WT	TOTAL WT.
422	10	10		32	2.7	89
424	10	10		32	3.67	117
426A	10	10		6	4.0	64
427A	10	10		2	4.51	9
427B	10	10		2	4.51	9
428	10	10		8	4.94	150
428A	10	10		2	4.84	10
428B	10	10		2	4.84	10
430A	10	10		18	5.01	90
430B	10	10		2	5.01	10
430C	10	10		8	5.01	40
430D	10	10		4	5.01	20
430E	10	10		2	5.01	10
432A	10	10		2	5.34	11
432B	10	10		2	5.34	11
434A	10	10		17	5.65	89
443	10	10		46	7.15	330
443A	10	10		12	7.15	56
449A	10	10		13	8.15	106
457A	10	10		32	9.52	305
459	10	10		48	9.85	473
480A	10	10		8	7.82	88
533A	10	10		8	9.15	88
581A	10	10		8	15.3	117
625A	10	10		4	9.35	36
627A	10	10		4	10.14	41
633A	10	10		2	12.35	25
634A	10	10		8	12.77	102
				Total		2495
400	10	1370			2.67	918
426	10	6'-6"		6	4.34	26
426A	10	6'-6"		3	4.34	13
429	10	7'-3"		4	4.80	19
437A	10	9'-3"		14	6.18	87
460	10	15'-0"		2	10.02	20
462	10	15'-6"		2	10.35	21
469	10	17'-3"		16	11.52	184
472	10	18'-0"		4	12.02	48
474	10	18'-6"		4	12.36	49
626	10	6'-6"		4	9.75	39
627A	10	6'-9"		4	10.14	41
629	10	7'-3"		4	10.89	44
631A	10	7'-9"		4	11.64	47
				Total		1556

NOTES

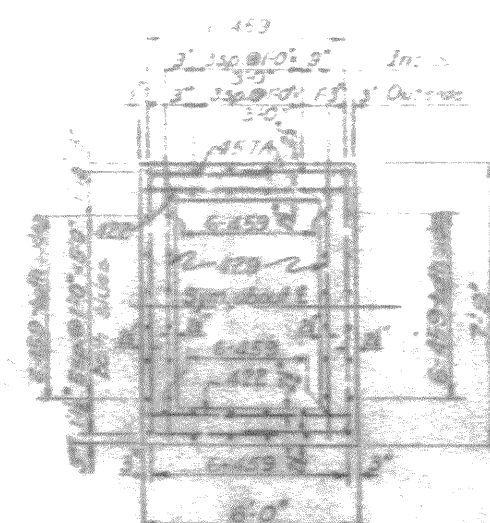
For masonry notes and explanation of reinforcing code see Dwg. No. 20/1
 For general plan, see Dwg. No. 16/2
 For masonry details, see Dwg. No. 20/5

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 42" CULVERT & GATE WELL - STA. 25+70 REINFORCING DETAILS	
DESIGNED BY: CHKD. & RECD.	TRACED BY:	APPROVED BY: <i>[Signature]</i>	DATE: OCT 1949
CHECKED BY: HJB & CWS	APPROVED BY: <i>[Signature]</i>	SCALE: 1/4" = 1'-0"	SHEET NO.: 0271-FM2-2-20/6
DATE:		DRAWING NUMBER:	

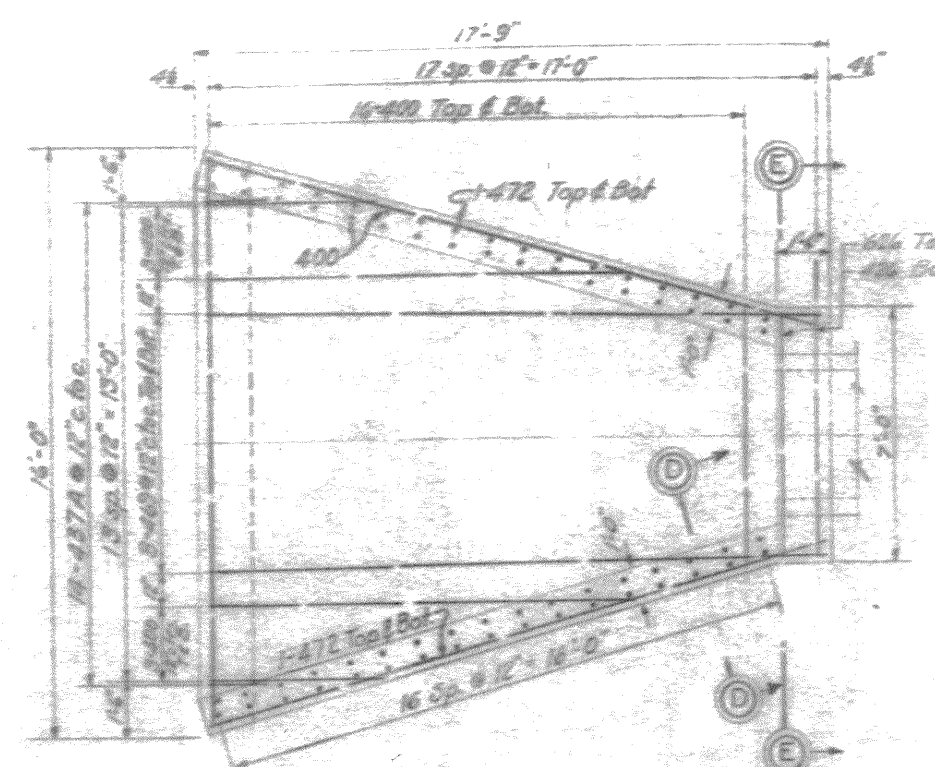
WORK AS CONSTRUCTED



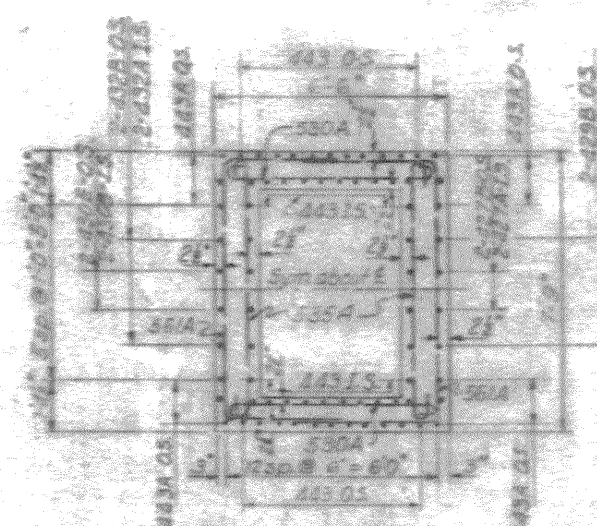
PLAN



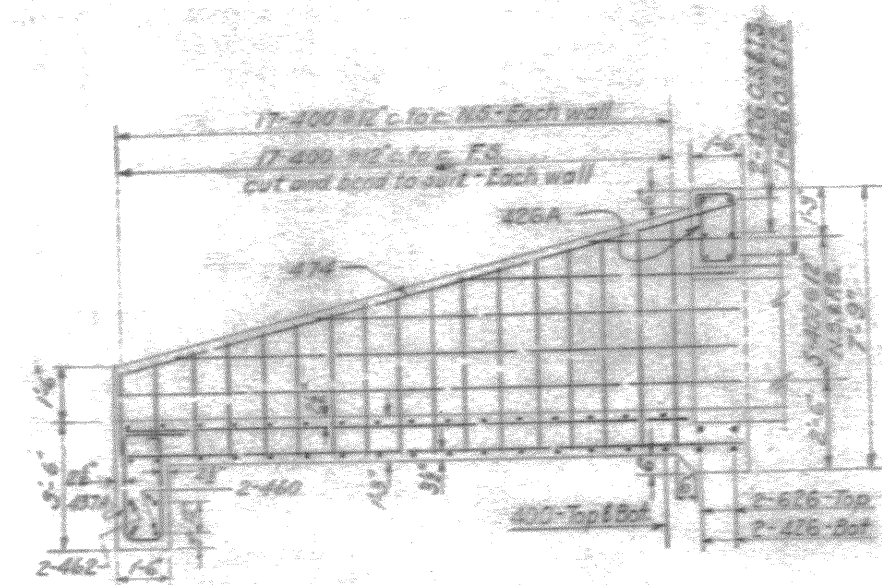
SECTION A-A



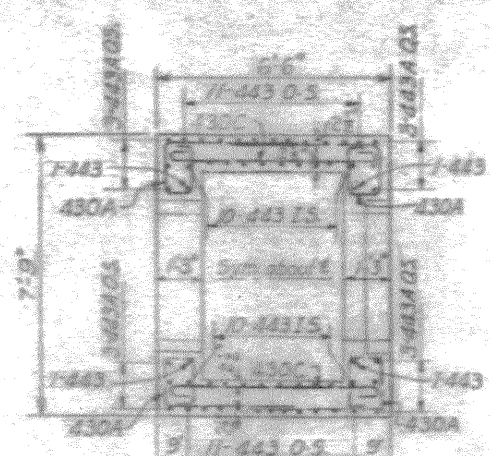
PLAN

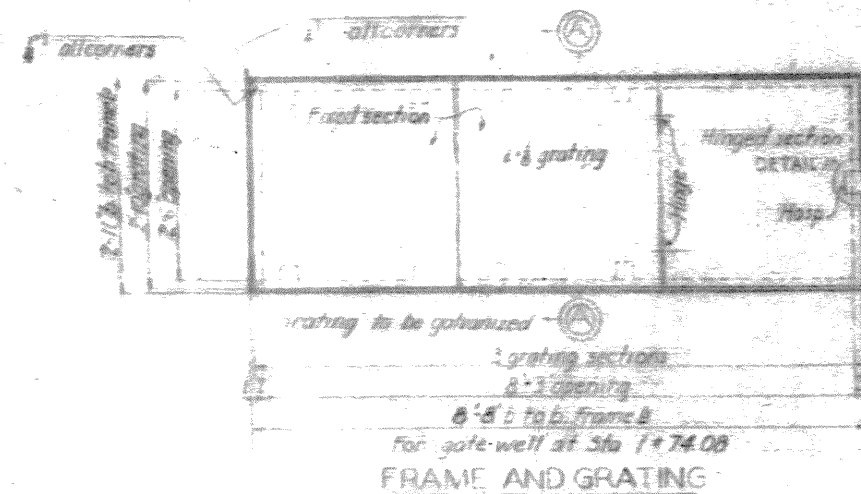


SECTION B-B

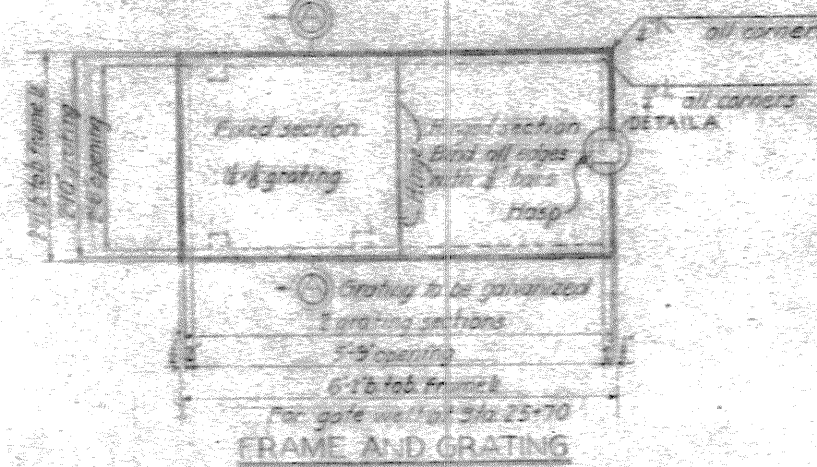


SECTIONAL ELEVATION

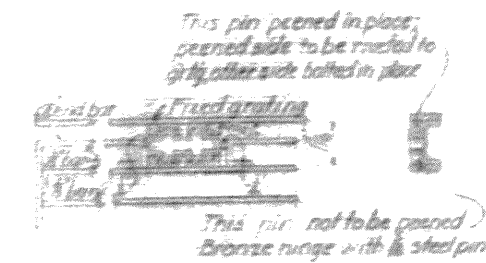
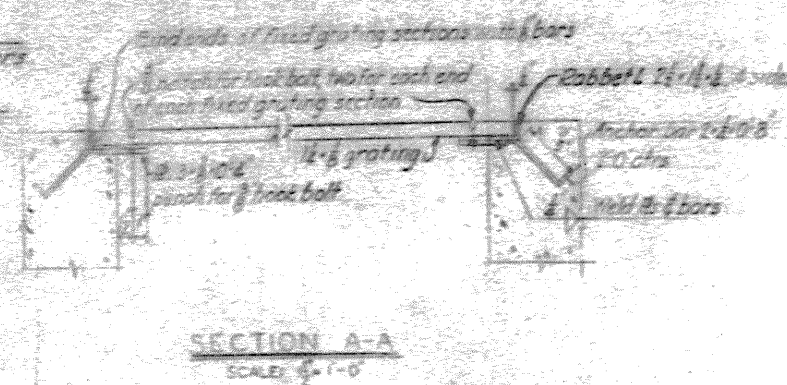




STRUCT. STEEL MARK 20/7-1 MAKE 1 WT. 101 LBS.
GRATING MARK 20/7-2 MAKE 1 24 SQ. FT.

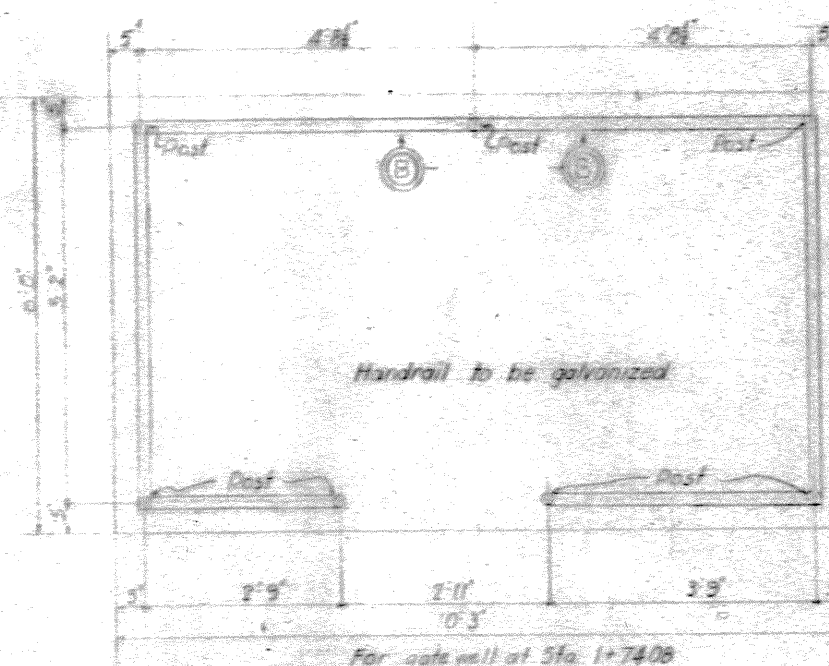
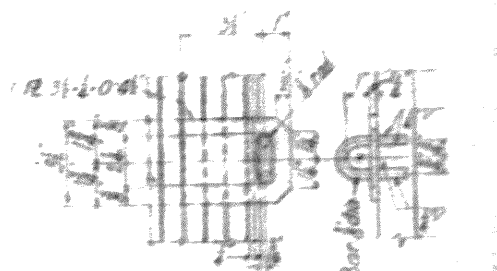


STRUCT. STEEL MARK 20/7-1 MAKE 1 WT. 77.6 LBS.
GRATING MARK 20/7-4 MAKE 1 17 SQ. FT.

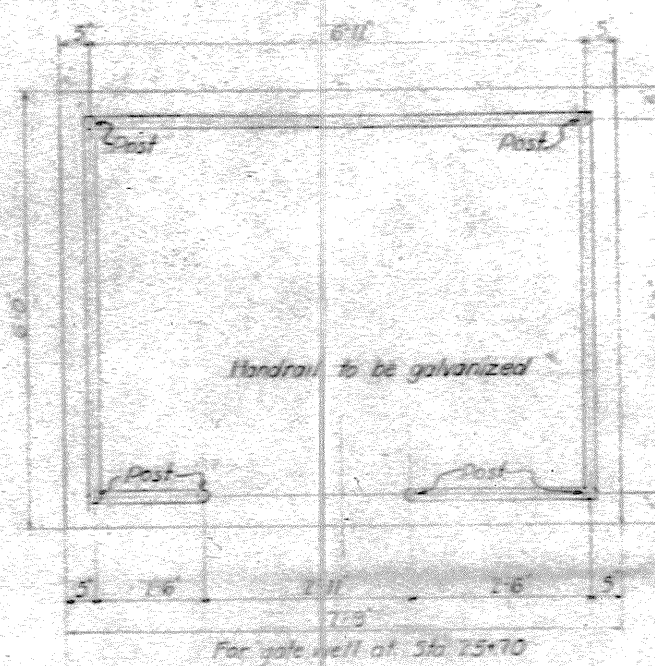


HINGE DETAIL
SCALE 1/2"=1'-0"

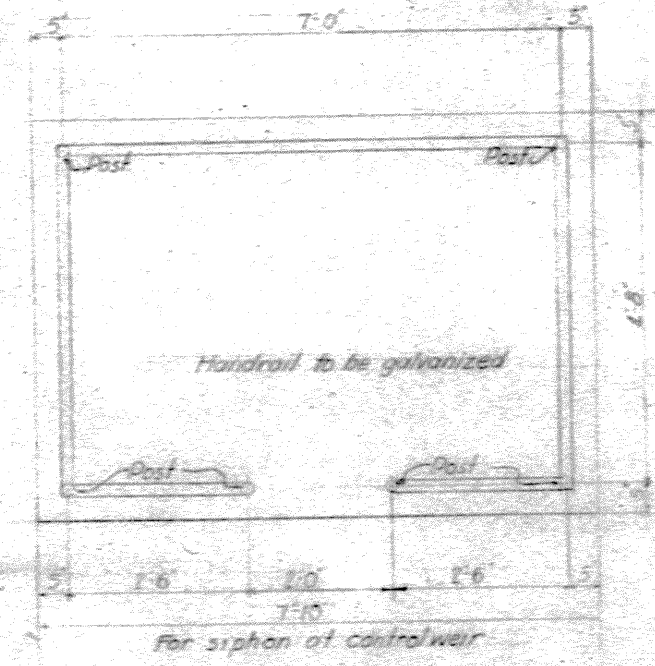
HOOK BOLT DETAIL
SCALE 1/2"=1'-0"



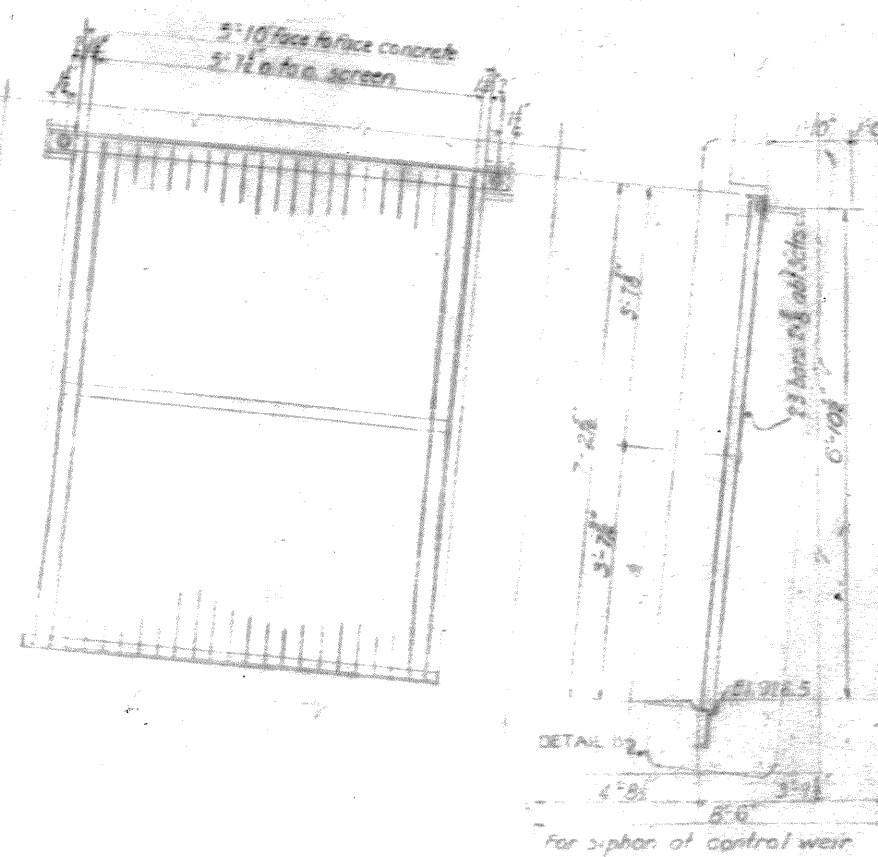
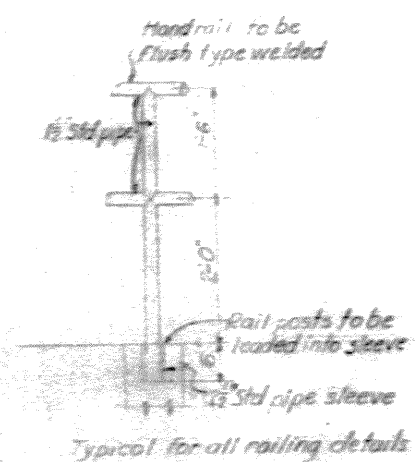
STEEL PIPE MARK 20/7-5 MAKE 1



STEEL PIPE MARK 20/7-5 MAKE 1

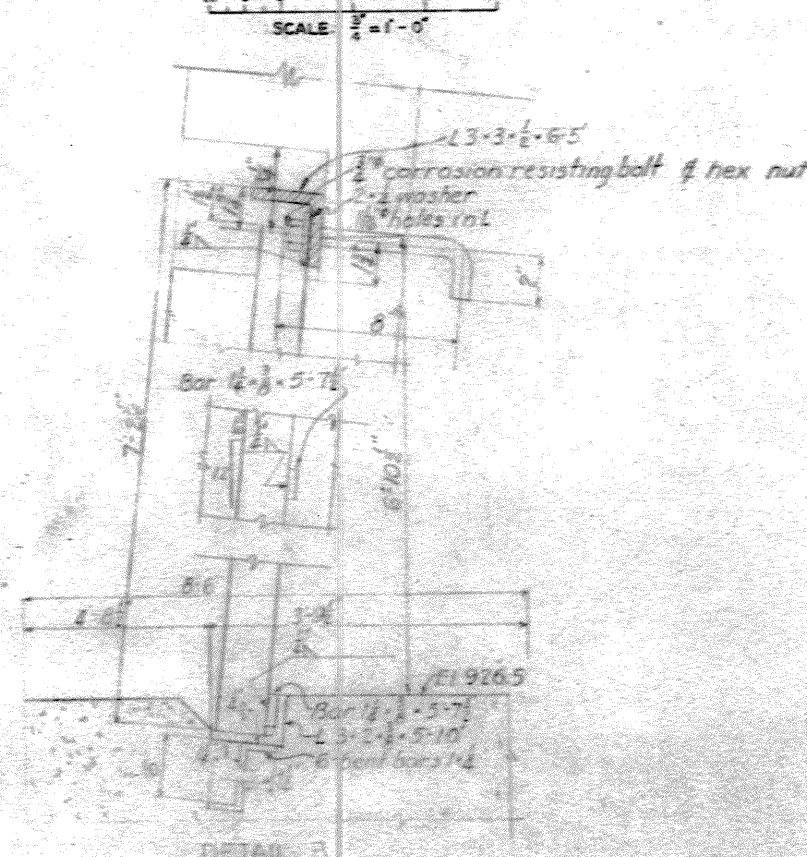


STEEL PIPE MARK 20/7-7 MAKE 1



BAR SCREEN

STEEL WITH CORROSION-RESISTING METAL
WT. COVER RESISTING METAL 2.7 LBS.
WT. STRUCT. STEEL 334 LBS.



NOTES

For masonry details of Siphon at Control Weir see Dwg. No. 20/2
For masonry details of Gate Well at Sta 1+74.00 see Dwg. No. 20/3
For masonry details of Gate Well at Sta 25+70 see Dwg. No. 20/5

DESIGN	DATE	REVISIONS AS CONSTRUCTED	MARK
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY	A. W. S.	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 GATE WELLS & 42' SIPHON MISCELLANEOUS METAL DETAILS	
TRACED BY		DATE OCT 1940	
CHECKED BY	A. A. G.	SCALE 1/2"=1'-0" SPEC. NO.	
SUBMITTED BY		DRAWING QUANTITY	
APPROVED		0271-PM2-2-20/7	
CHIEF OF DISTRICT		DATE 10 OF 00	
APPROVED FOR		WORK AS CONSTRUCTED	



REINFORCING SCHEDULE

15-FOOT WALL

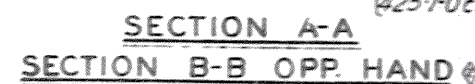
MARKS	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT WT	TOTAL WT
419A	2#	4'-9"		42	3.17	133
422A	2#	5'-6"		42	3.67	154
426A	2#	6'-6"		42	4.34	166
432	2#	8'-0"		28	5.34	150
451	2#	2'-9"		42	8.52	358
481	2#	20'-3"		46	13.53	622
529A	2#	7'-3"		42	7.56	318
551	2#	12'-9"		42	13.30	559
551A	2#	12'-9"		42	13.30	559
581	2#	20'-3"		64	21.12	1352
620A	2#	5'-0"		42	7.51	313
642A	2#	10'-6"		42	15.77	662
740A	2#	10'-0"		42	20.44	858
770A	2#	17'-6"		42	35.77	1502
551A	2#	12'-9"				

Total 7724

STOP LOG HOUSE


417A	2#	4'-3"		12	2.84	34
417B	2#	4'-3"		40	2.84	114
419A	2#	4'-9"		106	3.17	336
425A	2#	6'-3"		12	4.18	50
426	2#	6'-6"		6	4.18	33
429A	2#	7'-3"		4	4.34	17
437A	2#	8'-6"		40	4.84	154
434	2#	8'-6"		4	5.51	22
437A	2#	9'-3"		40	5.68	227
438	2#	9'-6"		40	6.18	247
448	2#	12'-0"		6	6.35	50
455	2#	13'-9"		47	8.02	377
478	2#	19'-6"		47	9.19	432
481	2#	20'-3"		12	13.03	156
407	2#	1'-9"		84	13.53	1136
413	2#	3'-3"		6	1.17	7
411	2#	2'-9"		12	2.17	26
				4	1.84	7

Total 3467

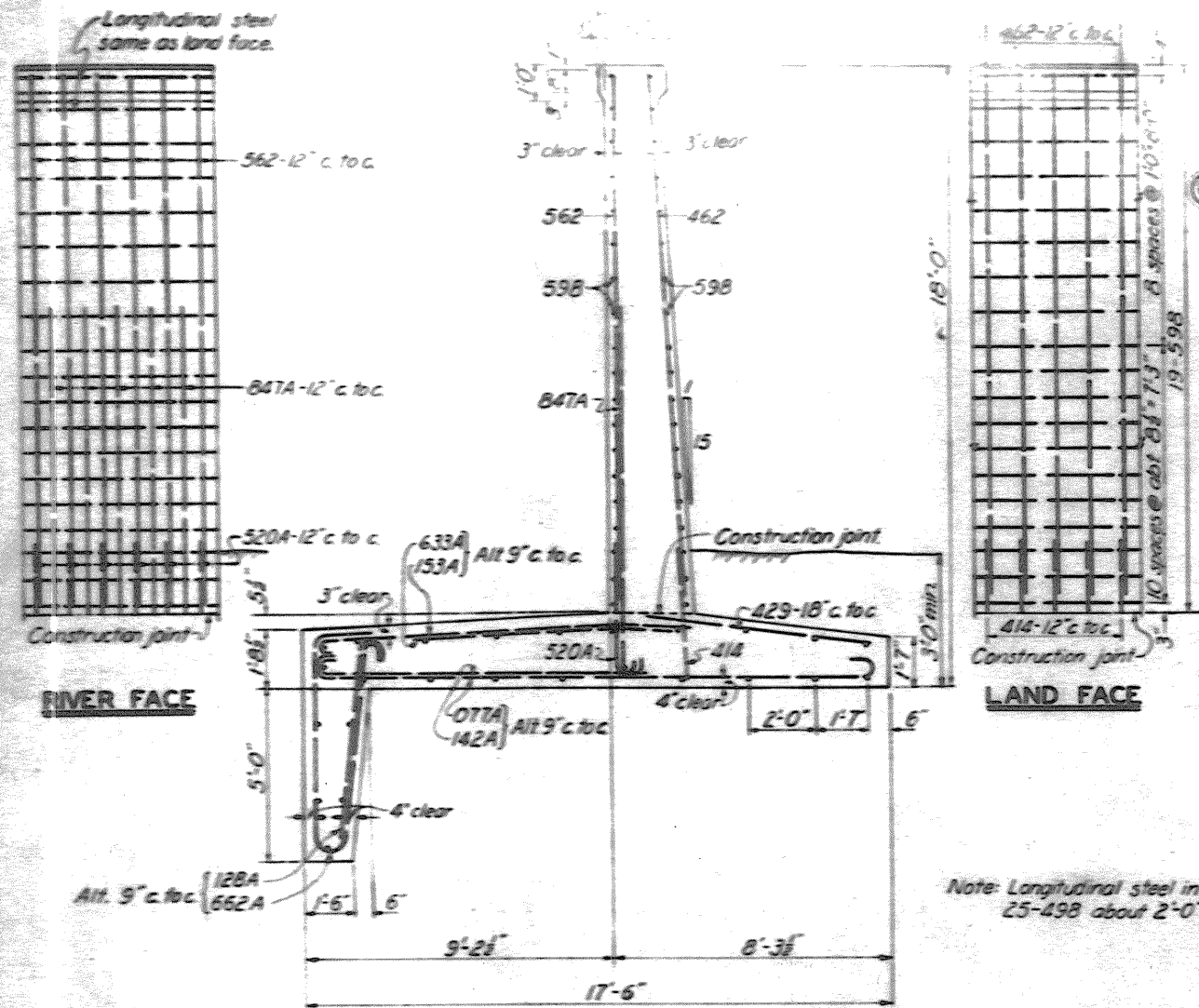


NOTES

For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1.
For structural steel details, see Dwg. No. 20/14.
For details of 16 and 20 foot walls, core walls and water stops, see Dwg. No. 20/9.

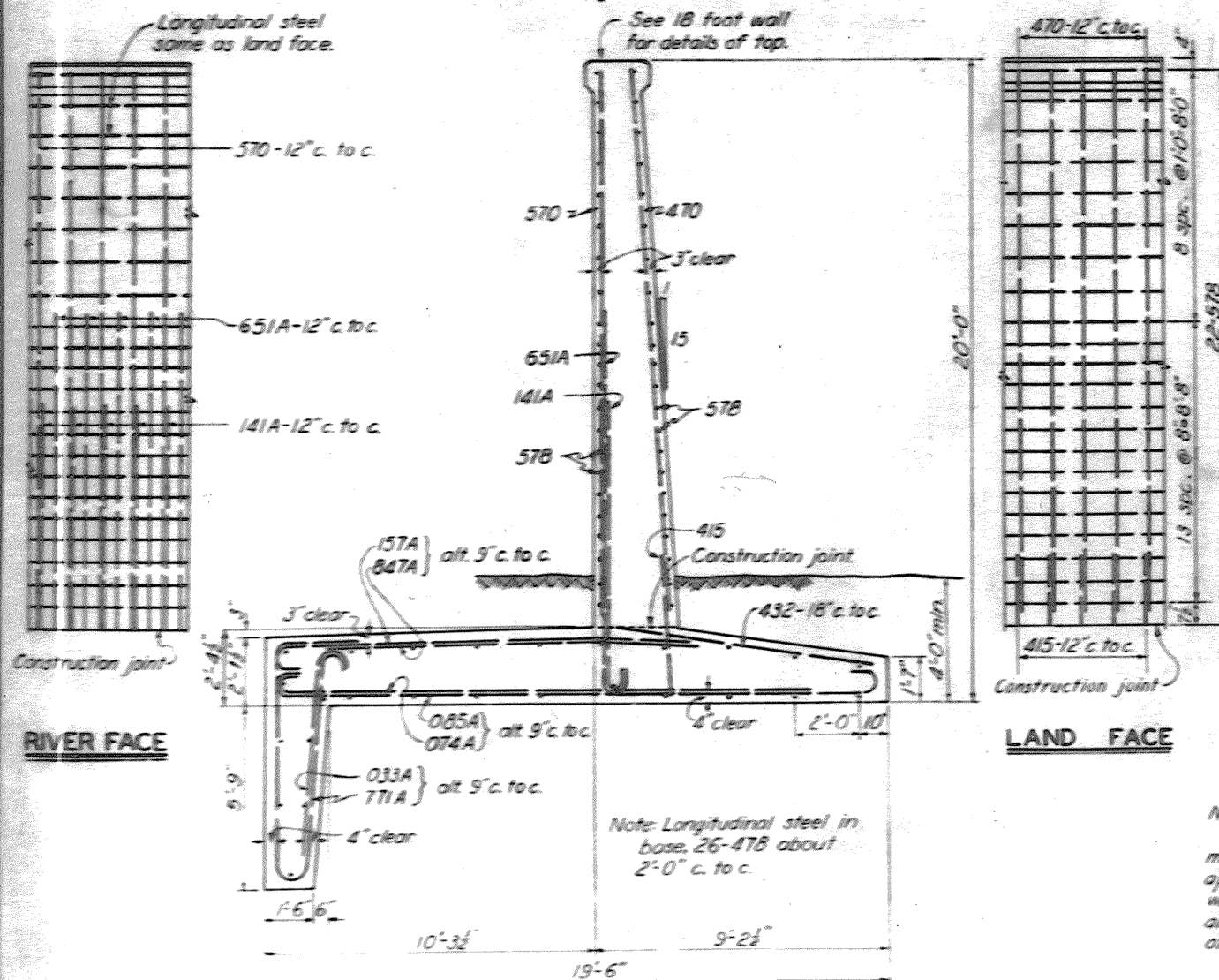
	1-20-51	RAISED FLOOR OF STORAGE HOUSE 1'-0"	K.S.
	5-10-49	REVISED LOCATION PLAN FOR RAISING OF GATE BILLS	A.B.
REVISION	DATE	DESCRIPTION	BY
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: E.S.M.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 TYPICAL WALL SECTION & STOP LOG STORAGE HOUSE	
TRACED BY: J.F.C.			
CHECKED BY: G.O.S.			
SUBMITTED BY: <i>[Signature]</i>			
APPROVED: <i>[Signature]</i>			
COL. G. E. DUFFY, DISTRICT ENGINEER		DATE:	OCT. 1940
APPROVED FOR:		SCALE: 1" = 1'-0"	SPEC. NO.
DATE:		DRAWING NUMBER 0271-PM2-2-20/B SHEET 17 OF 20	

WORK AS CONSTRUCTED

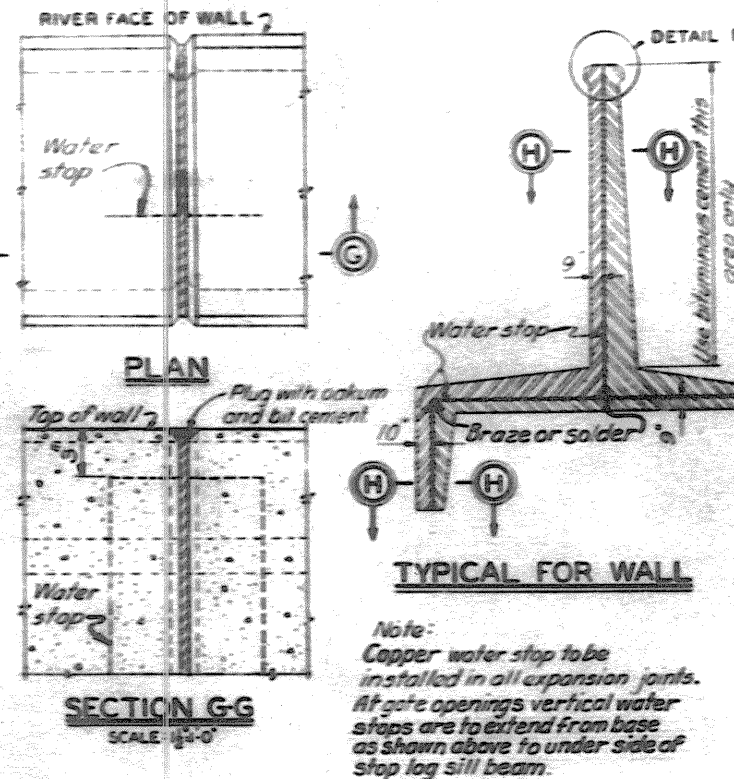


18 FOOT WALL

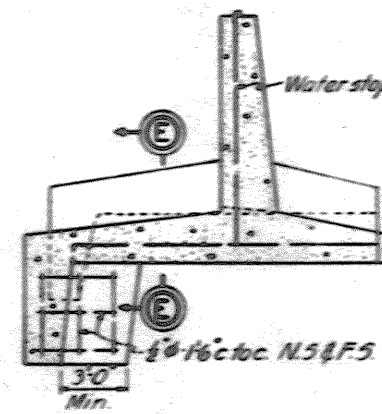
SCALE: 1/4" = 1'-0"



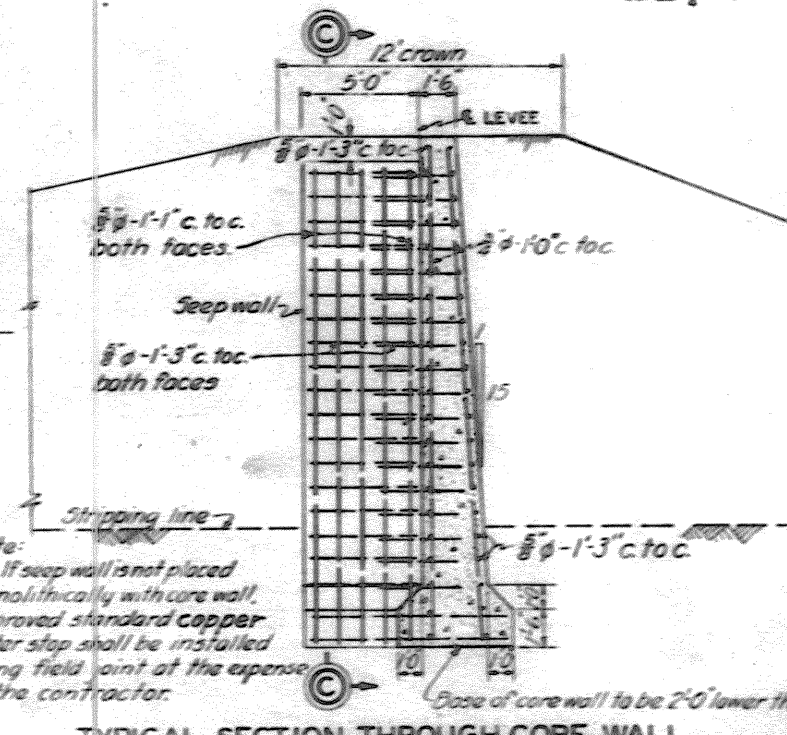
20-FOOT WALL



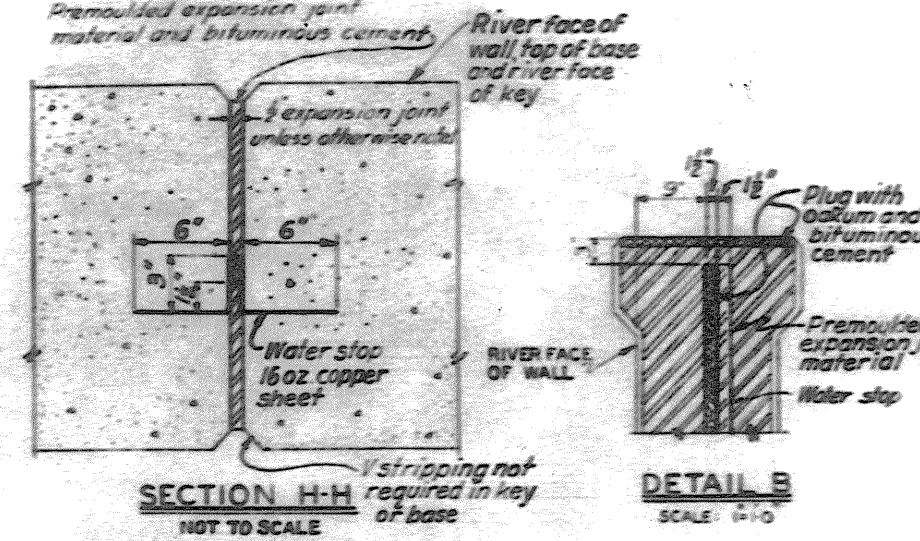
SECTION E-E



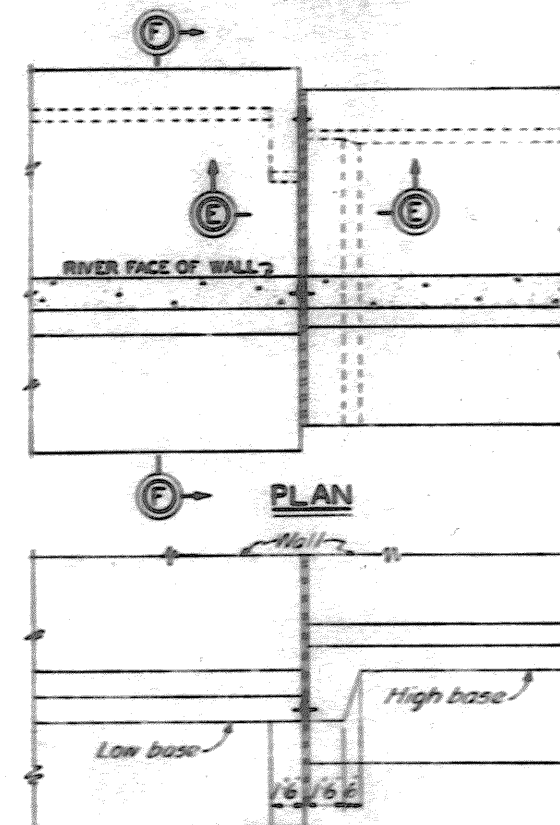
DETAILS AT EXPANSION JOINT FOR CHANGE IN FOOTING ELEVATIONS



TYPICAL SECTION THROUGH CORE WALL

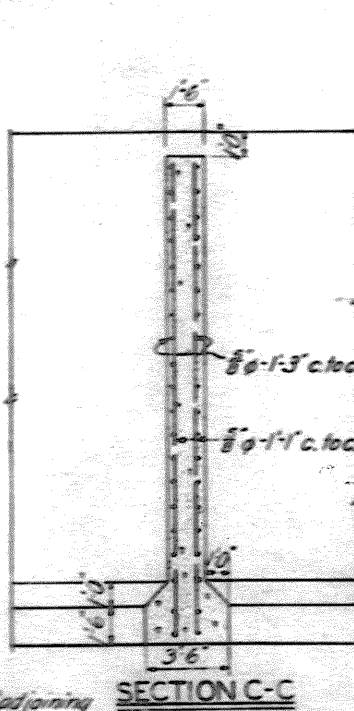


WATER STOP DETAILS



ELEVATION

PLAN



SECTION C-C

REINFORCING SCHEDULE

18-FOOT WALL

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT WT	TOTAL WT
414	1/2"	3'-6"		25	2.34	59
429	1/2"	7'-3"		17	4.84	82
462	1/2"	15'-6"		25	10.35	259
498	1/2"	24'-6"		25	16.37	409
520A	1/2"	4'-0"		25	4.17	104
562	1/2"	15'-6"		25	16.17	404
598	1/2"	24'-6"		38	25.85	971
633A	1/2"	8'-3"		17	12.39	211
662A	1/2"	15'-6"		17	23.28	396
847A	1/2"	11'-9"		25	31.37	784
128A	1/2"	7'-0"		17	23.60	405
142A	1/2"	10'-6"		17	35.70	607
153A	1/2"	13'-3"		17	45.05	766
OT7A	1/2"	19'-3"		17	102.28	1739
				Total		7186

20-FOOT WALL

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT WT	TOTAL WT
415	1/2"	3'-9"		20	2.51	50
432	1/2"	8'-0"		14	5.34	75
470	1/2"	17'-6"		20	11.69	234
478	1/2"	19'-6"		26	13.03	339
570	1/2"	17'-6"		20	18.25	365
578	1/2"	19'-6"		44	20.34	895
651A	1/2"	12'-9"		20	19.15	383
771A	1/2"	17'-9"		14	36.28	508
847A	1/2"	11'-9"		13	31.37	408
141A	1/2"	10'-3"		20	34.85	697
157A	1/2"	14'-3"		14	48.45	678
Q33A	1/2"	8'-3"		13	43.83	570
Q74A	1/2"	18'-6"		13	58.29	758
Q85A	1/2"	21'-3"		14	112.90	1581
				Total		8061

20-FOOT CORE WALL

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT WT	TOTAL WT
517	1/2"	4'-3"		26	4.43	115
519	1/2"	4'-9"		26	4.95	129
533	1/2"	8'-3"		4	8.60	34
574	1/2"	18'-6"		10	19.30	193
578	1/2"	19'-6"		32	20.34	651
678	1/2"	19'-6"		40	29.29	1172
				Total		2294

22-FOOT CORE WALL

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT WT	TOTAL WT
517	1/2"	4'-3"		30	4.43	133
519	1/2"	4'-9"		30	4.95	149
534	1/2"	8'-6"		4	8.87	35
578	1/2"	19'-6"		36	20.34	732
582	1/2"	20'-6"		10	27.38	274
686	1/2"	21'-6"		40	32.29	1292
				Total		2556

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
OFFICE OF THE DISTRICT ENGINEER
HUNTINGTON, W. VA.

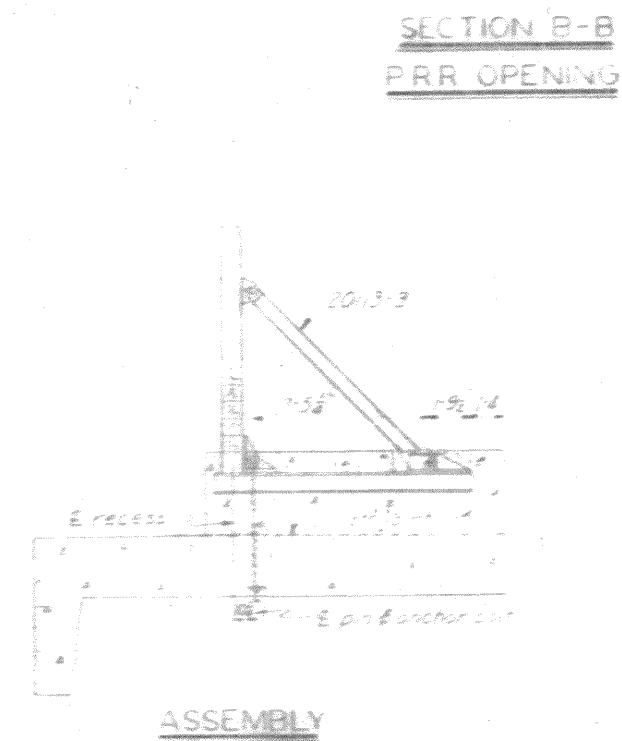
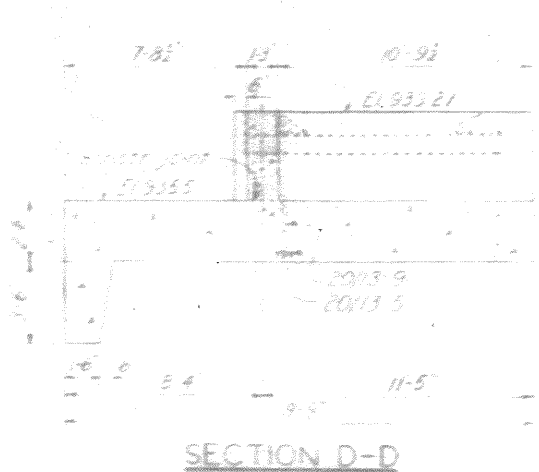
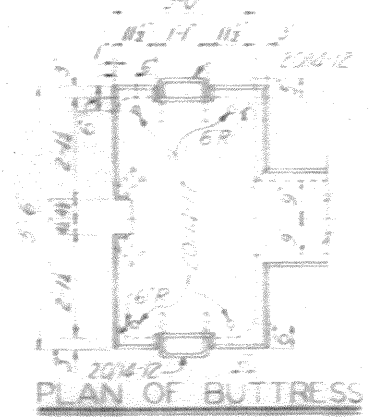
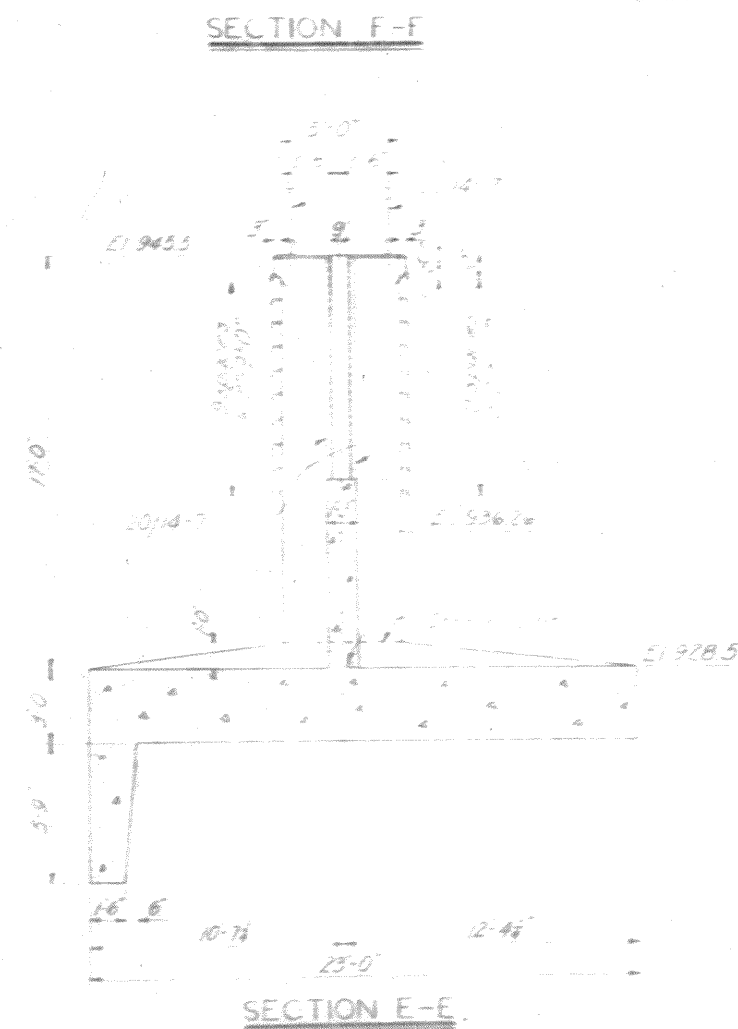
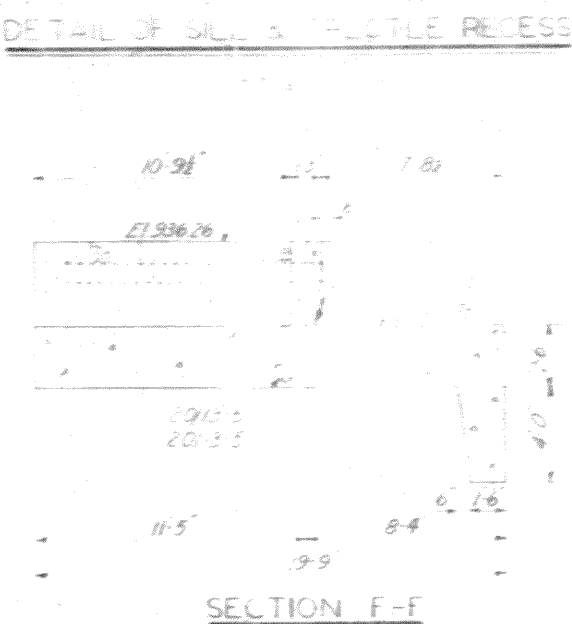
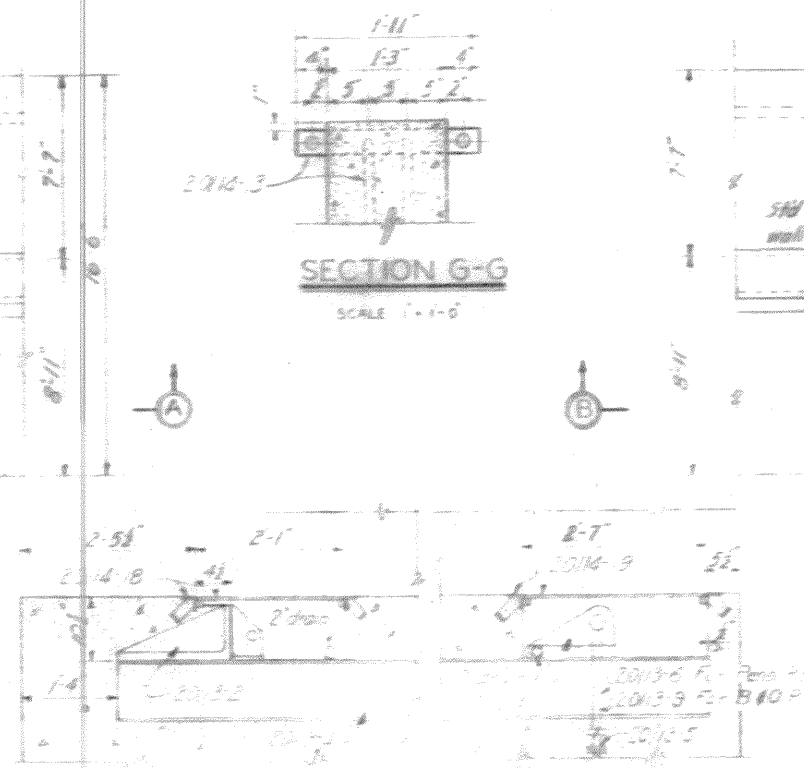
**TUSCARAWAS RIVER
LOCAL PROTECTION PROJECT
MASSILLON, OHIO
SECTION 2, UNIT 2
TYPICAL WALL SECTIONS
& MISCELLANEOUS WALL DETAILS**

DESIGNED BY: E.S.M.
CHECKED BY: B.T.C.
APPROVED BY: G.O.S.
DATE: OCT. 1948

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

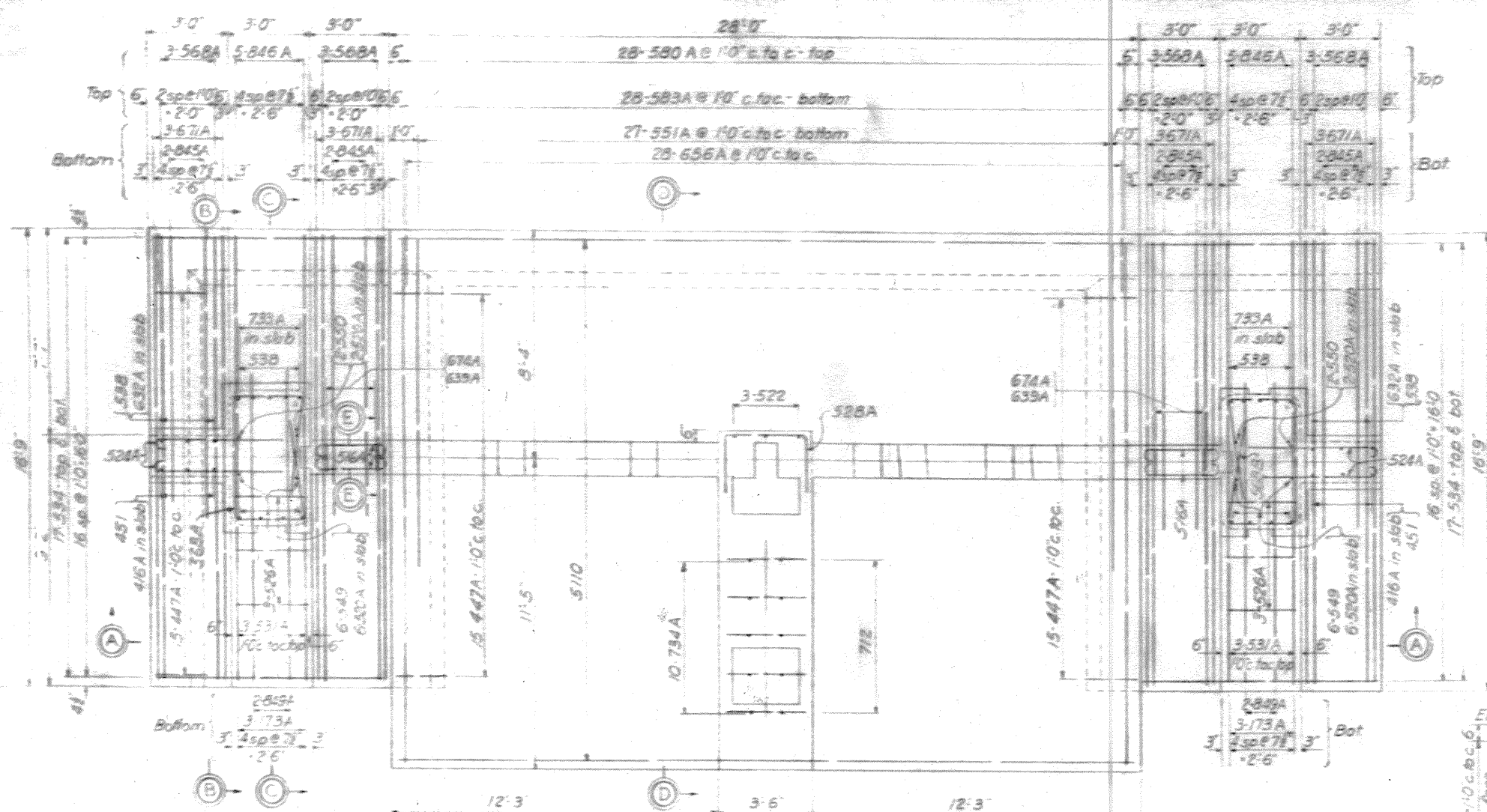
0271-PM2-2-20/9

WORK AS CONSTRUCTED

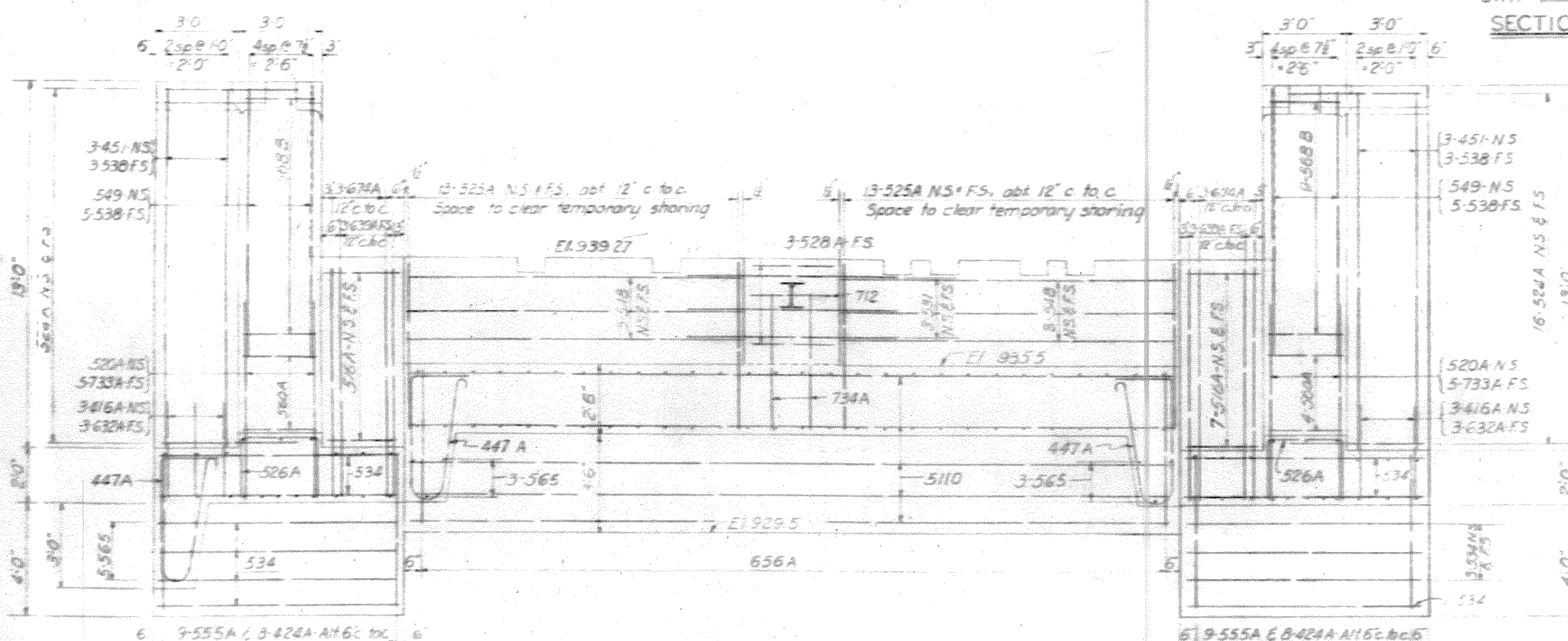


1. Number of exposed pipes unless otherwise noted
 For reinforced steel see Ins nos 2011 & 2012
 For steel pipe see Ins nos 2013 & 2014
 For galv. encl. pipe see Ins no 2015
 For 1" or 1 1/2" pipe see Ins no 2016
 For 2" or 3" pipe see Ins nos 2017 & 2018
 For 4" or 6" pipe see Ins nos 2019 & 2020

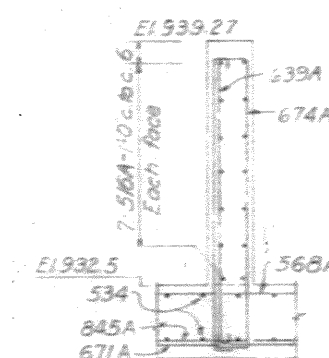
CORPS OF ENGINEERS U. S. ARMY OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: _____ R.G.P.	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 B. & O. R.R. & PENNA. R.R. OPENINGS MASONRY DETAILS
TRACED BY: _____	
CHECKED BY: _____ GOS - R.J.B.	
SUBMITTED BY: _____ D.W. SINGH	
APPROVED: _____ C. E. C.	
COL. C. E. DISTRICT ENGINEER	
APPROVED FOR: _____	DATE: _____ MARCH 1949
SCALE: 1" = 10'	SPEC. NO. _____
DRAWING NUMBER: 0271-PM2-2-20/10.1 SHEET 10 OF 10	

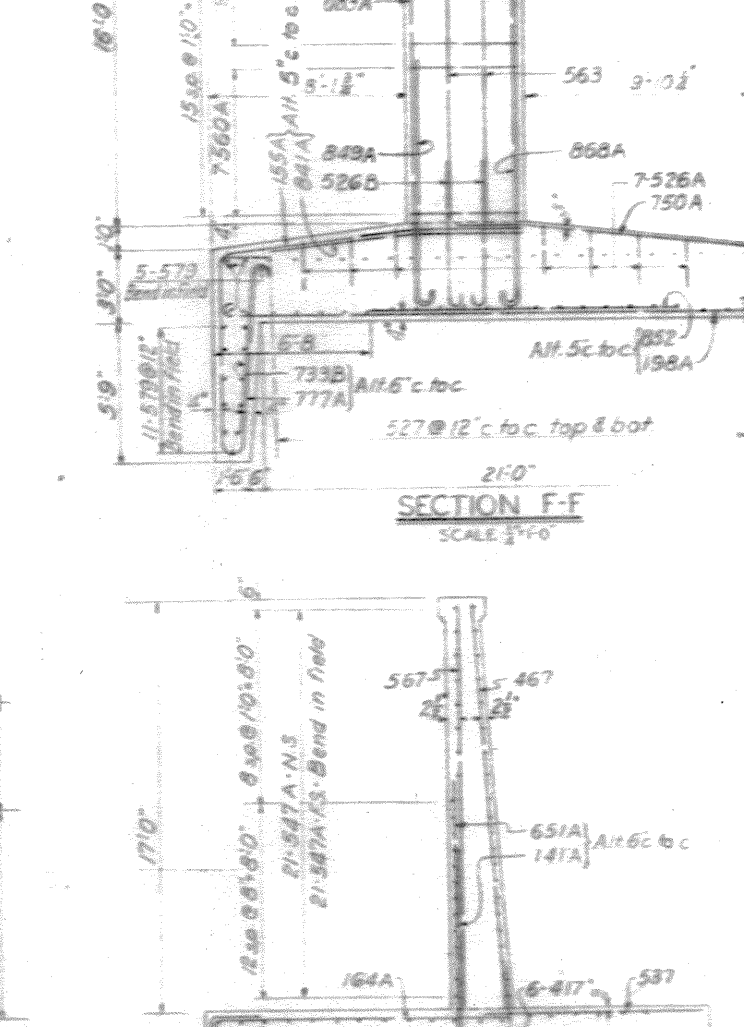
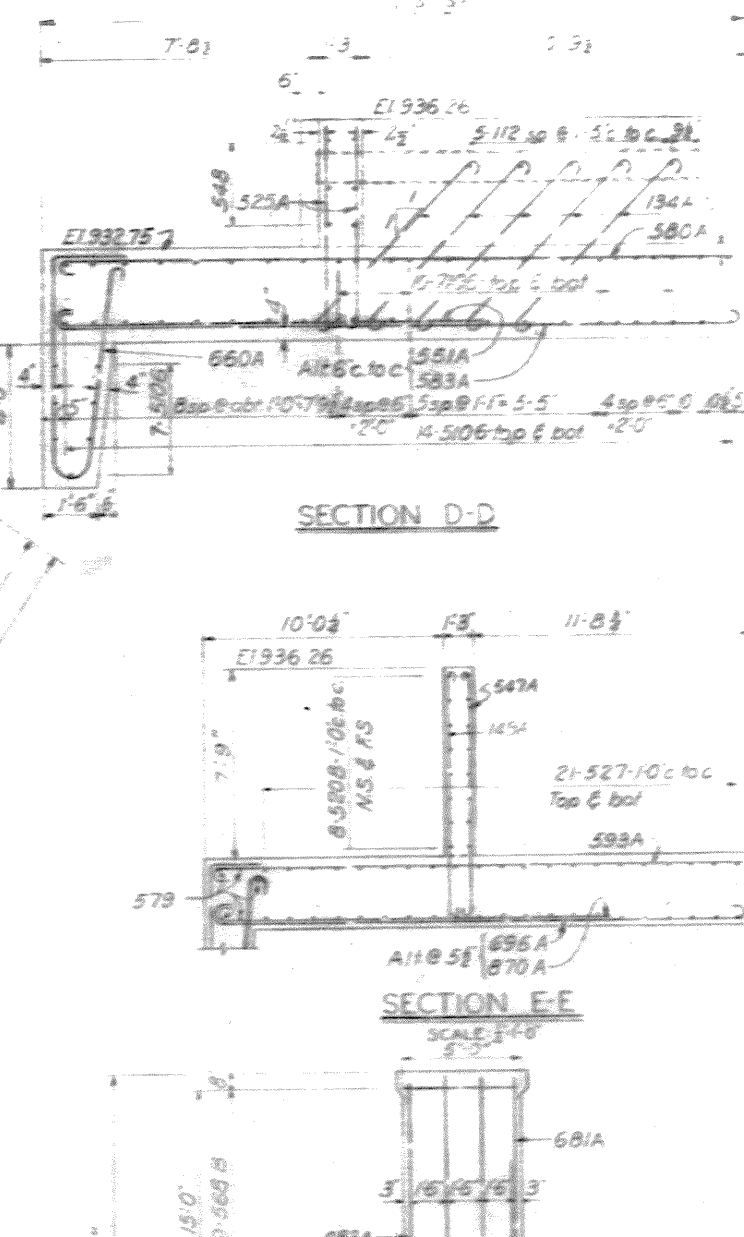


PLAN



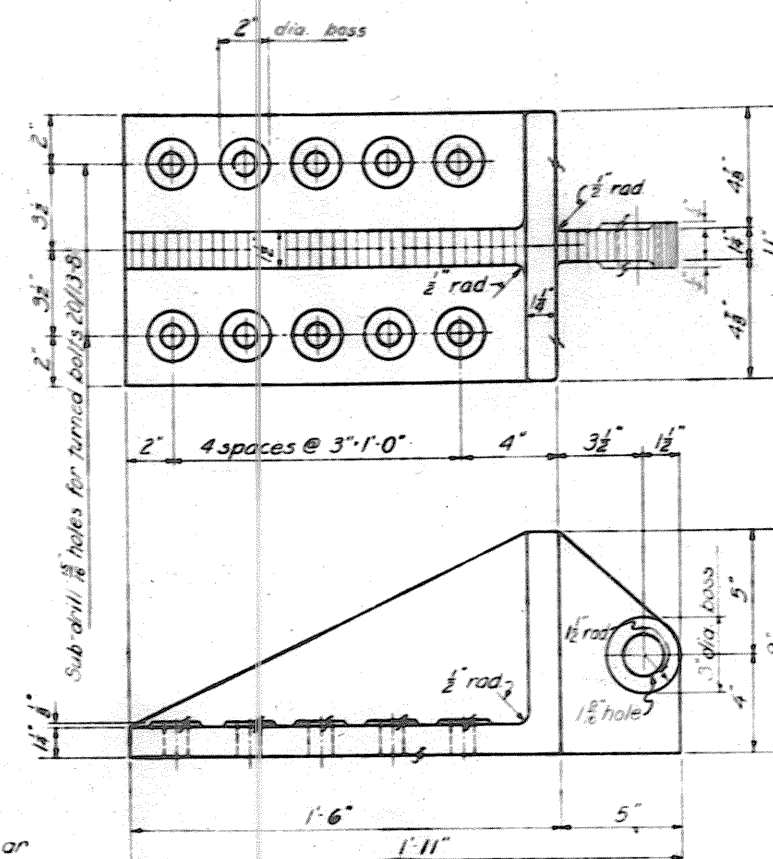
SECTION A-A





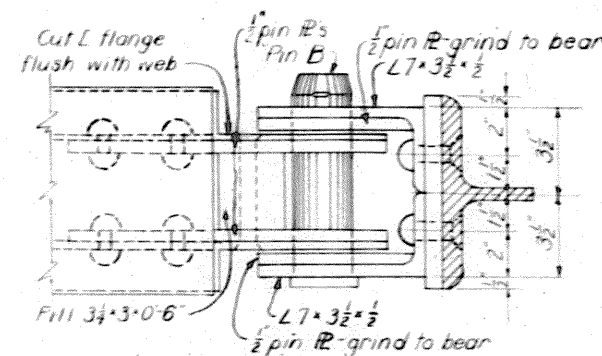
CORPS OF ENGINEERS U. S. ARMY OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DESIGN BY: E.S.W.	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PENNA. R.R. OPENING REINFORCING DETAILS
TRACED BY:	
CHECKED BY: GOS-CCM	
SUGGESTED BY: <i>[Signature]</i> CORP. ENG. DIV.	
APPROVED: <i>[Signature]</i> DIST. ENG. AGENT	APPROVED: <i>[Signature]</i> COL. C. E. BROWN, DIST. ENGR.
APPROVED FOR: _____ _____ DATE: _____	SCALE: 1"=1'-0" SHEET NO. _____ DRAWING NUMBER 0271-PM2-2-20/2.1 SHEET 21 OF 20

WORK AS CONSTRUCTED THIS DRAWING SUPERSEDES DWG. NO. 20/1



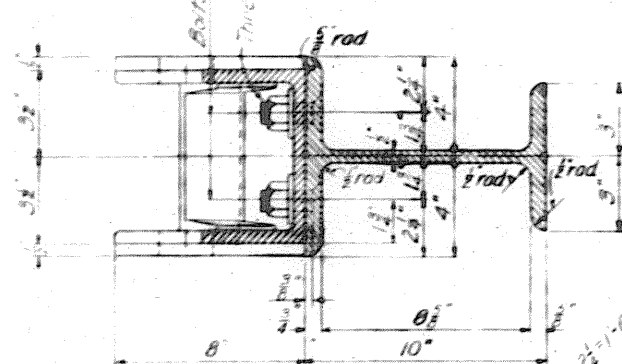
THRUST CASTING

CAST STEEL MARK 20/13-2
 MAKE 2 WT. 130 LBS.
 SCALE 3'-1'-0"



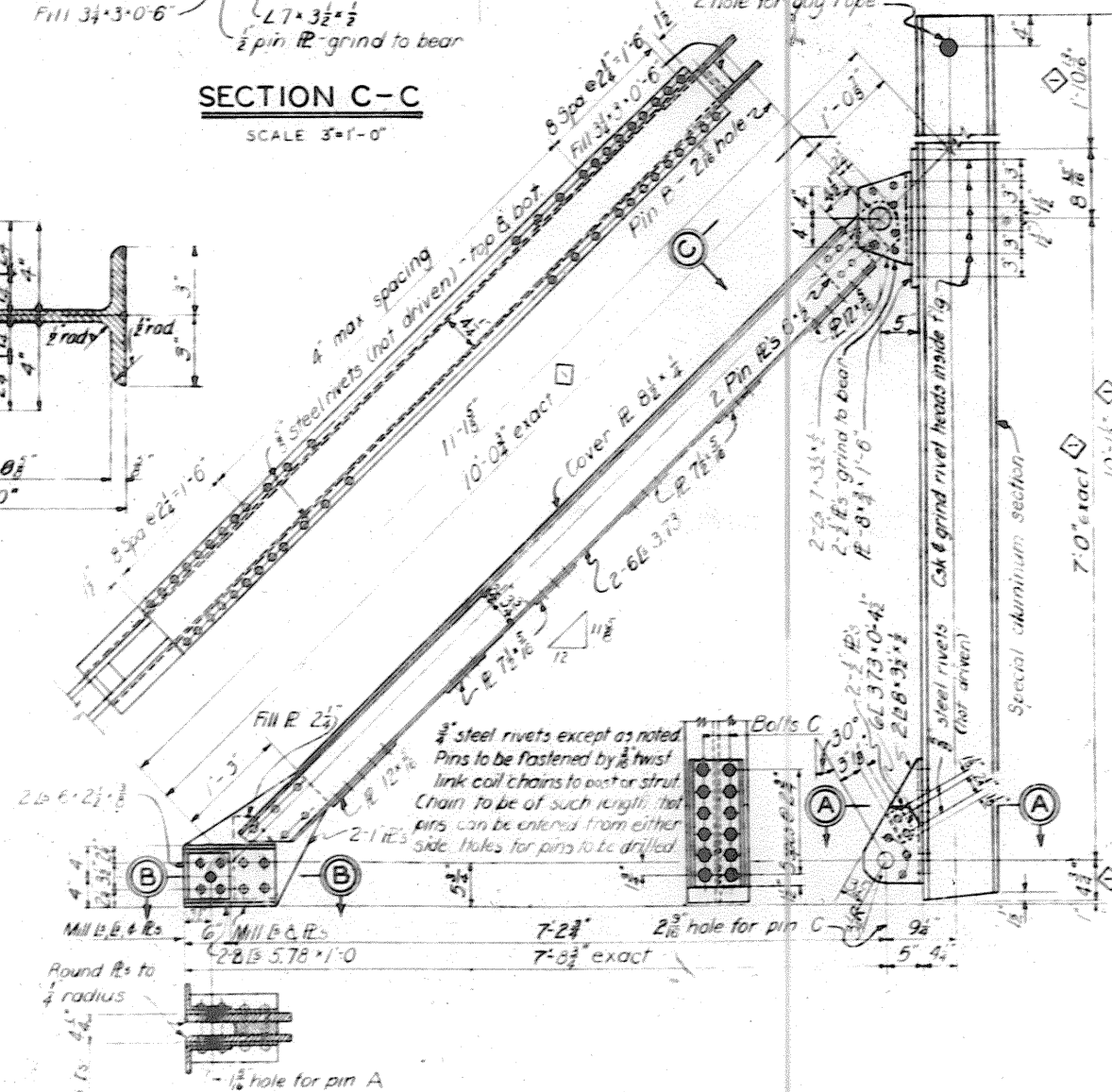
SCALE: 3-1-0

SCALE 3"=1'-0"



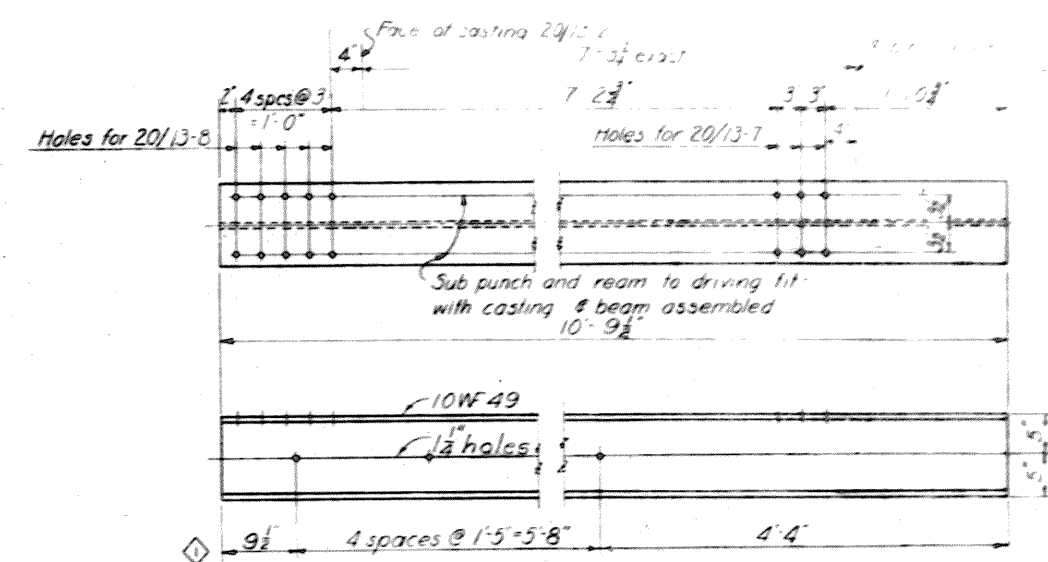
guy rope

SCALE: 3" = 1'-0"



TRESTLE

STRUCT ALUMINUM WITH CORR. RESISTING METAL & STEEL RIVETS
MARK 20/13-3 MAKE 2 ① WT. STRUCT. ALUMINUM 3980 LBS
WT CORR. RESISTING METAL 390 LBS WT RIVET STEEL 820 LBS

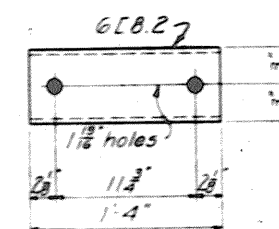


STRUCT STEEL MARK 20/13-4
MAKE 2 WT 526 LBS

STRUCT STEEL MARK 20/13-4
MAKE 2 WT 526 LBS

12' 6" 0" 3" 0" 1' 2'

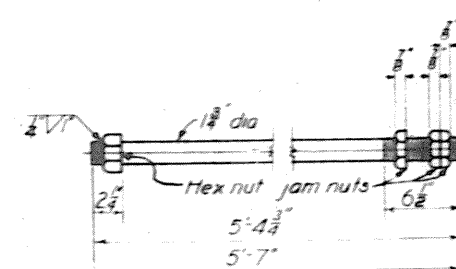
SCALE: 1" = 1'-0"



TURNED BOLT

STRUCT. STEEL MARK 20/13-5
① MAKE 2 WT. 107 LBS
SCALE 1 1/2" = 1'-0"

CORR. RESISTING METAL
 MARK 20/13-7 MAKE 12 WT. 18 LBS.
 MARK 20/13-8 MAKE 20 WT. 16 LBS.
 SCALE: 6"=1'-0"



Technical drawing of a shaft assembly. The shaft has a central section with a collar. Dimensions are given for three pins: Pin A, Pin B, and Pin C. The shaft diameter is 1" and the collar diameter is 1.5". The shaft length is 1.5". The collar length is 1.5". The shaft has a 1/2" thread at the end. The drawing includes the following dimensions:

- Pin A: 1" diameter, 1.5" length
- Pin B: 1" diameter, 1.5" length
- Pin C: 1" diameter, 1.5" length
- Collar: 1.5" diameter, 1.5" length
- Shaft: 1" diameter, 1.5" length
- Thread: 1/2" thread at the end of the shaft

Finish all over
 1/2" for Pin B
 1 1/2" for Pin A
 3/4" for Pin C

PIN

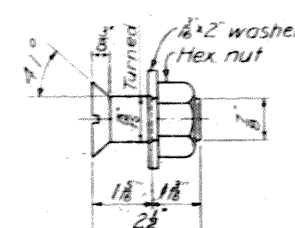
CORR RESISTING METAL

MARK 20/13-6 MAKE 2 WT. 48.0 LBS

MARK 20/13-9 MAKE 2 WT. 50.0 LBS

SCALE 1 1/2" = 1'-0"

CORR. RESISTING METAL
SCALE: 6" = 1'-0"



TURNED BOLT - C

CORR. RESISTING METAL
SCALE: 6" = 1'-0"

NOTES

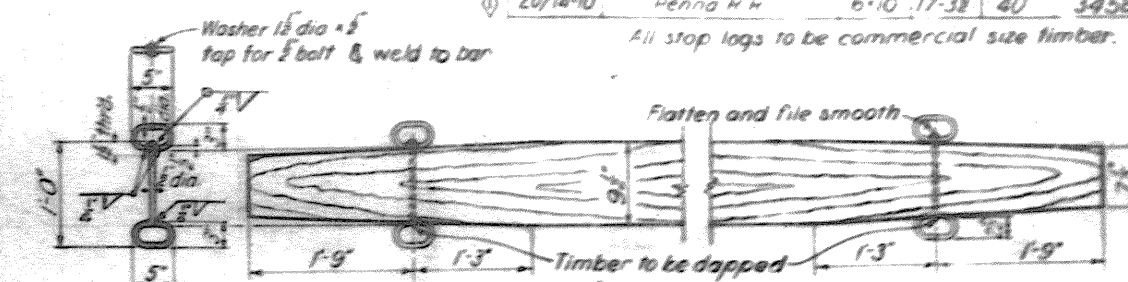
For assembly, see Dwg No 20/101
For stop logs & misc metal details
see Dwg No 20/14

DRAWN BY F. W. L.		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TRACED BY F. W. L.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2	
CHECKED BY A. W. S.		B. & O. R. R. & PENNA. R. R. OPENINGS TRESTLE & MISCELLANEOUS DETAILS	
SUBMITTED BY <i>[Signature]</i> DIST. ENG. DIV.		DATE OCT. 1948	
APPROVED <i>[Signature]</i> CHIEF ENGR. ASST.		APPROVED <i>[Signature]</i> COL. C. E. DISTRICT ENGINEER	
APPROVED FOR 		SCALE "A" - "C"	
DATE		DRAWING NUMBER O271-PM2-2-20/13	
SHEET 22 OF 60		WORK AS CONSTRUCTED	

STOP LOGS

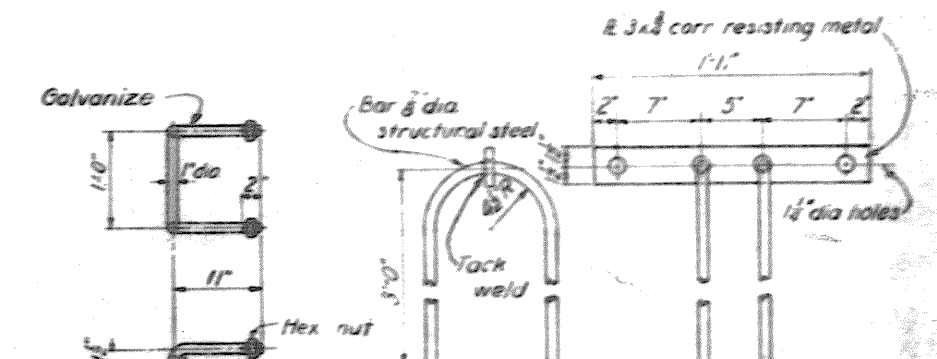
MARK	LOC. ON	SIZE	LGTH	NO	F.B.M.
20/14-9	G.C.H.H.	6" x 10"	17' 3"	28	2420
20/14-10	Penna H.H.	6" x 10"	17' 3"	40	3458

All stop logs to be commercial size timber.



TYPICAL STOP LOG HAND HOLD

STRUCTURAL STEEL MARK 20/14-8
MAKE 136 WT. 2.0 LBS.

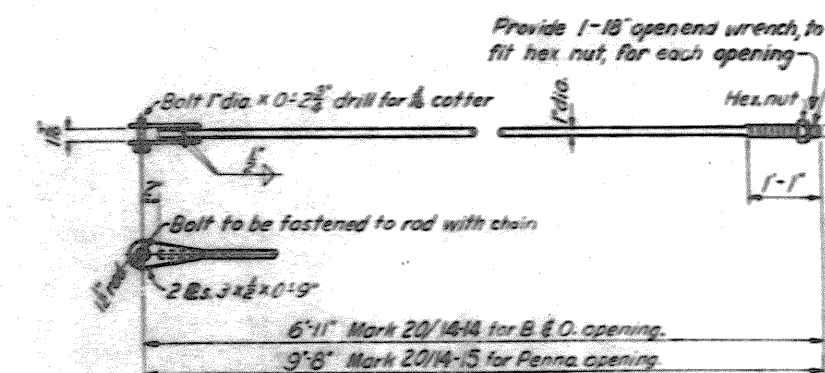


LADDER RUNG

STRUCTURAL STEEL MARK 20/14-12
MAKE 74 WT. 6.6 LBS.

CLAMP PLATE

CORR. RESISTING METAL WITH STRUCT. STEEL ANCHORS
MARK 20/14-13 WT. CORR. RESISTING METAL 13.6 LBS.
MAKE 8 WT. STRUCT. STEEL 28.5 LBS.
SCALE 1/2" = 1'-0"



CLAMP ROD

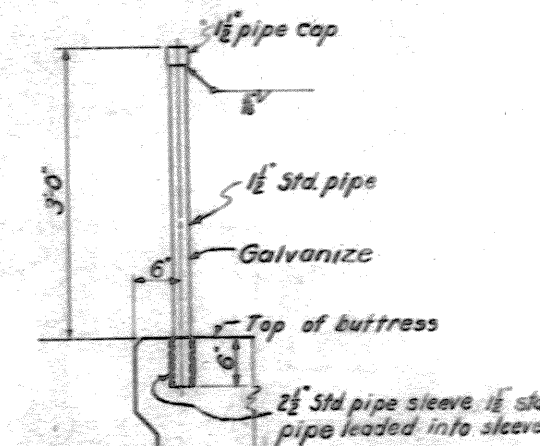
STRUCTURAL STEEL
MARK 20/14-14 MAKE 8 WT. 28.0 LBS.
MARK 20/14-15 MAKE 8 WT. 35.0 LBS.

CLAMP

STRUCT. STEEL MARK 20/14-16
MAKE 8 WT. 23.0 LBS.

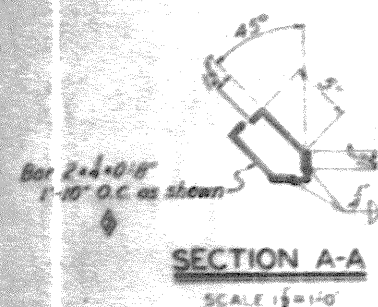
NOTES

For stop log storage house, see Dwg. No. 20/8
For assembly, see Dwg. No. 20/10.1



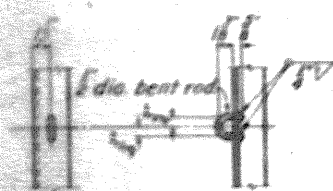
HAND HOLD

PIPE STEEL MARK 12
MARK 20/14-17 WT. 18.0 LBS.



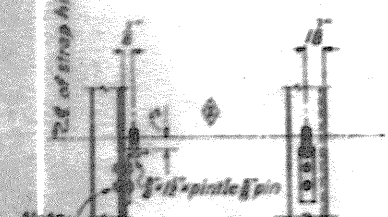
SECTION A-A

SCALE 1/2" = 1'-0"



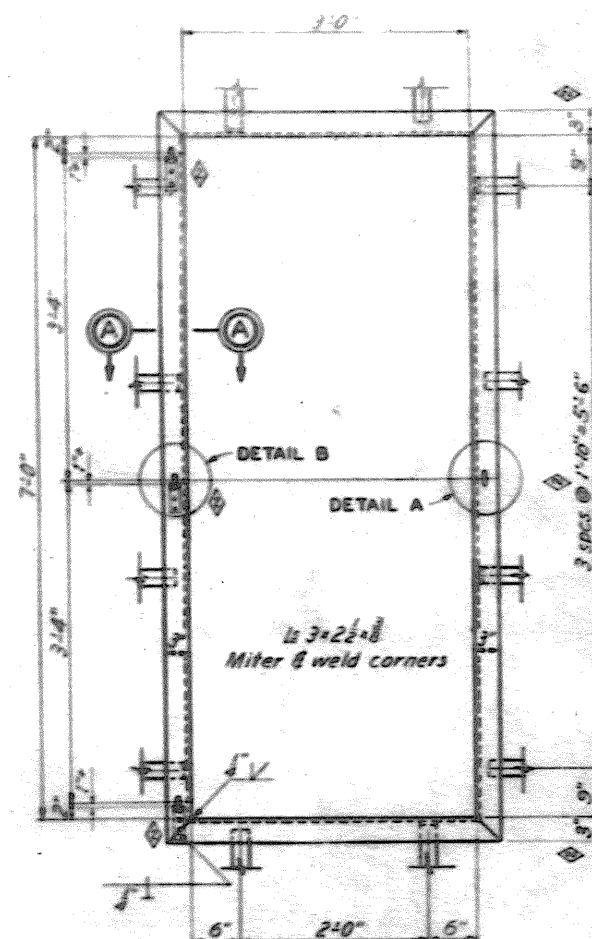
DETAIL A

SCALE 1/2" = 1'-0"



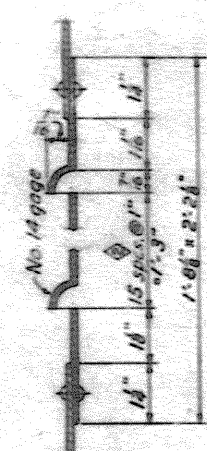
DETAIL B

SCALE 1/2" = 1'-0"



DOOR FRAME

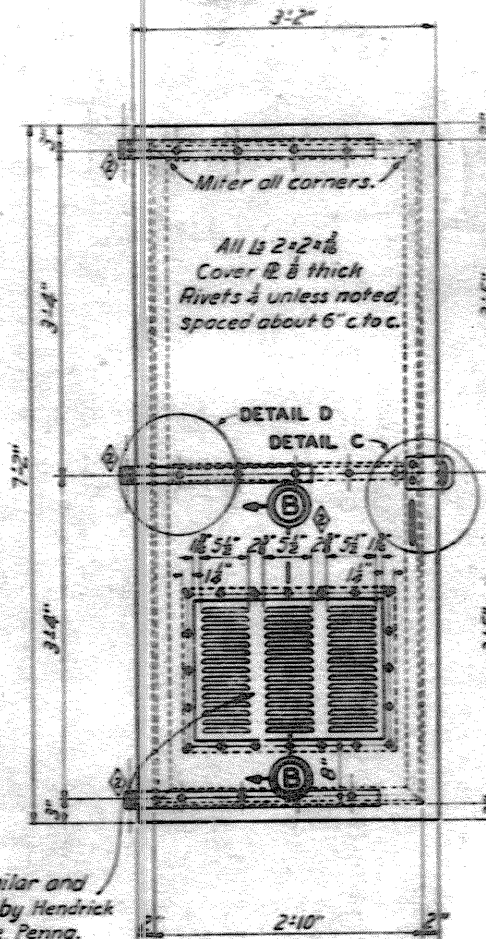
STRUCTURAL STEEL
MARK 20/14-18 MAKE 1 WT. 152.0 LBS.
MARK 20/14-19 MAKE 1 WT. 152.0 LBS.



SECTION B-B

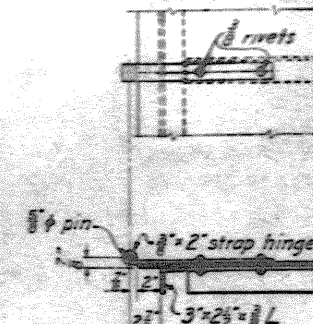
SCALE 6" = 1'-0"

Louvre to be similar and equal to that mfgd by Hendrick Mfg. Co. of Carbondale, Penna.
Note: Size of louvre openings and spacings is standard as per Hendrick Mfg. Co. catalog.



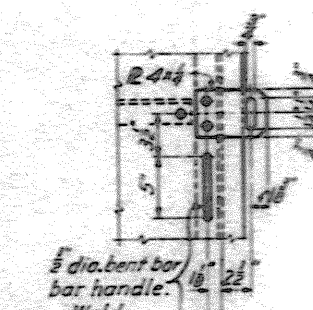
DOOR

STRUCTURAL STEEL
MARK 20/14-20 MAKE 1 WT. 178.0 LBS.
MARK 20/14-21 MAKE 1 WT. 178.0 LBS.



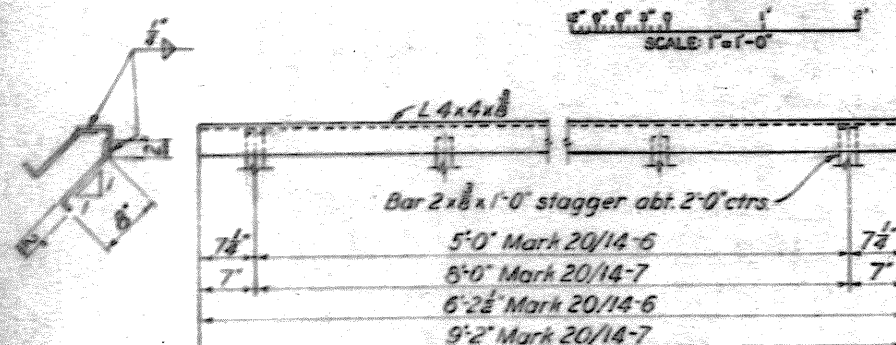
DETAIL D

SCALE 1/2" = 1'-0"



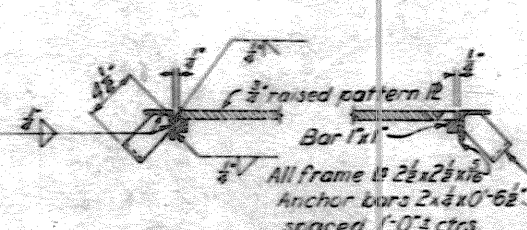
DETAIL C

SCALE 1/2" = 1'-0"



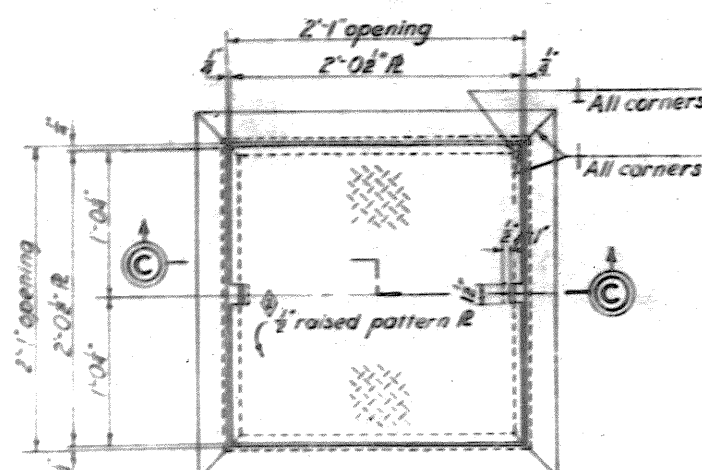
STOP LOG RECESS ANGLE

STRUCTURAL STEEL
MARK 20/14-6 MAKE 4 WT. 71.0 LBS.
MARK 20/14-7 MAKE 4 WT. 103.0 LBS.



SECTION C-C

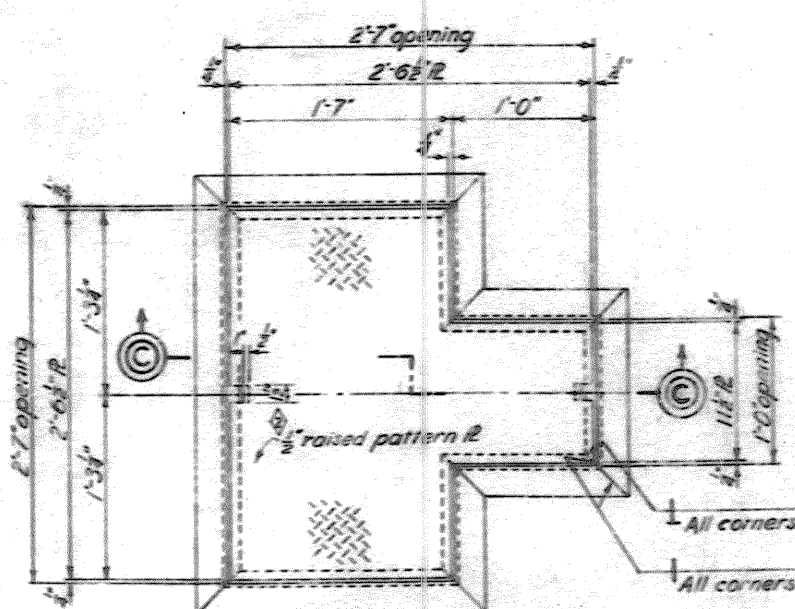
SCALE 1/2" = 1'-0"



PIN RECESS FRAME & COVER

STRUCTURAL STEEL MARK 20/14-18
MAKE 2 WT. 212.0 LBS.

SCALE 1/2" = 1'-0"



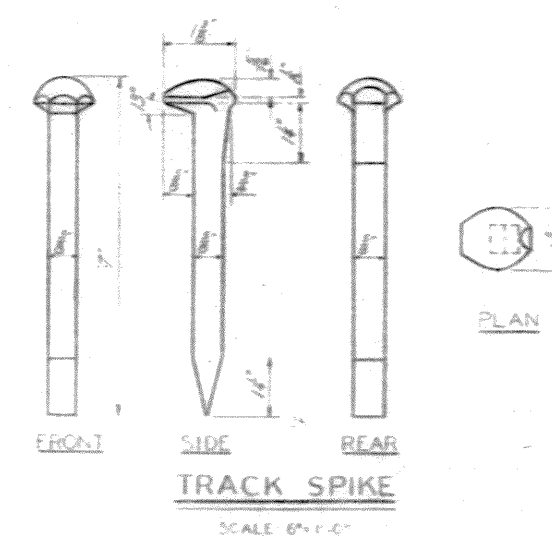
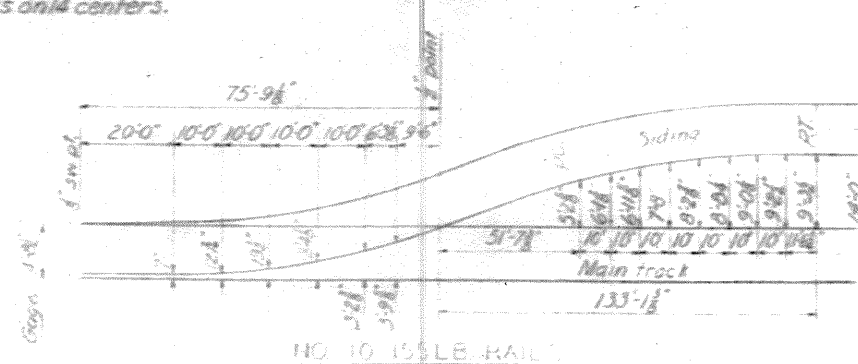
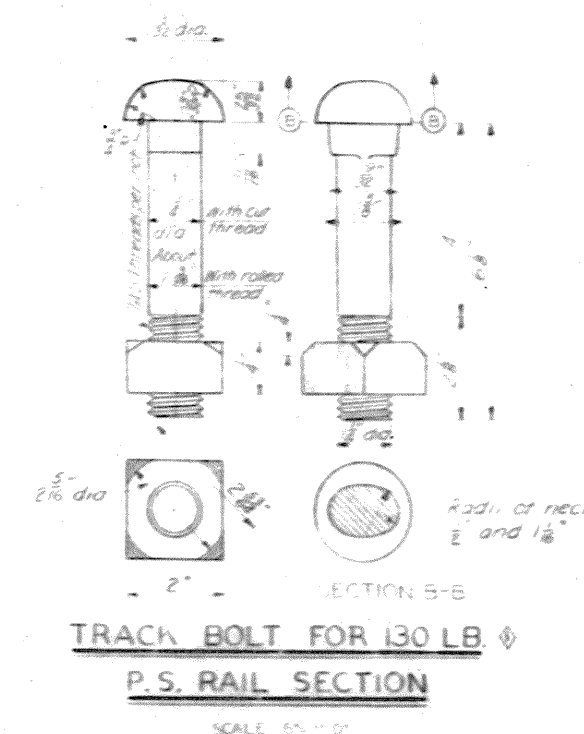
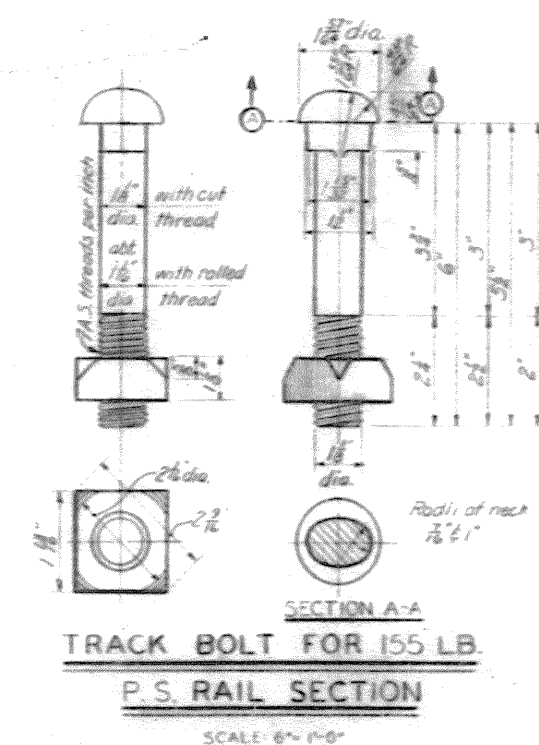
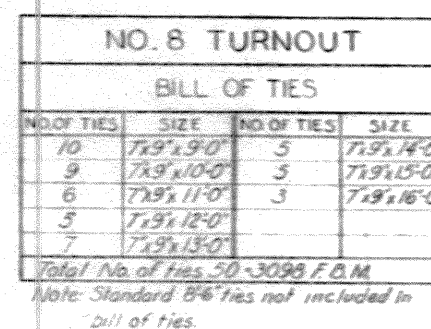
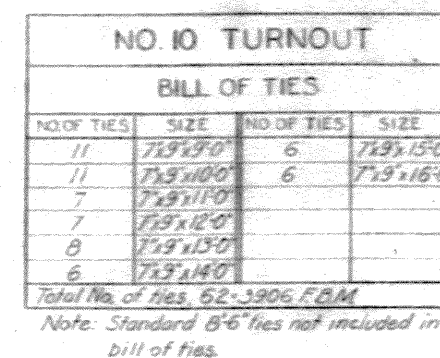
PIN RECESS FRAME & COVER

STRUCTURAL STEEL MARK 20/14-19
MAKE 2 WT. 255.0 LBS.

SCALE 1/2" = 1'-0"

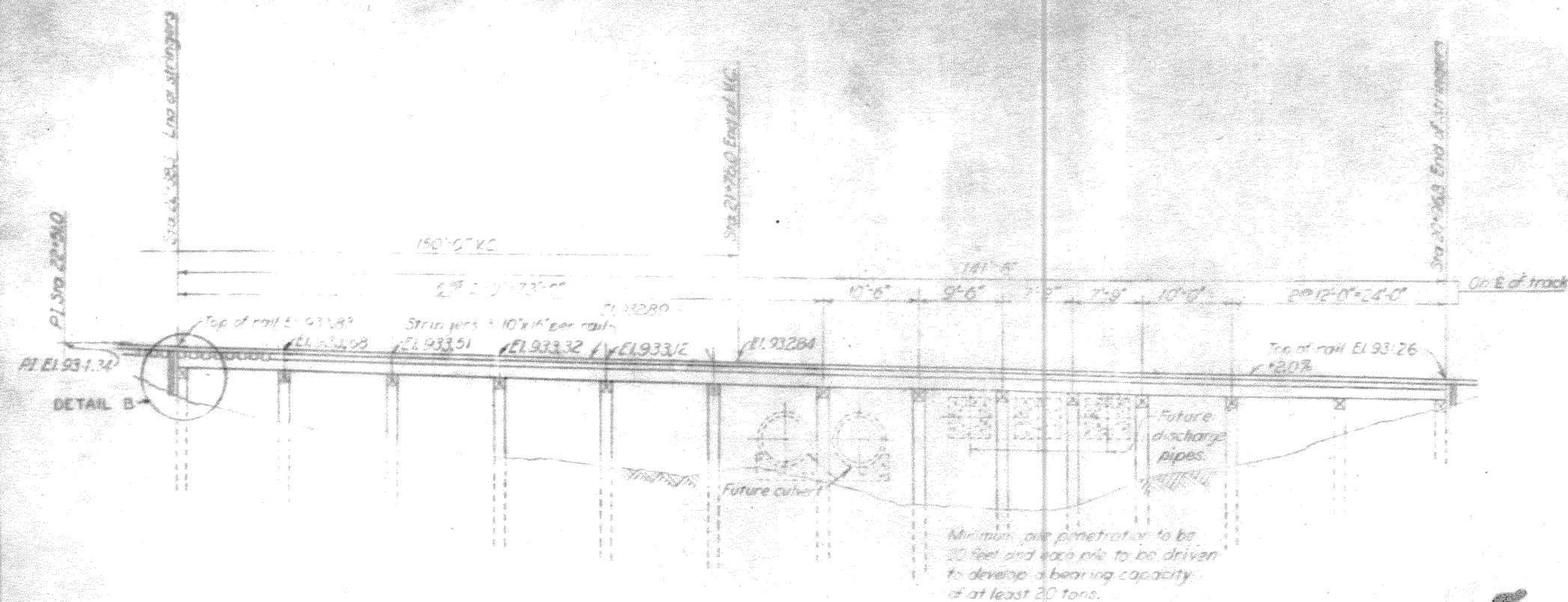
REVISION	DATE	DESCRIPTION	BY
1	8-8-53	REVISED AS CONSTRUCTED	A.W.S.
2	3-10-40	REVISED TO CONFORM TO REDESIGNED GATE OPENINGS	S.S.

DRAWN BY: H.S.M. & F.W.L.		TRACED BY: H.S.M. & F.W.L.		CHECKED BY: A.W.S. & A.W.S.		APPROVED BY: [Signature]	
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 B.&O. R.R. & PENNA. R.R. OPENINGS MISCELLANEOUS DETAILS		APPROVED BY: [Signature]		DATE: OCT. 1948		SCALE: 1" = 1'-0"	
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		DRAWING NUMBER: 0271-PM2-2-20/14		SHEET 25 OF 80		WORK AS CONSTRUCTED	

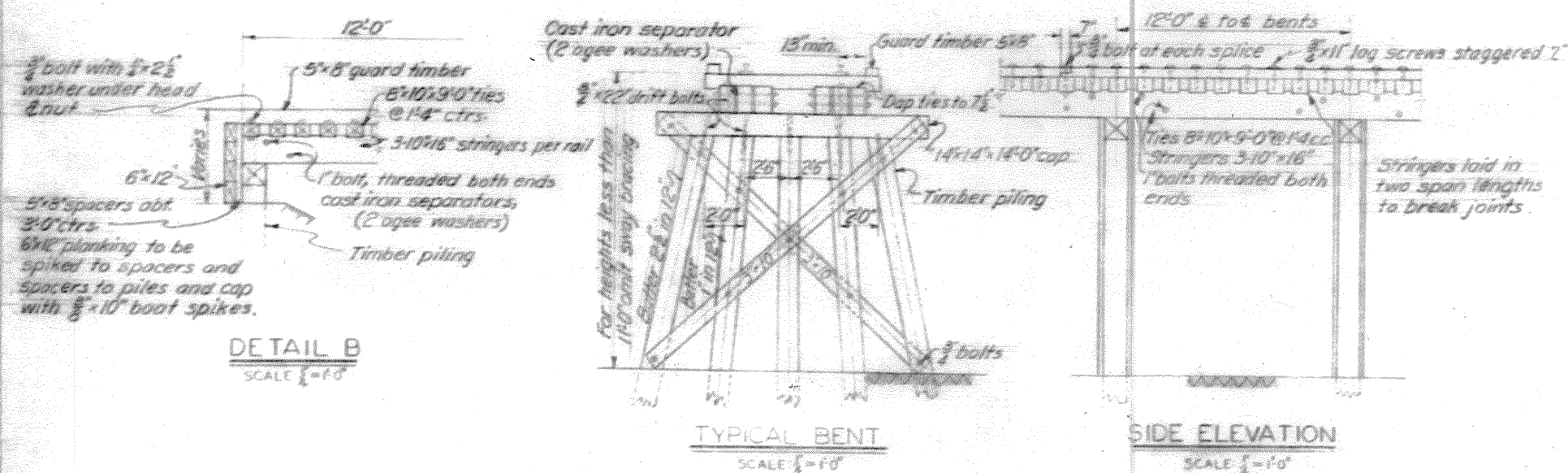


For location plan, see Dwg. Nos. 16/2,
16/3 and 16/5. ♦
No. 6 turnout for Ohio Drilling Company spur
♦ track, shall be in accordance with Pennsylvania
Railroad Standards.

REVISION	DATE	CHANGED NO. 4 TURNOUT TO 130 L.B. P.S. RAIL, ELIMINATED 100 L.B. BOLT AND ADDED 130 L.B. BOLT. ADDED NOTE FOR NO. 6 TURNOUT.	B
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: O. A. L.	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2. UNIT 2 PENNA. R.R. INDUSTRIAL TRACK DETAILS AND ROADBED SECTION		
TRACED BY:			
CHECKED BY: E.W.H. - C.G.M.			
SUBMITTED BY <i>[Signature]</i>			
APPROVED: <i>[Signature]</i> CHIEF OF DIST. DIST.	APPROVED: <i>[Signature]</i> COL. C.E. SMITH, DIST.	DATE: OCT. 1948	
APPROVED FOR:	SCALE: 1" = 10'	SPEC. NO.	
DATE:	DRAWING NUMBER 0271-PM2-2-66/		
SHEET 2-4 OF 50			



ELEVATION



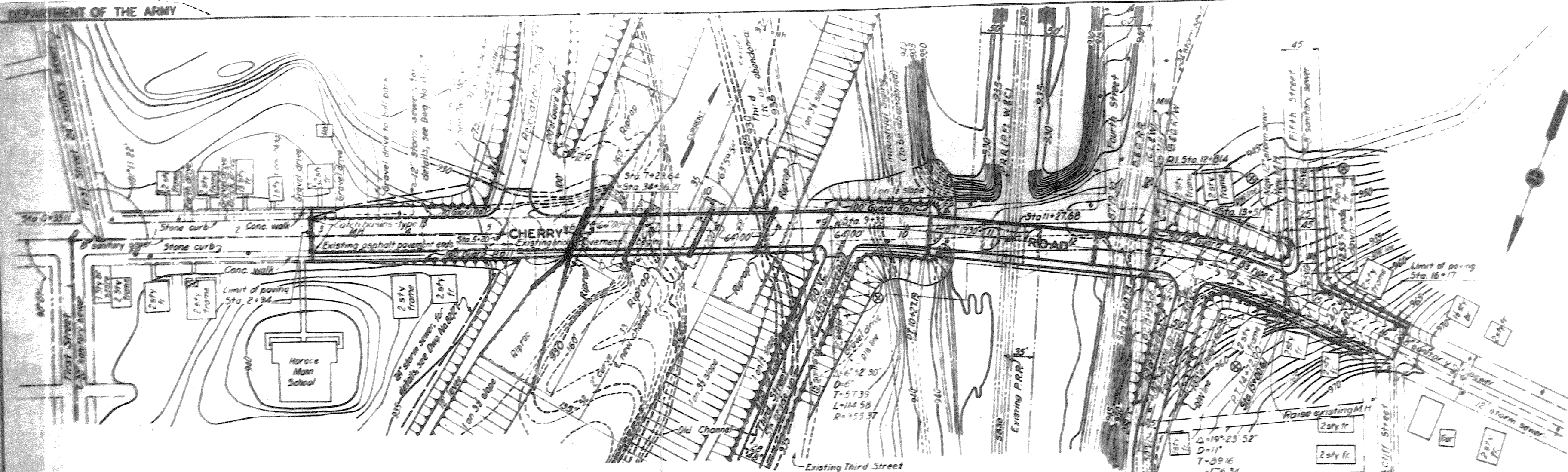
NOTES

- Fasten stringers to caps and caps to piling with 1/2" dia drift bolts.
- Log screws shall not be driven but must be screwed into position.
- Holes in guard timber and ties for log screws and bolts shall be bored on the job. Holes in ties for log screws shall be bored 1/2" in diameter.
- Std. ogee washers shall be used under bolt heads and nuts bearing on timber except as noted.

REVISION	DATE	DESCRIPTION	BY
1	10/1/48	REVISED TRESTLE TO 1-1/2" FUTURE DISCHARGE AND CULVERT PILES	W.E.T.

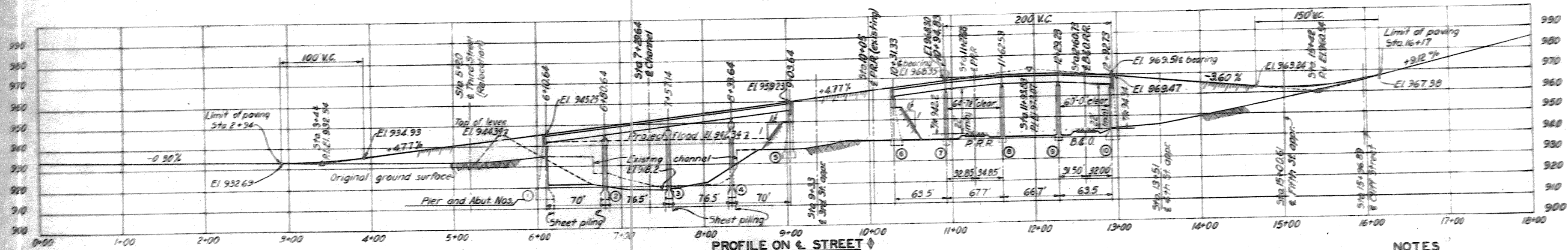
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: A.S.G.-A.R.S. TRACED BY: W.E.T. CHECKED BY: S.S. SUBMITTED BY: <i>[Signature]</i> APPROVED: <i>[Signature]</i> COL. C.E. DISTRICT ENGINEER	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PENNA. R.R. INDUSTRIAL TRACK TEMPORARY TRESTLE DATE: OCT. 1948 SCALE: AS SHOWN SHEET 25 OF 60

WORK AS CONSTRUCTED



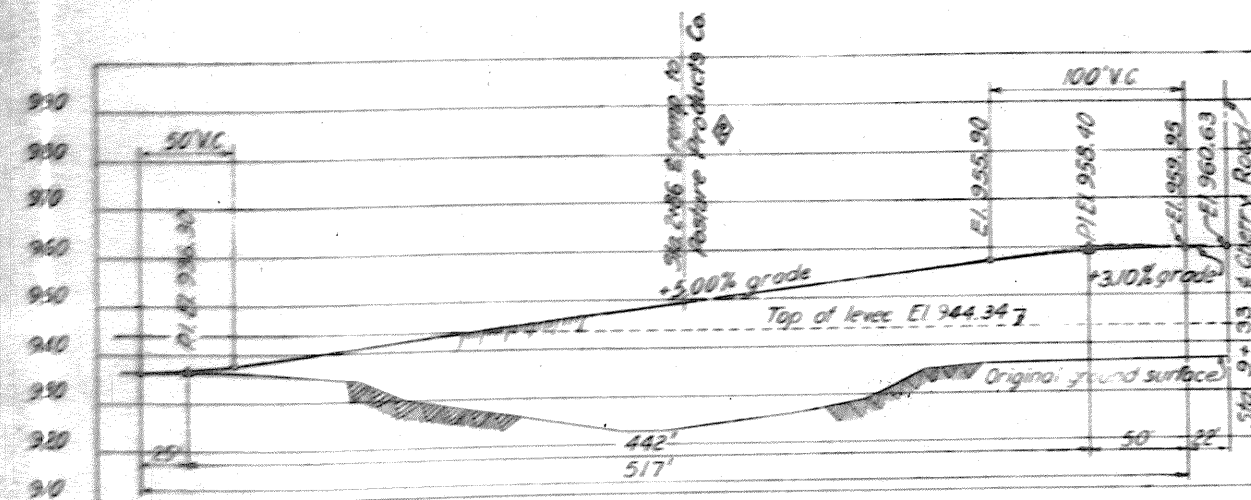
Note:
Connections to sewers from catch
basins to be 12" pipe

PLAN
SCALE: HORIZ. 1"=50'
VERT. 1"=20'



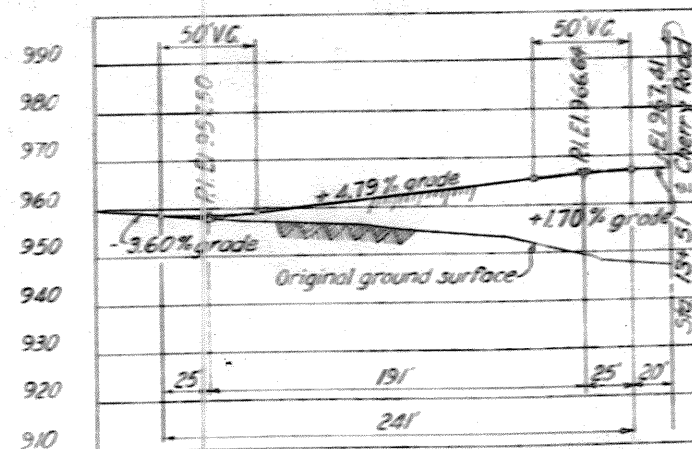
NOTES

For legend, see Dwg. No. 16/1.
For general plan, see Dwg. No. 16/2.
For guard rail details and approach
sections, see Dwg. No. 68/8.
25' approach slabs required at abutments
1, 5, 6 & 10. See Dwg. No. 68/9 for details.
For pavement details, see Dwg. Nos. 68/8
and 68/17.
For sewer and utility work, see Dwg. Nos.
82/21, 82/25, 82/27, 82/36 and 82/38.
For details of ramp to Third St approach, see Dwg. No. 82/17.



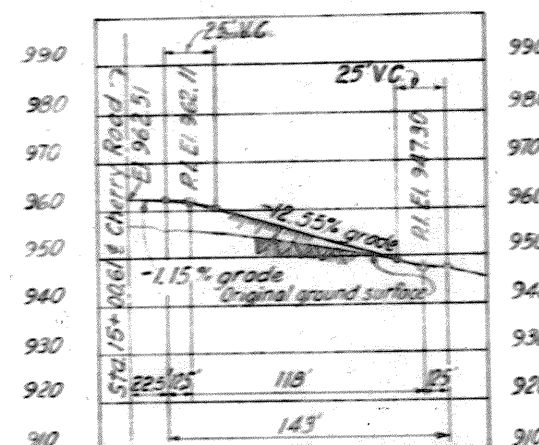
PROFILE OF THIRD ST. APPROACH

SCALE: HORIZ. 1"=50'
VERT. 1"=20'



PROFILE OF FOURTH ST. APPROACH

SCALE: HORIZ. 1"=50'
VERT. 1"=20'

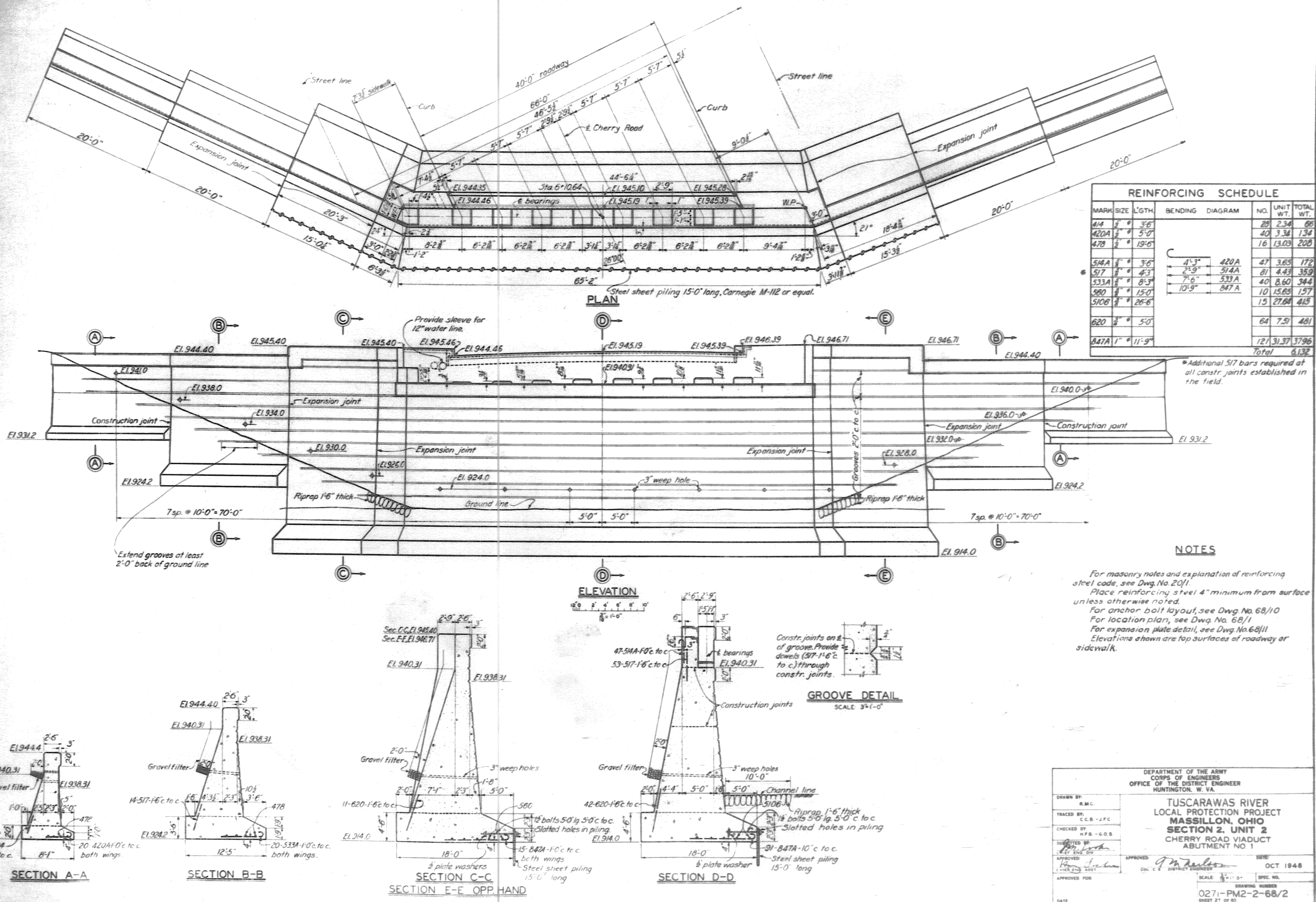


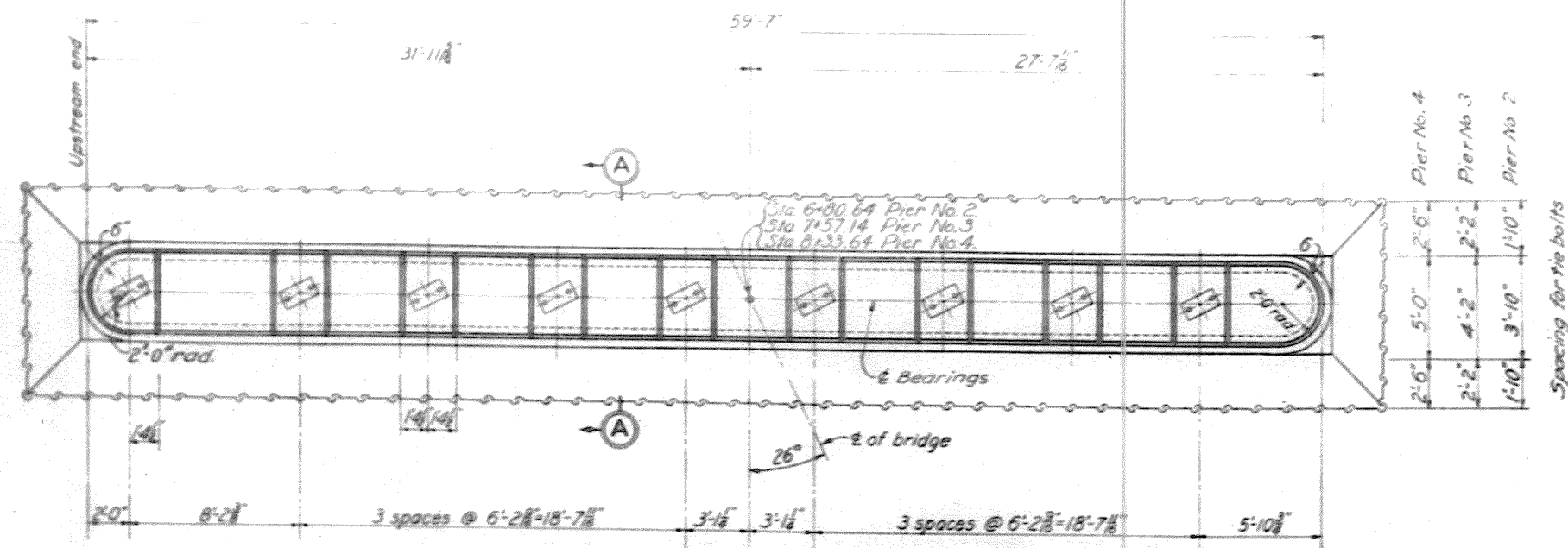
PROFILE OF FIFTH ST. APPROACH

SCALE: HORIZ. 1"=50'
VERT. 1"=20'

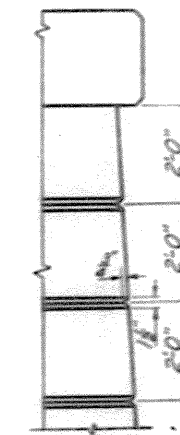
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT GENERAL PLAN & PROFILE	
DRAWN BY: H.C.H.	TRACED BY: A.F.-J.B.P.	CHECKED BY: H.F.B.-G.O.S.	SUBMITTED BY: J.M. [Signature]
APPROVED BY: [Signature]	DATE: OCT. 1948	SCALE: 1"=50'	SHEET NO. 0271-PM2-2-68/1
REVISION		DATE	
1-9-51 ADDED RAMP TO THIRD ST. APPROACH		H.S.B.	
11-18-48 ALTERED EXISTING GROUND SURFACE - ALTERATION ARTICLE		DATE	
DESCRIPTION		DATE	

WORK AS CONSTRUCTED

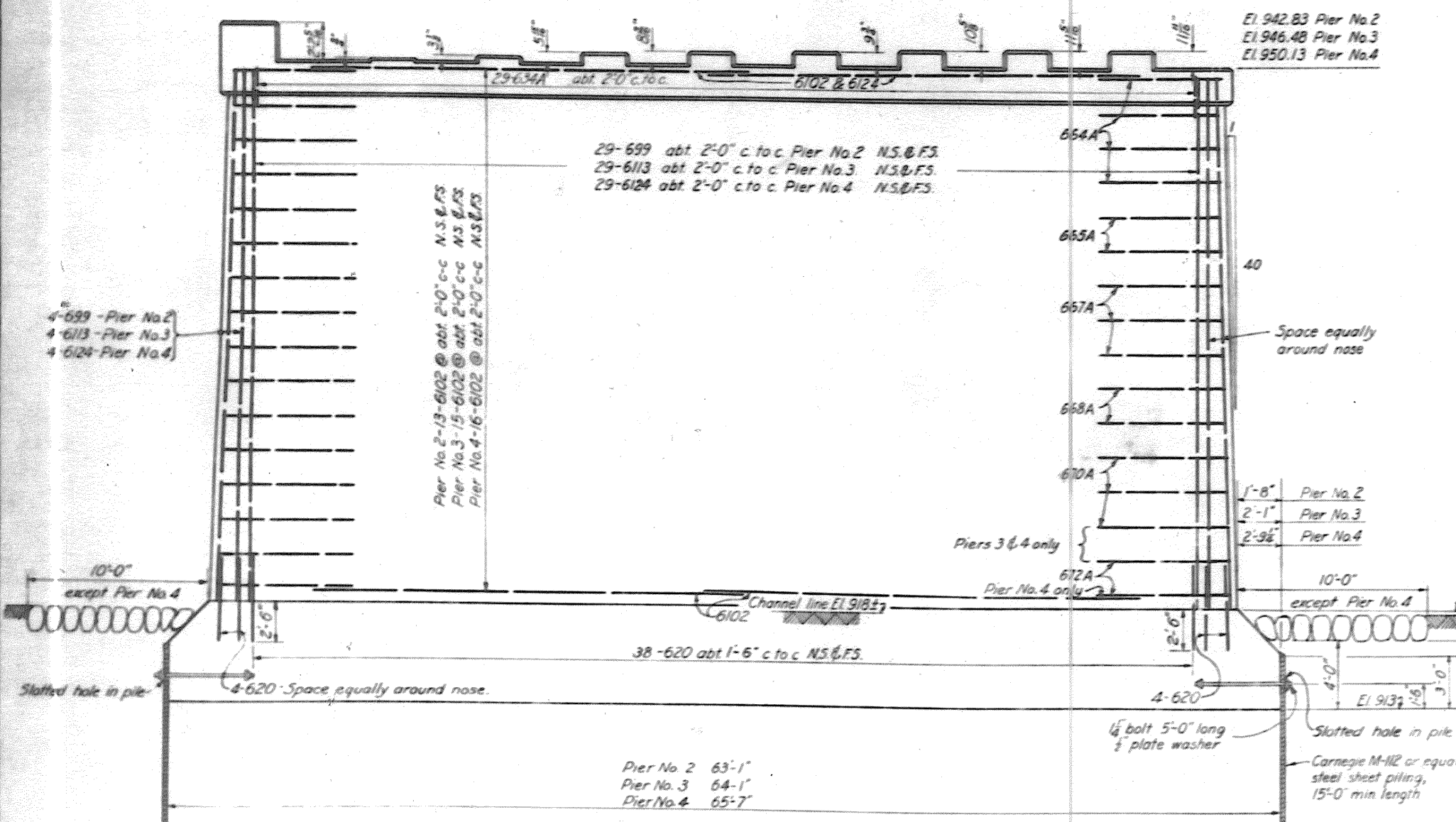




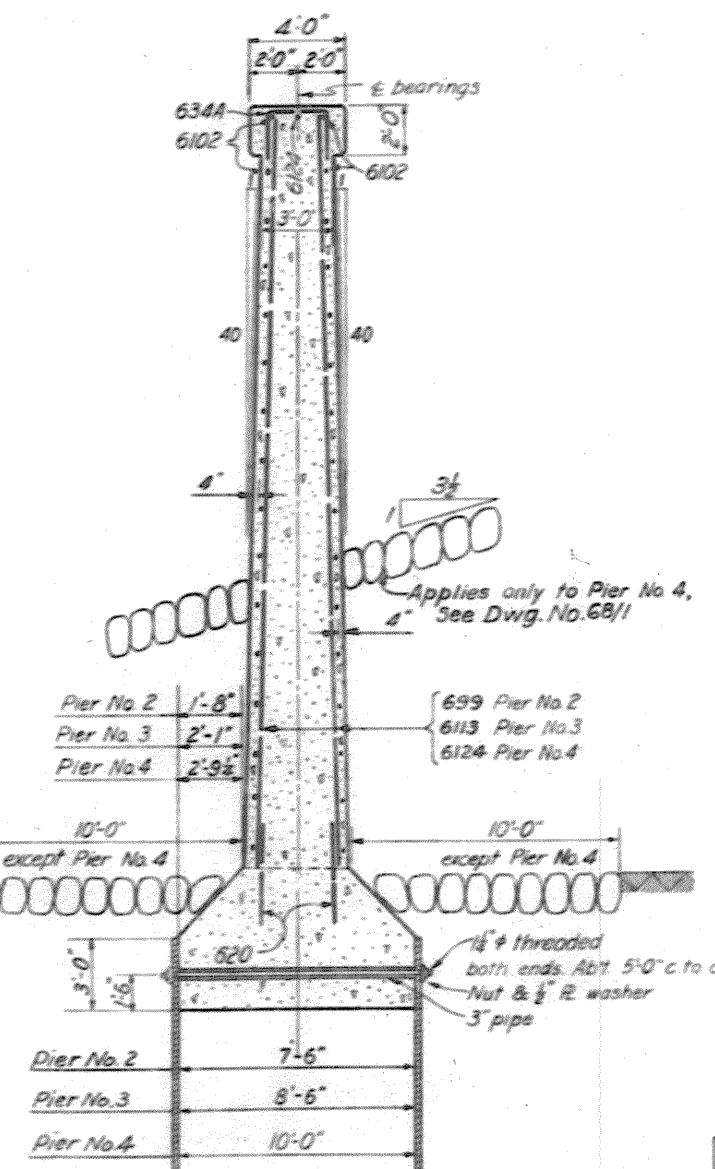
PLAN
PIERS 2, 3 & 4



GROOVE DETAIL
SCALE 1/2" = 1'-0"



ELEVATION



SECTION A-A
SCALE 1/4" = 1'-0"

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO.	UNIT WT.	TOTAL WT.	
Pier No. 2							
620	3/4"	5'-0"		84	7.51	631	
634A	3/4"	8'-6"		29	12.77	370	
664A	3/4"	16'-0"		8	24.03	192	
665A	3/4"	16'-3"		4	24.41	98	
667A	3/4"	16'-9"		6	25.16	151	
668A	3/4"	17'-0"		4	25.53	102	
670A	3/4"	17'-6"		4	26.29	105	
699	3/4"	24'-9"		66	37.17	2453	
6102	3/4"	25'-6"		52	38.30	1992	
6124	3/4"	31'-0"		2	46.56	93	
Total					6187		
Pier No. 3							
620	3/4"	5'-0"		84	7.51	631	
634A	3/4"	8'-6"		29	12.77	370	
664A	3/4"	16'-0"		8	24.03	192	
665A	3/4"	16'-3"		4	24.41	98	
667A	3/4"	16'-9"		6	25.16	151	
668A	3/4"	17'-0"		4	25.53	102	
670A	3/4"	17'-6"		6	26.29	138	
672A	3/4"	18'-0"		2	27.04	54	
6102	3/4"	25'-6"		60	38.30	2298	
6113	3/4"	28'-3"		66	42.43	2800	
6124	3/4"	31'-0"		2	46.56	93	
Total					6947		
Pier No. 4							
620	3/4"	5'-0"		84	7.51	631	
634A	3/4"	8'-6"		29	12.77	370	
664A	3/4"	16'-0"		8	24.03	192	
665A	3/4"	16'-3"		4	24.41	98	
667A	3/4"	16'-9"		6	25.16	151	
668A	3/4"	17'-0"		4	25.53	102	
670A	3/4"	17'-6"		6	26.29	158	
672A	3/4"	18'-0"		4	27.04	108	
6102	3/4"	25'-6"		64	38.30	2451	
6124	3/4"	31'-0"		66	46.56	3165	
Total					7427		

NOTES

For masonry notes and explanation of reinforcing steel code, see Dwg. No. 2C/1.
For anchor bolt layout, see Dwg. No. 68/10.
Location of construction joints shall be on ± of grooves and determined in field by contracting officer.
For location plan and for riprap around piers, see Dwg. No. 68/1.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
OFFICE OF THE DISTRICT ENGINEER
HUNTINGTON, W. VA.

TUSCARAWAS RIVER
LOCAL PROTECTION PROJECT
MASSILLON, OHIO
SECTION 2, UNIT 2
CHERRY ROAD VIADUCT
PIERS NOS. 2, 3 & 4

DRAWN BY: A.C.H.
TRACED BY: E.A.L.-B.T.C.
CHECKED BY: H.F.B.-G.O.S.
SUBMITTED BY: [Signature]
APPROVED: [Signature]
DATE: [Blank]

APPROVED: [Signature]
DATE: OCT. 1948
SCALE: 1/4" = 1'-0"
SPEC. NO.: [Blank]
DRAWING NUMBER: 0271-PM2-2-68/3
SHEET 28 OF 30

WORK AS CONSTRUCTED

REINFORCING SCHEDULE

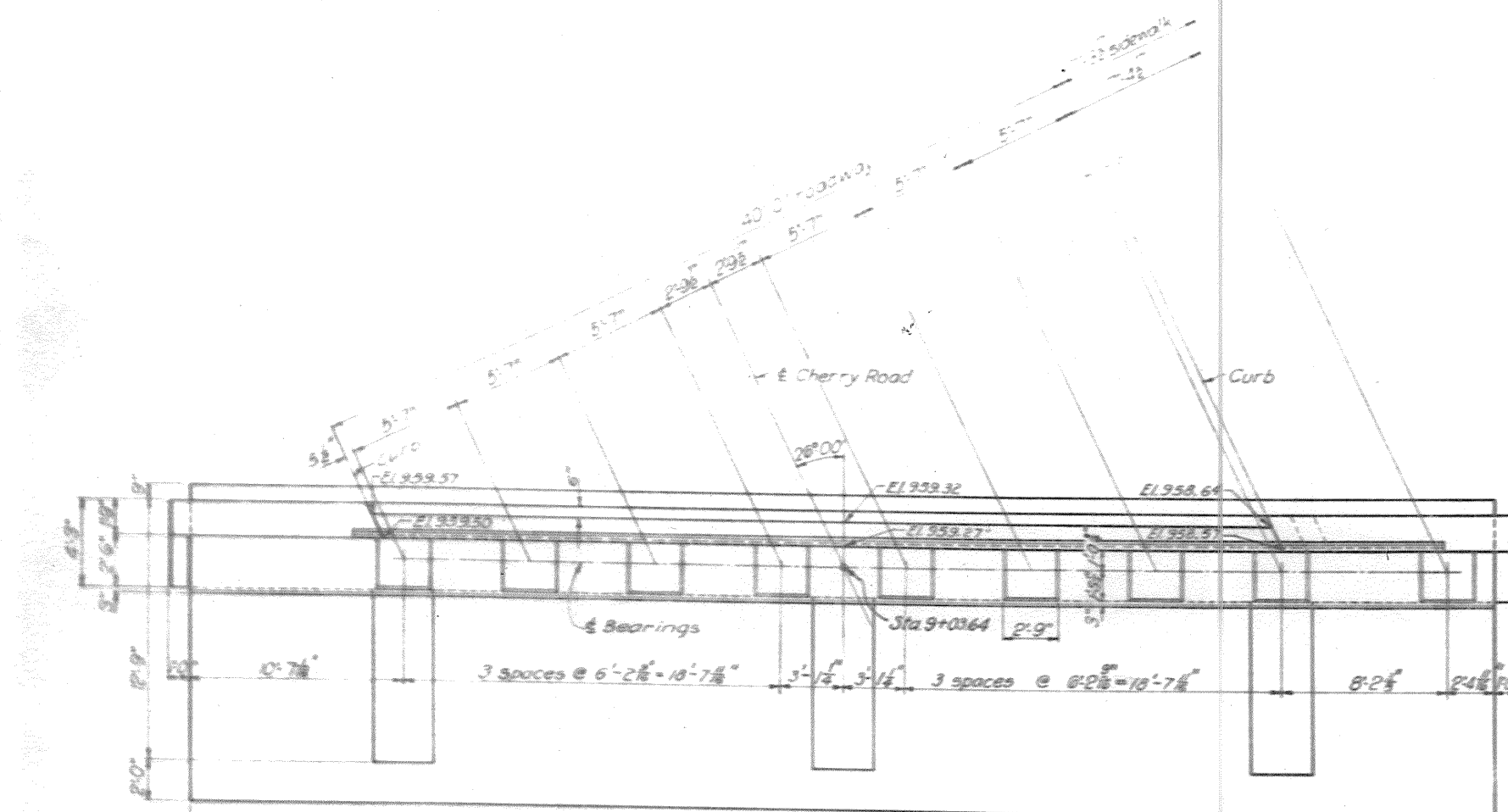
MARK	SIZE	LGTH	BEND	CURV	NO	UNIT WT	TOTAL WT
542	1/2"	3'-6"			25	5.85	146
518	1/2"	4'-6"			2	4.89	9.78
519	1/2"	4'-9"			36	4.95	178.2
521	1/2"	5'-3"			5	5.48	27.4
522A	1/2"	5'-6"			30	5.74	172.2
525	1/2"	6'-3"			6	6.52	39.12
531	1/2"	7'-9"			48	8.08	387.84
532	1/2"	8'-0"			24	8.34	200.16
537	1/2"	9'-3"			4	9.65	38.6
536A	1/2"	9'-0"			6	9.39	56.34
539	1/2"	9'-9"			9	10.17	91.53
540A	1/2"	10'-0"			4	10.43	41.72
540B	1/2"	10'-0"			6	10.43	62.58
546	1/2"	11'-6"			10	11.99	119.9
544A	1/2"	11'-0"			6	11.47	68.82
550A	1/2"	12'-6"			6	13.04	78.24
555	1/2"	13'-3"			6	13.82	82.92
554A	1/2"	13'-6"			6	14.08	84.48
558A	1/2"	14'-6"			6	15.12	90.72
560	1/2"	15'-0"			43	15.65	673.15
562A	1/2"	15'-6"			6	16.17	97.02
562B	1/2"	15'-6"			23	16.17	372.91
563A	1/2"	15'-9"			65	16.43	1068.05
566A	1/2"	16'-6"			6	17.21	103.26
567	1/2"	18'-9"			9	17.47	157.23
594	1/2"	23'-6"			24	24.51	588.24
5102	1/2"	25'-6"			4	26.44	105.76
544B	1/2"	11'-0"			45	11.47	516.15
621	1/2"	5'-3"			18	7.89	142.02
632A	1/2"	8'-0"			45	12.02	540.9
670	1/2"	17'-6"			18	26.29	473.22
642A	1/2"	35'-6"			8	53.32	426.56
7138A	1/2"	34'-6"			4	70.52	282.08
896A	1/2"	24'-0"			10	64.08	640.8
8100	1/2"	25'-0"			5	66.75	333.75
8139A	1/2"	34'-9"			14	92.78	1298.92
128A	1/2"	7'-0"			12	23.80	285.6
174	1/2"	18'-6"			12	62.90	754.8
996A	1/2"	26'-6"			14	104.2	1458.8
9100	1/2"	25'-0"			7	107.58	753.06
9140A	1/2"	35'-0"			6	150.61	903.66
0100	1/2"	25'-0"			7	132.83	929.81
0100A	1/2"	25'-0"			24	132.83	3187.92
0108	1/2"	27'-0"			5	143.45	717.25
0146A	1/2"	36'-6"			10	186.92	1869.2
Total							21,371

NOTES

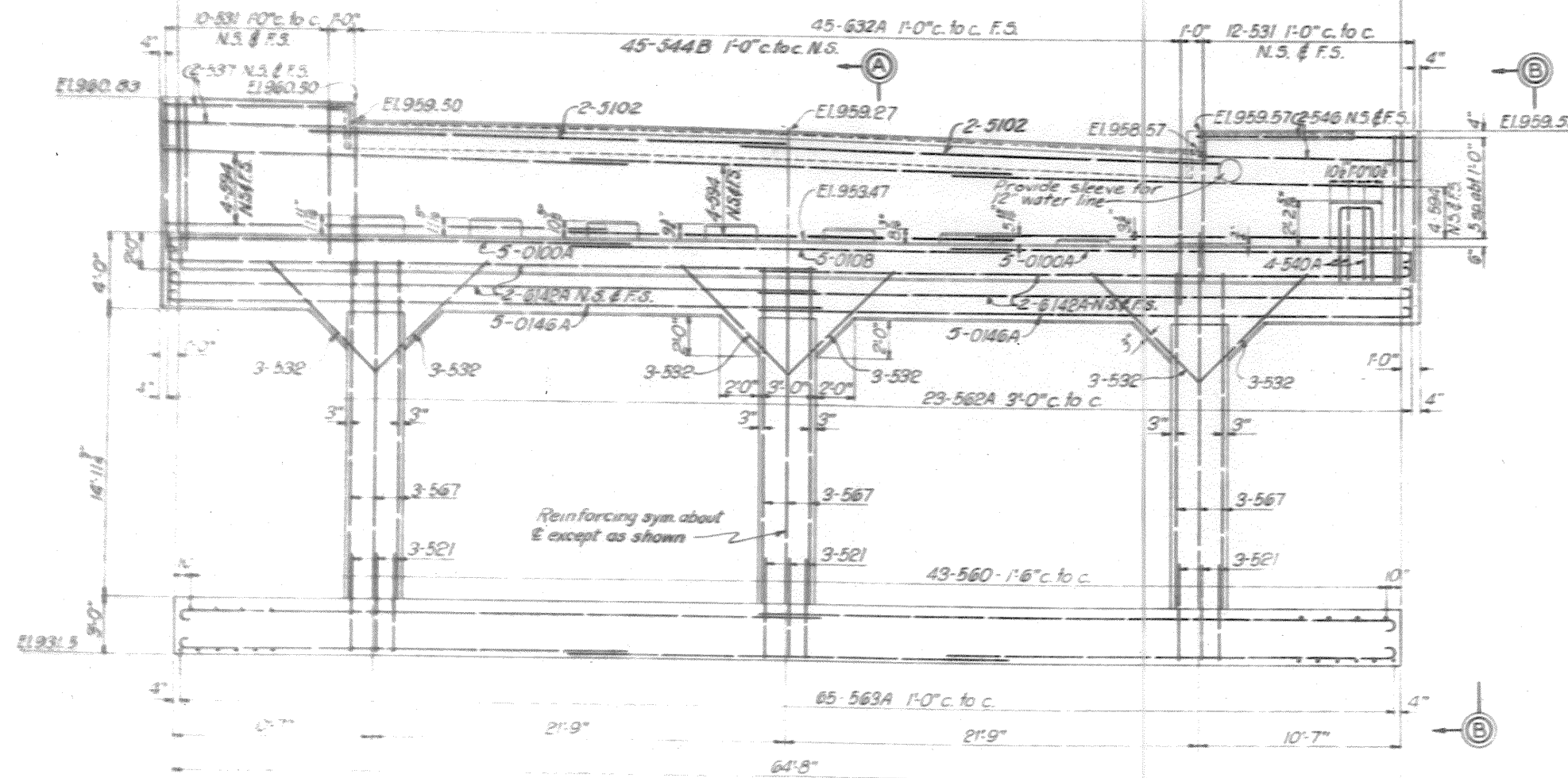
For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/11.
 For anchor bolt layout, see Dwg. No. 68/10.
 For location plan, see Dwg. No. 68/11.
 For expansion plate detail, see Dwg. No. 68/11.
 Elevations shown are to top surfaces of roadway or sidewalk.

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT ABUTMENT NO. 5	
DESIGNED BY: R. M. C.	TRACED BY: R. E. C. - J. F. C.	CHECKED BY: R. E. C. - J. F. C.	APPROVED BY: R. E. C. - J. F. C.
DATE: OCT. 1948		SCALE: 1/4" = 1'-0"	
DRAWING NUMBER 0271-PM2-2-68/4		SHEET 29 OF 30	

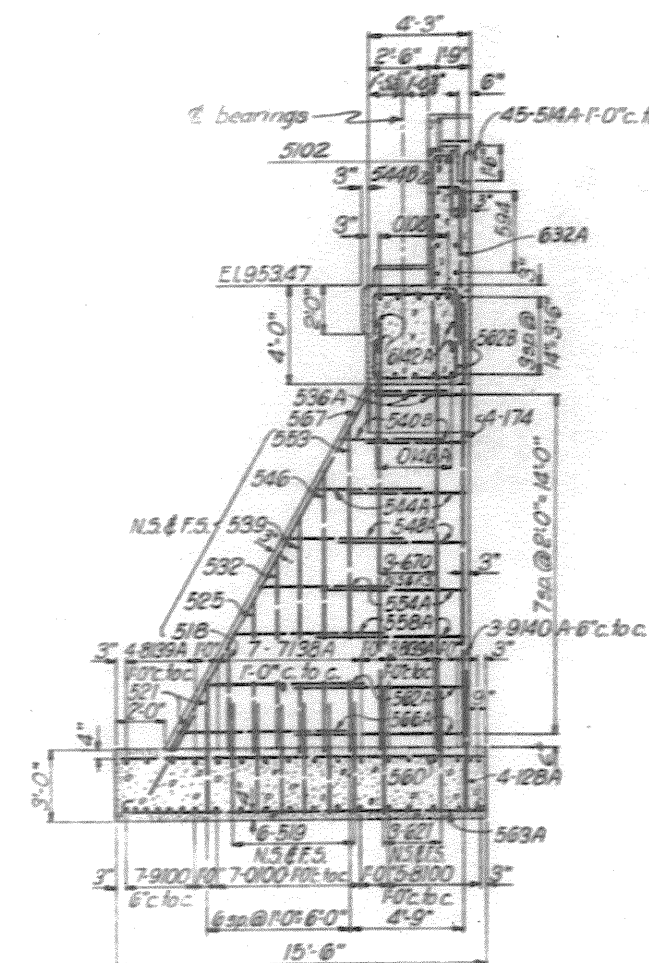
WORK AS CONSTRUCTED



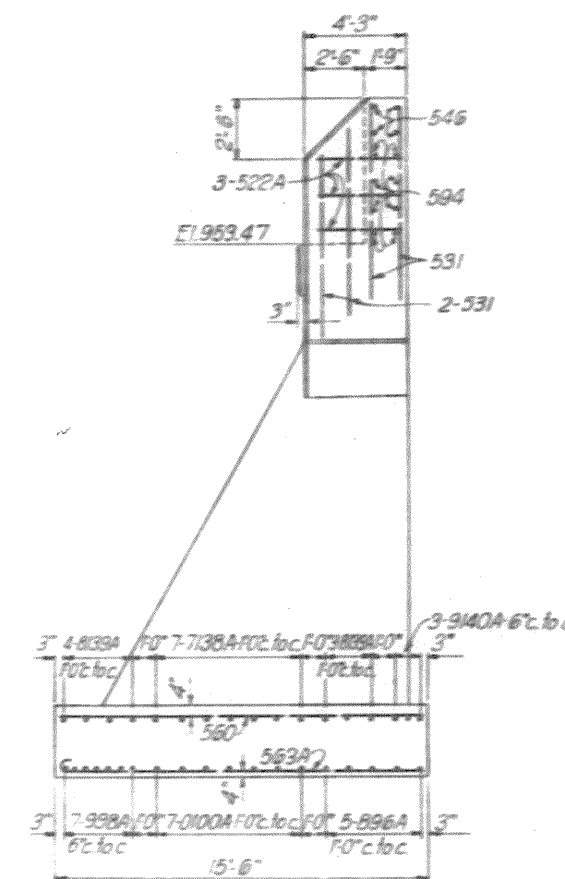
PLAN



ELEVATION



SECTION A-A



END VIEW B-B

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

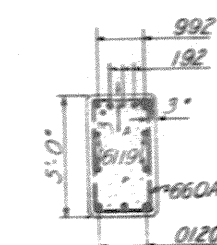


NOTES

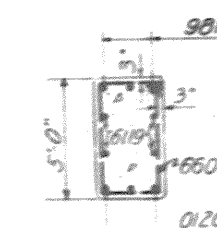
For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/I.
For anchor bolt layout, see Dwg. No.68/II.
For location plan, see Dwg. No.68/I.
For expansion plate detail, see Dwg.No.68/III.
Elevations shown are to top surfaces of roadway or sidewalk.

DRAWN BY: R. M. C.		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TRACED BY: L. D. H. - B. T. C.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT ABUTMENT NO. 6	
CHECKED BY: M. F. B. - C. O. S.			
SUBMITTED BY: <i>[Signature]</i> DIST. ENG. DIV.			
APPROVED: <i>[Signature]</i> CHIEF ENG. ASST.			
APPROVED FOR:		APPROVED: <i>[Signature]</i> COL. C. E. DISTRICT ENGINEER	
DATE:		DATE OCT. 1948	
SCALE: 1" = 10'		SPEC. NO.	
DRAWING NUMBER 0271-PM2-2-68/5		SHEET 30 OF 60	

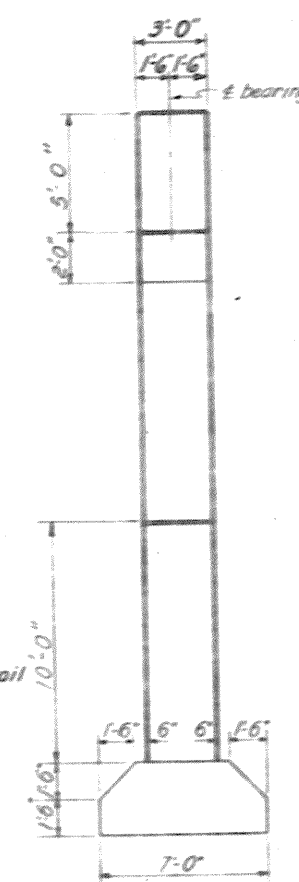
WORK AS CONSTRUCTED



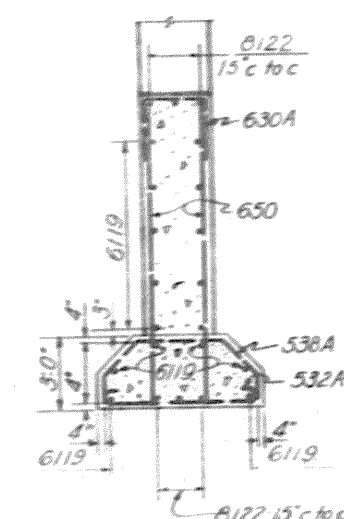
SECTION B-B



SECTION C-C



SECTION D-D



For masonry notes and explanation of
reinforcing steel code, see Dwg. No. 20/1.
For anchor bolt plan, see Dwg. No. 68/10
For location plan, see Dwg. No. 68/1

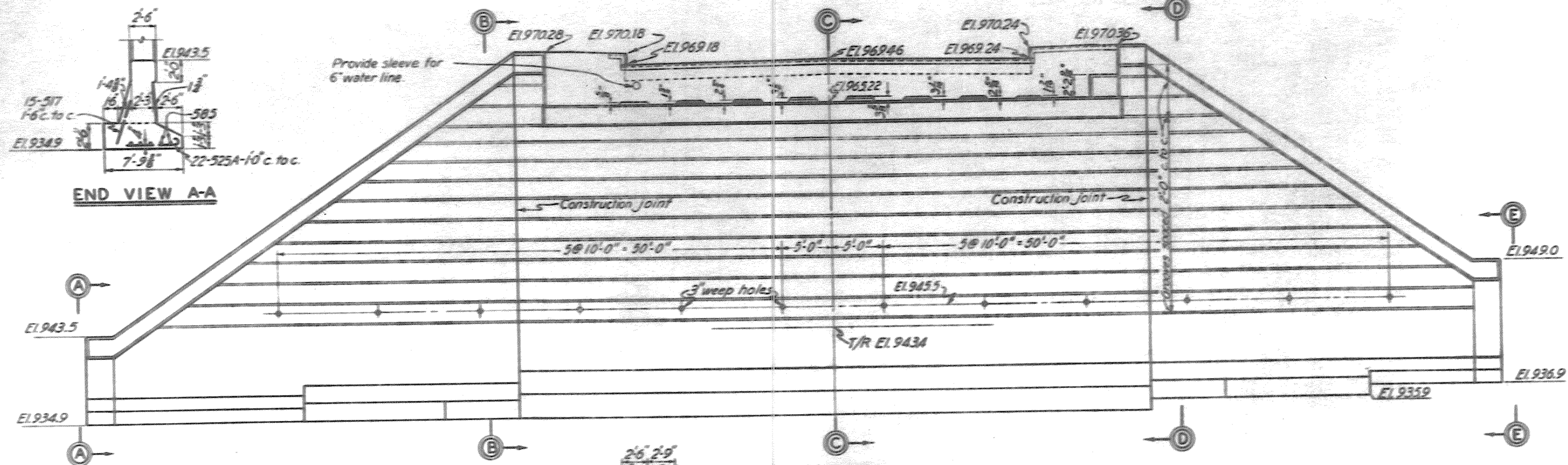
WORK AS CONSTRUCTED

MARK	SIZE	LTH	BENDING DIAGRAM	NO.	UNIT WT	TOTAL WT	
514A	#8	3'-6"		40	3.69	148	
517	#8	4'-3"		66	4.43	292	
525A	#8	6'-3"		35	6.32	228	
530	#8	12'-6"		5	13.04	65	
585	#8	21'-3"		838A	15	22.16	332
589	#8	22'-3"		145A	19	23.21	348
				514A			
620	#8	5'-0"		72	7.51	341	
838A	1"Ø	9'-6"		52	25.37	1319	
145A	1"Ø	11'-3"		75	38.25	2869	
						Total 6,140	

The plan view shows the bridge structure with various dimensions and elevations. Key features include:

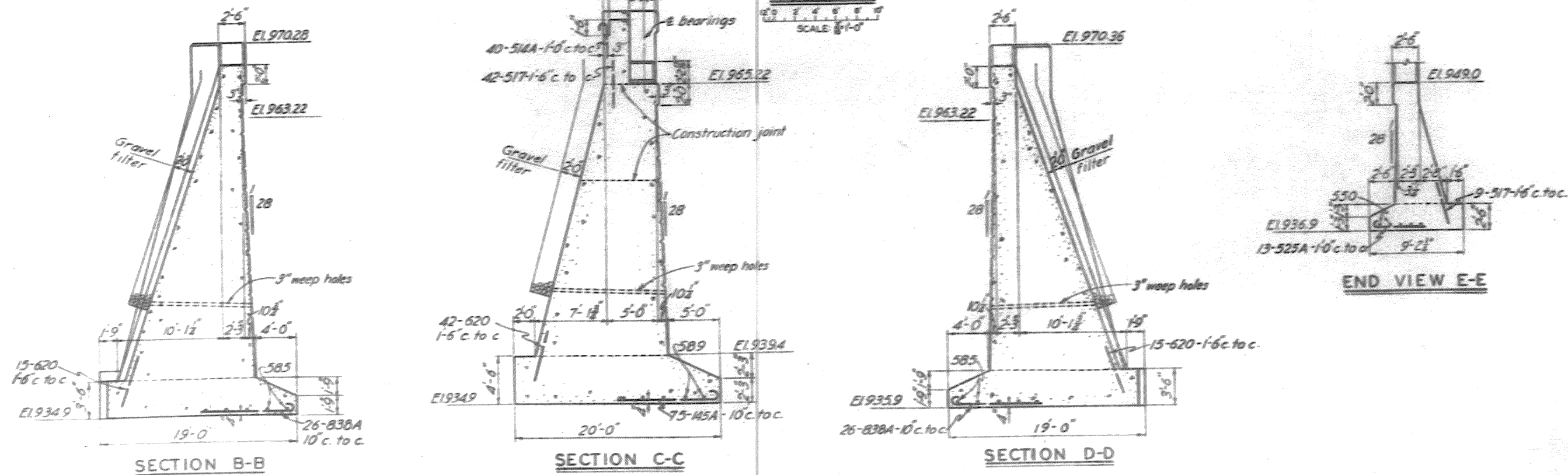
- Dimensions:**
 - Overall width: 40'-0" roadway, 7'-3 1/2" sidewalk, 7'-4 1/2" curb.
 - Bridge width: 40'-0" (roadway), 40'-3" (roadway + sidewalk), 43'-0" (roadway + sidewalk + curb).
 - Span length: 62'-2 1/2" (between piers), 62'-0" (between abutments).
 - Abutment width: 21'-6" (left), 21'-6" (right).
 - Span length: 32'-0" (between piers), 34'-9" (between abutments).
- Elevations:**
 - Left pier: EL 969.11 (top), EL 969.18 (bottom).
 - Right pier: EL 969.39 (top), EL 969.46 (bottom).
 - Right abutment: EL 969.17 (top), EL 969.24 (bottom).
- Construction Joints:** Indicated at the left pier and right abutment.
- Other Labels:** "Cherry Road", "Curb", "Side", "Bearing", "Sta. 12+92.73", "2'-7 1/2" (width of right pier), "2'-7 1/2" (width of right abutment), "2'-9" (width of right sidewalk), "2'-9" (width of right curb).

PLAN



END VIEW A-A

ELEVATION



SECTION B-B

SECTION C-C

SECTION D-D

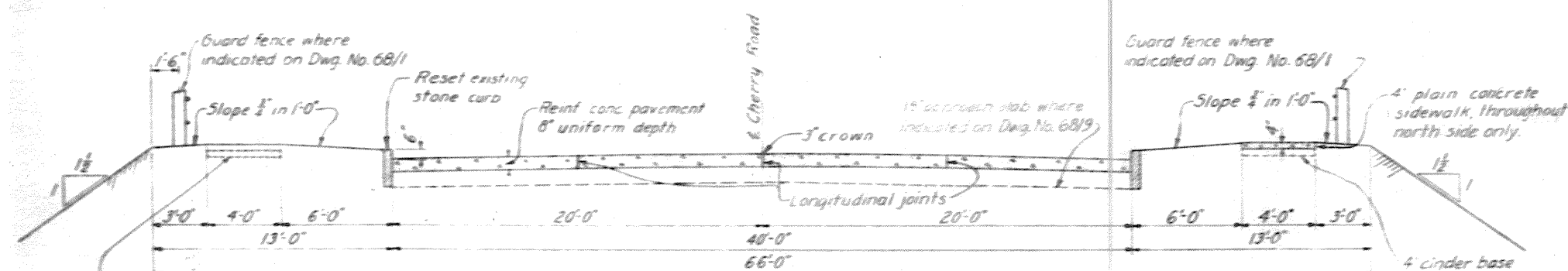
END VIEW E-E

For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/l
Place all reinforcing steel 4" minimum from surfaces unless otherwise noted.
For groove detail, see Dwg. No. 68/2.
For anchor bolt layout, see Dwg. No. 68/10.
For location plan, see Dwg. No. 68/l.
For expansion plate detail, see Dwg. No. 68/11.

Elevations shown are to top surfaces of roadway or sidewalk.

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
DRAWN BY: R.M.C.	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT ABUTMENT NO. 10	
TRACED BY: R.M.C.-JFC		
CHECKED BY: H.E.B. G.O.S.		
SUBMITTED BY: <i>[Signature]</i> CHIEF ENG. DIV.		
APPROVED: <i>[Signature]</i> DISTRICT ENGINEER		
APPROVED FOR:	APPROVED: <i>[Signature]</i> COL. C.E. DISTRICT ENGINEER	DATE: OCT. 1948
DRAWING NUMBER 027-PM2-2-68/7 SHEET 22 OF 60	SCALE 3/16" = 1'-0" SPEC. NO.	

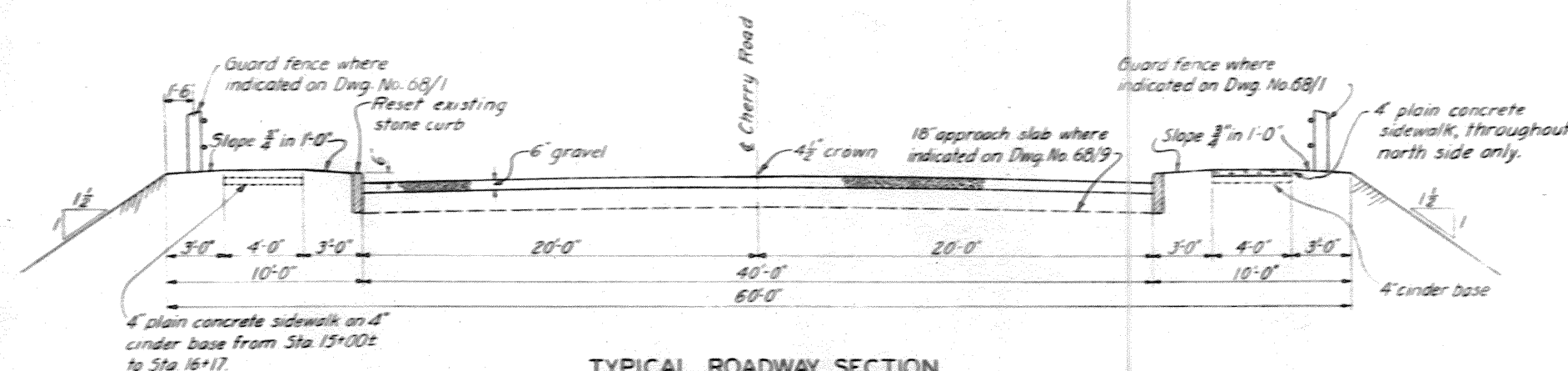
WORK AS CONSTRUCTED



TYPICAL ROADWAY SECTION
FROM STA. 2+94 TO STA. 6+07
AND STA. 9+06 TO STA. 10+29

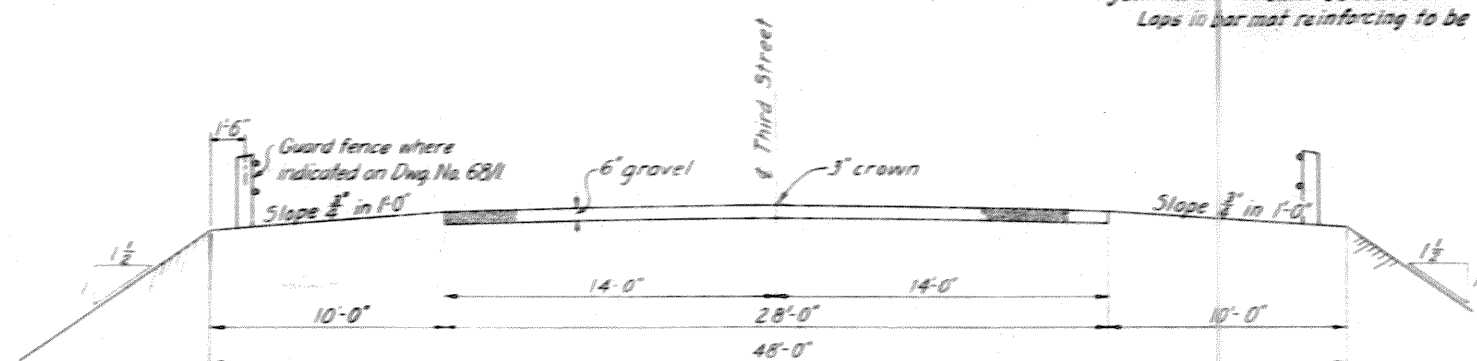
SCALE: $\frac{1}{2}$ " = 1'-0"

Note:
Curbs and sidewalks to be 6'
higher at bridge. Run out to
typical section in 50 feet, except
as noted on Dwg. No. 68/17.

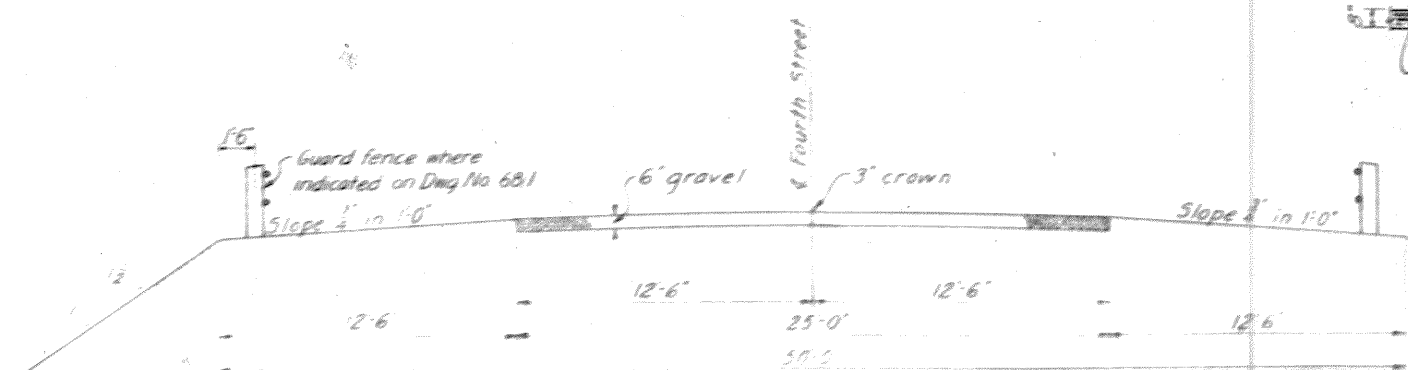


TYPICAL ROADWAY SECTION
FROM STA. 12+96 TO STA. 16+17

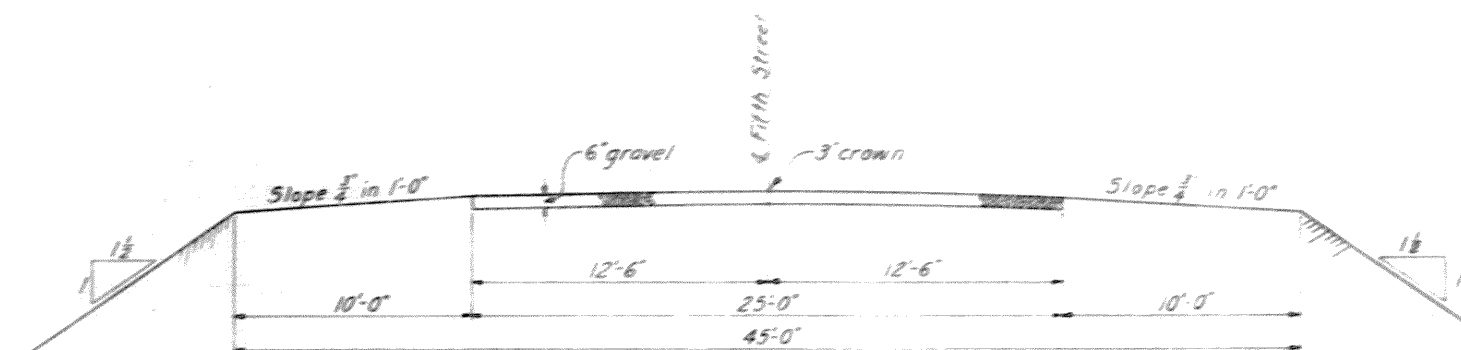
Note: Expansion joints to be placed in reinf. concrete pavement
at intervals of not more than 60 feet; these joints shall be continuous
across entire width of pavement, and at right angles to E. of pavement.
Construction joints, where necessary shall be constructed similar to
transverse expansion joints except that spacer tubes and pre-moulded
joint material shall be omitted.
Laps in bar mat reinforcing to be 1'-0" minimum



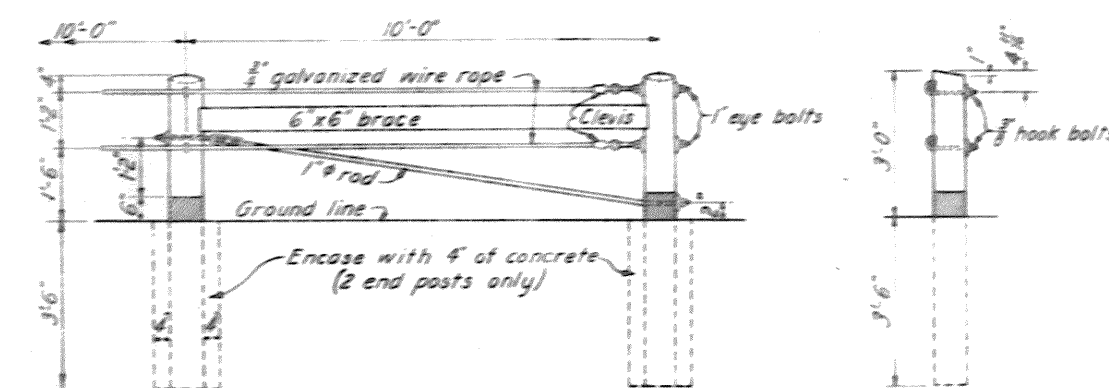
TYPICAL ROADWAY SECTION
THIRD ST. NORTH OF CHERRY ROAD



TYPICAL ROADWAY SECTION
FOURTH ST. NORTH OF CHERRY ROAD

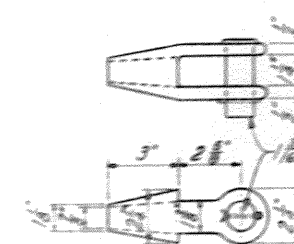


TYPICAL ROADWAY SECTION
FIFTH ST. SOUTH OF CHERRY ROAD

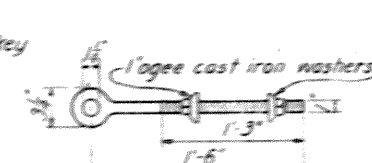


ELEVATION
SCALE: $\frac{1}{2}$ " = 1'-0"

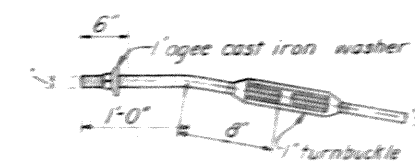
INTERMEDIATE POST
SCALE: $\frac{1}{2}$ " = 1'-0"



DETAIL OF CLEVIS
SCALE: $\frac{3}{4}$ " = 1'-0"



DETAIL OF EYE BOLT
SCALE: $\frac{1}{2}$ " = 1'-0"



DETAIL OF TIE ROD FITTING
SCALE: $\frac{1}{2}$ " = 1'-0"

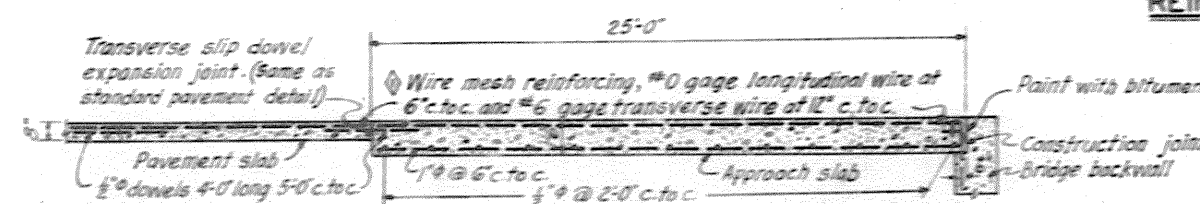


DETAIL OF HOOK BOLT
SCALE: $\frac{1}{2}$ " = 1'-0"

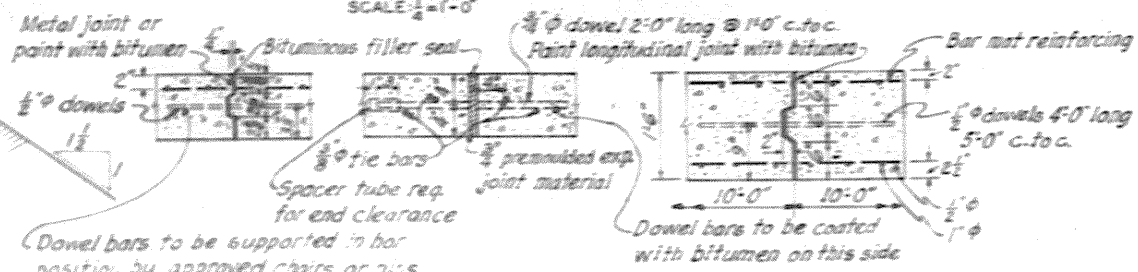
GUARD FENCE DETAILS

WIDTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
40'	0606	1457	2314	3257	4206	5100	6000	7006	8250	10715	12250	13887	15601	17401	19287	21258	23316	25459	27691	30000
26'	0727	1599	2507	3719	4987	6391	7929	9603	11412	13356	15435	17650	20000							
24'	0694	1528	2500	3611	4811	6250	7776	9444	11250	13194	15278	17500								
15'	0673	1549	2628	3911	5396	7085	8977	10000	(7.5' from 4)											

ORDINATES FOR CROWN
REINF. CONCRETE PAVEMENT



TYPICAL SECTION
SCALE: $\frac{1}{2}$ " = 1'-0"



LONGITUDINAL JOINT
SCALE: $\frac{1}{2}$ " = 1'-0"

TRANSVERSE
EXPANSION JOINT
SCALE: $\frac{1}{2}$ " = 1'-0"

LONGITUDINAL JOINT
SCALE: $\frac{1}{2}$ " = 1'-0"

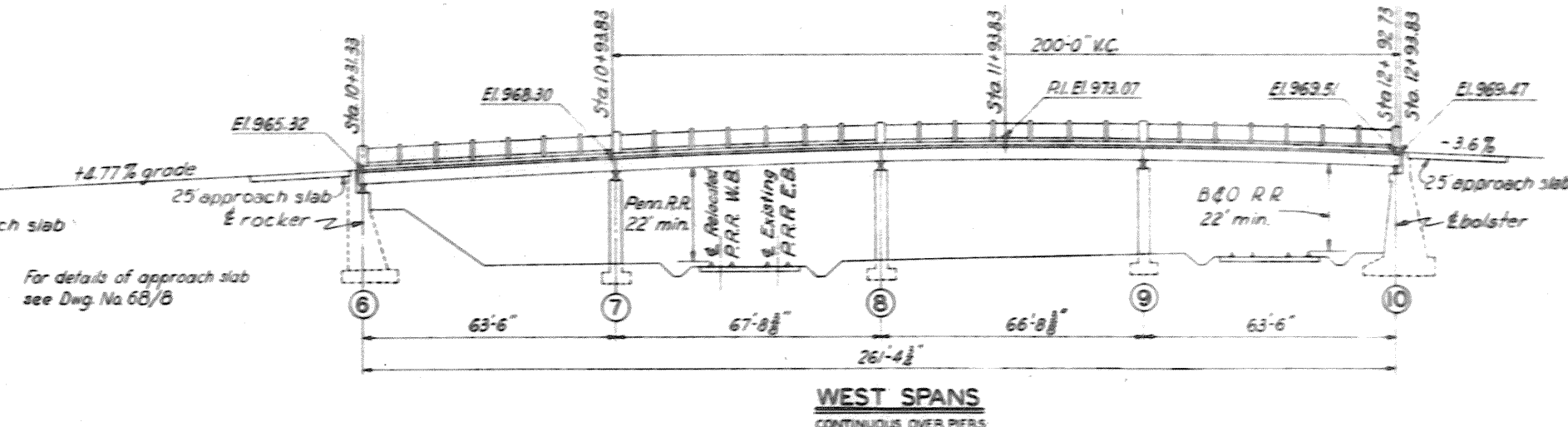
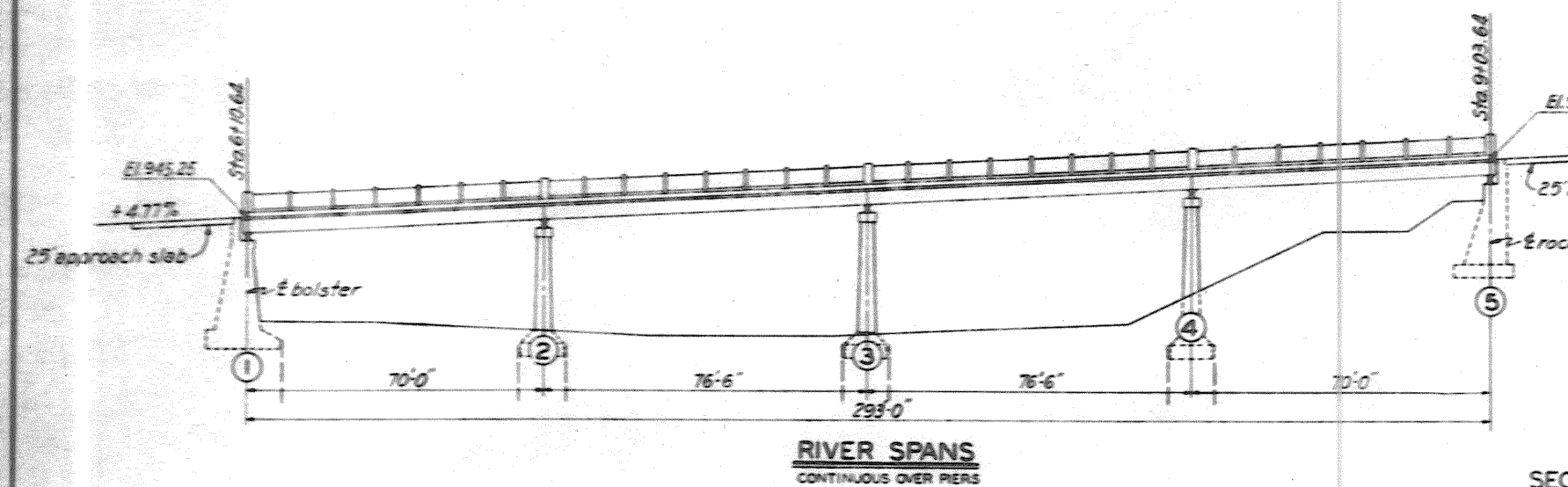
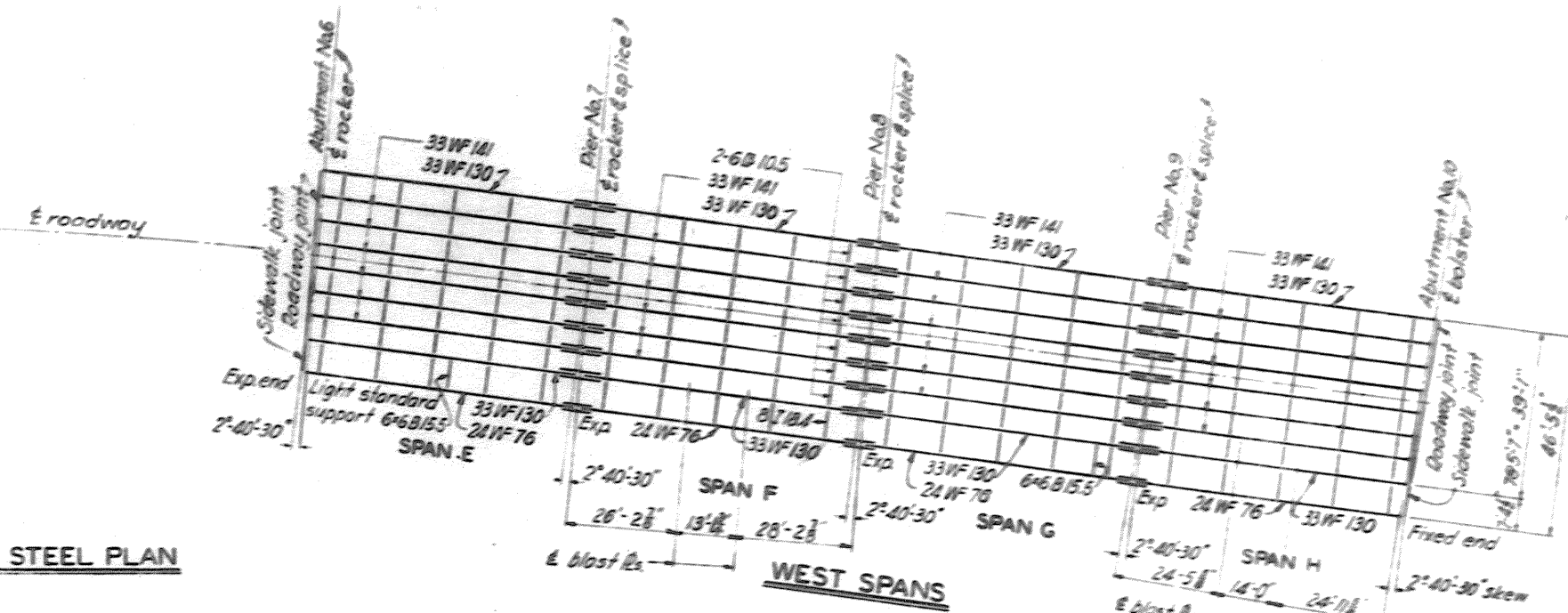
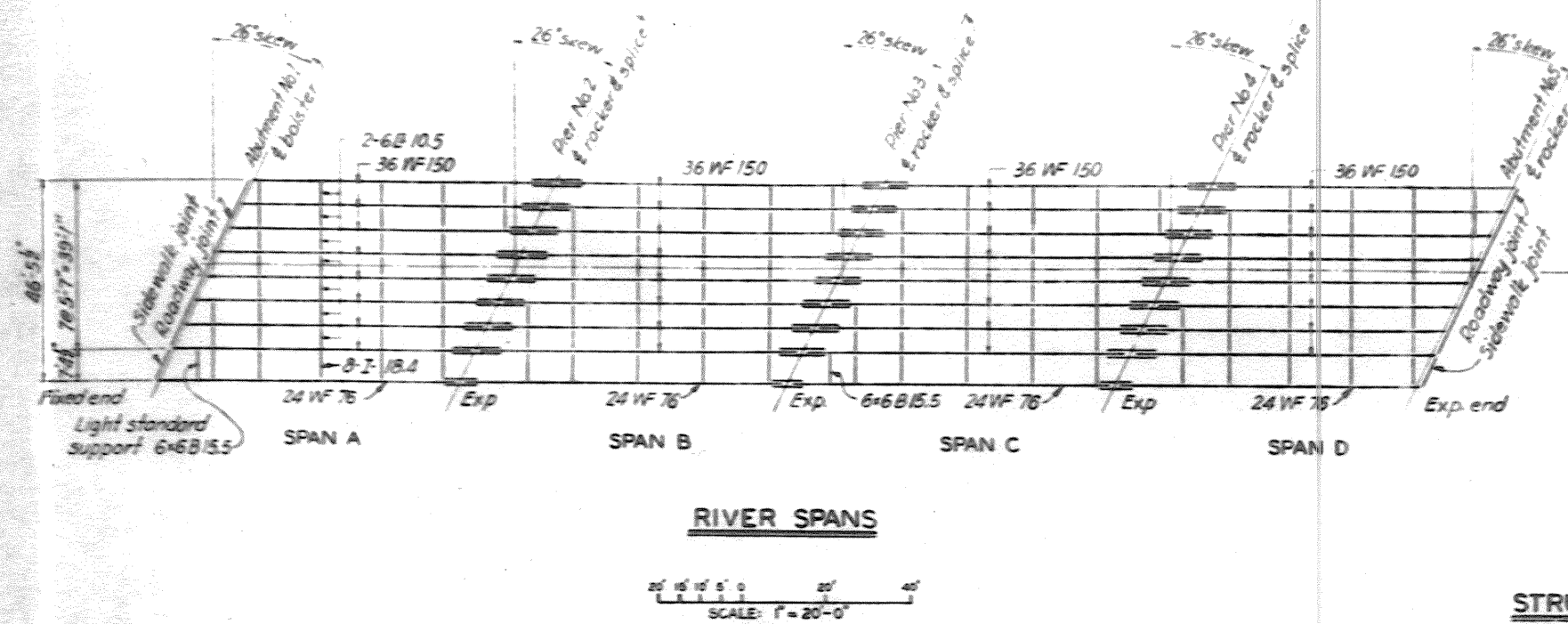
PAVEMENT DETAILS

NOTE

For location plan, see Dwg. No. 68/1.

11-18-48 REVISED WIRE MESH REINFORCING-ALTERATION ARTICLE		W.S.B.
REVISION	DATE	DESCRIPTION
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT APPROACH SECTIONS & DETAILS		
DRAWN BY: M.G.H.	TRACED BY: W.E.C.-B.T.C.	CHECKED BY: M.F.B.-G.O.S.
SUBMITTED BY: M.G.H.	APPROVED: M.G.H.	DATE: OCT. 1948
APPROVED FOR: M.G.H.	SCALE: $\frac{1}{2}$ " = 1'-0"	SPEC. NO.
DATE:	DRAWING NUMBER	
	0271-PM2-2-68/8	
	SHEET 23 OF 60	

WORK AS CONSTRUCTED



DESIGN DATA

Dead load - Actual weight plus 10% for future asphalt surface
 Live load - H20-33 loading (see Ohio State Highway Specifications 1933)
 Truck Wheel Loading or Traffic Lane Loading used, whichever gives greater stress. More than one span loaded when it causes maximum stress. Minimum clearance between trucks equals 30 feet. Not more than one truck per span used.
 Impact = $\frac{100}{L + 40}$ live load; where L = loaded length of span in feet
 $M_e = \frac{1}{8} M_l$ = Bending moment in interior beams due to lateral distribution of wheel loads; where M_l = bending moment due to one line of wheels and s = beam spacing in feet
 Unit stresses
 Tension
 Axial tension, net section _____ 18,000
 Bending on extreme fiber _____ 20,000
 Compression in flanges _____ 18,000
 but not to exceed $\frac{1}{3} f_c$
 where L = length in inches of unsupported flange and b = flange width in inches
 Shear
 Girder web, gross section _____ 12,000
 Pins and shop driven rivets _____ 13,500
 Power driven field rivets and turned bolts _____ 12,000
 Bearing
 Pins and shop driven rivets in double shear _____ 27,000
 Shop driven rivets in single shear and power driven field rivets and turned bolts in double shear _____ 24,000
 Power driven field rivets and turned bolts in single shear _____ 20,000

LOADS	RIVER SPANS						WEST SPANS					
	SPAN A & D			SPAN B & C			SPAN E & H			SPAN F & G		
	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM
DEAD LOAD	228,000	223,000	98,000	196,000	193,000	88,000	185,000	173,000	81,000	143,000	132,000	66,000
LIVE LOAD	416,000	270,000		375,000	243,000		370,000	239,000		333,000	216,000	
IMPACT	107,000	69,000		93,000	60,000		98,000	64,000		87,000	56,000	
SIDEWALK LL		97,000	109,000		90,000	102,000		79,000	89,000		69,000	76,000
TOTAL	751,000	659,000	207,000	664,000	586,000	190,000	653,000	555,000	170,000	563,000	473,000	144,000

LOADS	RIVER SPANS						WEST SPANS					
	PIER NOS 2 & 4			PIER NO 3			PIER NOS 7 & 9			PIER NO 8		
	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM
DEAD LOAD	209,000	202,000	81,000	172,000	166,000	67,000	166,000	160,000	65,000	124,000	120,000	48,000
LIVE LOAD	449,000	291,000		444,000	287,000		401,000	260,000		397,000	258,000	
IMPACT	83,000	54,000		80,000	52,000		78,000	51,000		76,000	49,000	
SIDEWALK LL		121,000	136,000		123,000	139,000		99,000	111,000		92,000	104,000
TOTAL	741,000	668,000	217,000	696,000	628,000	206,000	645,000	570,000	176,000	597,000	519,000	152,000

LOADS	REACTIONS IN LBS.											
	RIVER SPANS				WEST SPANS				PIER NOS			
	ABUTMENT NOS 1 & 5	PIER NOS 2 & 4	PIER NO 3	ABUTMENT NOS 6 & 10	PIER NOS 7 & 9	PIER NO 8	ABUTMENT NOS 1 & 5	PIER NOS 2 & 4	PIER NO 3	ABUTMENT NOS 6 & 10	PIER NOS 7 & 9	PIER NO 8
DEAD LOAD	15,400	5,000	6,500	41,900	40,800	17,400	39,300	38,300	16,500	13,700	12,900	6,000
LIVE LOAD	32,100	19,400		56,000	36,300		55,100	35,700		31,400	19,100	
IMPACT	8,200	5,000		10,300	6,700		9,900	6,400		8,400	5,100	
SIDEWALK LL		6,200	7,000		17,400	19,600		17,100	19,300		15,500	17,400
TOTAL	55,700	45,600	13,500	108,200	101,200	37,000	104,300	97,500	35,800	53,500	42,700	12,300

BY	DATE	CHARACTER
REVISIONS		

DEPARTMENT OF THE ARMY
 CORPS OF ENGINEERS
 OFFICE OF THE DISTRICT ENGINEER
 HUNTINGTON, W. VA.

TUSCARAWAS RIVER
 LOCAL PROTECTION PROJECT
 MASSILLON, OHIO
 SECTION 2, UNIT 2
 CHERRY ROAD VIADUCT
 STEEL PLAN & DESIGN DATA

DRAWN BY: J.H.
 TRACED BY: C.D.H.
 CHECKED BY: A.R.A.
 SUBMITTED BY: [Signature]
 APPROVED: [Signature]
 DATE: OCT. 1948

SCALE: 1"=20'
 SHEET 24 OF 30
 0271-PM2-2-68/9

WORK AS CONSTRUCTED



SECTION AT E ROADWAY

DESIGN DATA

NEGATIVE MOMENTS IN FT.-LBS.												
LOADS	RIVER SPANS						WEST SPANS					
	PIER NOS 2 & 4			PIER NO 3			PIER NOS 7 & 9			PIER NO 8		
	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM
DEAD LOAD	209,000	202,000	81,000	172,000	166,000	67,000	166,000	160,000	65,000	124,000	120,000	48,000
LIVE LOAD	449,000	291,000		444,000	287,000		401,000	260,000		397,000	258,000	
IMPACT	83,000	54,000		80,000	52,000		78,000	51,000		76,000	49,000	
SIDEWALK LL		121,000	136,000		123,000	139,000		99,000	111,000		92,000	104,000
TOTAL	741,000	669,000	217,000	696,000	628,000	206,000	645,000	570,000	176,000	597,000	519,000	152,000

REACTIONS IN LBS.																		
LOADS	RIVER SPANS									WEST SPANS								
	ABUTMENT NOS 1 & 5			PIER NOS 2 & 4			PIER NO 3			ABUTMENT NOS 6 & 10			PIER NOS 7 & 9			PIER NO 8		
	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM	INTERIOR BEAM	CURB BEAM	HANDRAIL BEAM
DEAD LOAD	15,400	5,000	6,500	41,900	40,800	17,400	39,300	38,300	16,500	13,700	12,900	6,000	36,900	34,800	15,600	33,100	31,300	14,200
LIVE LOAD	32,100	9,400		56,000	36,300		55,100	35,700		31,400	19,100		53,200	34,400		52,300	33,900	
IMPACT	8,200	5,000		10,300	6,700		9,900	6,400		8,400	5,100		10,400	6,700		10,100	6,500	
SIDEWALK LL		6,200	7,000		17,400	19,600		17,100	19,300		5,600	6,300		15,500	17,000		14,800	16,700
TOTAL	55,700	45,600	13,500	108,200	101,200	37,000	104,300	97,500	35,800	53,500	42,700	12,300	100,500	91,400	33,000	95,500	86,500	30,900

Dead load = Actual weight plus 10% for future asphalt surface
Live load = H-20-33 loading. (See Ohio State Highway Specifications 1933)
Truck Wheel Loading or Traffic Lane Loading used, whichever gives greater stress. More than one span loaded when it causes maximum stress. Minimum clearance between trucks equals 30 feet.
Not more than one truck per span used.

Impact = $\frac{50}{L+30}$ = live load; where L = loaded length of span in feet
 $M_2 = \frac{3}{8} M_1$ = bending moment in interior beams due to lateral distribution of wheel loads;
where M_1 = bending moment due to one line of wheels and S = beam spacing in feet

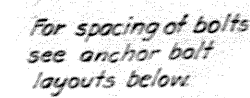
Unit stresses

Tension
Axial tension, net section _____ 18,000
Bending on extreme fiber _____ 20,000
Compression in flanges _____ 18,000
but not to exceed _____ 20,000 ($\frac{5}{8}$)²
where L = length in inches of unsupported flange and b = flange width in inches

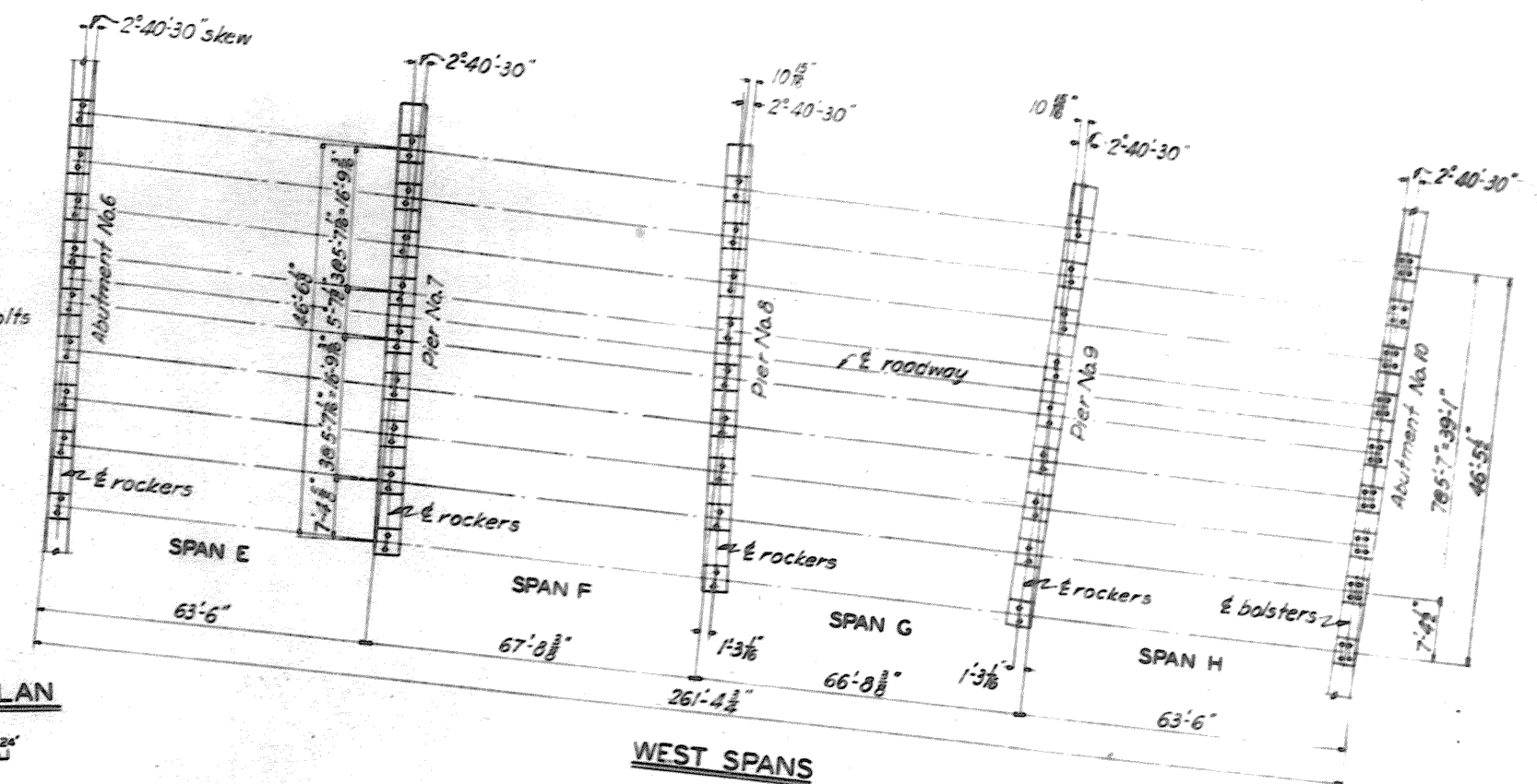
Shear
Girder web, gross section _____ 12,000
Pins and shop driven rivets _____ 13,500
Power driven field rivets and turned bolts _____ 12,000
Bearing
Pins and shop driven rivets in double shear _____ 27,000
Shop driven rivets in single shear and power driven field rivets and turned bolts in double shear _____ 24,000
Power driven field rivets and turned bolts in single shear _____ 20,000

DRAWN BY: J.H. TRACED BY: C.D.M. CHECKED BY: A.R.N. SUBMITTED BY: <i>[Signature]</i> C.D.M. INC. OHIO APPROVED: <i>[Signature]</i> C.D.M. INC. OHIO APPROVED FOR:		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA. TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT STEEL PLAN & DESIGN DATA	
DATE:		OCT. 1948	
SCALE: 1/2"=1'		SPEC. NO.	
DATE:		027 - PM2-2-68/9	

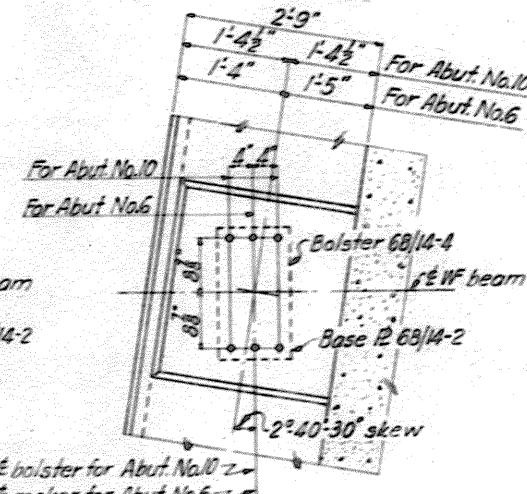
WORK AS CONSTRUCTED



RIVER SPANS



ANCHOR BOLT PLAN



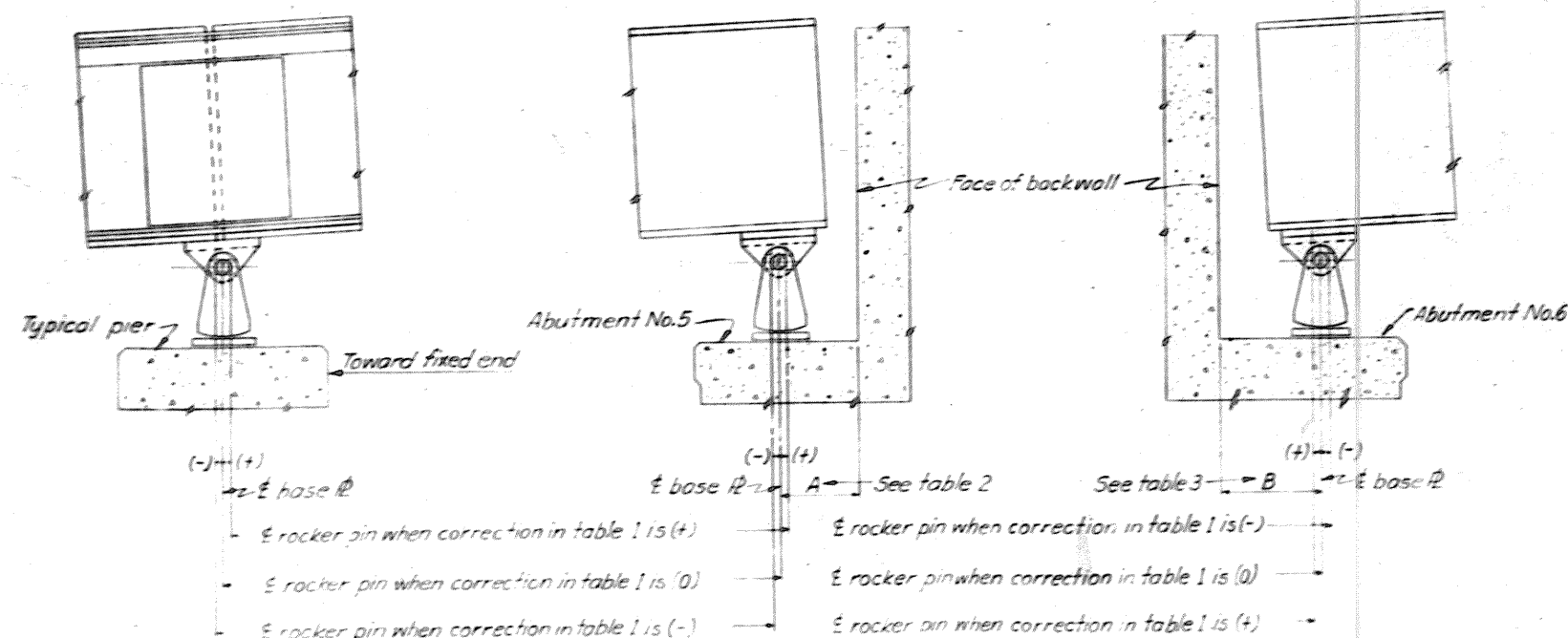
ABUTMENT NO.1
ABUTMENT NO.5 SIMILAR EXCEPT AS NOTED

PIERS NO'S. 2,3&4

PIER NO.9
PIER NOS. 7 & 8 SIMILAR EXCEPT OPPOSITE HAND

ABUTMENT NO.10
ABUTMENT NO.6 SIMILAR EXCEPT OPPOSITE
HAND AND AS NOTED

TYPICAL ANCHOR BOLT LAYOUTS



ROCKER SETTING



TABLE NO.2
FORCE "A" FOR ROCKER ON
ABUTMENT NO.5

TEMPERATURE						
0°	20°	40°	60°	80°	100°	120°
1-2	1-1.5	1-1	1-0.5	1-0	1/2	1/2

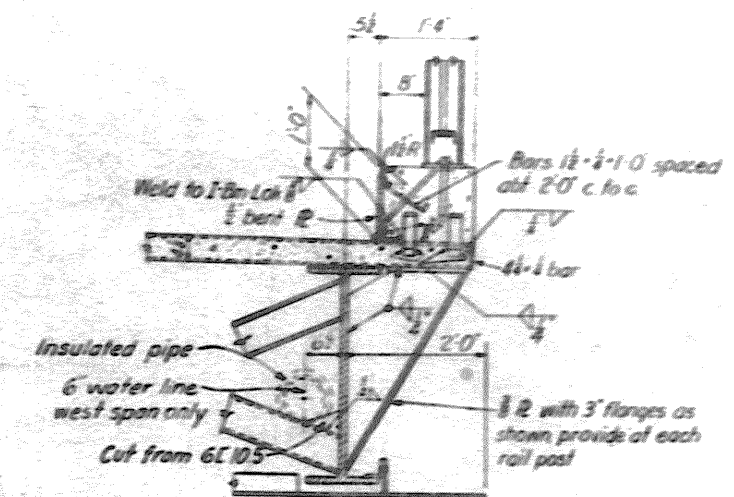
TABLE NO.3
DISTANCE "B" FOR ROCKER ON
ABUTMENT NO.6

TEMPERATURE						
0°	20°	40°	60°	80°	100°	120°
1.6	1.5	1.5	1.5	1.4	1.4	1.3

TABLE NO.1
TEMPERATURE CORRECTION FOR
SETTING EXPANSION ROCKERS

ROCKER LOCATION	TEMPERATURE						
	0°	20°	40°	60°	80°	100°	120°
PIER NO 2	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5
PIER NO 3	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5
PIER NO 4	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5
ABUT. NO 5	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5
ABUT. NO 6	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5
PIER NO 7	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5
PIER NO 8	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5
PIER NO 9	-1.5	-1.5	-1.5	0	+1.5	+1.5	+1.5

DRAWN BY: ALK.D. TRACED BY: C.D.H. CHECKED BY: H.W.B. SUBMITTED BY: <i>[Signature]</i> CHECKED BY: <i>[Signature]</i> APPROVED: <i>[Signature]</i> C. L. H. ENG. ASST. APPROVED FOR:		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA. TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT ANCHOR BOLT PLAN & ERECTION DATA APPROVED: <i>[Signature]</i> COL. C. E. DISTRICT ENGINEER DATE: OCT. 1948 SCALE: A-5 SHOWN SPEC. HO. DRAWING NUMBER 0271-PM2-2-68/10 SHEET 35 OF 80
---	--	--



Technical drawing of a light standard base. The drawing shows a cross-section of the base with various components and dimensions labeled. The components include:

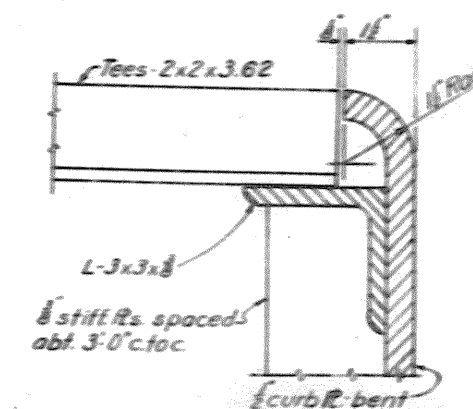
- Light standard (by others)
- 1/4 Std. pipe sleeves
- 12-3/4" center - 1" O bevel
- Weld sleeves to beveled E
- 11-1/2" O-5" Stiff E
- 11-1/2" O-5" Stiff E
- 1" Anchor bolts
- 1/4" Weld bevel washer to E and hex nut to washer

4 bars 16-#4 / FT at each post
and abt 20 dtrs between posts

DETAIL OF SCUPPER

Diagram of a 6'0" x 3'6" Wrought Iron Tank. The tank has 5/8" holes for 1/2" bolts. It features a 3-1/2" lug and is filled with Mastic Filler. The tank is labeled "L-1 Wrought Iron P".

For location of blast plates, see Dwg. No. 68/9.



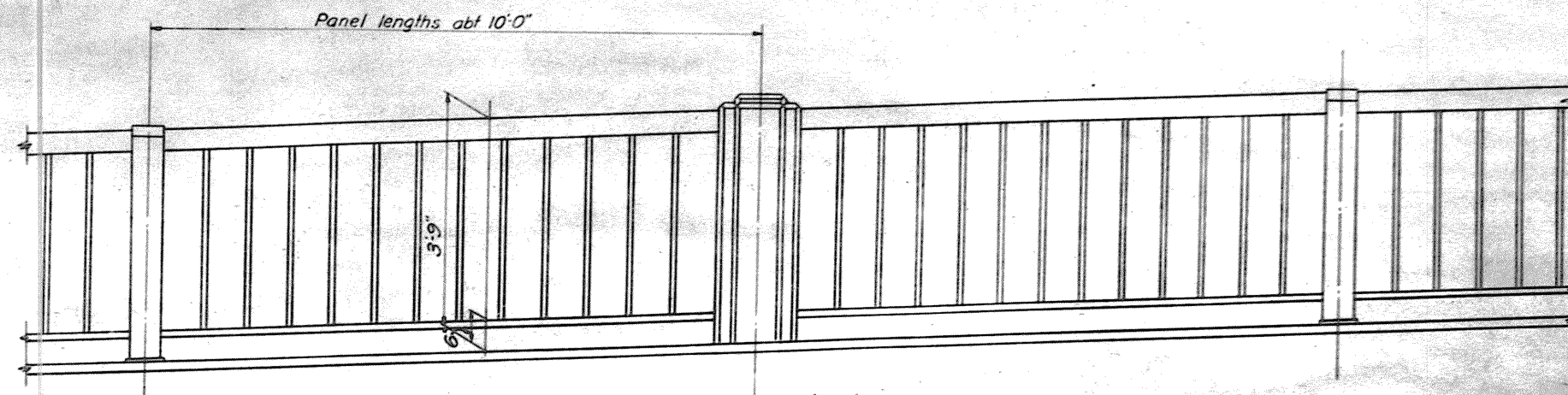
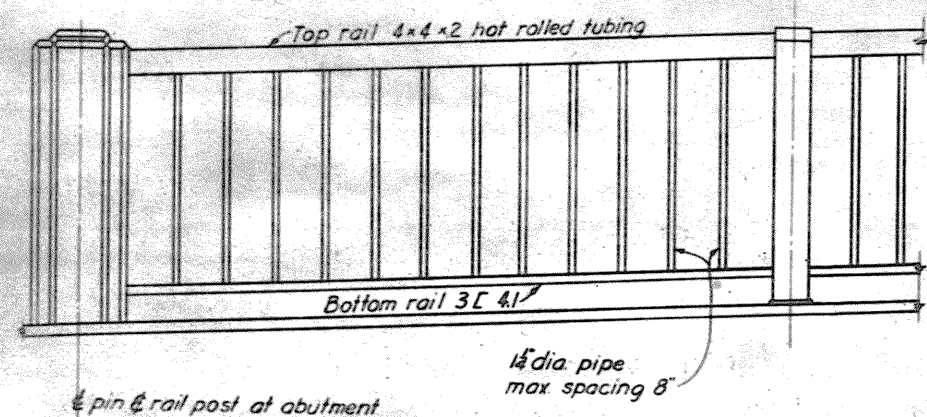
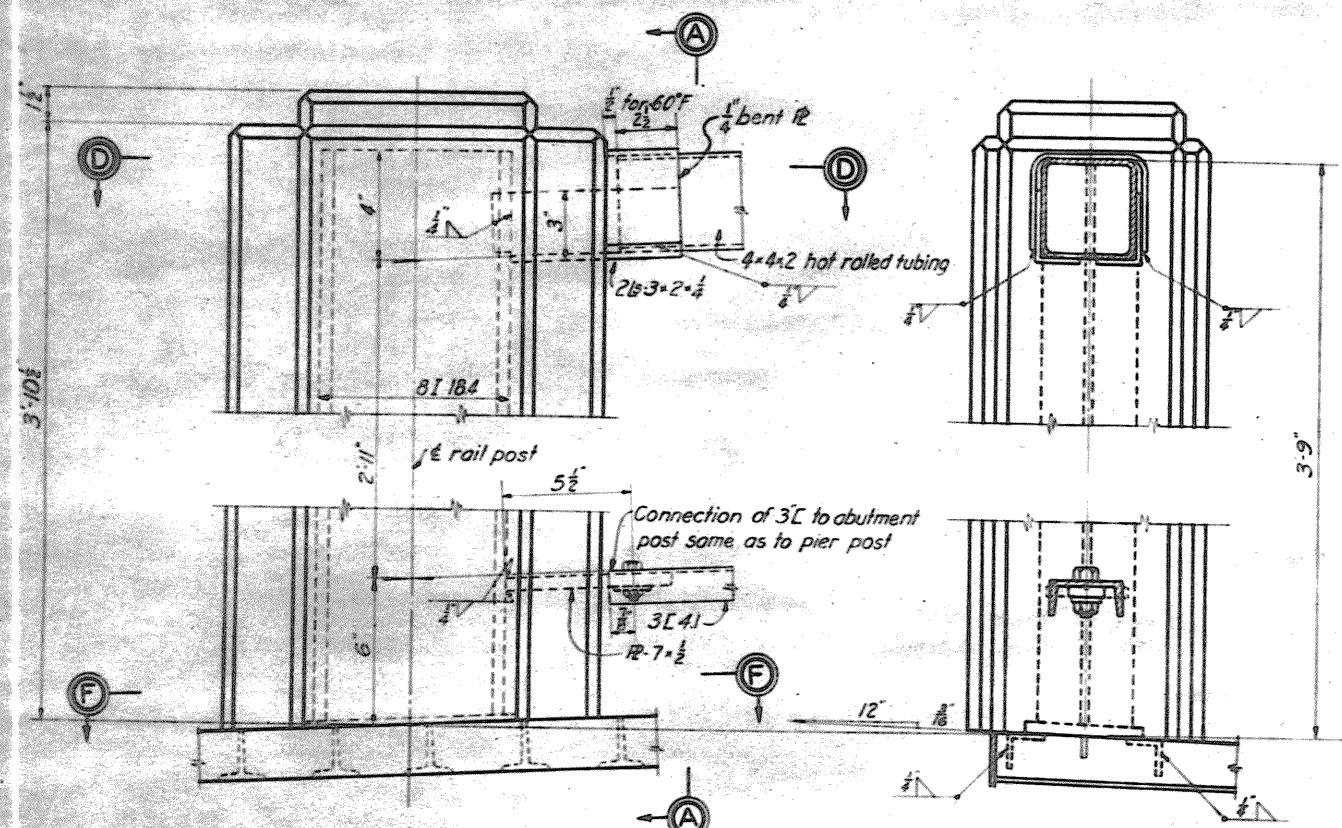
$L-3 \times 3 \times \frac{1}{8}$
 stiff Rs. spaced
 abt. 3'-0" c.to c.
 curb R. bent

HEIGHT OF PEDESTALS UNDER BOLSTERS										BRIDGE SEAT	PLATE PLUS 1/2" NORMAL SHIMS	
LOCATION	F	G	H	J	K	K-1	J-1	H-1	G-1	ELEVATION	SIDEWALK BEAM	ROADWAY BEAMS
ABUT. NO.1	2'-2 1/2"	4 1/2"	3 1/2"	5 1/2"	8 3/8"	9 3/8"	10 3/8"	11 1/8"	11 1/8"	940.31	1 1/2"	1 1/2"
ABUT. NO.10	2'-2 1/2"	1 1/2"	2 1/2"	3 1/2"	3 3/8"	3 1/2"	2 3/8"	1 1/8"		963.22	1 1/2"	1 1/2"

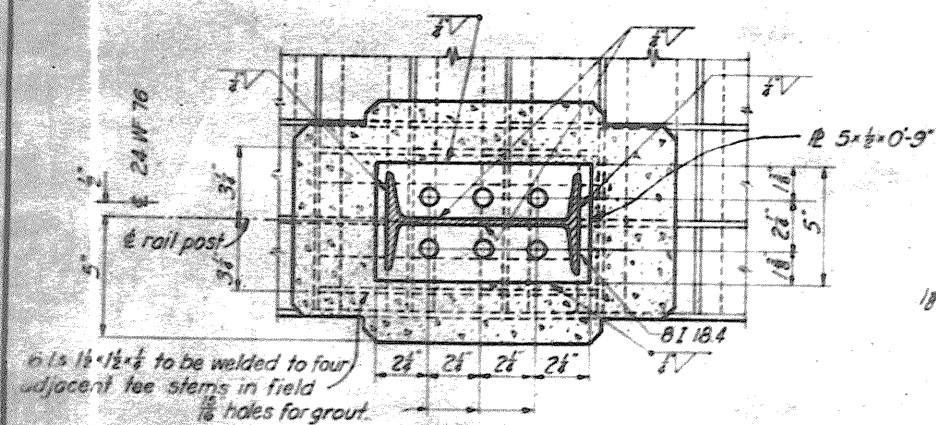
By	DATE	CHARACTER REVISIONS

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: A.W.S. TRACED BY: H.C. CHECKED BY: H.W.B. A.W.S. SIGNED BY: <i>[Signature]</i> SPECIAL AGENT	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT TYPICAL SECTIONS & DETAILS
APPROVED: <i>[Signature]</i> DIST. ENGR.	APPROVED: <i>[Signature]</i> COL. C. C. DISTRICT ENGINEER
APPROVED FOR: _____ DATE: _____	SCALE: $\frac{1}{4} = 1'-0"$ SHEET NUMBER 0271-PM2-2-68/12 SHEET 37 OF 60

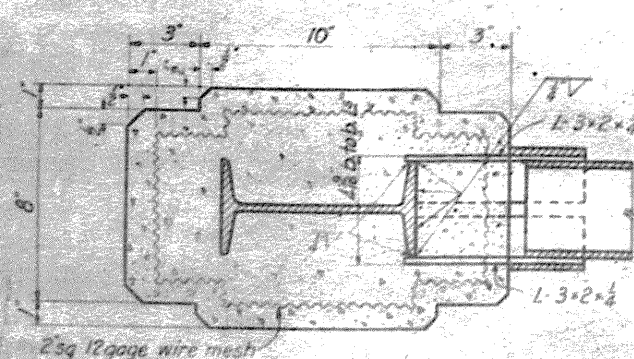
WORK AS CONSTRUCTED

TYPICAL RAILING PANELS
SCALE 3/8"=1'-0"

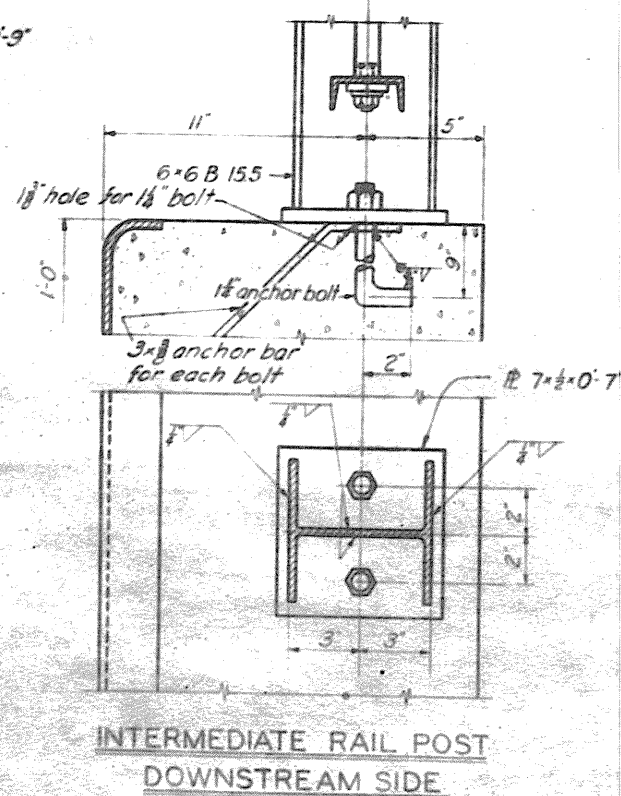
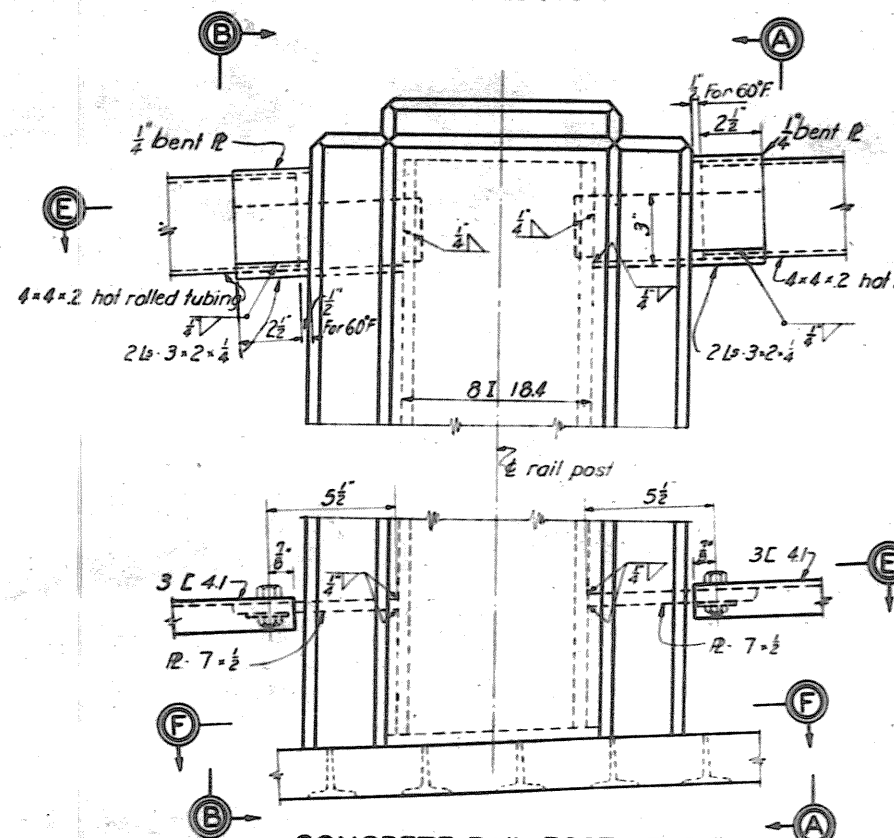
CONCRETE RAIL POST AT ABUTMENT

SECTION A-A AS SHOWN
SECTION B-B OPP HAND
SCALE: 3/8"=1'-0"

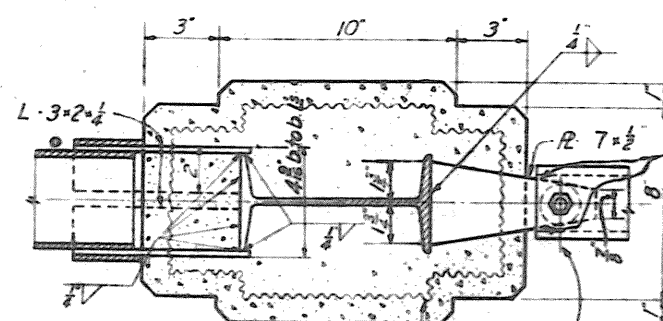
SECTION F-F



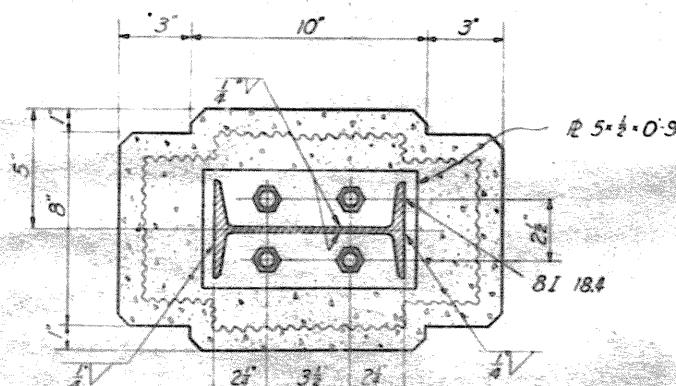
SECTION D-D

INTERMEDIATE RAIL POST
DOWNSTREAM SIDE

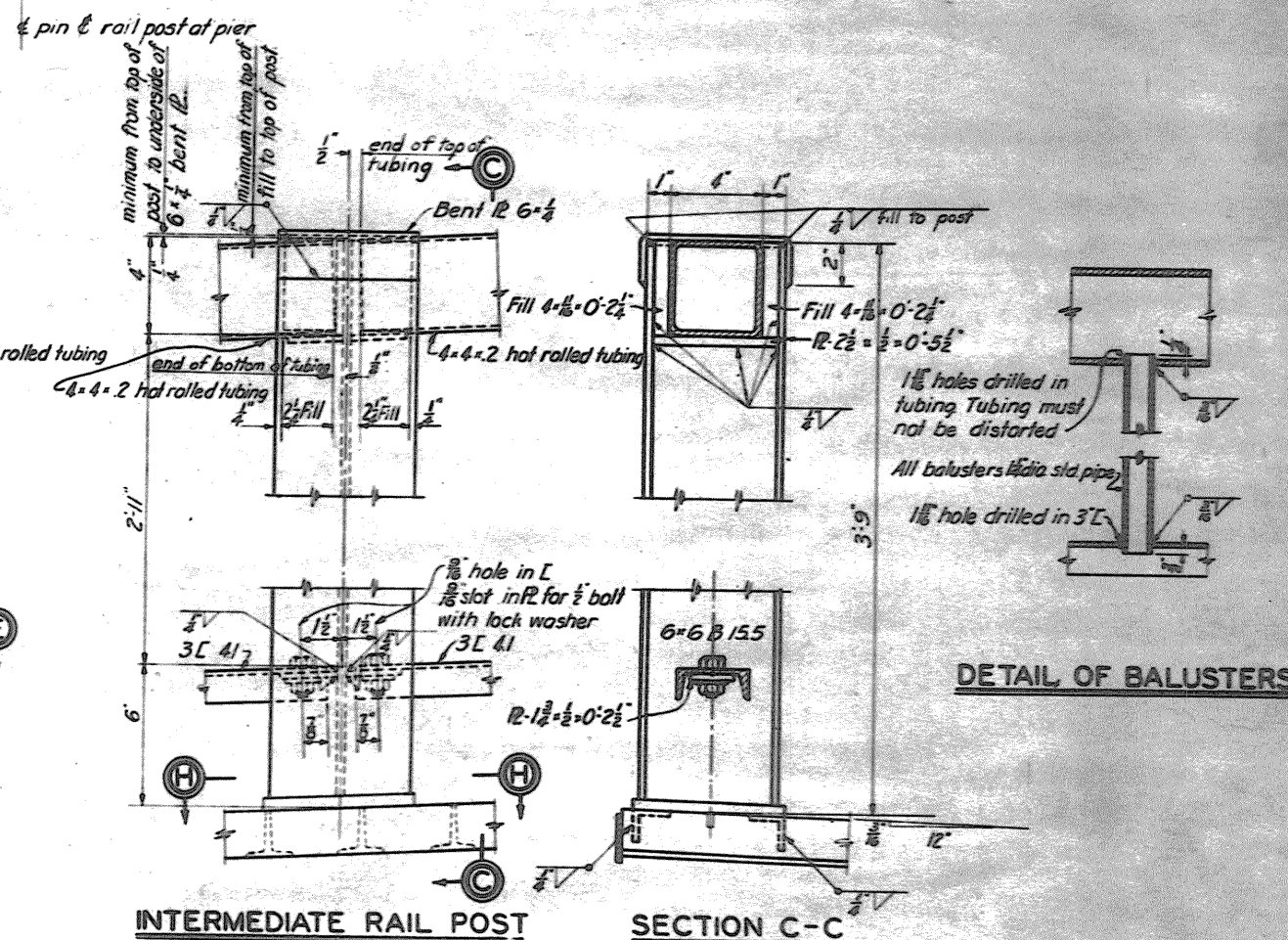
CONCRETE RAIL POST AT PIERS



SECTION E-E

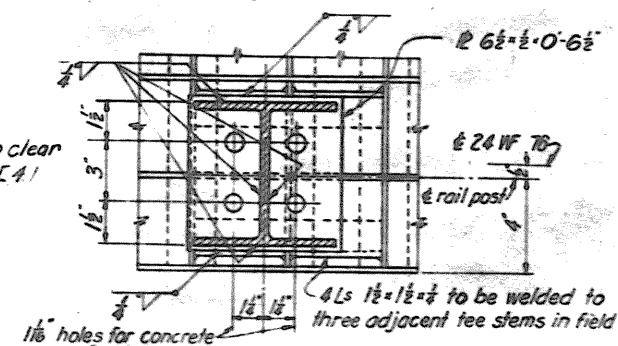


SECTION G-G

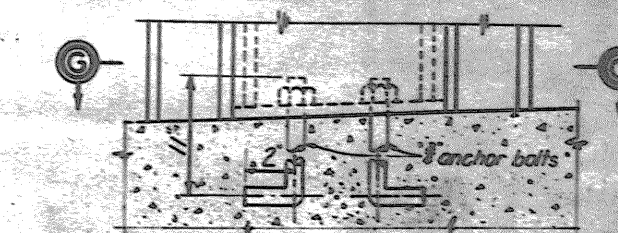


INTERMEDIATE RAIL POST

SECTION C-C



SECTION H-H

CONCRETE RAIL POST AT PIERS
AND ABUTMENTS-DOWNSTREAM SIDE

NOTES

Material for railing to be structural steel.
Steel railing posts are to be welded in place before sidewalk slab is poured.
All railing posts shown are for upstream side except as noted.
Railing posts to be beveled to take care of sidewalk slope and grade of roadway.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
OFFICE OF THE DISTRICT ENGINEER
HUNTINGTON, W. VA.

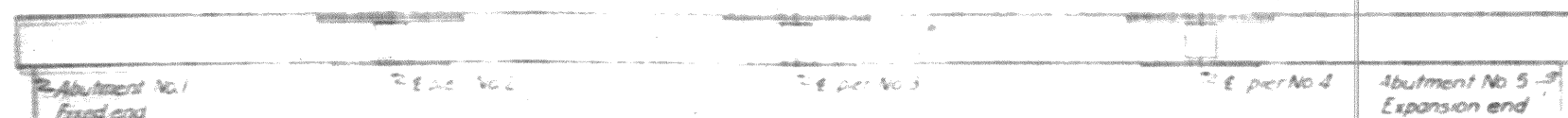
TUSCARAWAS RIVER
LOCAL PROTECTION PROJECT
MASSILLON, OHIO
SECTION 2, UNIT 2
CHERRY ROAD VIADUCT
RAILING DETAILS

DRAWN BY: A. J. M.
TRACED BY: H. C.
CHECKED BY: H. C. & A. W. S.
SUPERVISOR: [Signature]
APPROVED: [Signature]
DATE: OCT. 1938

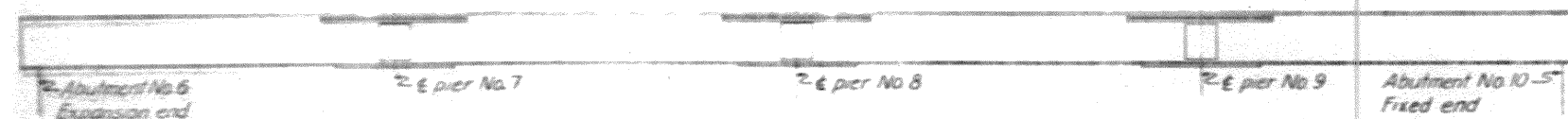
SCALE: 3/8"=1'-0" SPEC. NO.
DRAWING NUMBER
O271-PM2-2-68/13
SHEET 30 OF 60

MWW 8-7-53 REVISED AS CONSTRUCTED
BY DATE CHARACTER
REVISIONS

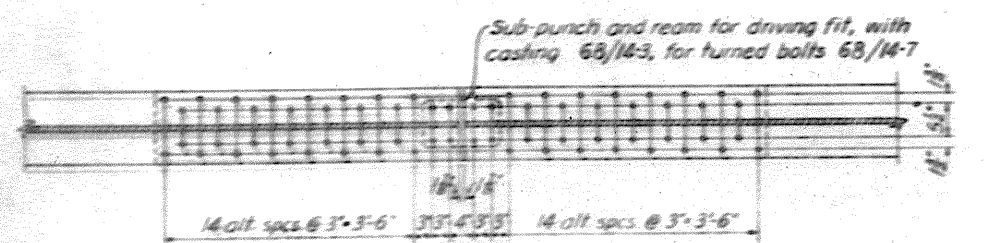
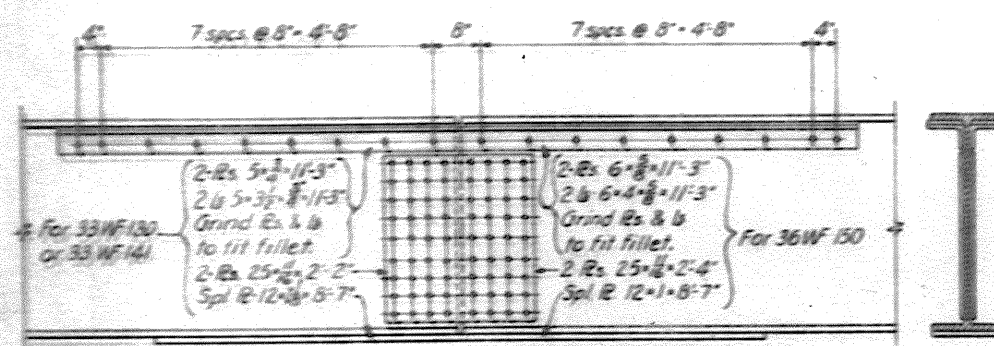
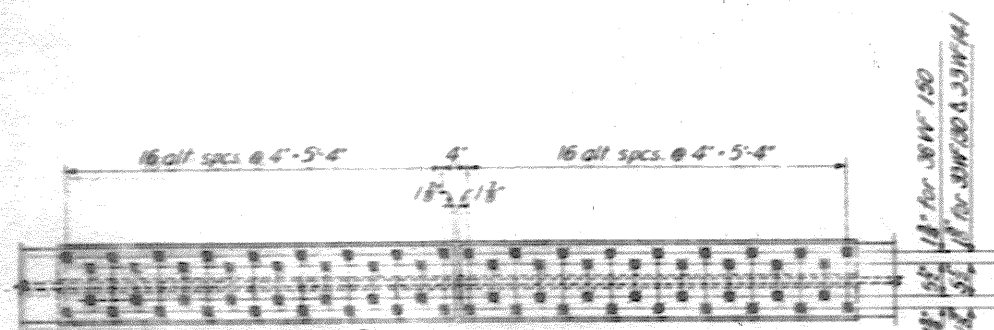
WORK AS CONSTRUCTED



SPLICE DIAGRAM-RIVER SPANS

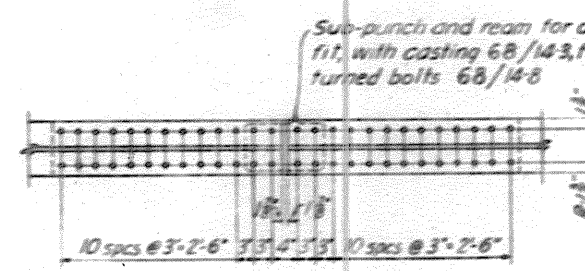
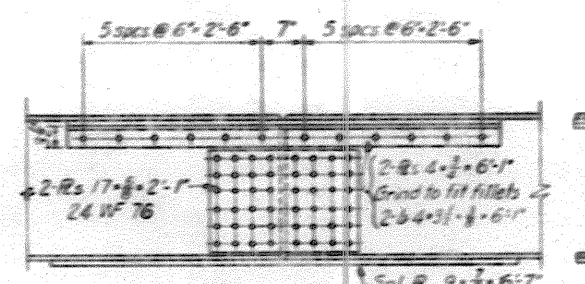
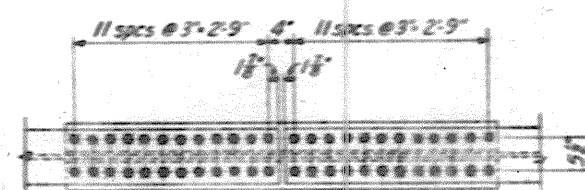


SPLICE DIAGRAM-WEST SPAN



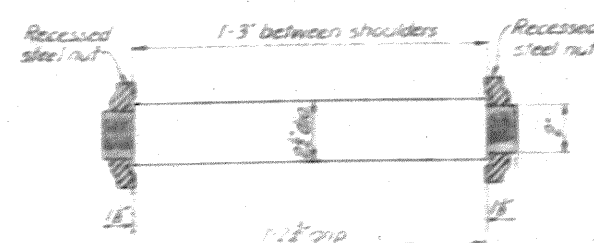
SPLICE FOR ROADWAY STRINGERS

SCALE: 3/4"=1'-0"



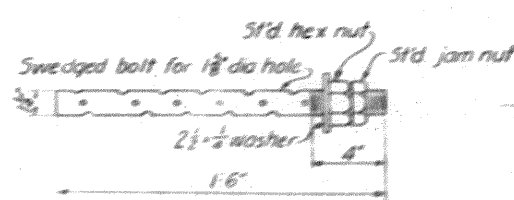
SPLICE FOR SIDEWALK STRINGERS

SCALE: 3/4"=1'-0"



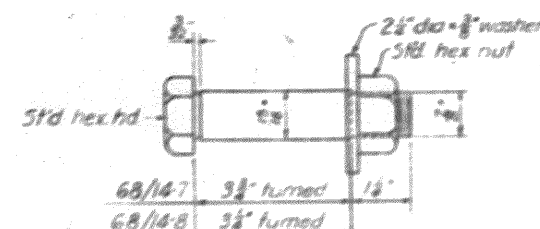
DETAIL OF PIN

COLD ROLLED STEEL WITH RECESSED STEEL NUT
MARK 68/14-3 COLD ROLLED STEEL WT 26.9 LBS
MAKE 80 RECESSED STEEL NUTS WT 4.0 LBS



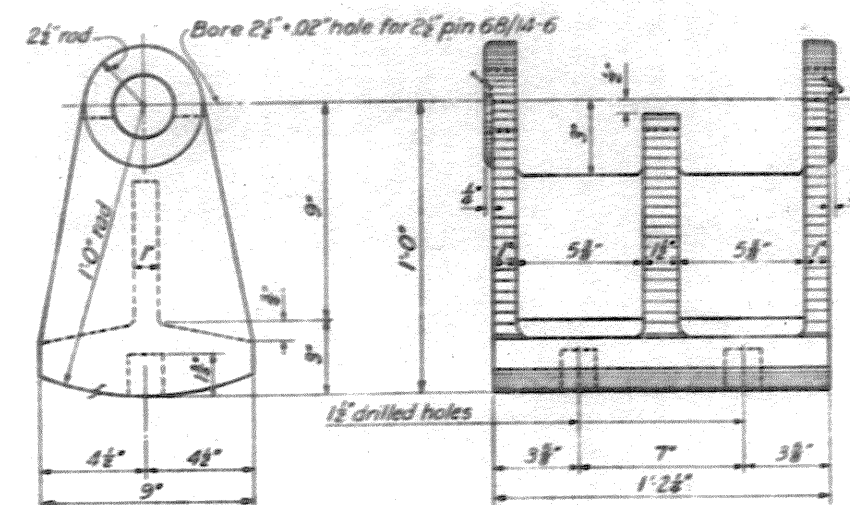
DETAIL OF ANCHOR BOLT

STRUCTURAL STEEL
MARK 68/14-3
MAKE 72 WT 7.0 LBS



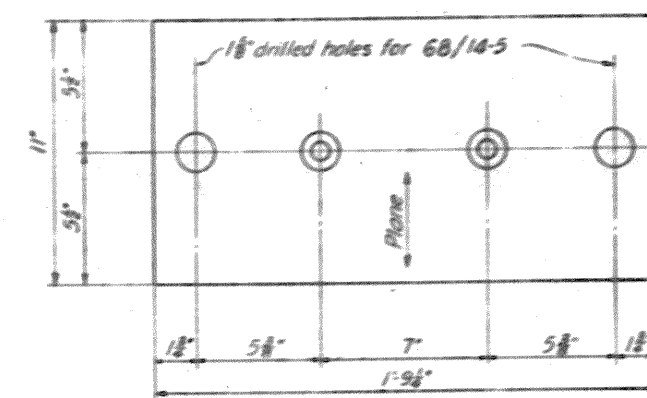
DETAIL OF TURNED BOLT

STRUCTURAL STEEL
MARK 68/14-7 MAKE 640 WT 1.83 LBS
MARK 68/14-8 MAKE 80 WT 1.72 LBS
SCALE 6"=1'-0"



DETAIL OF ROCKER

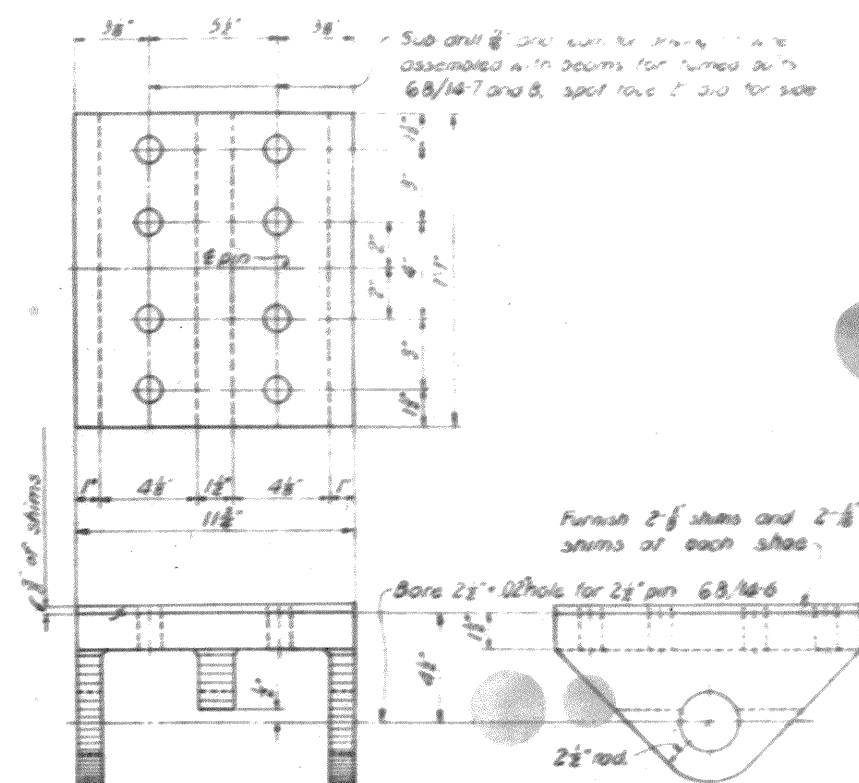
CAST STEEL
MAKE 72
MARK 68/14-1
WT 1730 LBS



DETAIL OF BASE PLATE

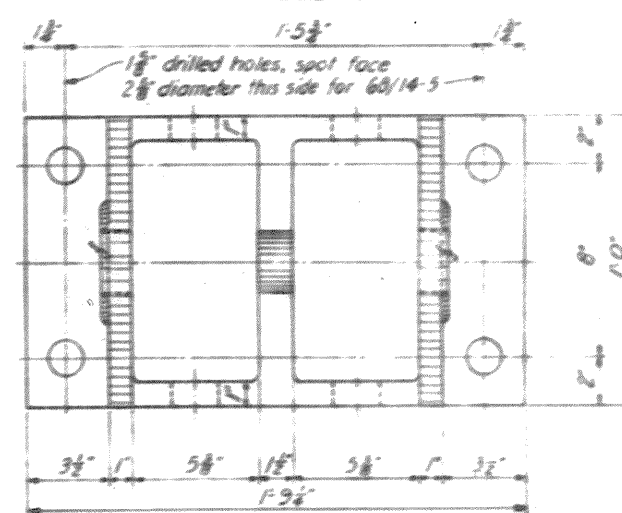
STRUCTURAL STEEL
MAKE 72
MARK 68/14-2
WT 1310 LBS

SCALE: 3/4"=1'-0"



DETAIL OF UPPER SHOE

CAST STEEL WITH STRUCTURAL STEEL SHIMS
MARK 68/14-3 WT CAST STEEL 95.0 LBS
MAKE 80 WT STRUCTURAL STEEL 15.6 LBS



DETAIL OF BOLSTER

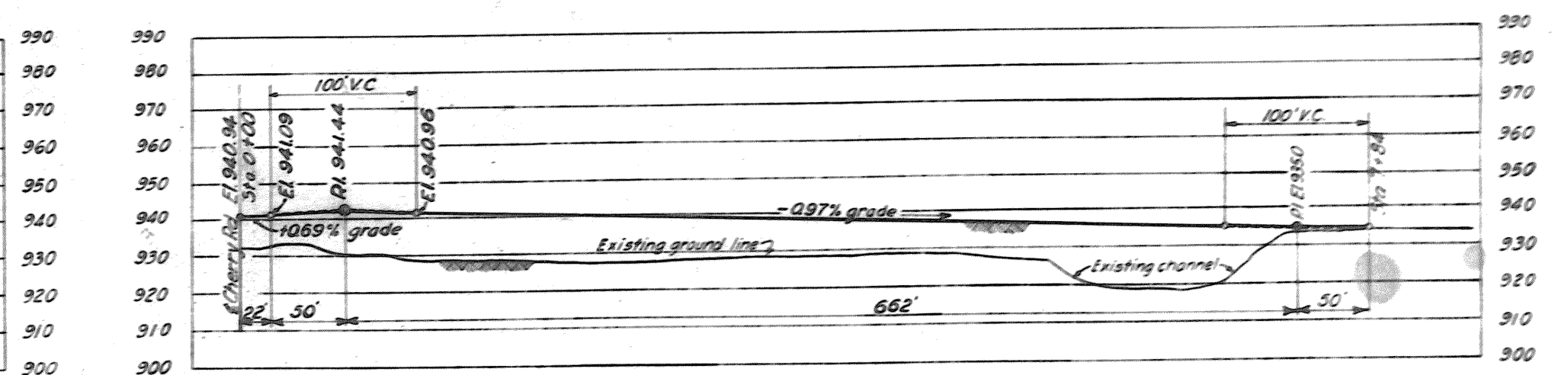
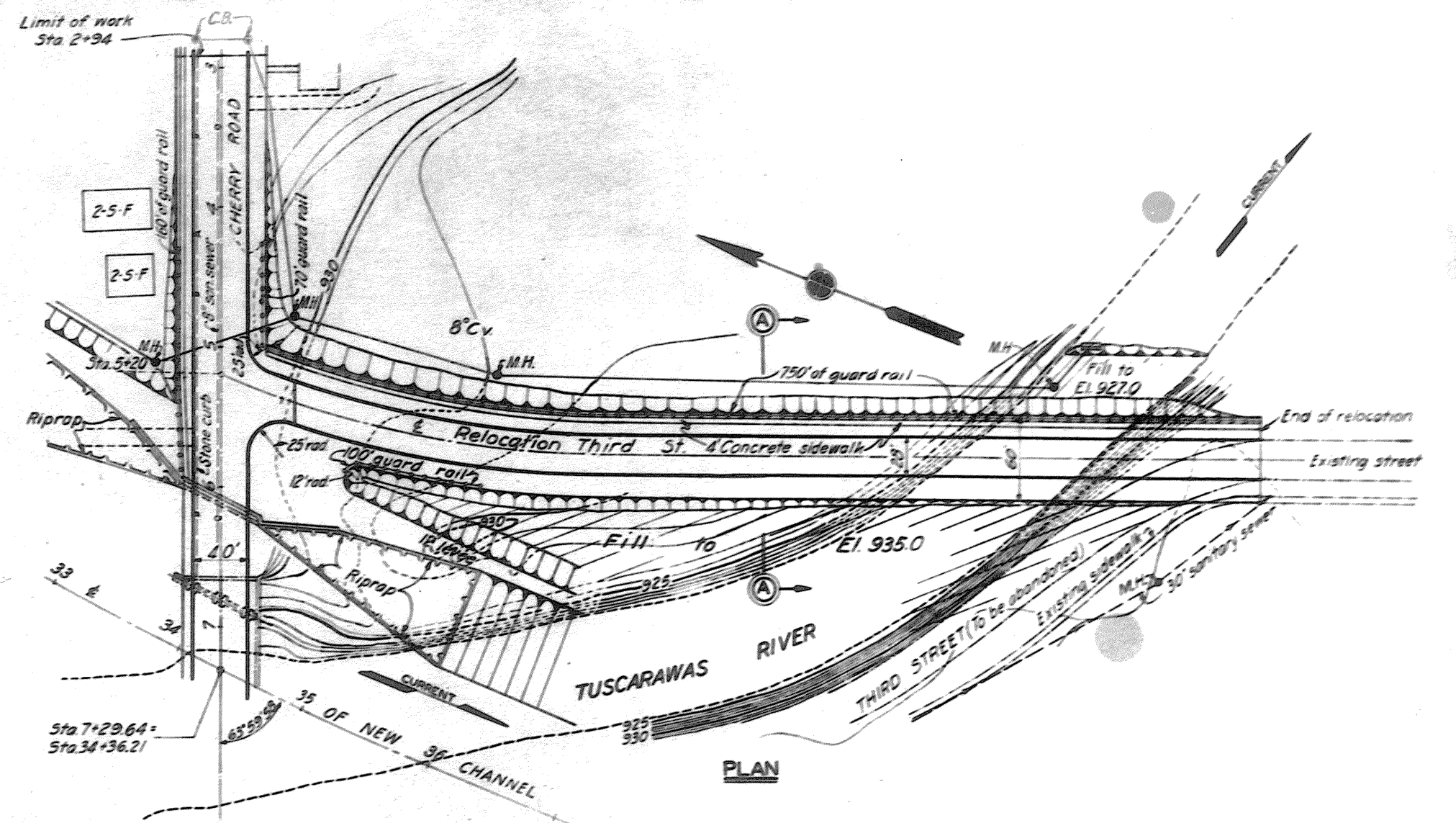
CAST STEEL
MAKE 18
MARK 68/14-4
WT 1450 LBS

NOTES

3/4" rivets for girder splices
Casting fillets are 1/4" rad unless noted.

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD VIADUCT CASTINGS & SPLICES	
DESIGN BY: H. E. G.	TRACED BY: A. R. C.	CHECKED BY: H. E. G.	APPROVED: J. H. B.
DATE: OCT. 1948		SCALE: 3/4"=1'-0"	
BY DATE		CHARACTER REVISIONS	
DATE		DATE	

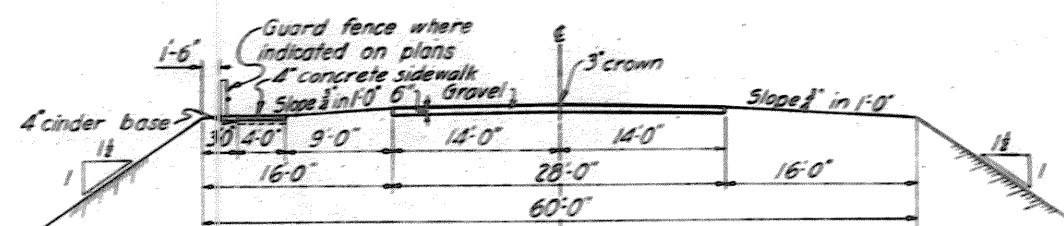
WORK AS CONSTRUCTED



PROFILE ON & OF RELOCATION

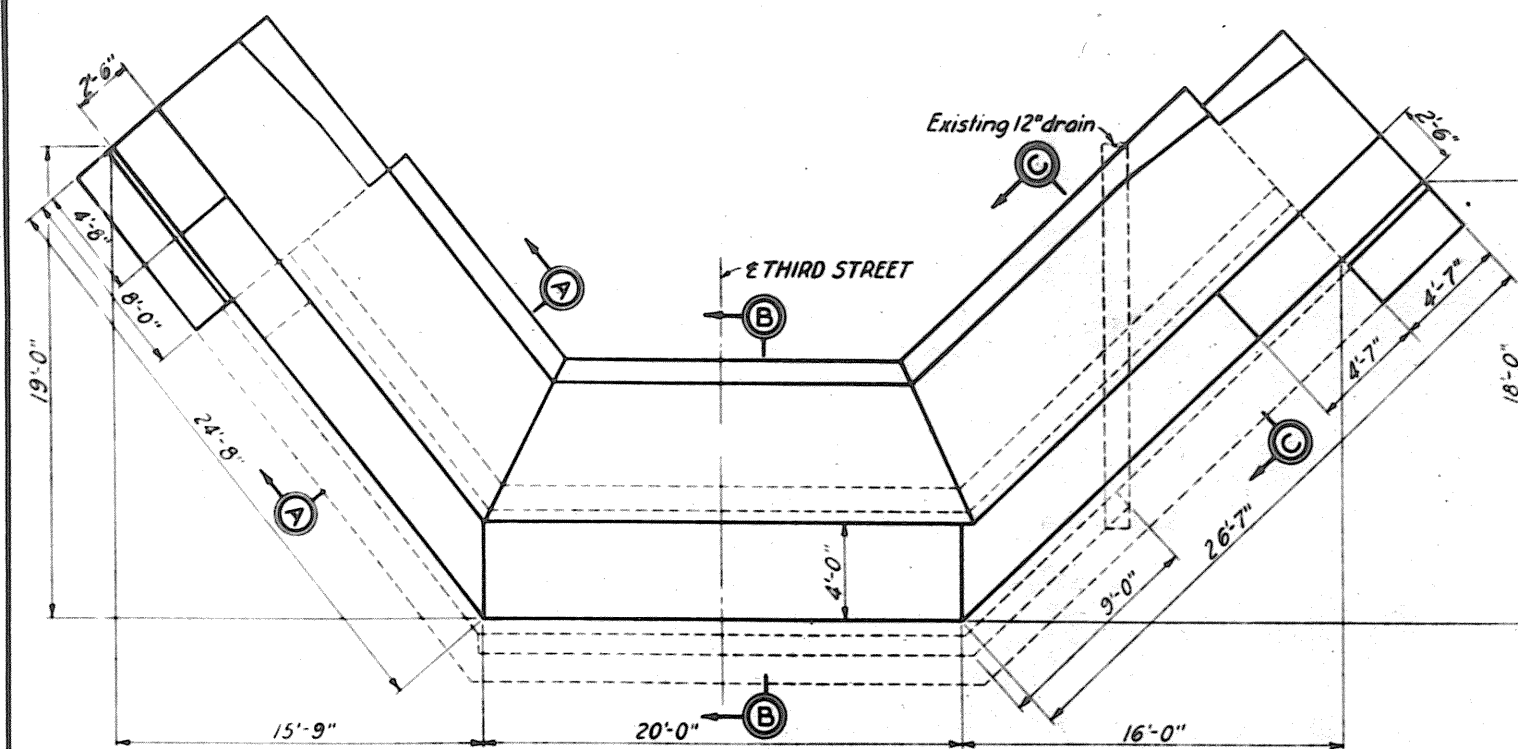
HOR. SCALE : 1" = 50'
VERT. SCALE : 1" = 20'

For details of raising Third Street bridge
over Newman Creek, see Dwg. No. 68/16.
For Cherry Road Viaduct General Plan and
Profile, see Dwg. No. 68/11.
For general plans, see Dwg. Nos. 16/1 and 18/2.
For details of pavement return at Cherry
Road, see Dwg. No. 68/17.
For details of guard rail, see Dwg. No. 68/8.

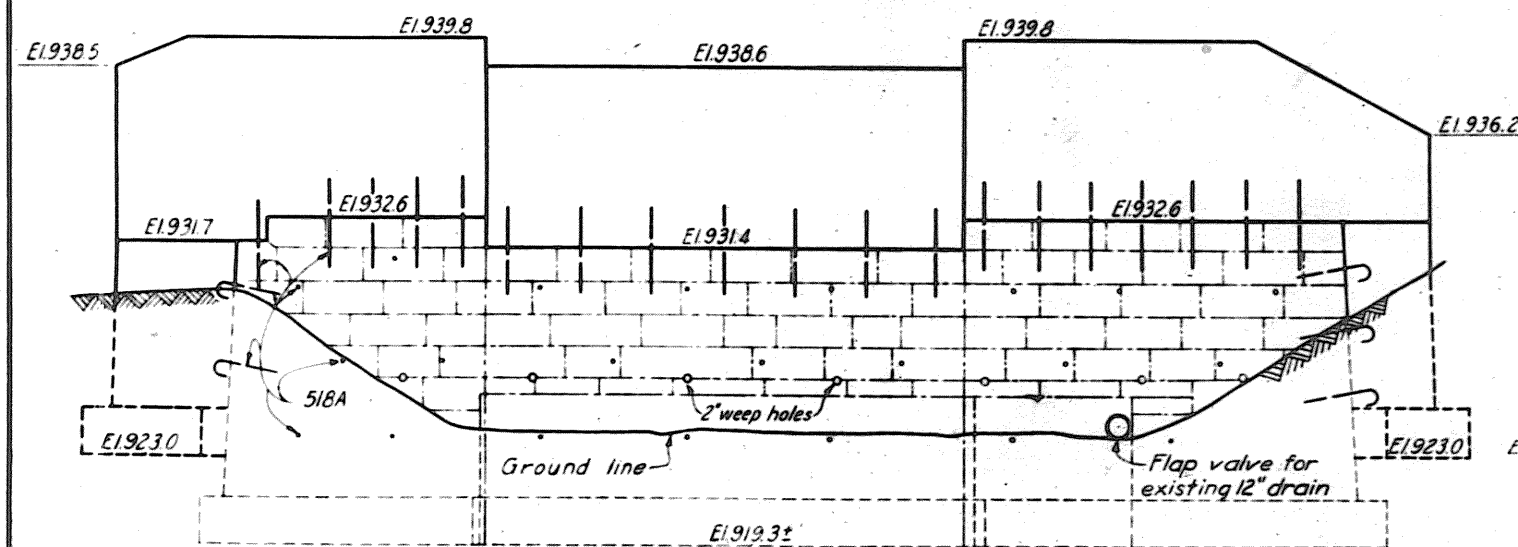


THIRD STREET RELOCATION AT CHERRY ROAD

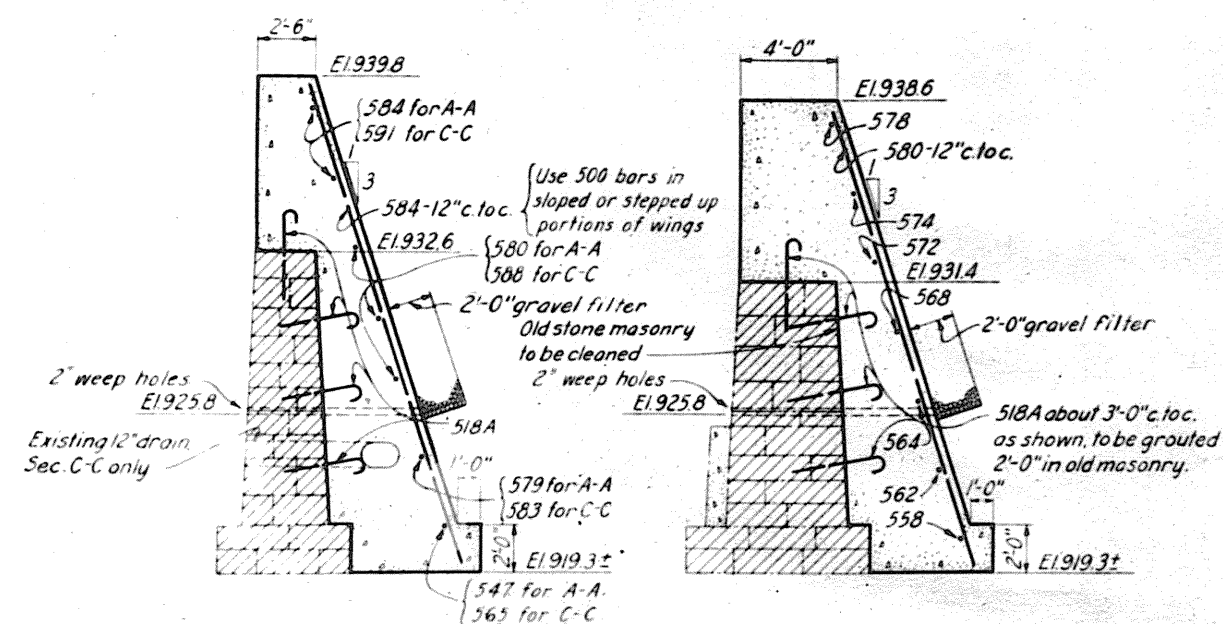
DRAWN BY: R.G.H.		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TRACED BY: D.R.J. - C.C.C.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 THIRD ST. AT CHERRY ROAD AND NEWMAN CREEK PLAN AND PROFILE	
CHECKED BY: H.F.B. - E.S.H.		DATE:	
SUBMITTED BY: T.C.H. AND G.H.		APPROVED: <i>[Signature]</i>	
APPROVED: <i>[Signature]</i> CHIEF OF DIST. ASST.		DATE: OCT. 1948	
APPROVED FOR:		SCALE: 1" = 50' DRAWING NUMBER: 0271-PM2-2-68/15 SHEET 40 OF 60	
DATE:			



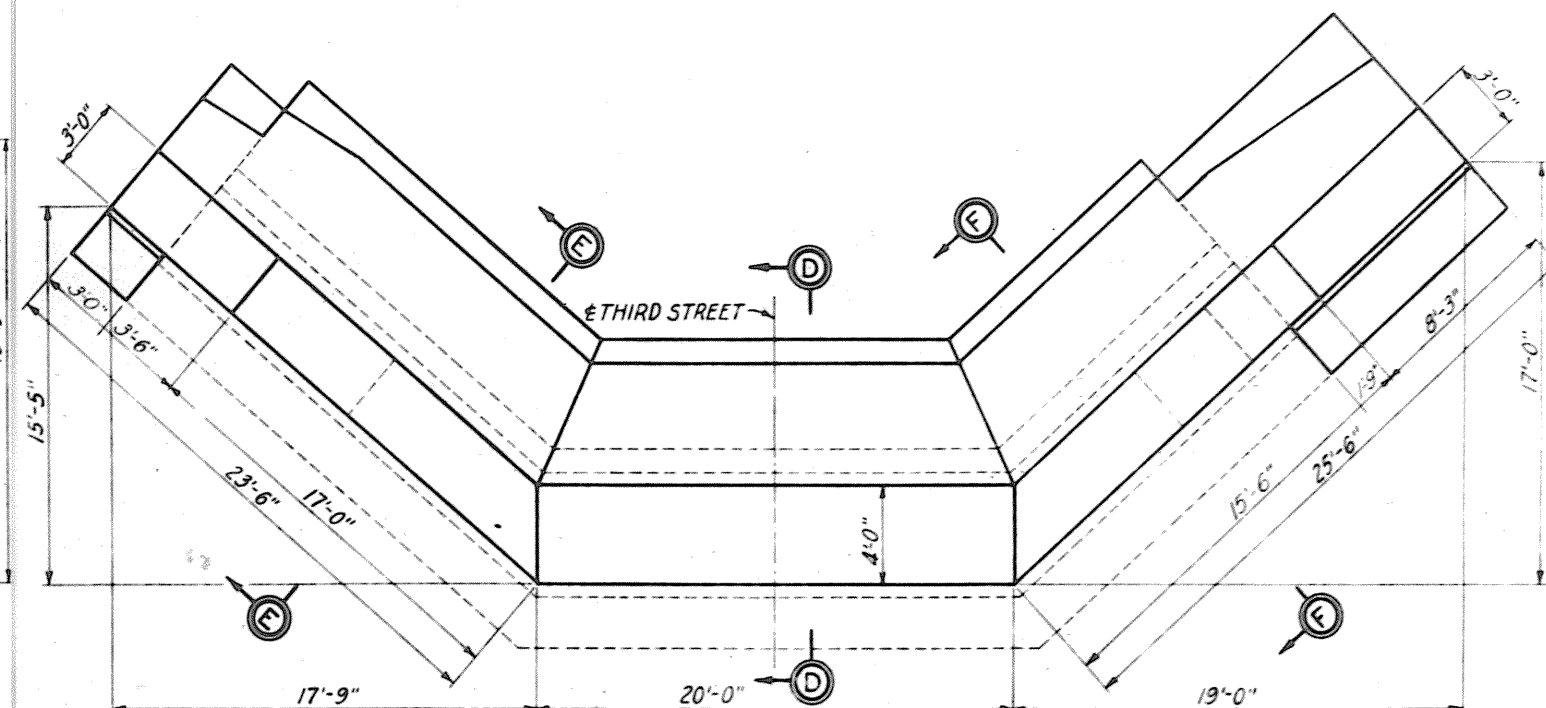
PLAN-SOUTH ABUTMENT



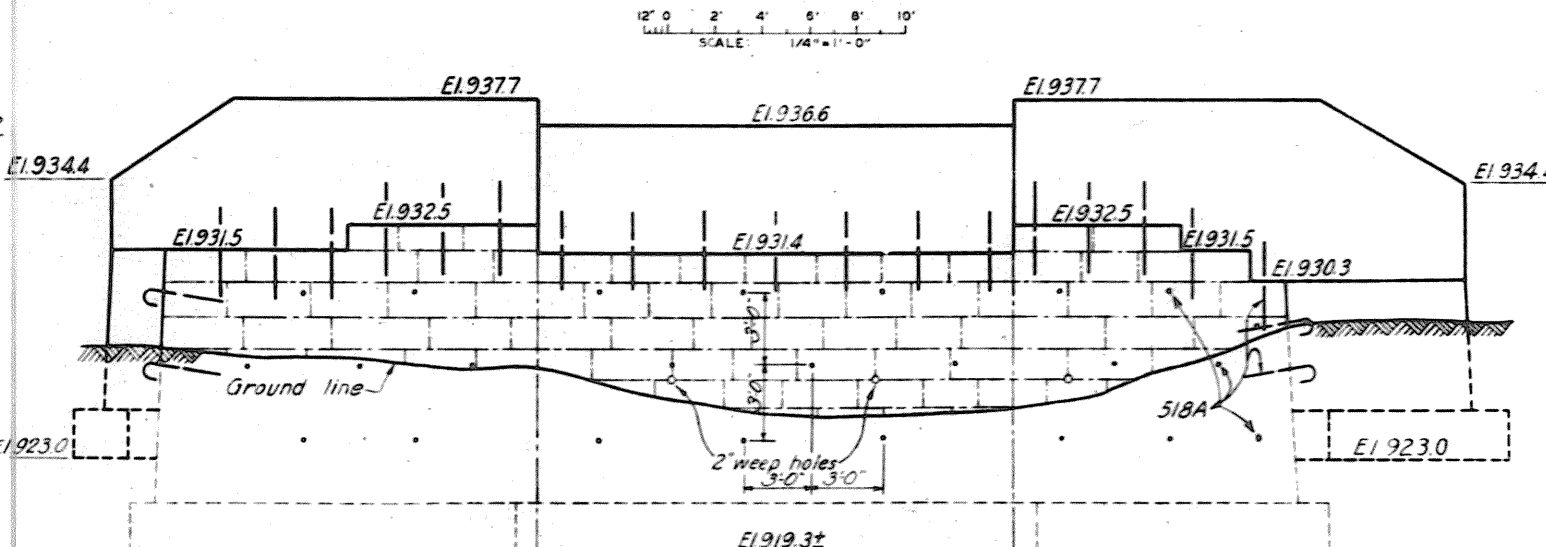
ELEVATION-SOUTH ABUTMENT

SECTION A-A
SECTION C-C

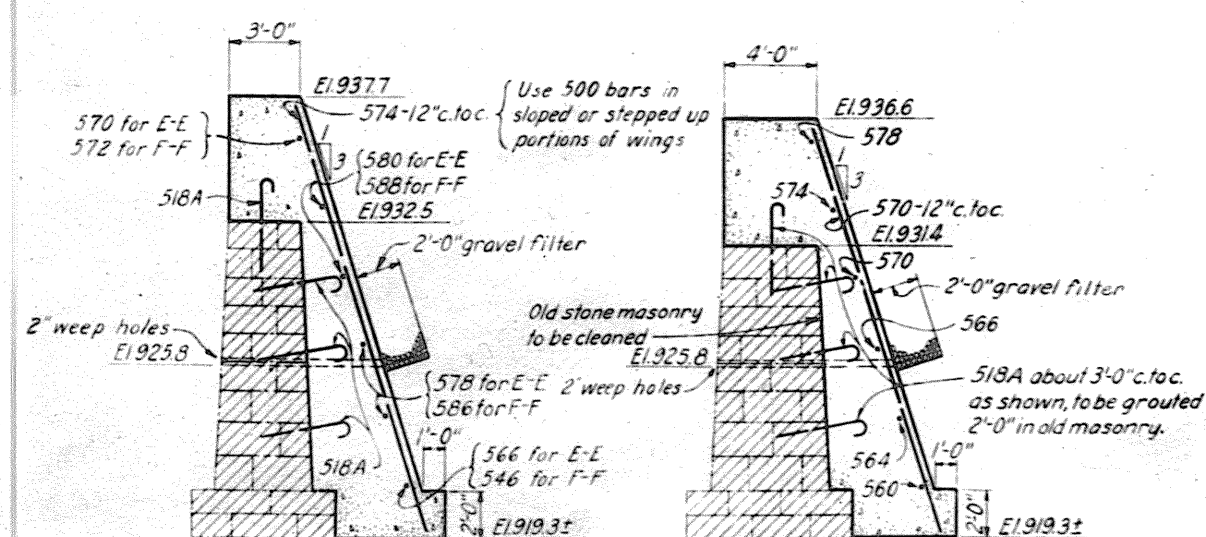
SECTION B-B



PLAN-NORTH ABUTMENT



ELEVATION-NORTH ABUTMENT

SECTION E-E
SECTION F-F

SECTION D-D

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO.	UNIT WT.	TOTAL WT.
518A	#8	4'-6"		93	4.69	436
558	#8	14'-6"		1	15.12	15
560	#8	15'-0"		1	15.65	16
562	#8	15'-6"		1	16.17	16
564	#8	16'-0"		2	16.69	33
565	#8	16'-3"		1	16.95	17
566	#8	16'-6"		2	17.21	34
568	#8	17'-0"		1	17.73	18
570	#8	17'-6"		21	18.25	383
572	#8	18'-0"		2	18.77	37
574	#8	18'-6"		27	19.30	521
578	#8	19'-6"		4	20.34	81
579	#8	19'-9"		1	20.60	21
580	#8	20'-0"		24	20.86	501
584	#8	21'-0"		27	21.90	591
586	#8	21'-6"		2	22.42	45
588	#8	22'-0"		5	22.95	115
500	#8	550'1		-	1.043	574
591	#8	22'-9"		2	23.73	47
583	#8	20'-9"		1	21.64	22
547	#8	11'-9"		1	12.26	12
546	#8	11'-6"		1	11.99	12
Total					3,547	

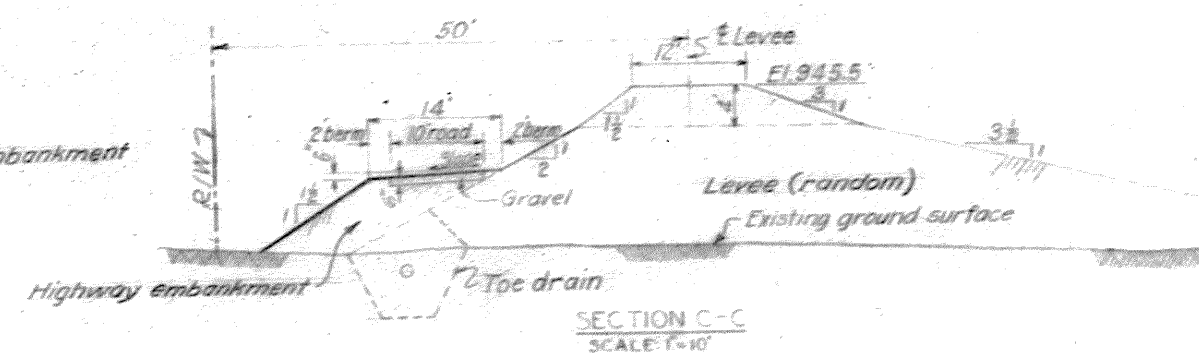
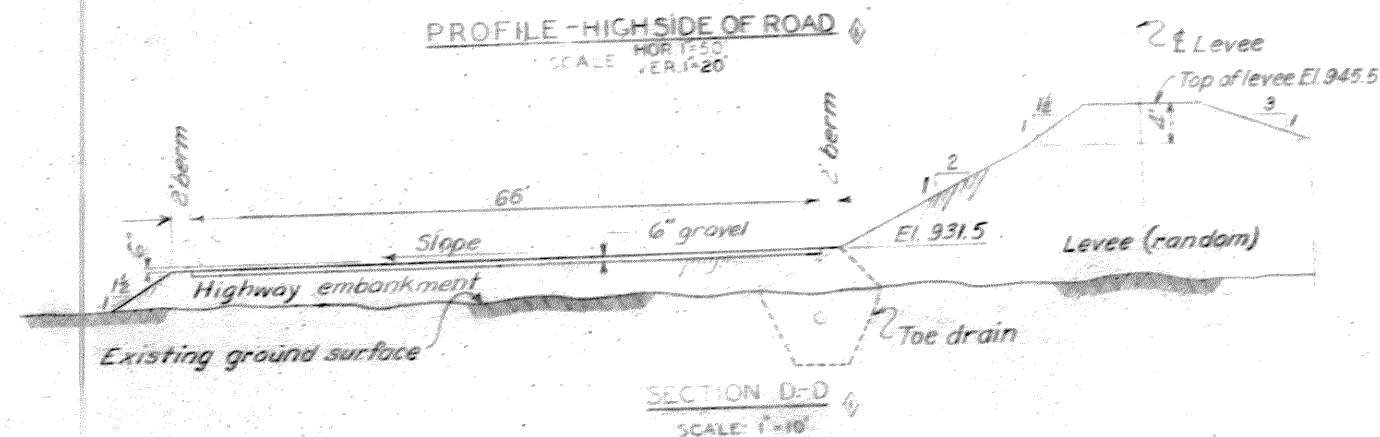
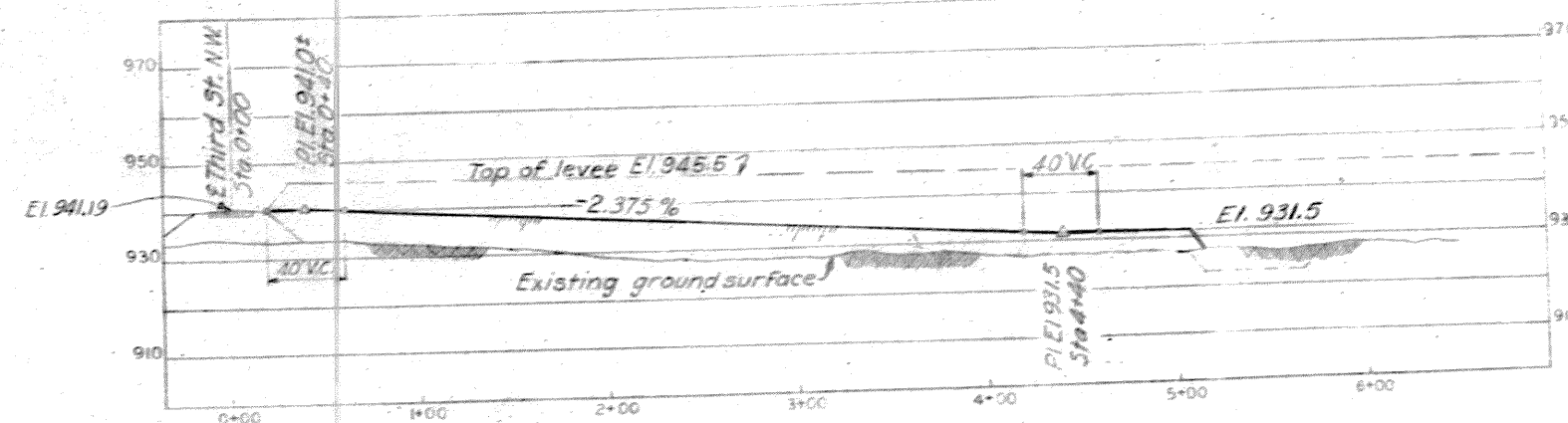
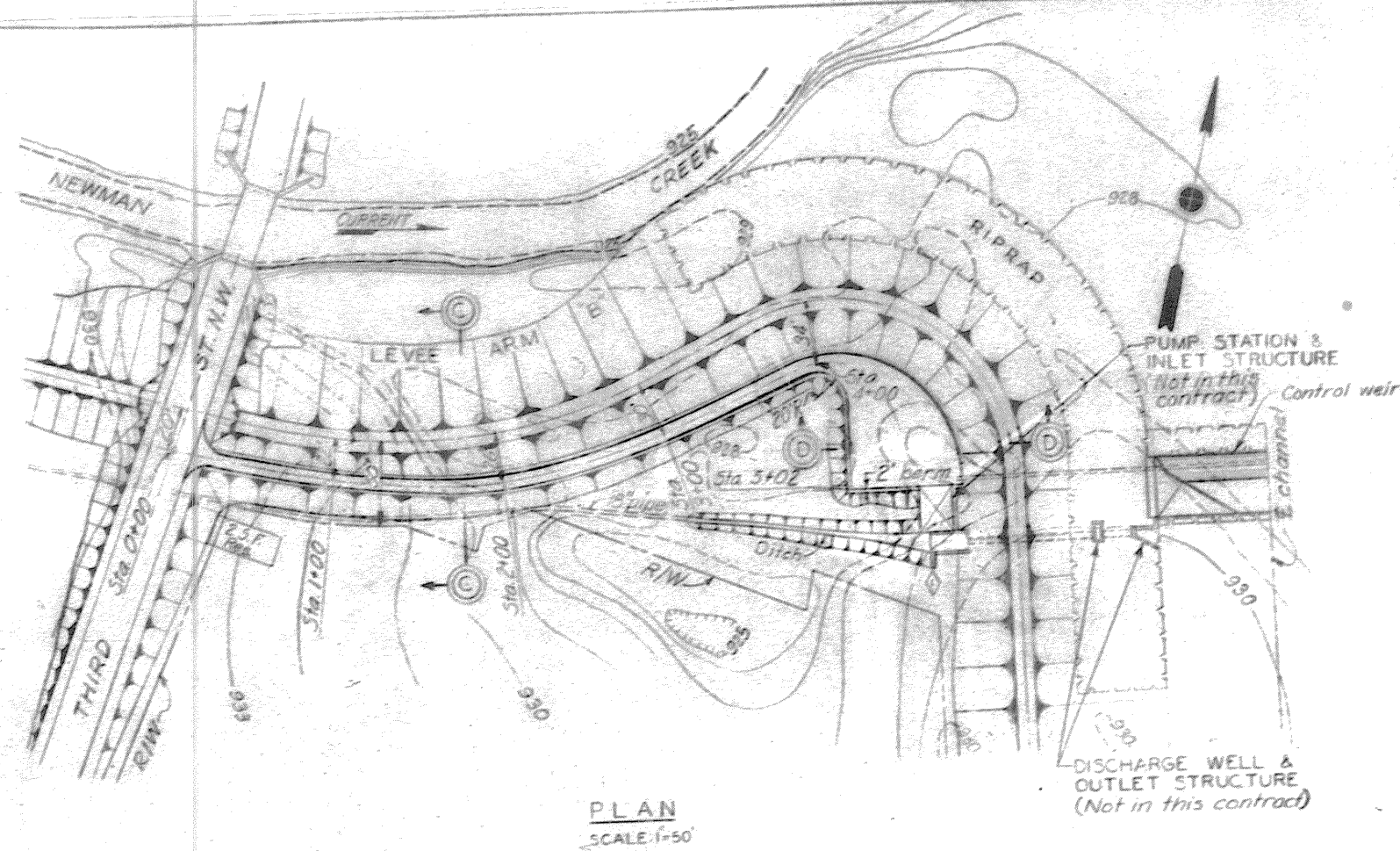
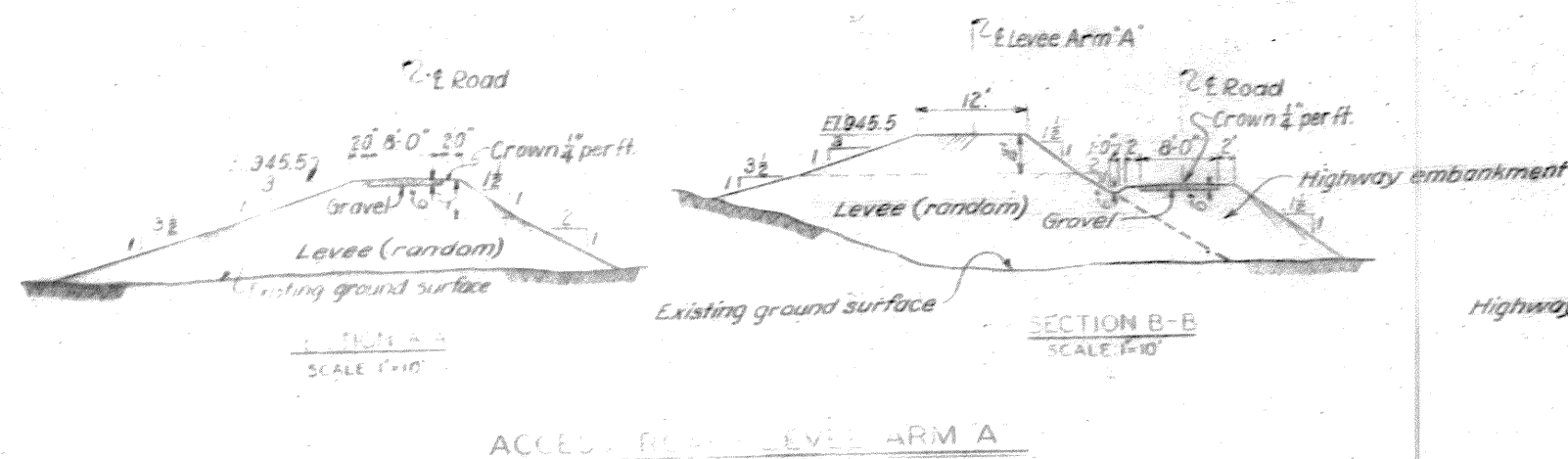
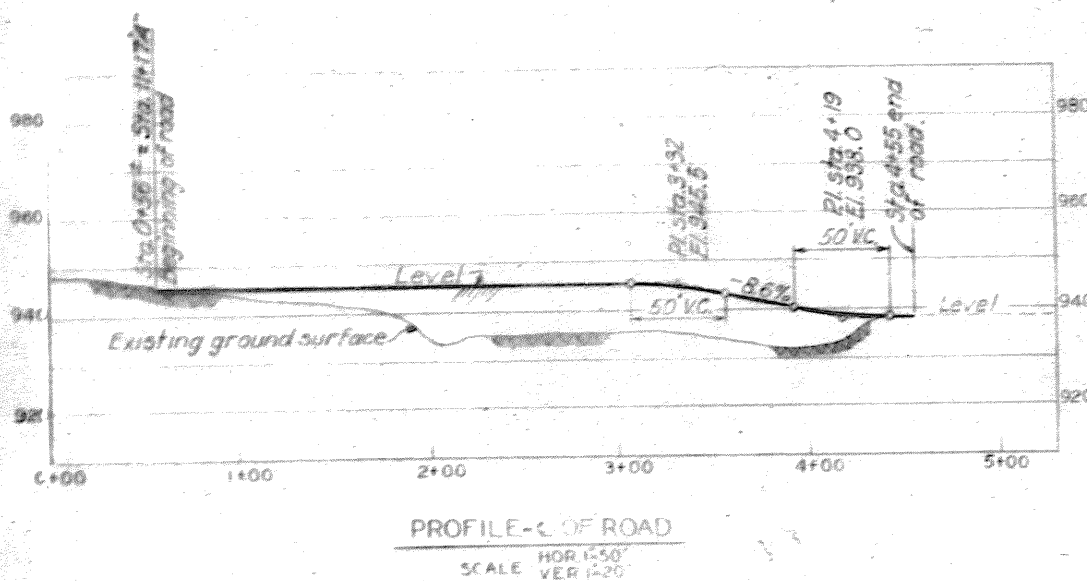
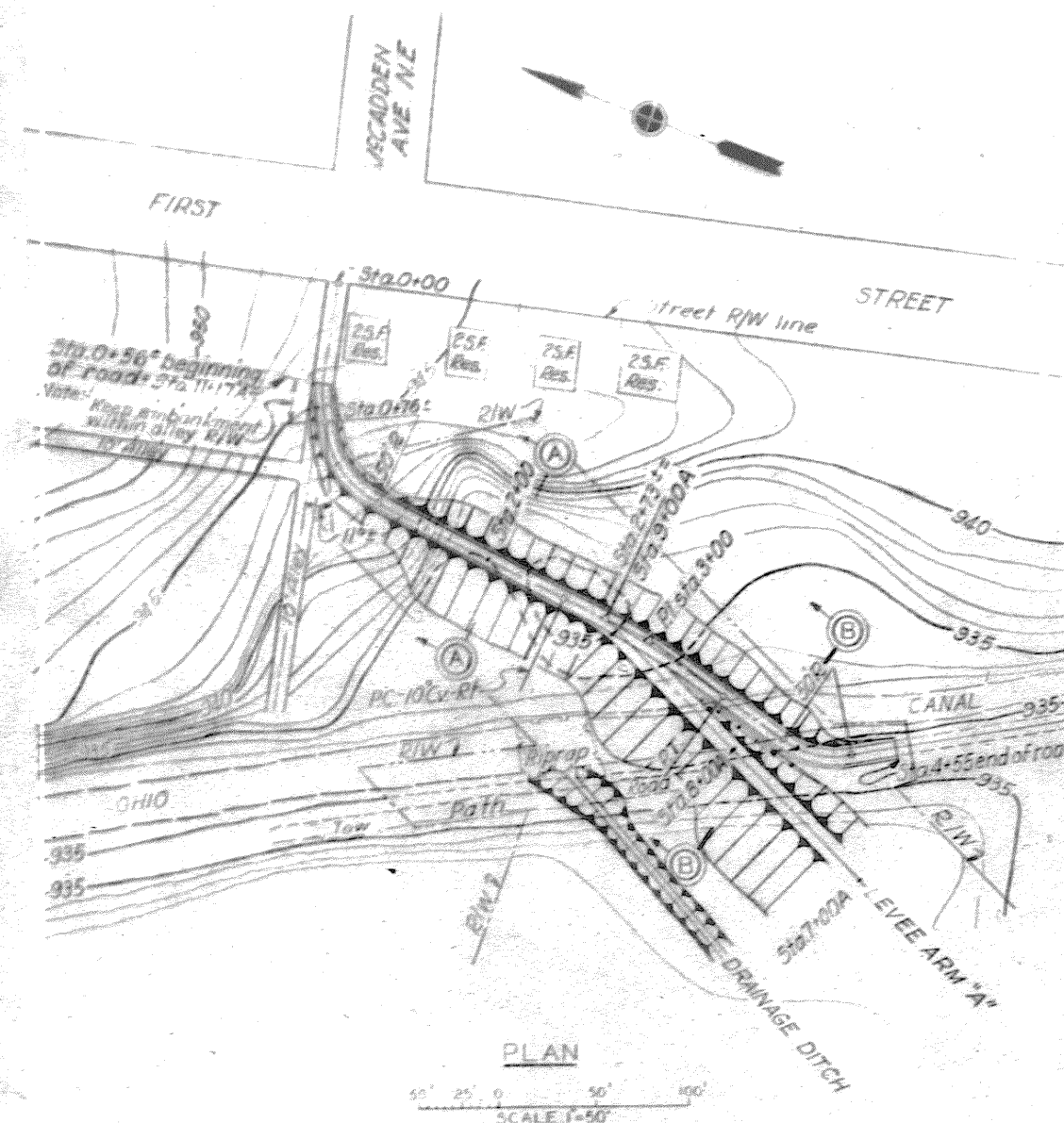
NOTE

For general information and explanation of reinforcing steel code, see Dwg. No. 20/1.
For plan and profile see Dwg. No. 68/15.
For general plan see Drawing No. 16/1.

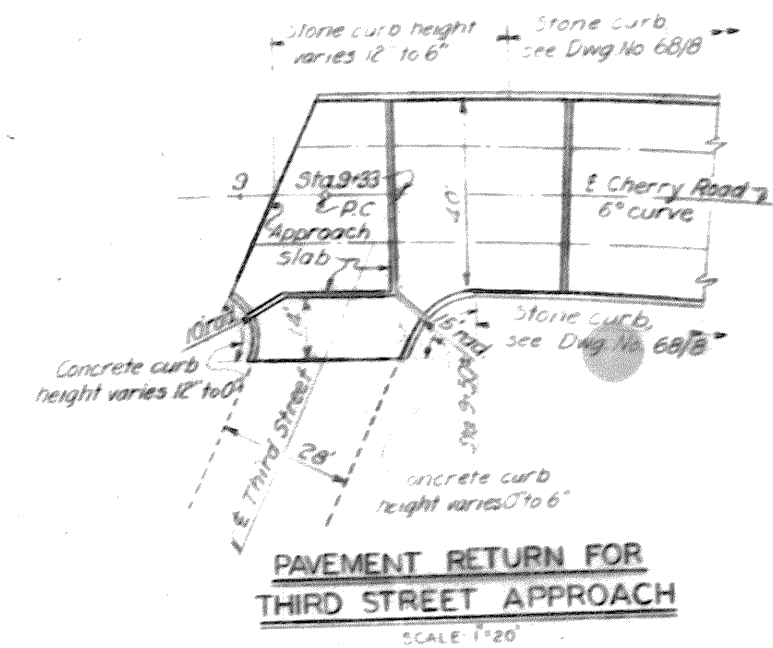
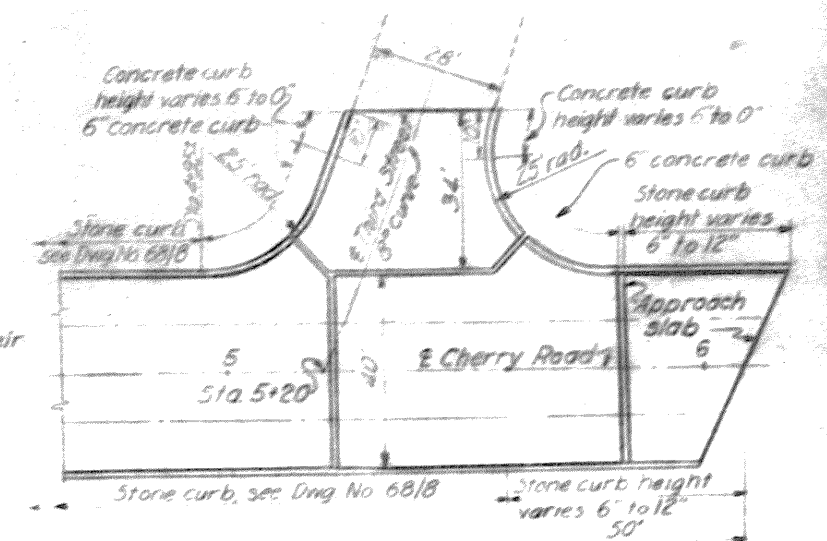
DRAWN BY: R.M.C.		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TRACED BY: JGG-JEC		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 RAISING THIRD ST. BRIDGE OVER NEWMAN CREEK	
CHECKED BY: MFB-GGS		APPROVED: <i>Am. Nelson</i> DATE: OCT. 1948	
SUBMITTED BY: <i>Am. Nelson</i>		APPROVED FOR: <i>Am. Nelson</i> SCALE: 1" = 1'-0" SPEC. NO.	
APPROVED: <i>Am. Nelson</i>		DRAWING NUMBER: 0271-PM2-2-68/16	
APPROVED FOR: <i>Am. Nelson</i>		SHEET 41 OF 80	

WORK AS CONSTRUCTED

DEPARTMENT OF THE ARMY



ACCESS ROAD AT THIRD STREET N.W.

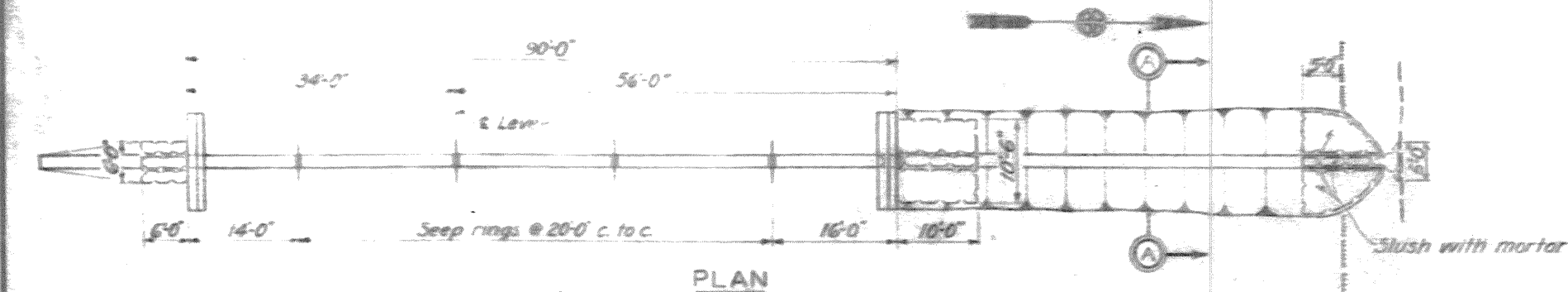


NOTES

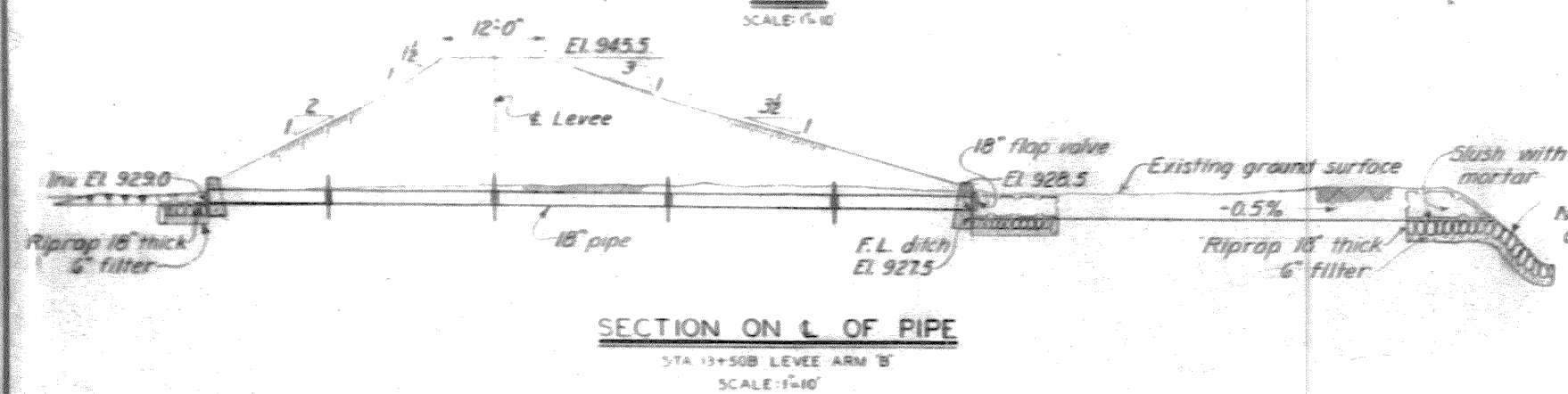
For general plan, see Dwg No 16/1
For plan and profile of Third Street N.W.
see Dwg No 68/13.
For details of pavement reinforcing, see
Dwg No 68/2.

3 N-50, REVISED PROFILE OF ROAD AND LAYOUT OF PUMP STATION AND APPURTENANCES		A.S.B.	
REVISION	DATE	DESCRIPTION	BY
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: E.R.P.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 ACCESS ROADS LEVEE ARM A & THIRD ST. N. W.	
TRACED BY:		DATE: OCT. 1948	
CHECKED BY: E.S.W. & C.C.M.		SCALE: 5 SHOWN	
SUPPORTED BY: J.R. L.		SPEC. NO.	
APPROVED BY: J.R. L.		DRAWING NUMBER 027i-PM2-2-68/17	
CHIEF ENG. ASST.		SHEET 42 OF 60	
APPROVED FOR:		DATE:	

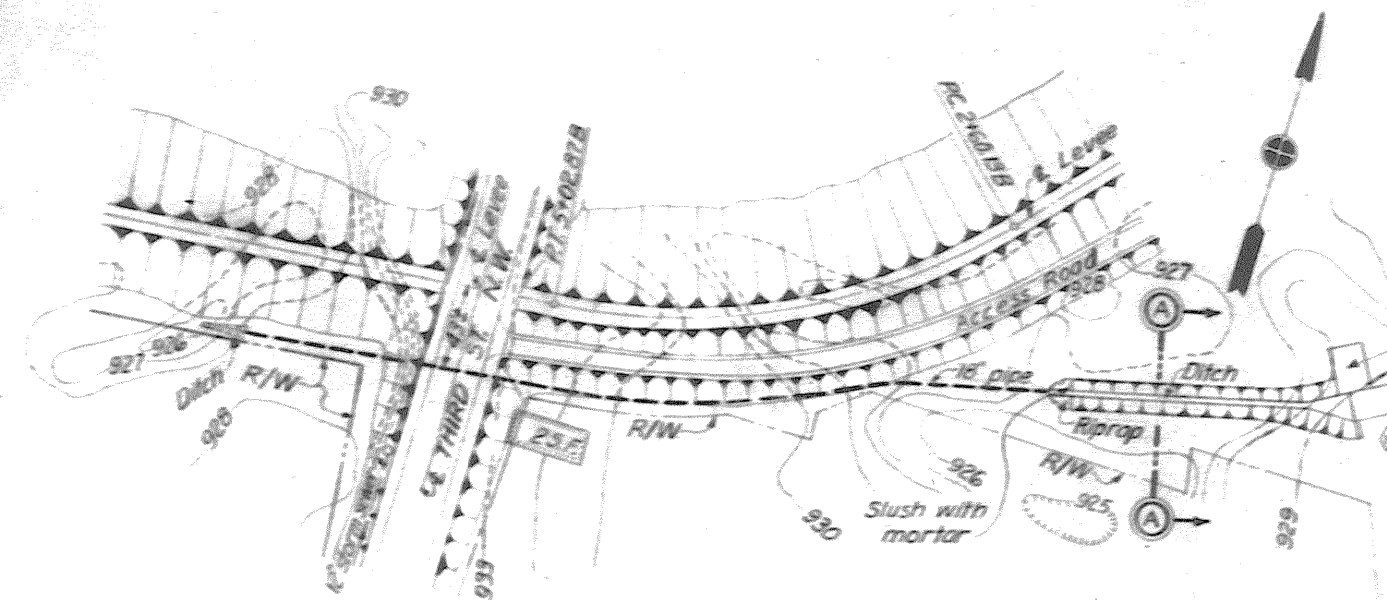
WORK AS CONSTRUCTED



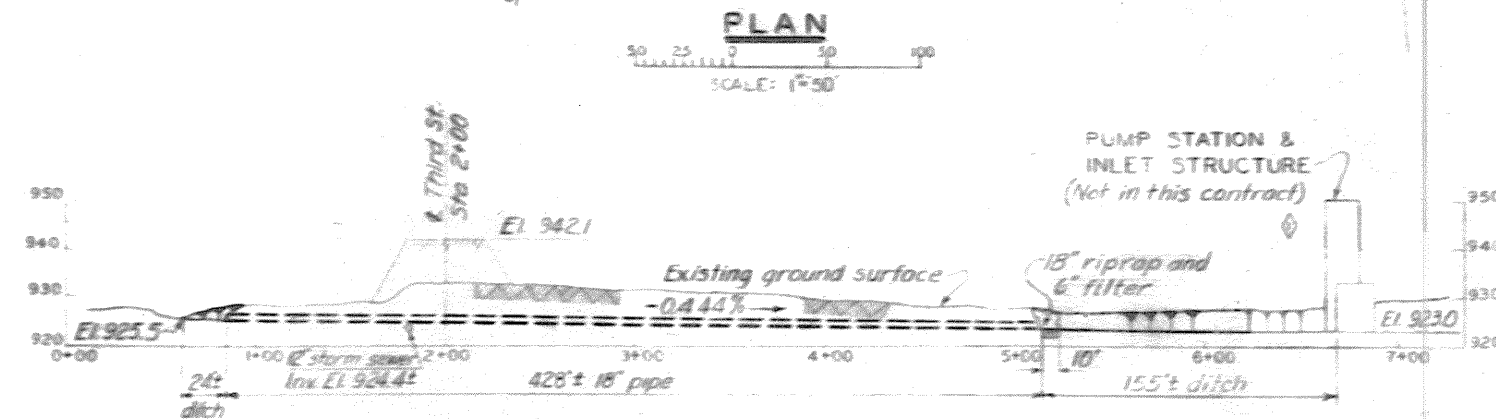
PLAN
SCALE: 1"=10'



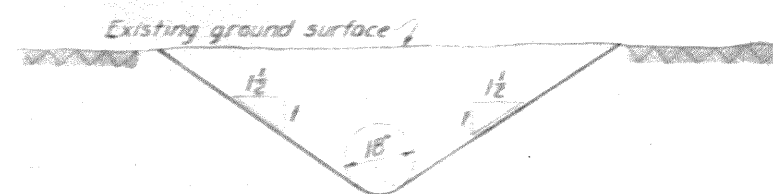
SECTION ON L OF PIPE
STA 13+50.8 LEVEE ARM B
SCALE: 1"=10'



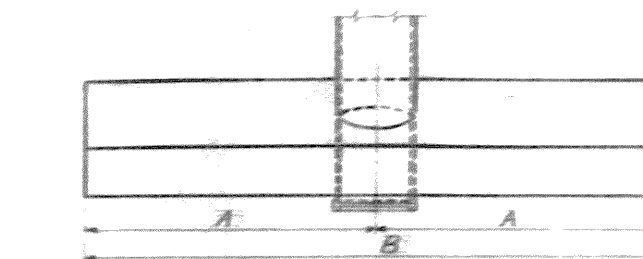
PLAN
SCALE: 1"=50'



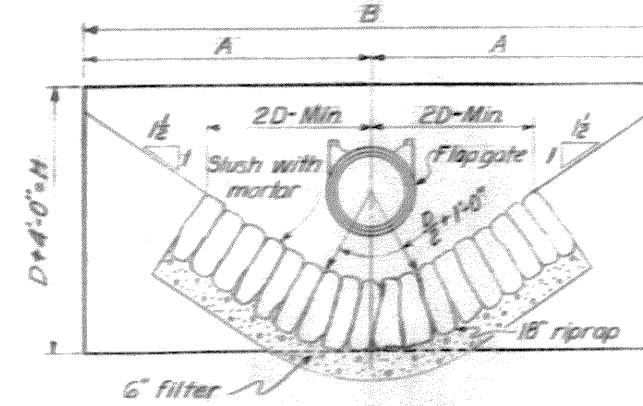
PROFILE ON L OF PIPE AT THIRD STREET
SCALE: HOR. 1"=50' VERT. 1"=20'



SECTION A-A
SCALE: 1"=20'

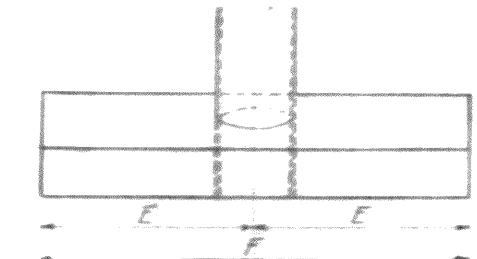


PLAN

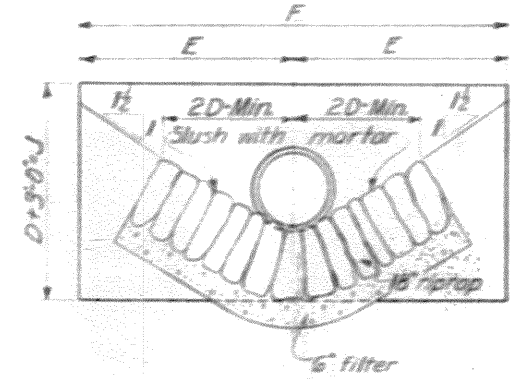


ELEVATION

HEADWALL WITH FLAP GATE



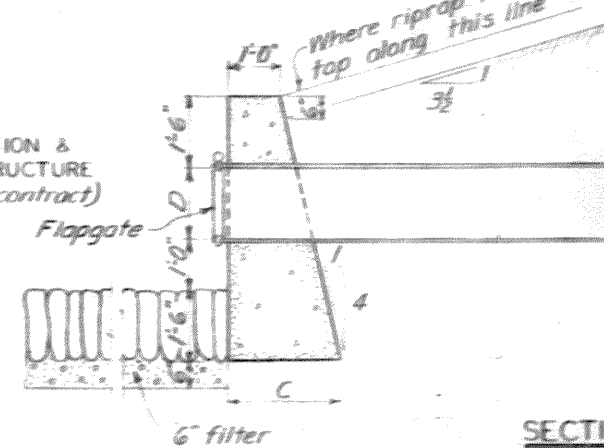
PLAN



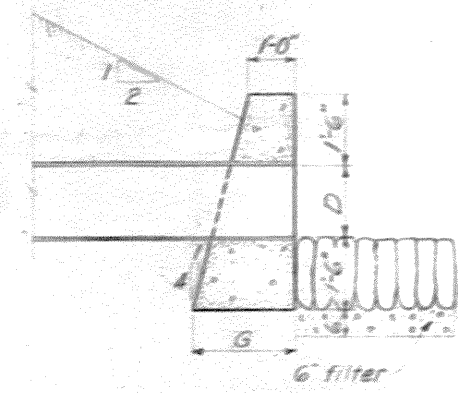
ELEVATION

HEADWALL WITHOUT FLAP GATE

PUMP STATION & INLET STRUCTURE (not in this contract)



SECTION

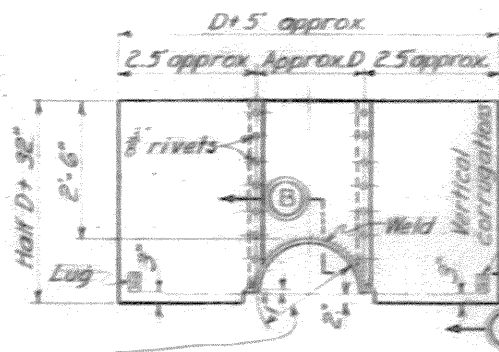


HEADWALL DETAILS
NOT TO SCALE

DIA. OF PIPE	DIMENSIONS									
	D	A	B	C	H	E	F	G	J	
12"	5'-3"	10'-6"	2'-3"	5'-0"	3'-9"	7'-6"	2'-0"	4'-0"		
18"	6'-0"	12'-0"	2'-4"	5'-6"	4'-6"	9'-0"	2'-8"	4'-6"		
24"	6'-9"	13'-6"	2'-6"	6'-0"	5'-3"	10'-6"	2'-3"	5'-0"		
30"	7'-6"	15'-0"	2'-7"	6'-6"	6'-0"	12'-0"	2'-4"	5'-6"		
36"	8'-3"	16'-6"	2'-9"	7'-0"	6'-9"	13'-6"	2'-6"	6'-0"		
42"	9'-0"	18'-0"	2'-10"	7'-6"	7'-6"	15'-0"	2'-7"	6'-6"		

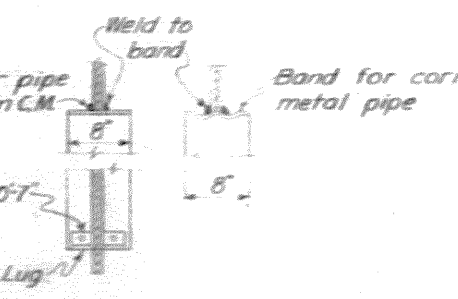
NOTES

For general plan, see Dwg. No. 16/1.
For plan and profile of access road, see Dwg. No. 16/2.



ELEVATION

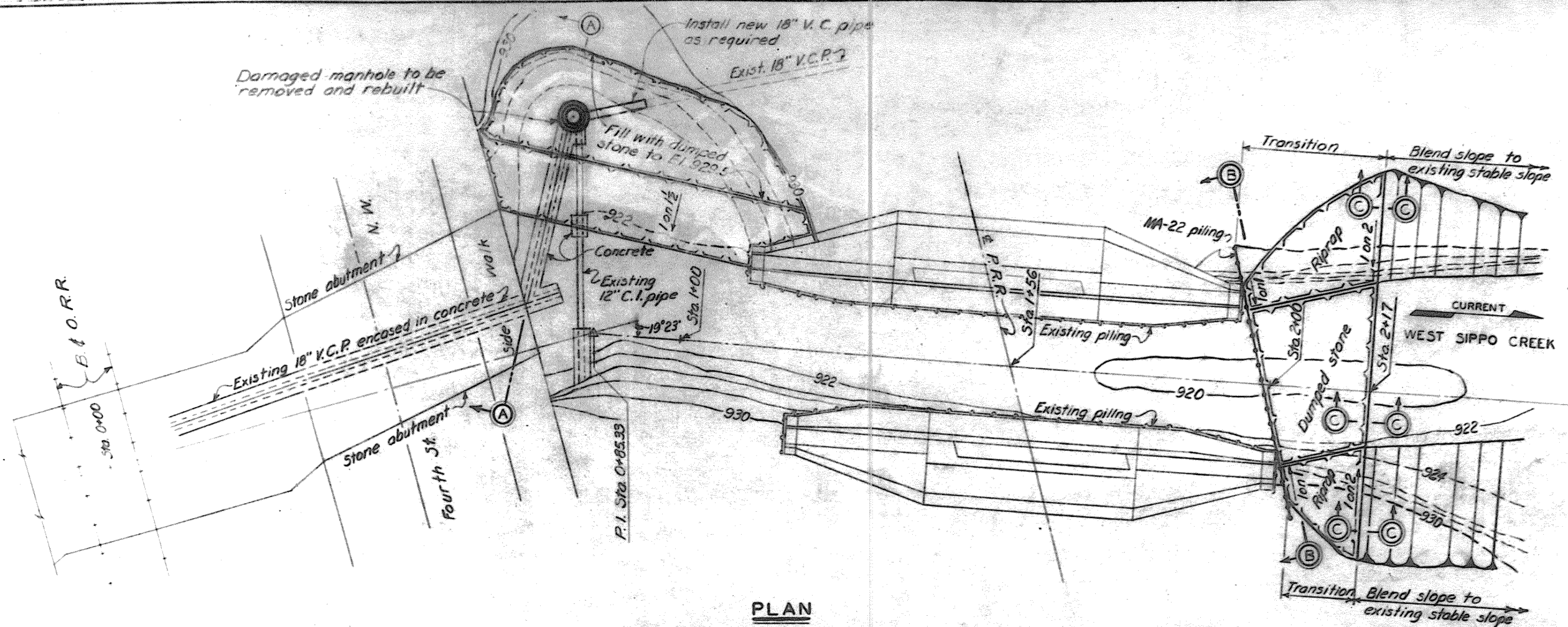
DETAIL OF METAL SEEP RING
NOT TO SCALE



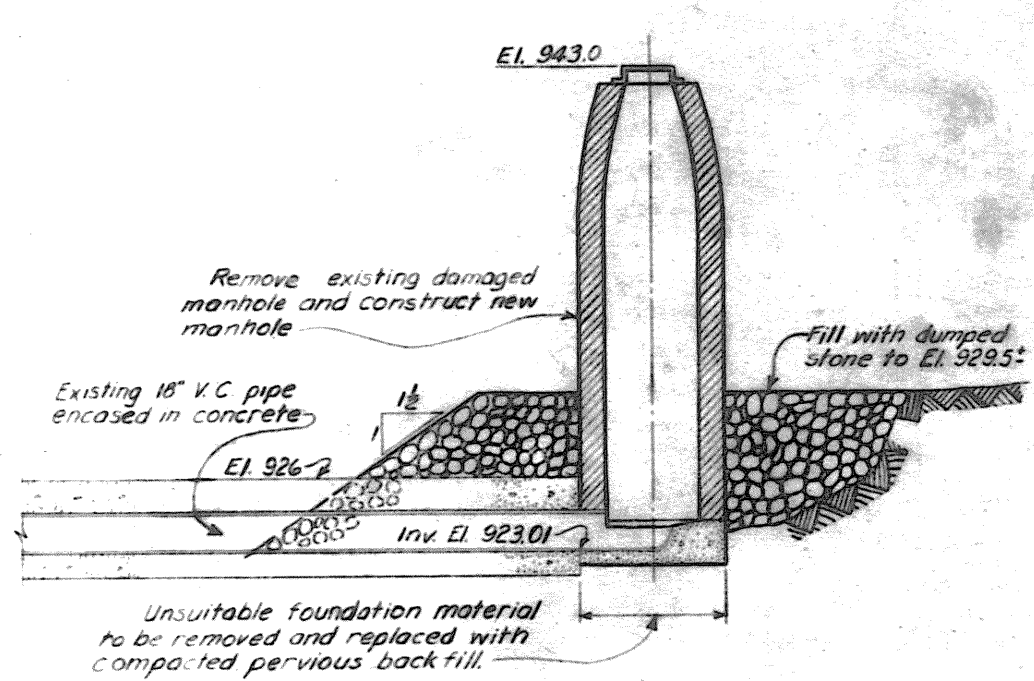
SECTION B-B

3-10-50 ELIMINATED POND AND EXTENDED DITCH		BY
DESIGNER	DATE	DESCRIPTION
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PIPE CULVERT DETAILS		
DRAWN BY: EWH-J.M.D.	CHECKED BY: CCM-G.O.S.	DATE: OCT. 1948
APPROVED: [Signature]		DATE: OCT. 1948
APPROVED FOR: [Signature]		DATE: OCT. 1948
SCALE: AS SHOWN		SPEC. NO.
DRAWING NUMBER: 0271-PM2-2-68/18		SHEET 43 OF 50

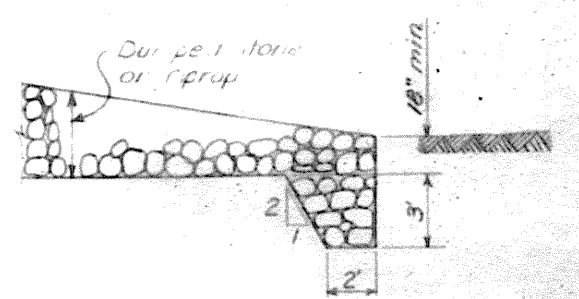
WORK AS CONSTRUCTED



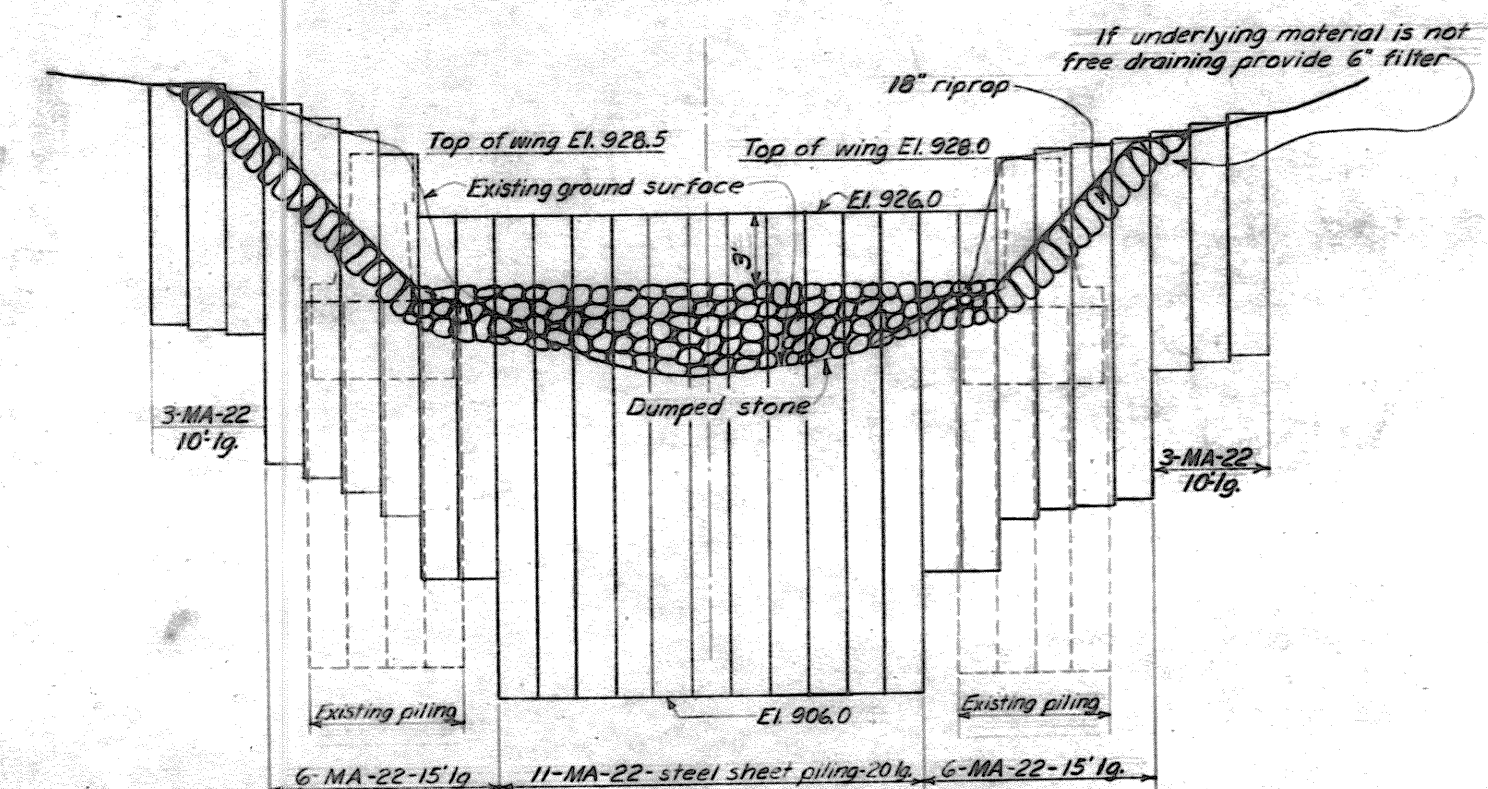
PLAN
SCALE: 1"=10'



SECTION A-A
SCALE: 1/4"=1'-0"



SECTION C-C
SCALE: 3/4"=1'-0"



Note:
Surface of dumped stone to meet existing stream bed at Sta. 2+17.

SECTION B-B
SCALE: 1/4"=1'-0"

NOTES

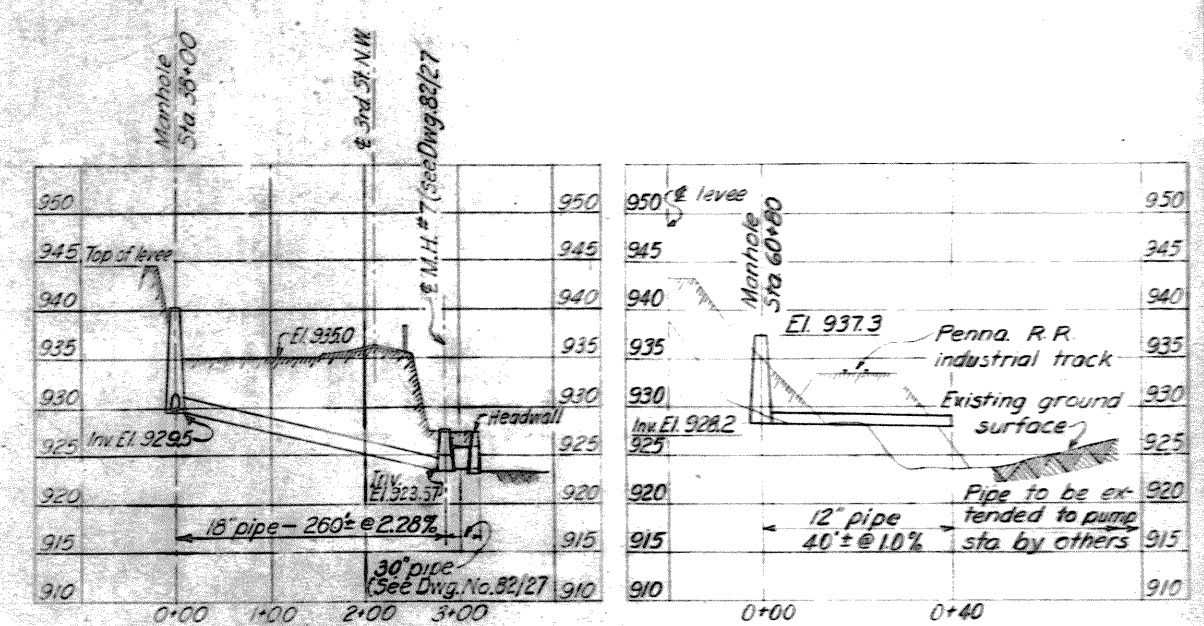
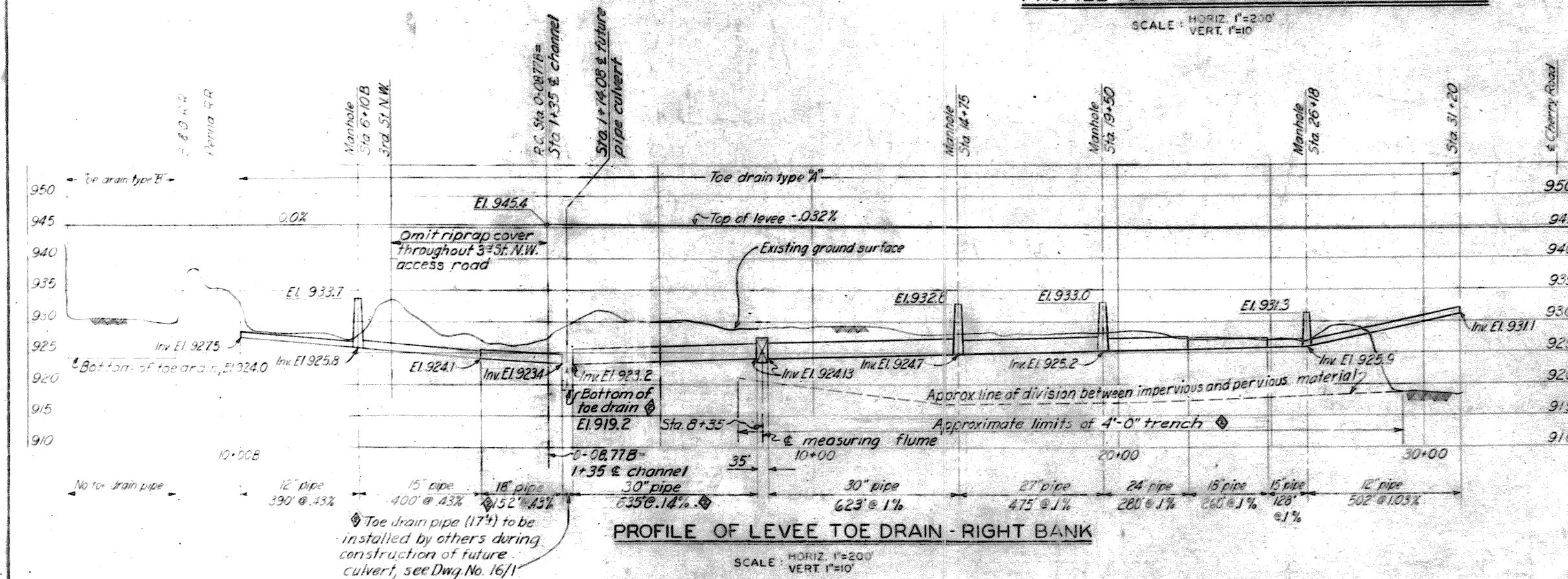
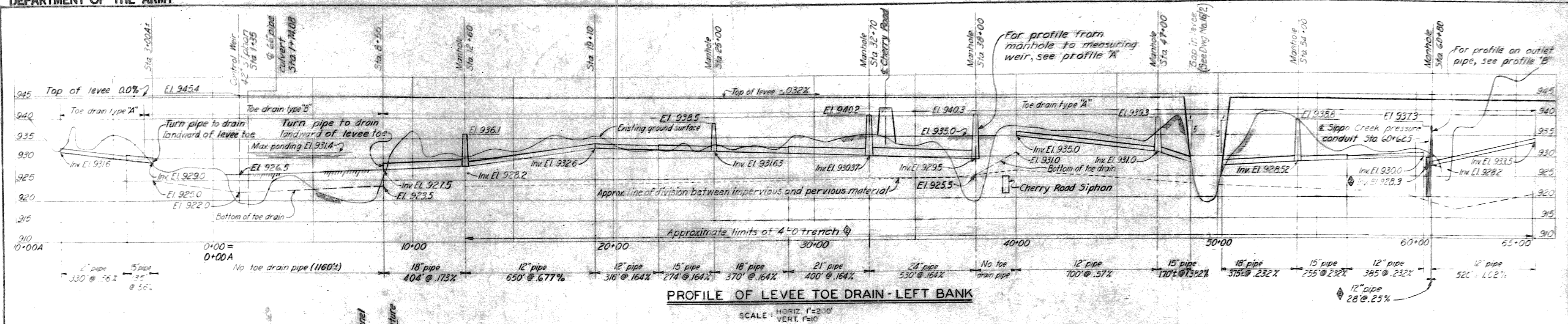
For manhole details see Dwg. No. 82/36.

CORPS OF ENGINEERS
U.S. ARMY
OFFICE OF THE DISTRICT ENGINEER
HUNTINGTON W. VA.

TUSCARAWAS RIVER
LOCAL PROTECTION PROJECT
MASSILLON, OHIO
SECTION 2, UNIT 2
REMEDIAL WORK
WEST SIPPO CREEK

DRAWN BY: D.A.L. & J.W.D. DATE: OCTOBER 1950
CHECKED BY: K.S.B. FILE NO. 0271-PM2-2-68/19

WORK AS CONSTRUCTED



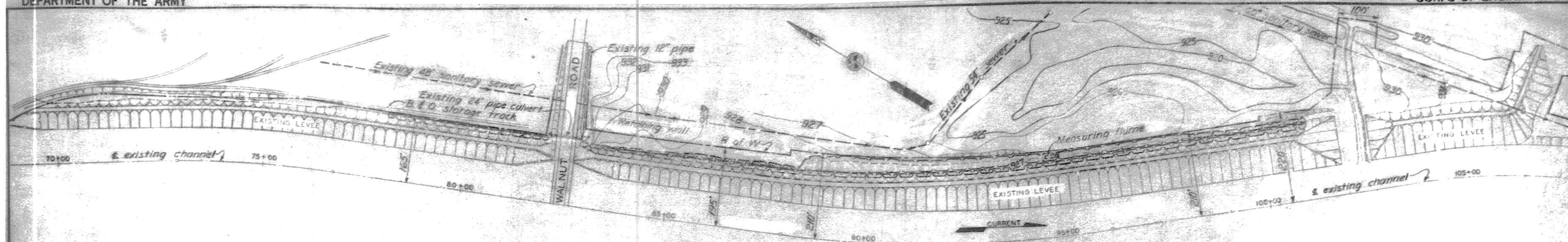
NOTES

Stations shown on profiles are \pm of channel stationing.
For general plans, see Dwg. Nos. 16/1, 16/2 and 16/3.

For details of measuring flume at Sta. 8+35 on right bank, see Dwg. No. 82/3.
For details of pipe culvert at Sta. 14+08 see Dwg. No. 20/3.
For standard manhole details see Dwg. No. 82/36.
For details of standard headwall, see Dwg. No. 68/18.
For location plan of profile A, see Dwg. No. 82/27.

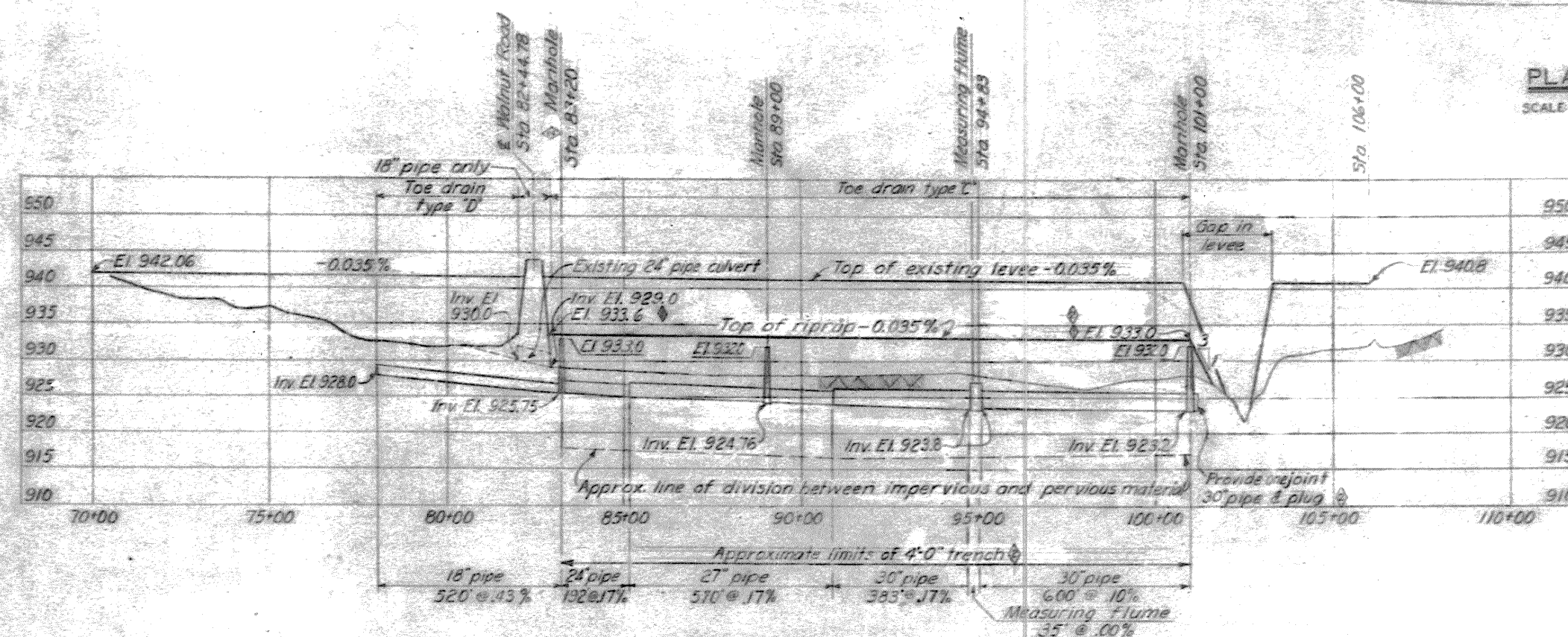
3-10-50	REVISED PROFILE "A" TO ELIMINATE MEASURING WEIR AT THIRD STREET, N. E.	R.S.B.	
3-18-49	CHANGED DRAILED HOLES TO TRENCH 4'-0" WIDE. REVISED TOE DRAIN, RIGHT BANK, BETWEEN STA. 1+60 & STA. 4+40 AND ADDED PIPE ON LEFT BANK AT STA. 60+00	R.S.B.	
11-10-40	CHANGED MANHOLE STATIONING ON RIGHT BANK TO STA. 14+08-ALTERATION ARTICLE	R.S.B.	
REVISION	DATE	DESCRIPTION	BY
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: A.E.P.-G.M.C.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 LEVEE TOE DRAIN PROFILE & DETAILS	
TRACED BY:			
CHECKED BY: E.S.W.-C.E.M.			
SUGGESTED BY: <i>[Signature]</i>			
APPROVED BY: <i>[Signature]</i>		DATE: OCT. 1949	
APPROVED FOR: <i>[Signature]</i>		SCALE: AS SHOWN SPEC. NO.	
DATE:		DRAWING NUMBER 0271-PM2-2-82/1 SHEET 44 OF 50	

WORK AS CONSTRUCTED



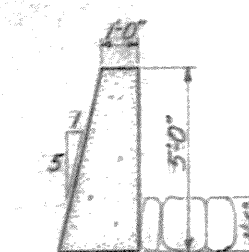
PLAN

SCALE 1"=100'

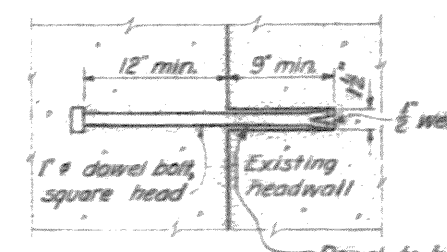
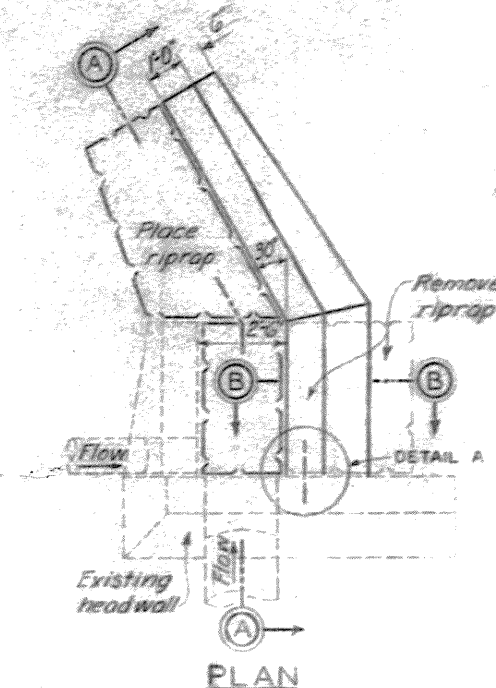


PROFILE OF LEVEE TOE DRAIN-LEFT BANK

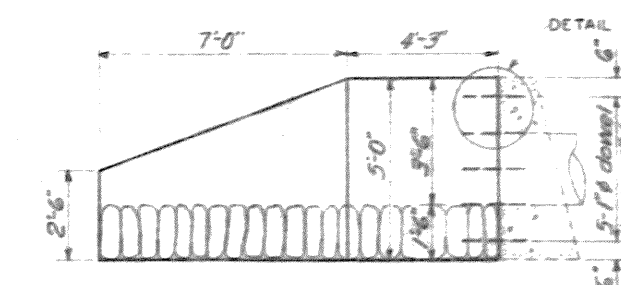
SCALE HORIZ. 1"=200' VERT. 1"=10'



SECTION B-B

DETAIL A
Dowel to be set in grout
SCALE: 1/2"=1'-0"

PLAN



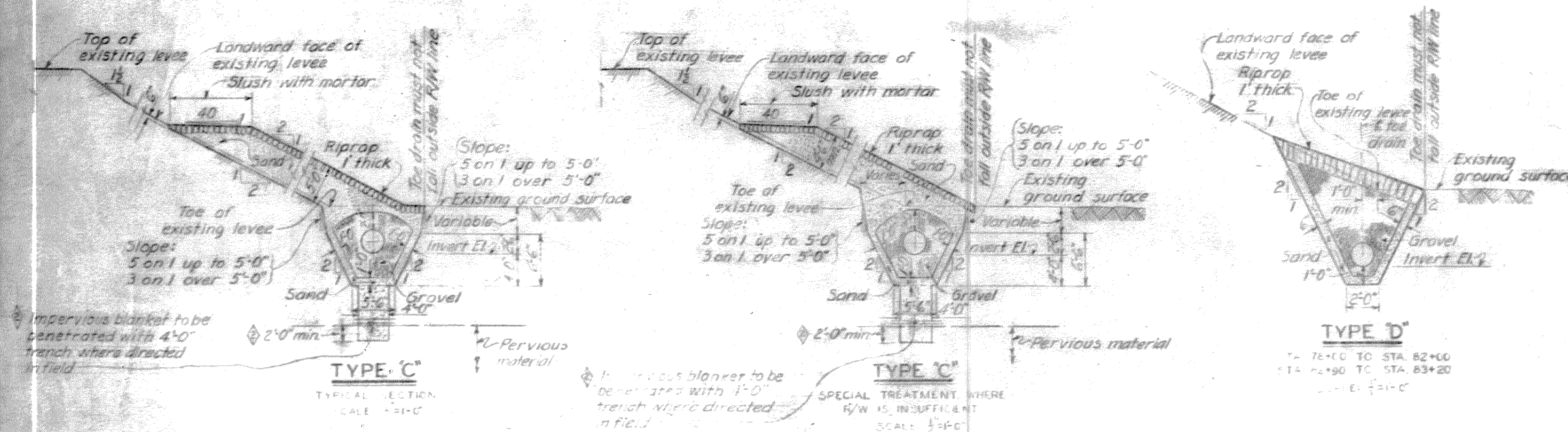
SECTION A-A

RETAINING WALL-WALNUT ROAD

SCALE 3/8"=1'-0"

NOTES

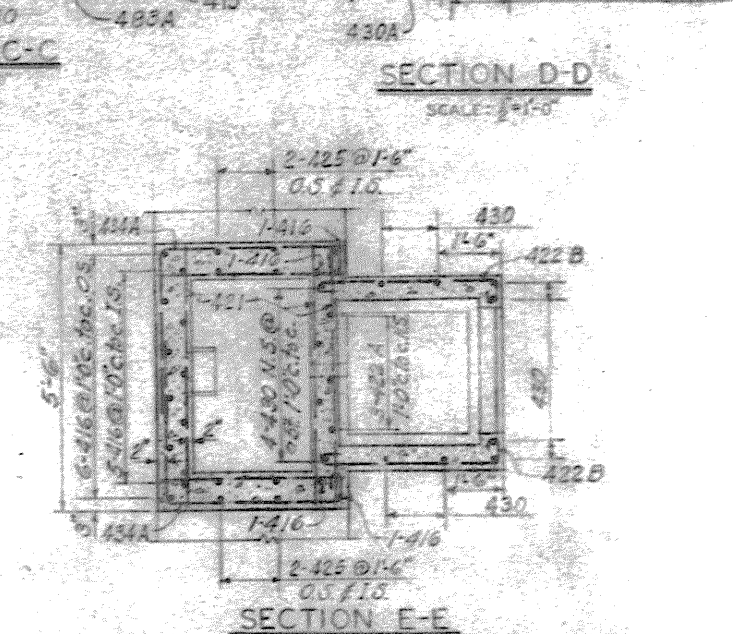
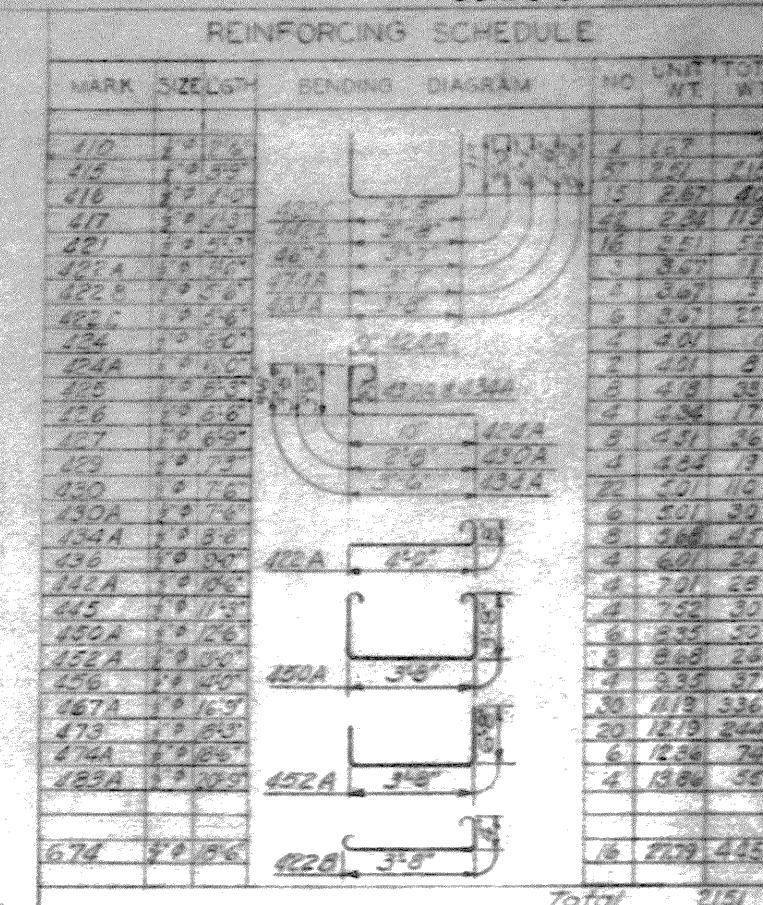
For details of measuring flume Sta 94+83, see Dwg. No. 82/4.



DETAILS OF TOE DRAIN

3-18-48	CHANGED DRILLED HOLES TO 4\"/>		
11-18-48	REVISED TOP OF BERM ELEVATIONS - ADDENDUM NO. 1	R.S.B.	
REVISION	DATE	DESCRIPTION	BY
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 LEVEE TOE DRAIN PLAN, PROFILE & DETAILS			
DRAWN BY:	J.W.D.		
TRACED BY:			
CHECKED BY:	C.C.M. & G.O.S.		
SUBMITTED BY:			
APPROVED:		DATE	OCT. 1948
APPROVED FOR:		SCALE AS SHOWN	SPEC. NO.
DATE:		DRAWING NUMBER	
		0271-PM2-2-82/2	
		SHEET 45 OF 60	

WORK AS CONSTRUCTED



All reinforcing steel, unless otherwise indicated in schedule, to be bent in field to suit conditions.

Clear distance from face of concrete to nearest reinforcing bar shall be 2" unless otherwise indicated.

For details of baffle plates and flume lining, see Dwg. No. B2/7.

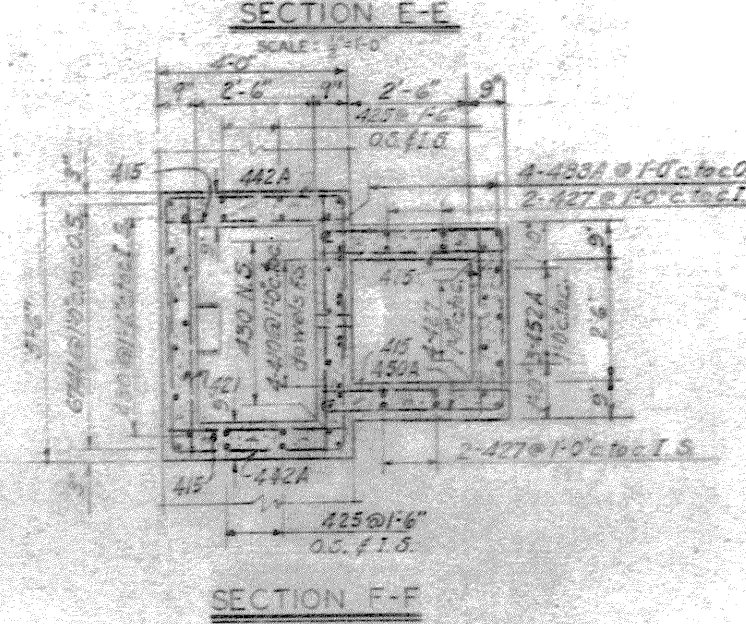
For recorder house details, see Dwg. No. B2/6

For profile of toe drain, see Dwg. No. B2/1

For general plan, see Dwg. No. 16/1.

For masonry notes and explanation of reinforcing steel code, see Dwg. No. B2/11.

For details of standard manhole frame and cover and C.I. steps, see Dwg. No. B2/36.



DRAWN BY: A.E.R.		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TRACED BY:			
CHECKED BY: C.S.W. & C.C.M.			
SUBMITTED BY: <i>[Signature]</i> DATE: CHG. DIV.			
APPROVED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	DATE: OCT. 1948	
APPROVED FOR: _____		SCALE: $\frac{1}{8}'' = 1'-0''$ DRAWING NUMBER: 0271-FM2-2-82/3 SHEET 48 OF 49	

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT	TOTAL
					WT.	WT.
410	3/8"	2'-6"		4	1.67	7
415	3/8"	3'-9"		80	2.51	201
417	3/8"	4'-3"		42	2.84	119
418A	3/8"	4'-6"		3	3.01	9
421	3/8"	5'-3"		11	3.51	39
422A	3/8"	5'-6"		6	3.67	22
422B	3/8"	5'-6"		4	3.67	15
424	3/8"	6'-0"		12	4.01	48
424A	3/8"	6'-0"		2	4.01	8
426	3/8"	6'-6"		4	4.34	17
429	3/8"	7'-3"		4	4.84	19
430	3/8"	7'-6"		12	5.01	60
430A	3/8"	7'-6"		6	5.01	30
434A	3/8"	8'-6"		6	5.68	24
415	3/8"	4'-6"		8	3.01	24
436	3/8"	9'-0"		4	6.01	24
442A	3/8"	10'-6"		2	7.01	14
432	3/8"	10'-6"		7	5.34	37
443	3/8"	10'-6"		4	7.18	29
450A	3/8"	12'-6"		5	8.35	42
456	3/8"	14'-0"		4	9.35	37
467A	3/8"	16'-9"		30	11.19	336
473	3/8"	18'-3"		80	12.19	244
470A	3/8"	17'-6"		3	11.63	35
473A	3/8"	18'-3"		6	12.19	73
477A	3/8"	13'-3"		4	12.86	51
674	3/8"	18'-6"		16	2.79	445
Total						2019

NOTES

Top of manhole and recorder house floor sill elevation may vary from 0' to 2' to suit conditions if special treatment is required for toe drain due to insufficient R/W (see Dwg. No. 82/2).

Elevations shown are to be verified in the field before reinforcing steel is placed.

All reinforcing steel, unless otherwise indicated in schedule, to be bent in field to suit conditions.

Clear distance from face of concrete to nearest reinforcing bars shall be 2" unless otherwise indicated.

For baffle plates and liner for flume, see Dwg. No. 82/7.

For details of recorder house, see Dwg. No. 82/36.

For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1.

For details of standard manhole frame and cover and C.I. steps, see Dwg. No. 82/36.

For profile of toe drain, see Dwg. No. 82/2.

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT	TOTAL
					WT.	WT.
410	3/8"	2'-6"		4	1.67	7
415	3/8"	3'-9"		80	2.51	201
417	3/8"	4'-3"		42	2.84	119
418A	3/8"	4'-6"		3	3.01	9
421	3/8"	5'-3"		11	3.51	39
422A	3/8"	5'-6"		6	3.67	22
422B	3/8"	5'-6"		4	3.67	15
424	3/8"	6'-0"		12	4.01	48
424A	3/8"	6'-0"		2	4.01	8
426	3/8"	6'-6"		4	4.34	17
429	3/8"	7'-3"		4	4.84	19
430	3/8"	7'-6"		12	5.01	60
430A	3/8"	7'-6"		6	5.01	30
434A	3/8"	8'-6"		6	5.68	24
415	3/8"	4'-6"		8	3.01	24
436	3/8"	9'-0"		4	6.01	24
442A	3/8"	10'-6"		2	7.01	14
432	3/8"	10'-6"		7	5.34	37
443	3/8"	10'-6"		4	7.18	29
450A	3/8"	12'-6"		5	8.35	42
456	3/8"	14'-0"		4	9.35	37
467A	3/8"	16'-9"		30	11.19	336
473	3/8"	18'-3"		80	12.19	244
470A	3/8"	17'-6"		3	11.63	35
473A	3/8"	18'-3"		6	12.19	73
477A	3/8"	13'-3"		4	12.86	51
674	3/8"	18'-6"		16	2.79	445
Total						2019

NOTES

Top of manhole and recorder house floor sill elevation may vary from 0' to 2' to suit conditions if special treatment is required for toe drain due to insufficient R/W (see Dwg. No. 82/2).

Elevations shown are to be verified in the field before reinforcing steel is placed.

All reinforcing steel, unless otherwise indicated in schedule, to be bent in field to suit conditions.

Clear distance from face of concrete to nearest reinforcing bars shall be 2" unless otherwise indicated.

For baffle plates and liner for flume, see Dwg. No. 82/7.

For details of recorder house, see Dwg. No. 82/36.

For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1.

For details of standard manhole frame and cover and C.I. steps, see Dwg. No. 82/36.

For profile of toe drain, see Dwg. No. 82/2.

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT	TOTAL
					WT.	WT.
410	3/8"	2'-6"		4	1.67	7
415	3/8"	3'-9"		80	2.51	201
417	3/8"	4'-3"		42	2.84	119
418A	3/8"	4'-6"		3	3.01	9
421	3/8"	5'-3"		11	3.51	39
422A	3/8"	5'-6"		6	3.67	22
422B	3/8"	5'-6"		4	3.67	15
424	3/8"	6'-0"		12	4.01	48
424A	3/8"	6'-0"		2	4.01	8
426	3/8"	6'-6"		4	4.34	17
429	3/8"	7'-3"		4	4.84	19
430	3/8"	7'-6"		12	5.01	60
430A	3/8"	7'-6"		6	5.01	30
434A	3/8"	8'-6"		6	5.68	24
415	3/8"	4'-6"		8	3.01	24
436	3/8"	9'-0"		4	6.01	24
442A	3/8"	10'-6"		2	7.01	14
432	3/8"	10'-6"		7	5.34	37
443	3/8"	10'-6"		4	7.18	29
450A	3/8"	12'-6"		5	8.35	42
456	3/8"	14'-0"		4	9.35	37
467A	3/8"	16'-9"		30	11.19	336
473	3/8"	18'-3"		80	12.19	244
470A	3/8"	17'-6"		3	11.63	35
473A	3/8"	18'-3"		6	12.19	73
477A	3/8"	13'-3"		4	12.86	51
674	3/8"	18'-6"		16	2.79	445
Total						2019

NOTES

Top of manhole and recorder house floor sill elevation may vary from 0' to 2' to suit conditions if special treatment is required for toe drain due to insufficient R/W (see Dwg. No. 82/2).

Elevations shown are to be verified in the field before reinforcing steel is placed.

All reinforcing steel, unless otherwise indicated in schedule, to be bent in field to suit conditions.

Clear distance from face of concrete to nearest reinforcing bars shall be 2" unless otherwise indicated.

For baffle plates and liner for flume, see Dwg. No. 82/7.

For details of recorder house, see Dwg. No. 82/36.

For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1.

For details of standard manhole frame and cover and C.I. steps, see Dwg. No. 82/36.

For profile of toe drain, see Dwg. No. 82/2.

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT	TOTAL
					WT.	WT.
410	3/8"	2'-6"		4	1.67	7
415	3/8"	3'-9"		80	2.51	201
417	3/8"	4'-3"		42	2.84	119
418A	3/8"	4'-6"		3	3.01	9
421	3/8"	5'-3"		11	3.51	39
422A	3/8"	5'-6"		6	3.67	22
422B	3/8"	5'-6"		4	3.67	15
424	3/8"	6'-0"		12	4.01	48
424A	3/8"	6'-0"		2	4.01	8
426	3/8"	6'-6"		4	4.34	17
429	3/8"	7'-3"		4	4.84	19
430	3/8"	7'-6"		12	5.01	60
430A	3/8"	7'-6"		6	5.01	30
434A	3/8"	8'-6"		6	5.68	24
415	3/8"	4'-6"		8	3.01	24
436	3/8"	9'-0"		4	6.01	24
442A	3/8"	10'-6"		2	7.01	14
432	3/8"	10'-6"		7	5.34	37
443	3/8"	10'-6"		4	7.18	29
450A	3/8"	12'-6"		5	8.35	42
456	3/8"	14'-0"		4	9.35	37
467A	3/8"	16'-9"		30	11.19	336
473	3/8"	18'-3"		80	12.19	244
470A	3/8"	17'-6"		3	11.63	35
473A	3/8"	18'-3"		6	12.19	73
477A	3/8"	13'-3"		4	12.86	51
674	3/8"	18'-6"		16	2.79	445
Total						2019

NOTES

Top of manhole and recorder house floor sill elevation may vary from 0' to 2' to suit conditions if special treatment is required for toe drain due to insufficient R/W (see Dwg. No. 82/2).

Elevations shown are to be verified in the field before reinforcing steel is placed.

All reinforcing steel, unless otherwise indicated in schedule, to be bent in field to suit conditions.

Clear distance from face of concrete to nearest reinforcing bars shall be 2" unless otherwise indicated.

For baffle plates and liner for flume, see Dwg. No. 82/7.

For details of recorder house, see Dwg. No. 82/36.

For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1.

For details of standard manhole frame and cover and C.I. steps, see Dwg. No. 82/36.

For profile of toe drain, see Dwg. No. 82/2.

REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT	TOTAL
					WT.	WT.
410	3/8"	2'-6"		4	1.67	7
415	3/8"	3'-9"		80	2.51	201
417	3/8"	4'-3"		42	2.84	119
418A	3/8"	4'-6"		3	3.01	9
421	3/8"	5'-3"		11	3.51	39
422A	3/8"	5'-6"		6	3.67	22
422B	3/8"	5'-6"		4	3.67	15
424	3/8"	6'-0"		12	4.01	48
424A	3/8"	6'-0"		2	4.01	8
426	3/8"	6'-6"		4	4.34	17
429	3/8"	7'-3"		4	4.84	19
430	3/8"	7'-6"		12	5.01	60
430A	3/8"	7'-6"		6	5.01	30
434A	3/8"	8'-6"		6	5.68	24
415	3/8"	4'-6"		8	3.01	24
436	3/8"	9'-0"		4	6.01	24
442A	3/8"	10'-6"		2	7.01	14
432	3/8"	10'-6"		7	5.34	37
443	3/8"	10'-6"		4	7.18	29
450A	3/8"	12'-6"		5	8.35	42
456	3/8"	14'-0"		4	9.35	37
467A	3/8"	16'-9"		30	11.19	336
473	3/8"	18'-3"		80	12.19	244
470A	3/8"	17'-6"		3	11.63	35
473A	3/8"	18'-3"		6	12.19	73
477A	3/8"	13'-3"		4	12.86	51
674	3/8"	18'-6"		16	2.79	445
Total						2019

NOTES

Top of manhole and recorder house floor sill elevation may vary from 0' to 2' to suit conditions if special treatment is required for toe drain due to insufficient R/W (see Dwg. No. 82/2).

Elevations shown are to be verified in the field before reinforcing steel is placed.

All reinforcing steel, unless otherwise indicated in schedule, to be bent in field to suit conditions.

Clear distance from face of concrete to nearest reinforcing bars shall be 2" unless otherwise indicated.

For baffle plates and liner for flume, see Dwg. No. 82/7.

For details of recorder house, see Dwg. No. 82/36.

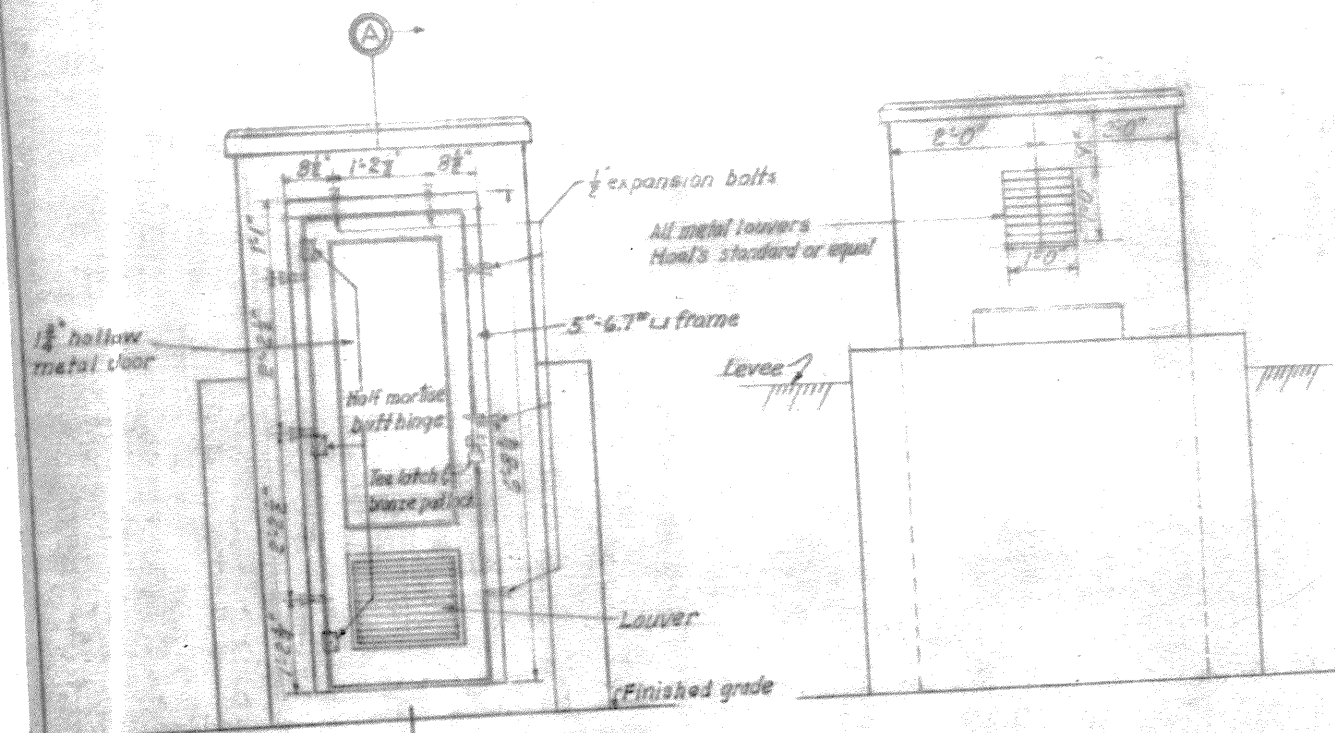
For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1.

For details of standard manhole frame and cover and C.I. steps, see Dwg. No. 82/36.

For profile of toe drain, see Dwg. No. 82/2.

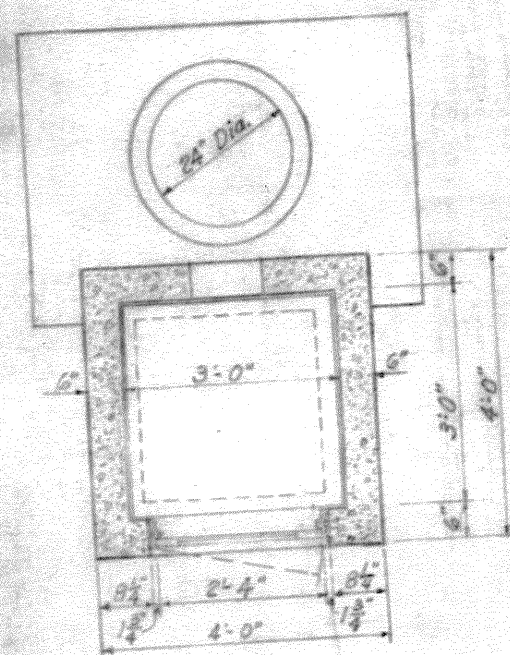
REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING DIAGRAM	NO	UNIT WT.	TOTAL WT.
410	3/8"	2'-6"		4	1.67	7
415	3/8"	3'-9"		20	2.51	201
417	3/8"	4'-3"		42	2.84	119
418A	1/2"	4'-6"		3	3.01	
421	1/2"	5'-3"		11	3.51	39
422A	2/3"	5'-6"	422A 3'-8"	6	3.67	22
422B	2/3"	5'-6"	442A 3'-8"	4	3.67	15
424	2/3"	6'-0"	467A 3'-7"	12	4.01	48
424A	2/3"	6'-0"	477A 3'-7"	2	4.01	8
426	3/4"	6'-6"		4	4.24	17
429	1/2"	7'-3"		7	4.24	19
430	1/2"	7'-6"		12	5.01	60
430A	3/4"	7'-6"		6	5.01	30
434A	2/3"	8'-6"		6	5.68	34
418	3/8"	4'-8"		8	3.01	24
436	3/4"	9'-0"		4	6.01	24
442A	3/4"	10'-6"		2	7.01	14
452	3/4"	8'-0"		7	5.34	37
443	1/2"	10'-9"	418A 3'-1"	4	7.18	29
450A	3/4"	12'-6"		5	8.35	42
456	3/4"	14'-0"		4	9.35	37
467A	3/4"	16'-9"		30	11.19	336
473	3/4"	18'-3"		20	12.19	245
470A	1/2"	17'-6"	450A 3'-8"	3	11.63	34
473A	3/4"	18'-3"		6	12.19	73
477A	3/4"	3'-3"		4	12.86	51
674	3/4"	18'-6"		16	27.79	445
470A			3'-7"			
475A			3'-7"			
422B			3'-8"			
Total						2012



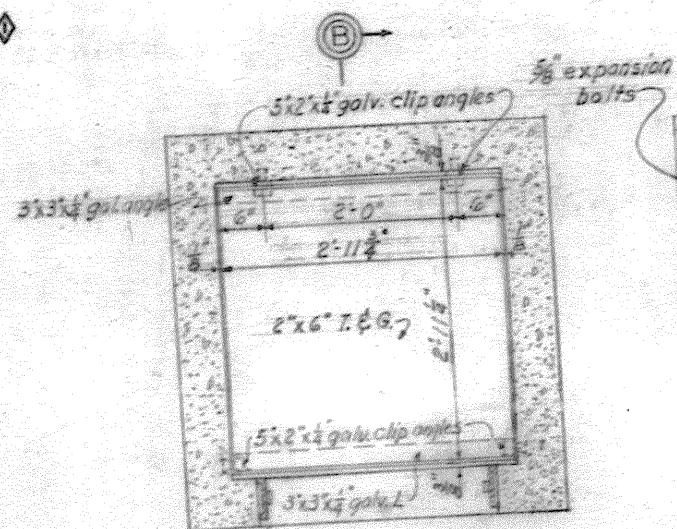
FRONT ELEVATION

REAR ELEVATION



SECTIONAL PLAN

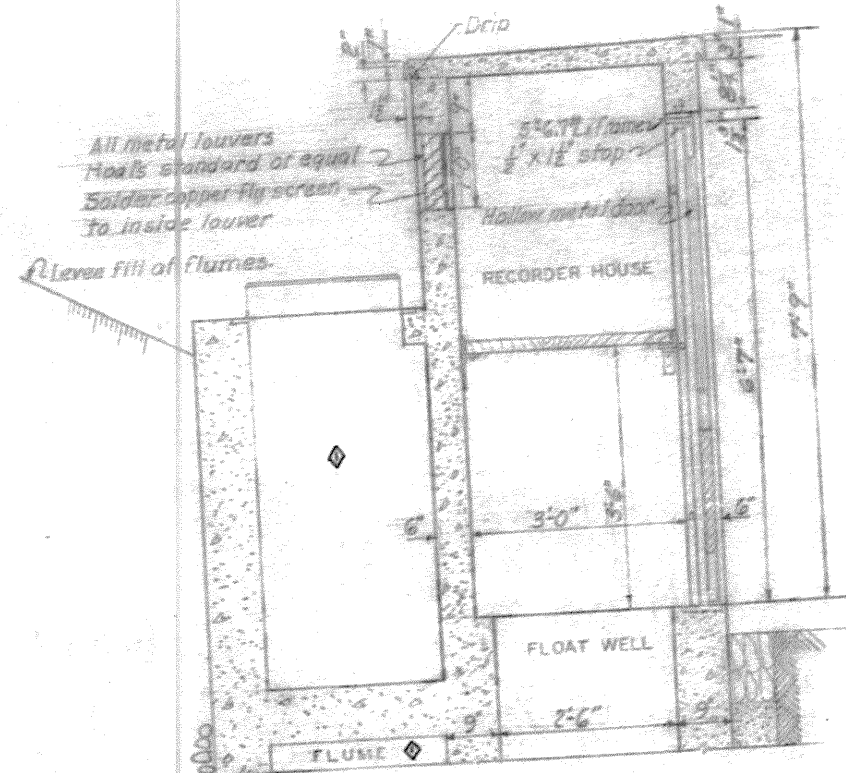
SCALE 1/4" = 1'-0"



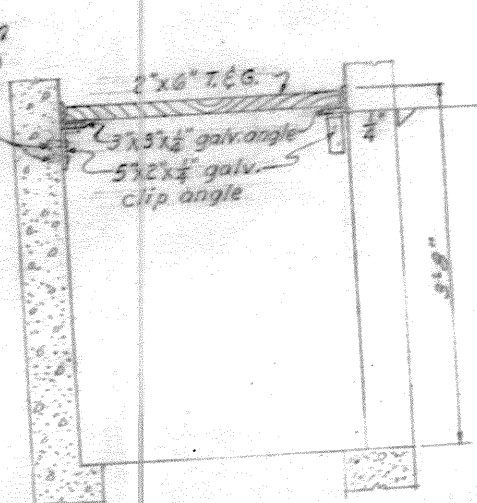
PLAN

RECORDER SHELF DETAILS

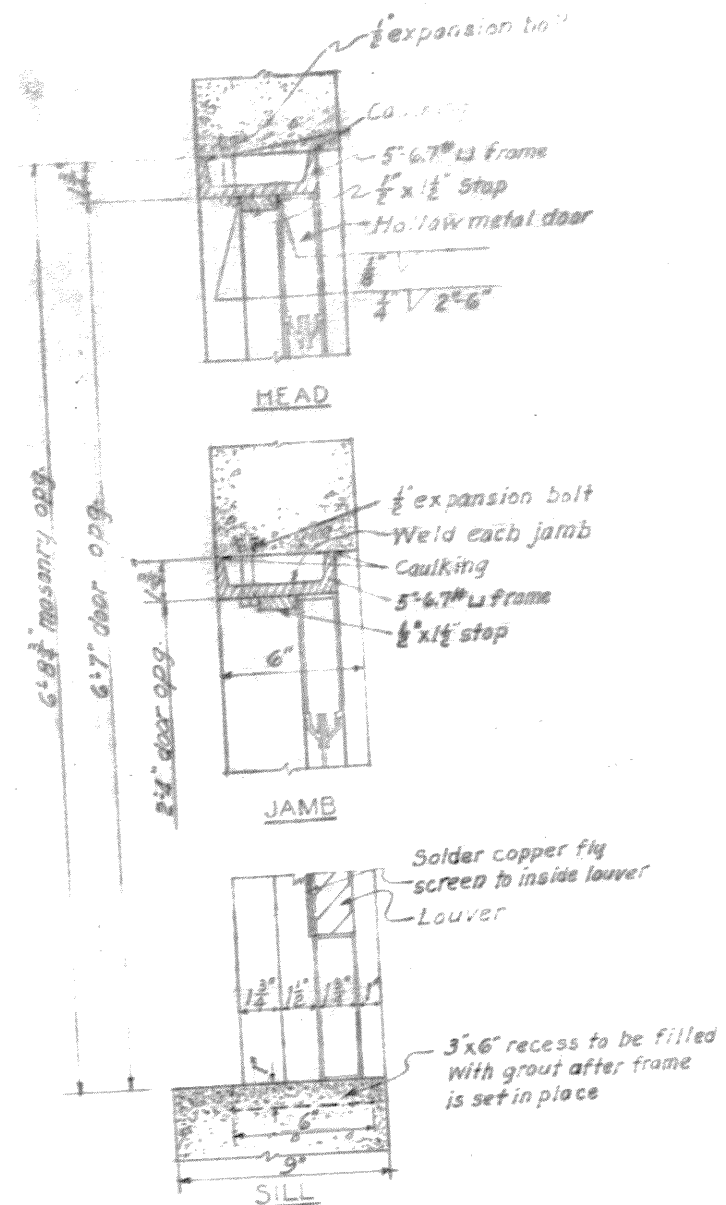
SCALE 1/4" = 1'-0"



SECTION A-A



SECTION B-B



DOOR DETAILS

SCALE 3/4" = 1'-0"

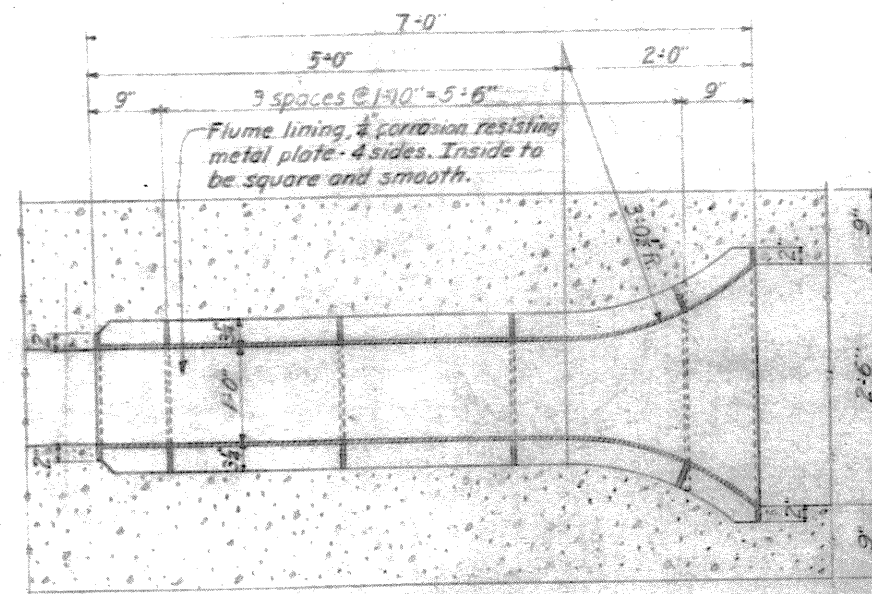
NOTES

For details of flume and reinforcing details of recorder house Sta. 8+35 see Dwg. No. 82/3.
For details of flume and reinforcing details of recorder house Sta. 94+83, see Dwg. No. 82/4.

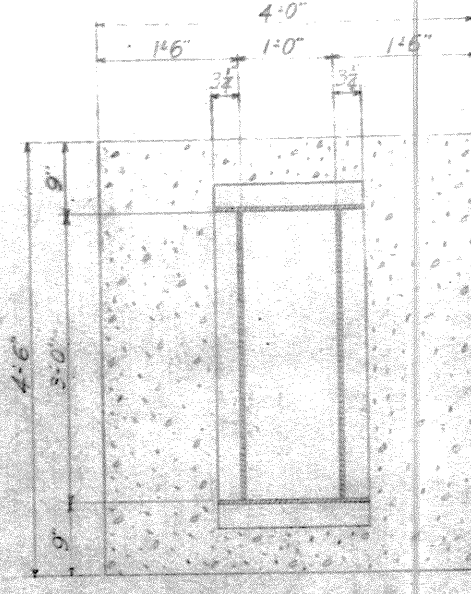
REVISION DATE		DESCRIPTION	
DRAWN BY: A. E. P.		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TRACED BY:		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 LEVEE TOE DRAIN RECORDER HOUSE MISCELLANEOUS DETAILS	
CHECKED BY: C. M. & G. S.		DATE: OCT. 1948	
APPROVED BY: [Signature]		APPROVED FOR: [Signature]	
DATE:		SCALE: 3/4" = 1'-0"	
		SHEET 43 OF 50	

WORK AS CONSTRUCTED

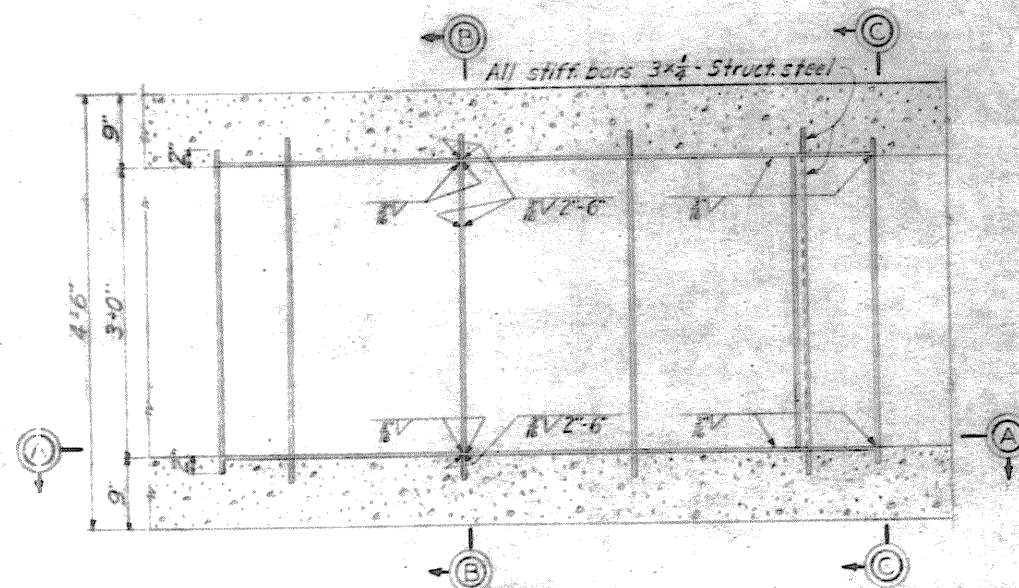
DEPARTMENT OF THE ARMY



SECTION A-A



SECTION B-B



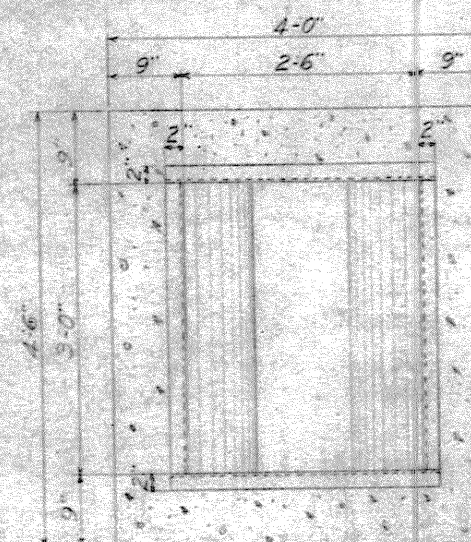
FLUME LINER

Corr.-Resisting Metal with Struct. Steel

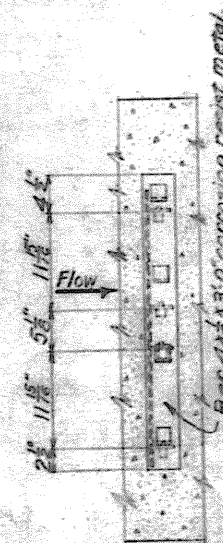
MARK 82/7-1 WT. CORR.-RESISTING METAL 712 LBS.

MAKE 2 WT. STRUCT. STEEL 105 LBS.

SCALE: 1"=1'-0"



SECTION C-C

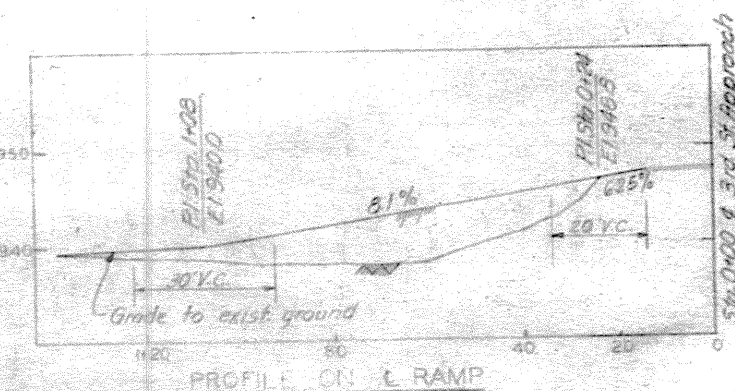


BAFFLE PLATE & FRAME

STRUCT. STEEL WITH CORR.-RESISTING METAL

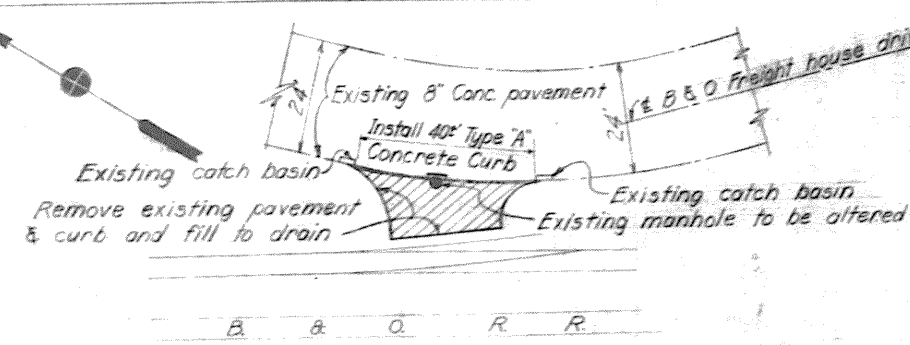
MARK 82/7-2 WT. CORR.-RESISTING METAL 20 LBS.

MAKE 2 WT. STRUCT. STEEL 104 LBS.



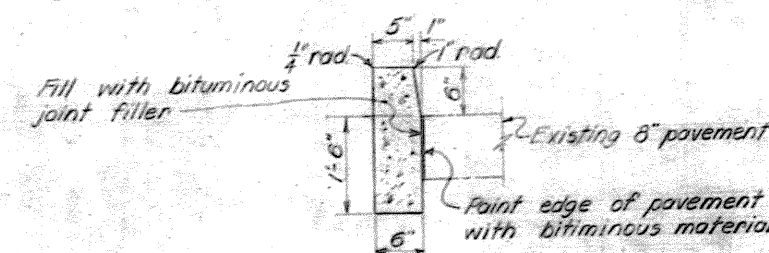
RAMP SECTION

SCALE: 1"=1'-0"



SITE PLAN

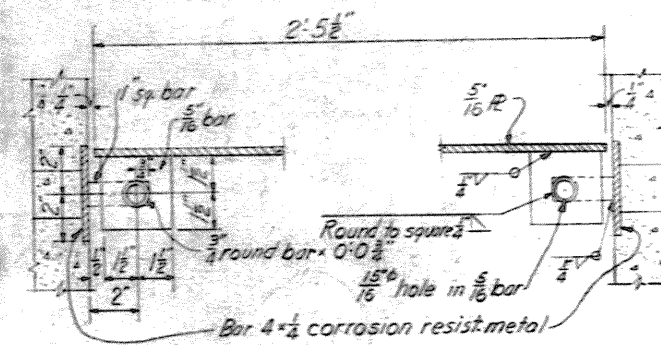
SCALE: 1"=20'



CONCRETE CURB - TYPE "A"

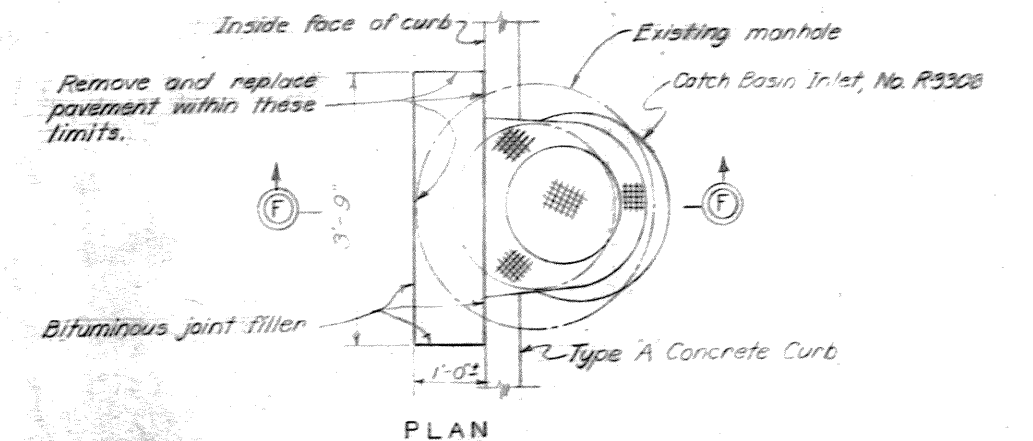
SCALE: 1"=1'-0"

B. & O. FREIGHT HOUSE DRIVEWAY ALTERATIONS

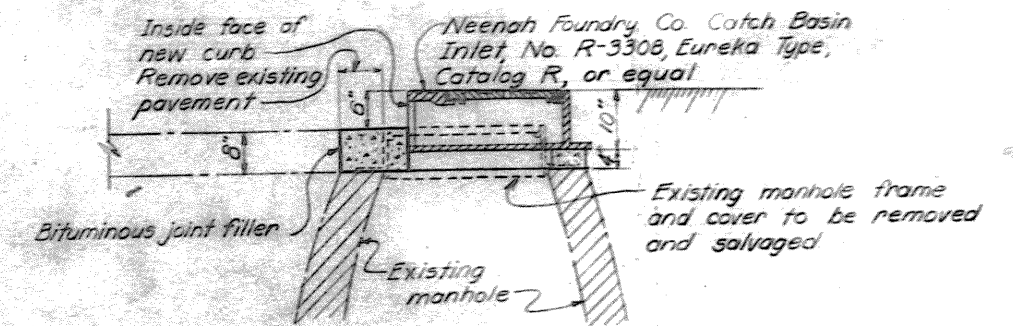


SECTION E-E

SCALE: 3/4"=1'-0"



PLAN



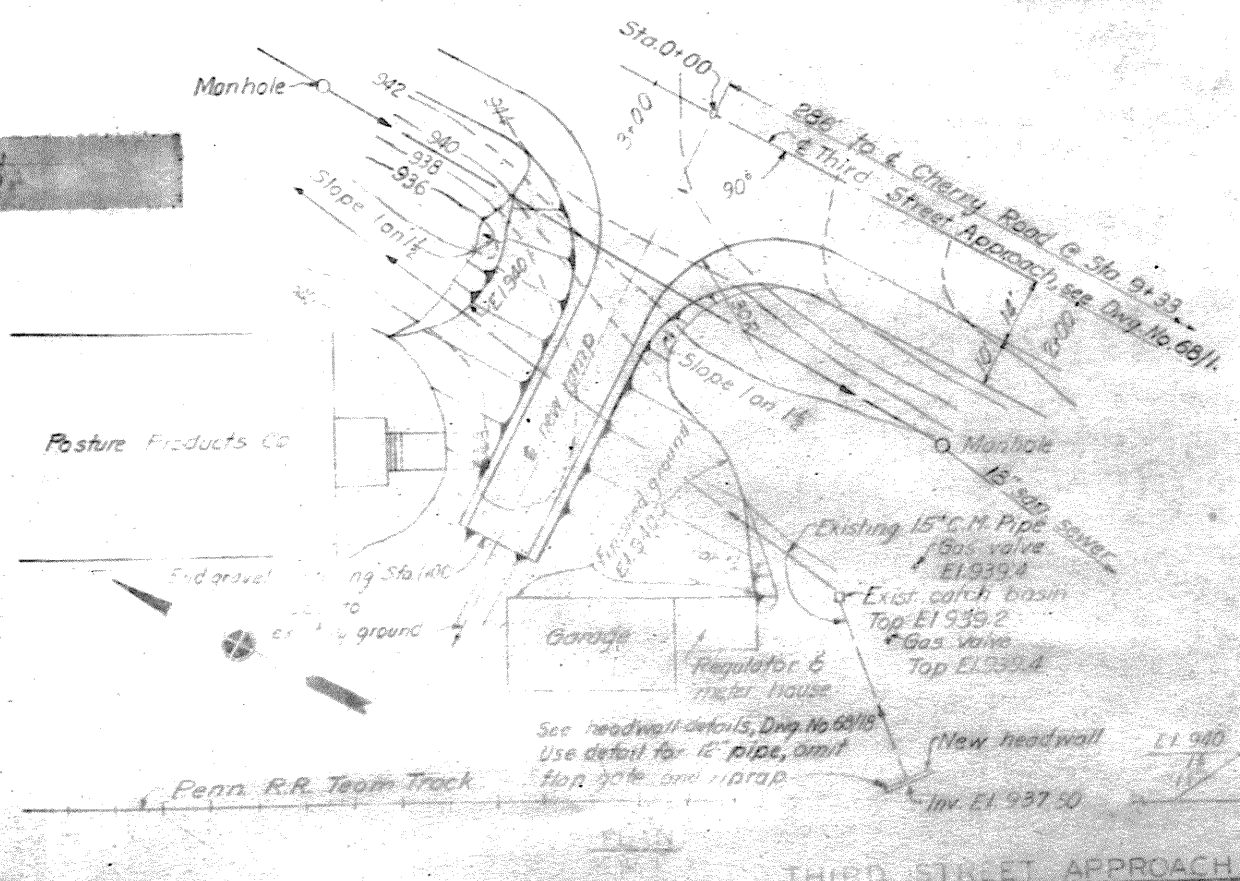
MANHOLE ALTERATIONS

SCALE: 1"=1'-0"

NOTES

All material structural steel unless otherwise noted.

For location of flume liners, and baffle plates 82/7-2, see Dwg. Nos. 82/3 & 82/4.

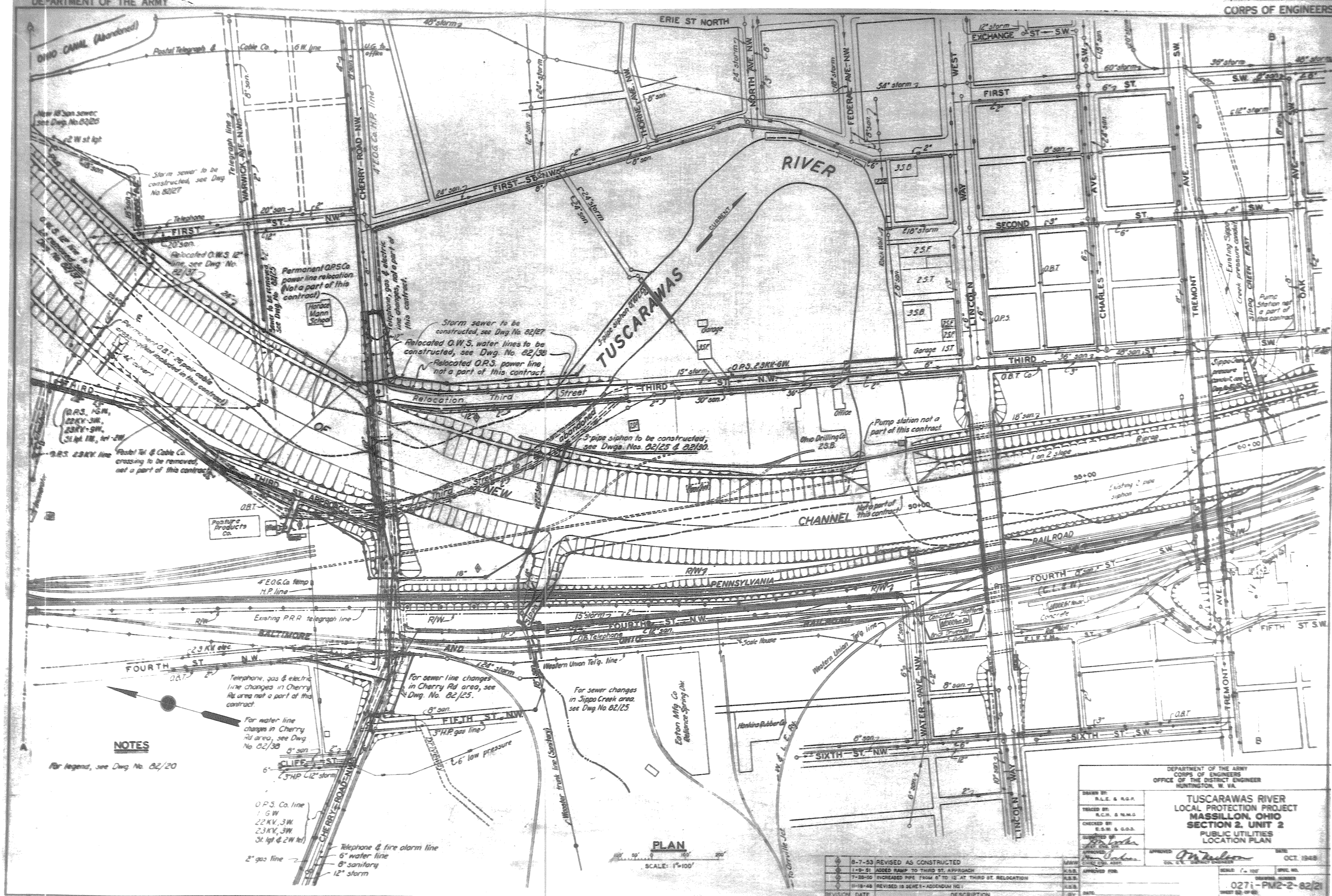


THIRD STREET APPROACH RAMP

1-9-8	ADDED RAMP TO THIRD ST. APPROACH	K.S.B.
2-10-8	DELETED V-NOTCHED WEIR DETAILS AND ADDED B. & O. FREIGHT HOUSE DRIVEWAY ALTERATIONS.	K.S.B.
REVISION DATE	DESCRIPTION	BY
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
DRAWN BY:	TUSCARAWAS RIVER	
TRACED BY:	LOCAL PROTECTION PROJECT	
CHECKED BY:	MASSILLON, OHIO	
SUBMITTED BY:	SECTION 2, UNIT 2	
APPROVED:	LEVEE TOE DRAIN	
CHIEF ENG. ASST.	MISCELLANEOUS METAL DETAILS	
APPROVED FOR:	DATE	OCT. 1948
DATE:	SCALE: 1"=1'-0"	SPEC. NO.
	0271-PM2-2-82/7	
	SHEET 50 OF 60	

WORK AS CONSTRUCTED





NOTES

For legend, see Dwg. No. 82/20

Telephone, gas & electric line changes in Cherry Rd area, see Dwg. No. 82/30. Not a part of this contract.

O.P.S. Co. line
1.6W
22KV, 3W
23KV, 3W
St. lgt. & 2W lgt.

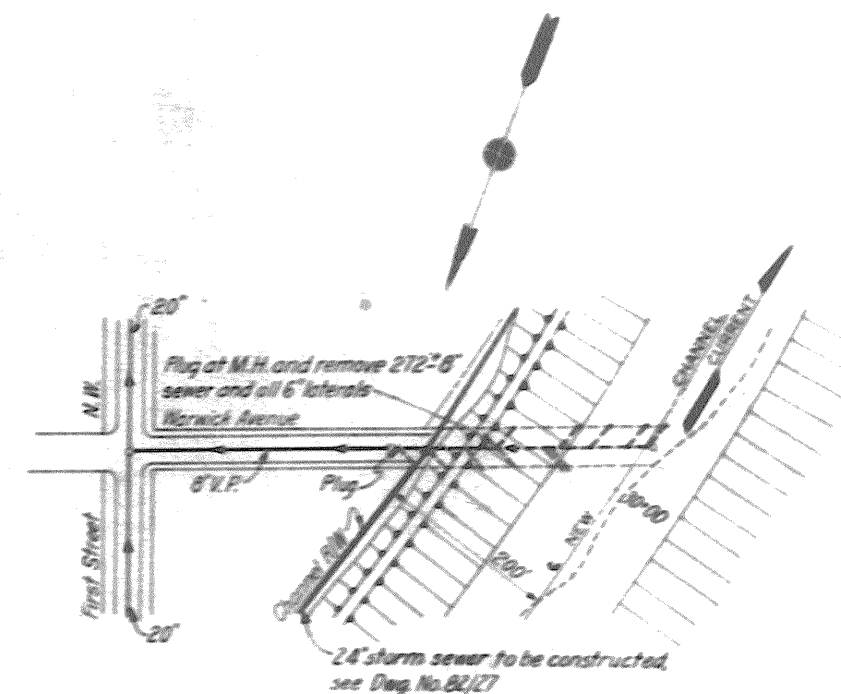
Telephone & fire alarm line
6" water line
8" sanitary
12" storm

PLAN

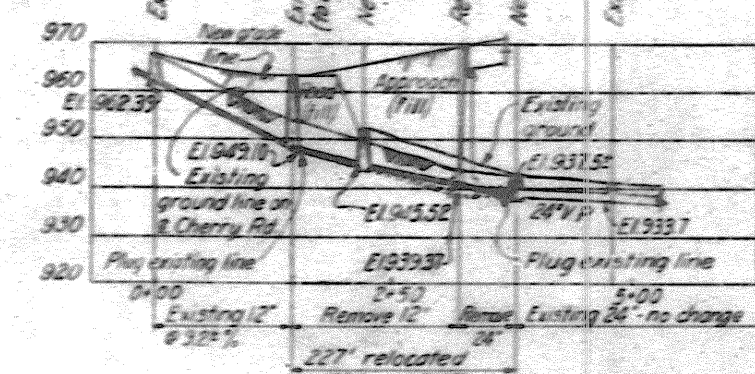
SCALE: 1"=100'

REVISION	DATE	DESCRIPTION
8-7-53		REVISED AS CONSTRUCTED
1-9-54		ADDED RAMP TO THIRD ST. APPROACH
7-20-50		INCREASED PIPE FROM 6" TO 12" AT THIRD ST. RELOCATION
11-18-48		REVISED IN SERIES-ADDENDUM NO. 1

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PUBLIC UTILITIES LOCATION PLAN	
DRAWN BY: A.E. & R.G. CHECKED BY: R.C. & N.M. APPROVED BY: E.S. & G.O. DATE: OCT. 1948	APPROPRIATED FOR: _____ DATE: _____ SCALE: 1"=100' SHEET NO. 0271-PM2-2-82/21 TOTAL SHEETS 82/21

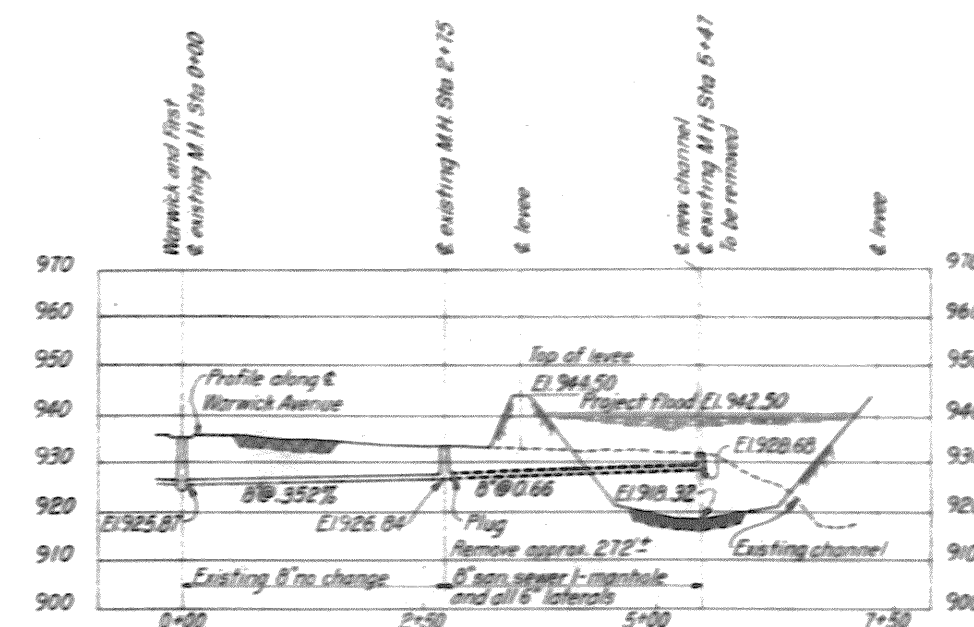


PLAN



PROFILE

WARWICK AVE. SANITARY SEWER CHANGES



NOTES

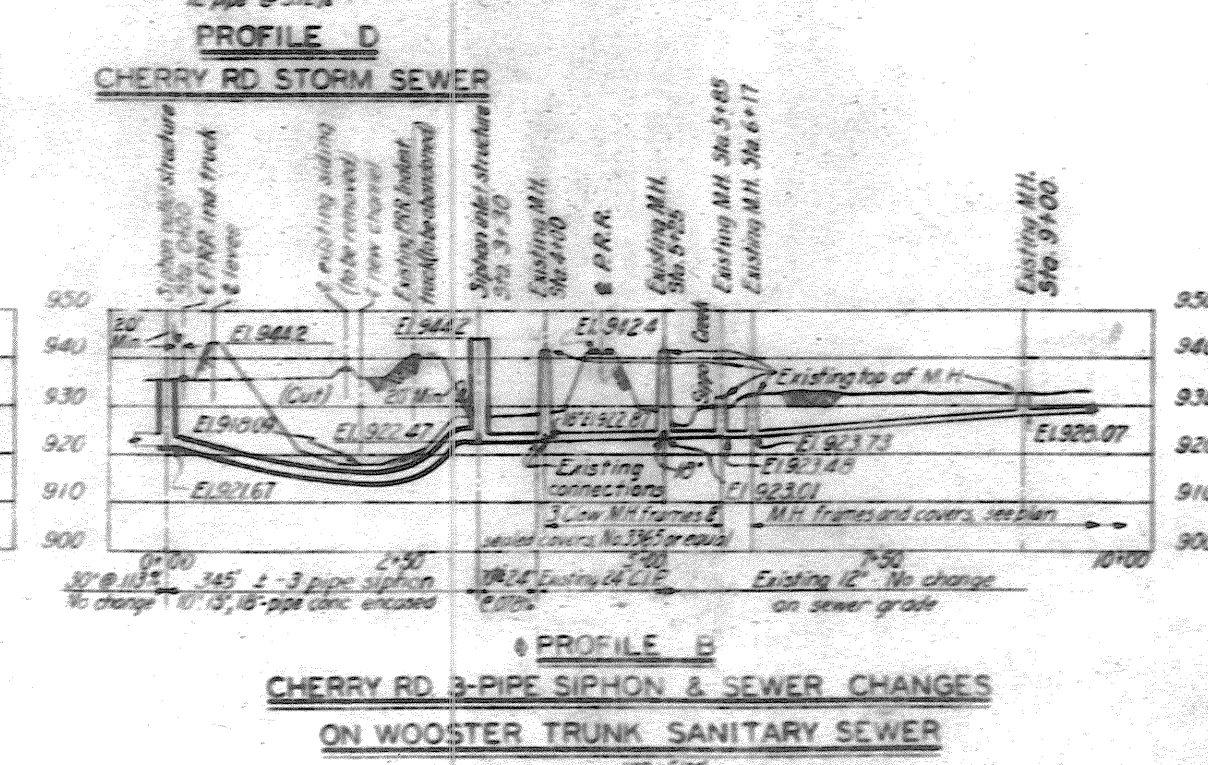
Close, M.H. frames and sealed covers, F.3363 Na.2, Catalog No. 41 or equal are required to support a 20 foot head of water.

All replaced or abandoned manhole frames and covers are to be salvaged for use at other sewer work in this contract.




For general utility plan, see Dwg. No. 82/21.
For general plan, see Dwg. No. 16/2.
For Cherry Road Viaduct, see Dwg. No. 58/1.

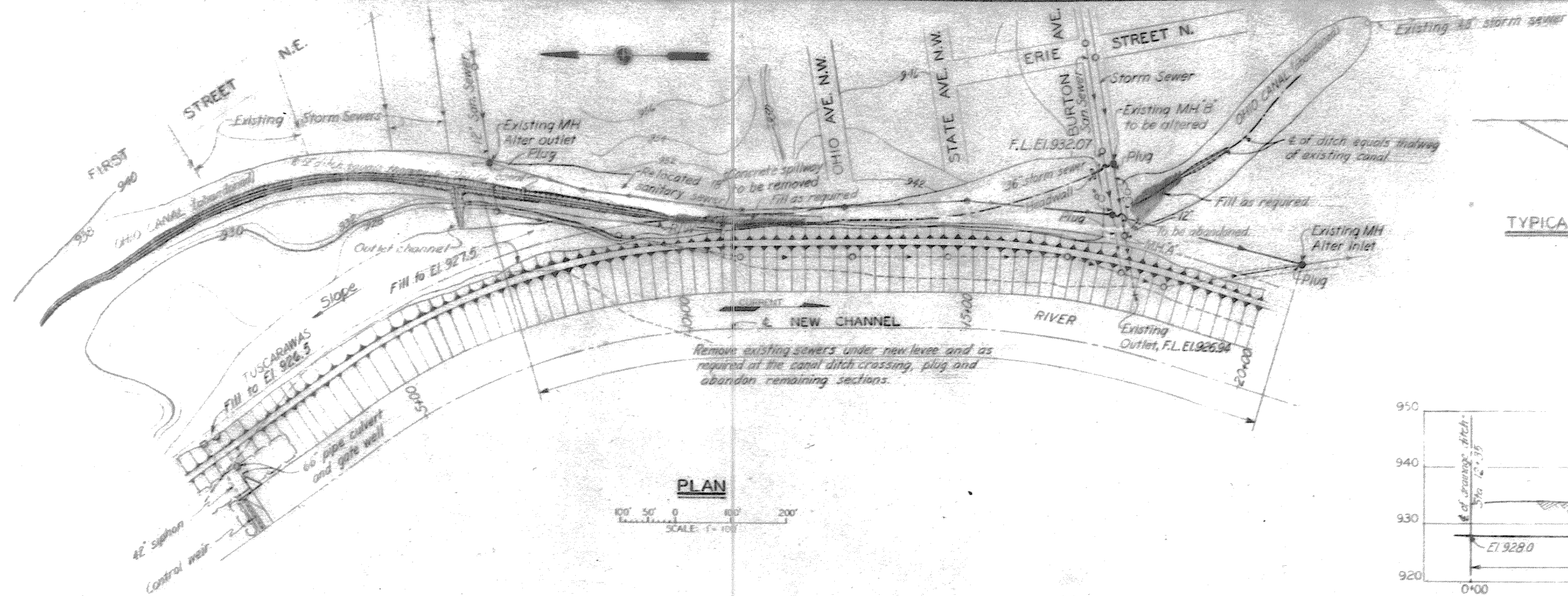
⊗ For 15" C.M. pipe drain and catch basin for Third St. approach ramp, see Dwg. No. 82/17.

⊗ For details of catch basin at Fourth Street ramp, see Dwg. No. 82/36.

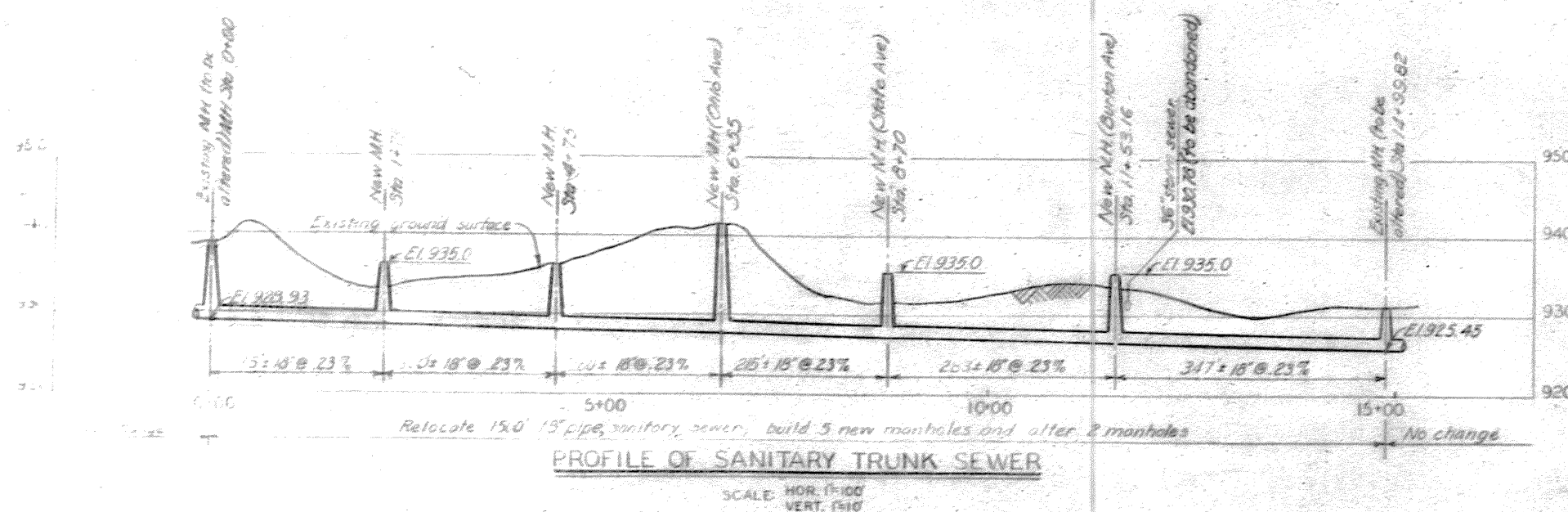
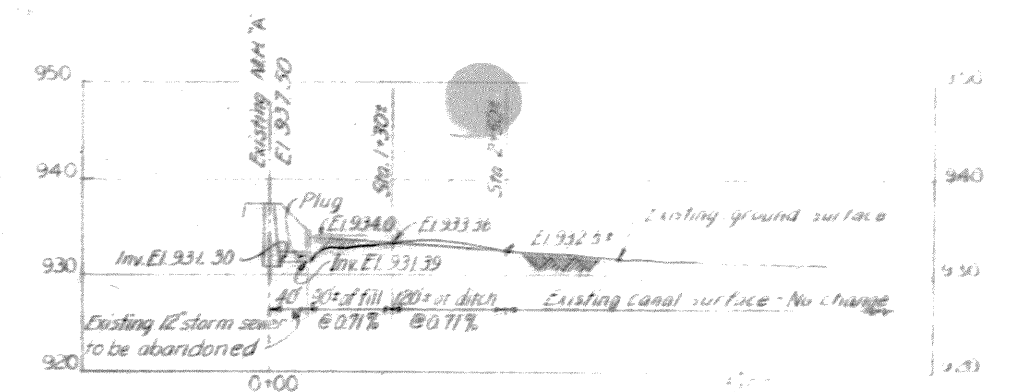
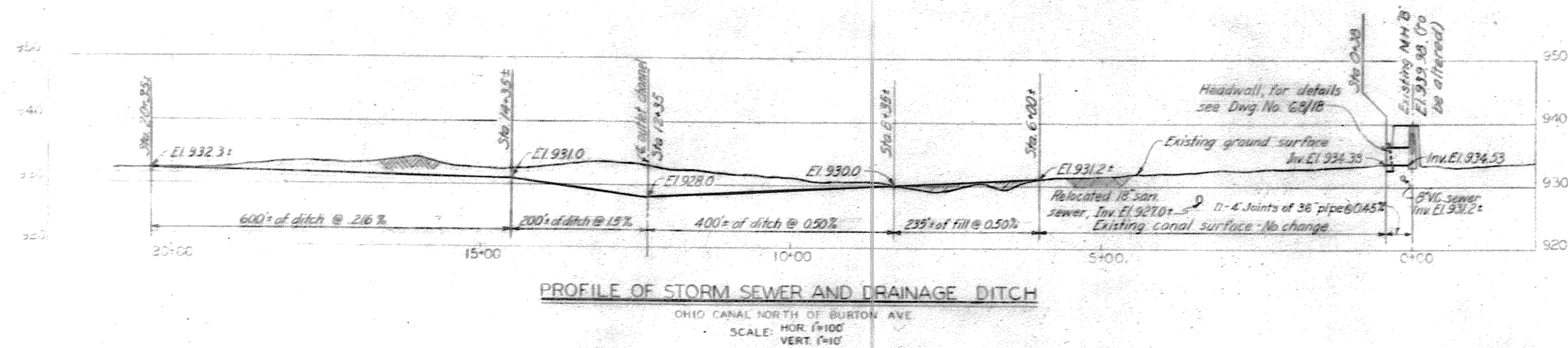
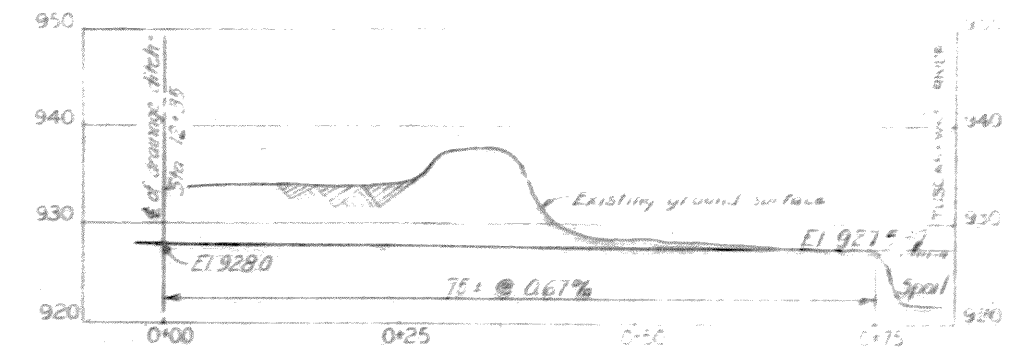


0-7-53	REVISED A.S. CONSTRUCTED
0-29-51	ADDED C.B. & 12" SEWER AT FOURTH ST.
1-0-51	ADDED RAMP TO THIRD ST. APPROACH
11-2-48	REVISED PROFILES A AND B - ADDITION NO. 1
REVISION	DATE DESCRIPTION

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
DRAWN BY: R.L.E. - G.D.S.	<div style="text-align: center;"> TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 SEWER CHANGES CERRY ROAD & WARWICK AVE. </div>
TRACED BY: R.C.N. - N.B.G.	
CHECKED BY: E.S.W. - G.D.S.	
SUBMITTED BY:  R.C.N. - ENG. DSG.	
APPROVED BY:  J. C. C. - DIST. ENGR.	
APPROVED:  MADE COL. C.E. DISTRICT ENGINEER OCT. 1940	
APPROVED FOR: DATE: _____	SCALE: 1" = 100' SHEET NUMBER 0271-PM2-2-82/25 SHEET 23 OF 60
WORK AS CONSTRUCTED	



TYPICAL SECTION OF DITCH AND CHANNEL

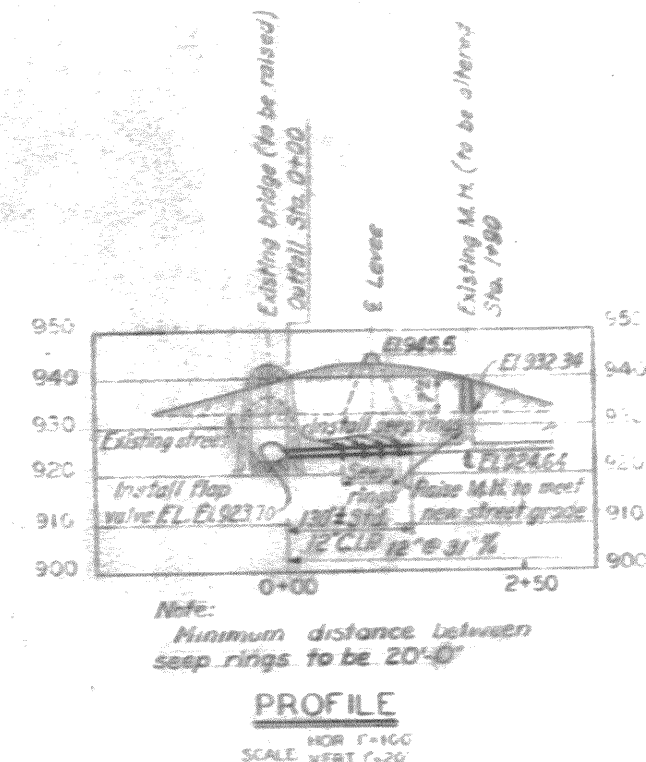
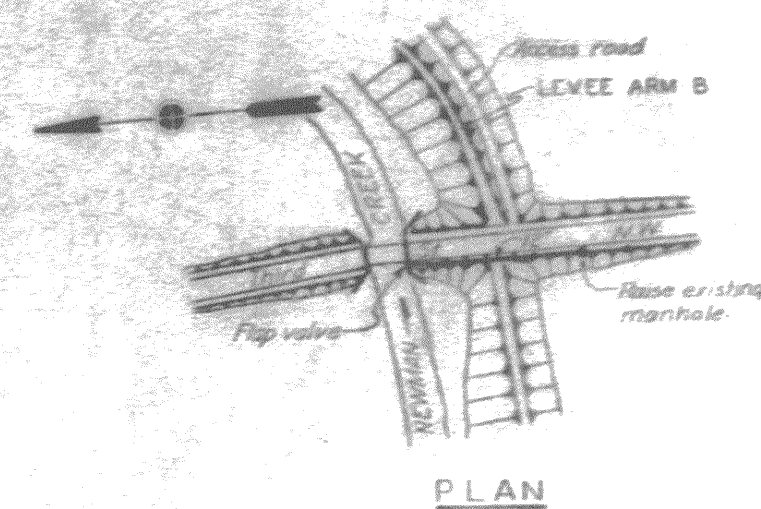
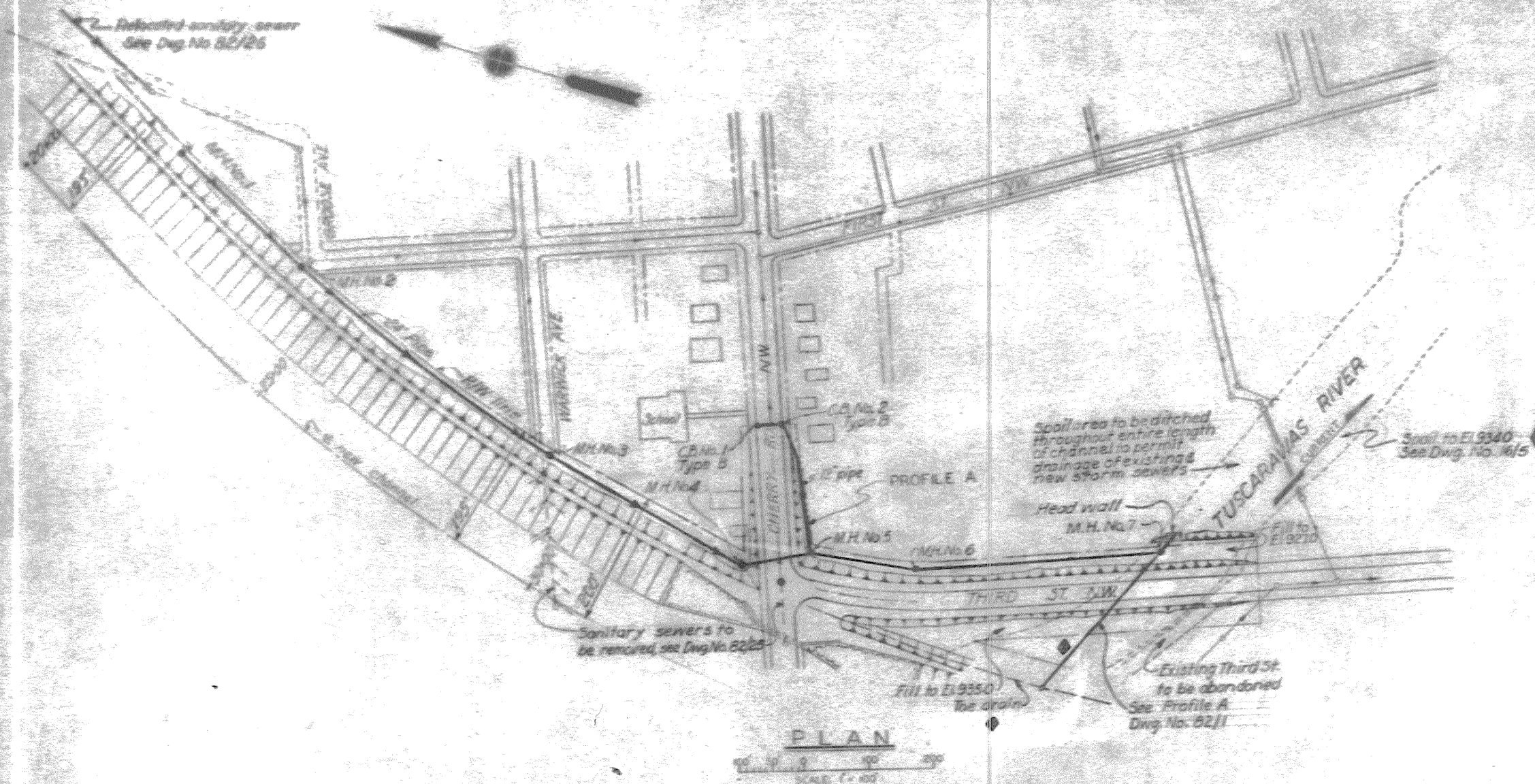


NOTES

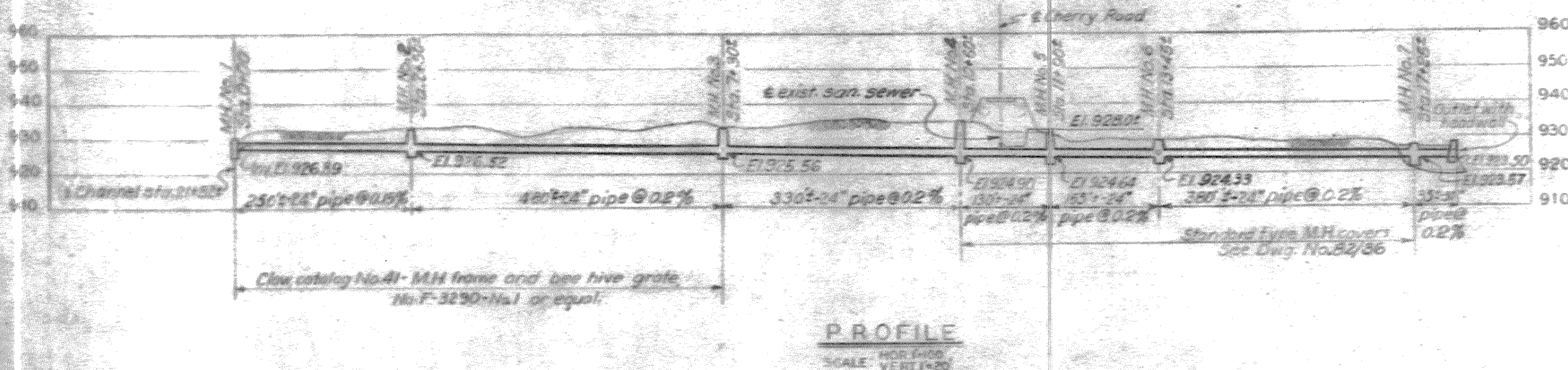
For general plan, see Dwg. No. 16/1.
 For general utility plans, see Dwg. No. 82/20.
 For manholes and miscellaneous sewer details, see Dwg. No. 82/36.
 For headwall details see Dwg. No. 68/18.

REVISION	DATE	REVISION AS	CONSTRUCTION
DESCRIPTION			
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
DRAWN BY: G.A.L.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 SEWER CHANGES COMMONWEALTH AVE. TO BURTON AVE.	
TRACED BY:		DATE: OCT. 1948	
CHECKED BY: E.S.W. 1003		APPROVED: [Signature]	
SUBMITTED BY: [Signature]		APPROVED FOR: [Signature]	
DATE:		SCALE: 1" = 100'	
		DRAWING NUMBER: 0271-PM2-2-82/26	
		SHEET 54 OF 60	

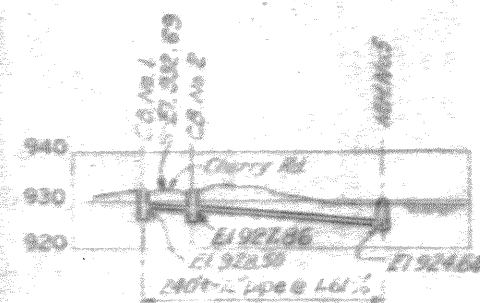
WORK AS CONSTRUCTED



THIRD ST. SOUTH OF NEWMAN CREEK - STORM SEWER



GOOSE AVE.-TUSCARAWAS RIVER - STORM SEWER



NOTES

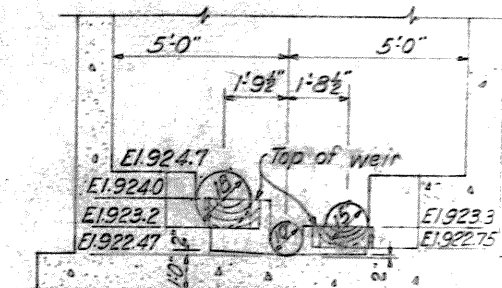
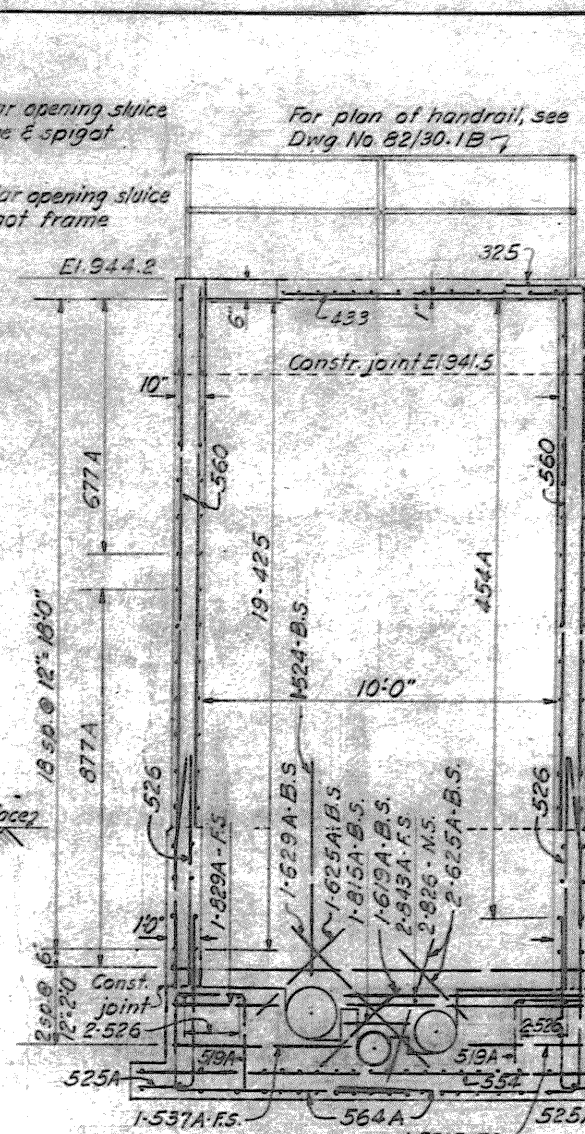
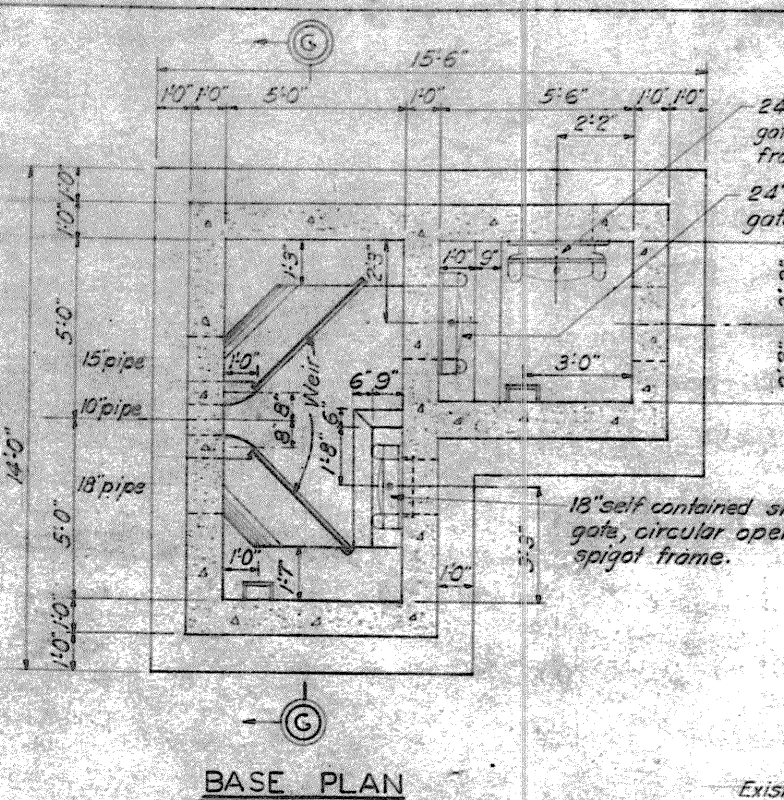
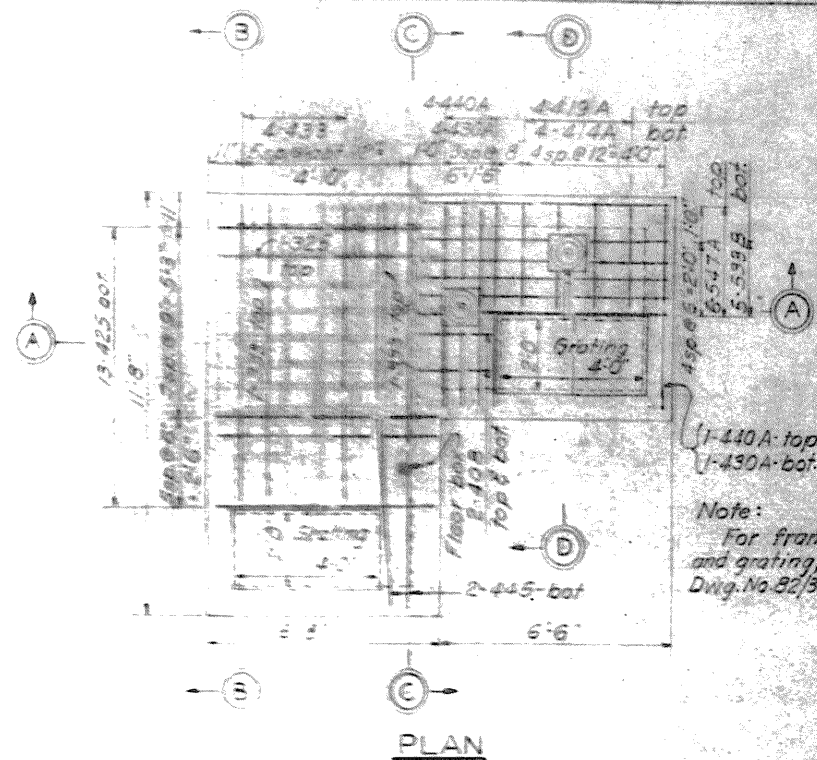
For general plans, see Dwg. No. 82/26.
For details of headwall and deep rings, see Dwg. No. 68/13.
For details of raising Newman Creek Bridge, see Dwg. Nos. 68/15 and 68/16.
For general utility plan, see Dwg. No. 82/20 & 82/21.
For details of standard manholes and Type B catch basins, see Dwg. No. 82/36.

3-10-50	DELETED V-NOTCHED WEIR.	K.S.B.
1-18-48	REVISED SPOIL ELEVATION-ADDENDUM NO. 1	K.S.B.
REVISION	DATE	DESCRIPTION
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
DRAWN BY: GAL	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 SEWER CHANGES GOOSE AVE. TO TUSCARAWAS RIVER AND AT NEWMAN CREEK	
TRACED BY:		
CHECKED BY: C.S.W.-G.S.B.		
DESIGNED BY: <i>[Signature]</i> C.E.M. 504 APPROVED: <i>[Signature]</i> C.E.M. 504 APPROVED FOR: _____		
DATE: _____	DRAWING NUMBER 0271-PM2-2-82/27 SHEET 25 OF 60	

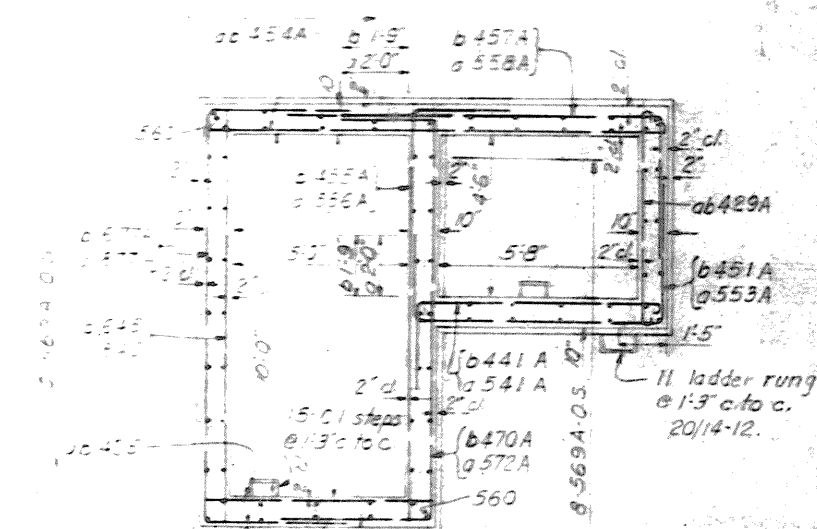
WORK AS CONSTRUCTED

REINFORCING SCHEDULE

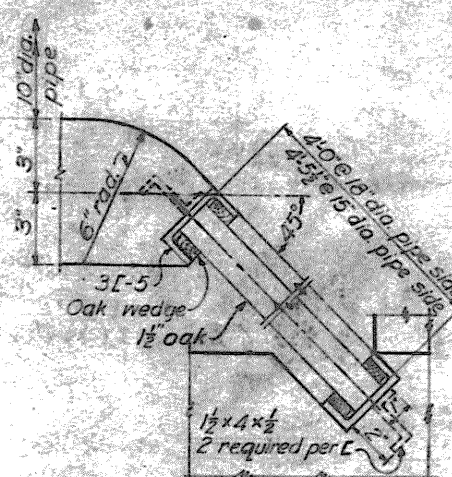
MARK	SIZE	LGTH	BENDING DIAGRAM	NO.	UNIT	TOTAL
					WT.	WT.
325	#9	6'-5"		1	235	2
333	#8	8'-3"		2	310	5
408	#10	2'-0"		4	134	5
410A	2'-6"			4	167	7
414A	3'-6"			4	234	9
415	3'-8"			2	251	5
419A	4'-8"			4	317	13
425	6'-5"			30	418	134
429A	7'-5"			72	424	106
430A	7'-6"			5	50	25
433	8'-3"			4	55	22
435	8'-8"			2	555	2
435A	8'-8"			3	585	12
440A	10'-0"			6	668	33
441A	10'-3"			6	685	35
445	10'-8"			8	752	15
451A	2'-9"			8	902	68
454A	3'-6"			9	922	71
455A	3'-8"			9	922	71
457A	4'-3"			8	950	75
470A	17'-6"			5	69	94
519A	3'-5"			5	335	4
514A	3'-6"			5	355	4
515A	3'-8"			5	355	4
517A	4'-8"			5	443	5
518	4'-9"			5	455	5
519A	4'-9"			5	455	5
520	5'-0"			5	520	10
520A	5'-0"			5	520	10
523A	5'-5"			5	550	10
524	5'-5"			5	550	10
524A	6'-0"			5	550	10
525A	6'-3"			5	550	10
526	6'-6"			5	550	10
529	7'-0"			5	550	10
529A	7'-0"			5	550	10
531A	7'-8"			5	550	10
531B	7'-3"			5	550	10
532	8'-0"			5	550	10
533	8'-3"			5	550	10
533B	8'-3"			5	550	10
534	8'-5"			5	550	10
534A	8'-5"			5	550	10
537A	9'-3"			5	550	10
538A	9'-6"			5	550	10
540	10'-0"			5	550	10
540A	10'-0"			5	550	10
541A	10'-3"			5	550	10
545A	11'-3"			5	550	10
546	11'-6"			5	550	10
546A	11'-6"			5	550	10
547A	11'-9"			5	550	10
551A	12'-9"			5	550	10
549A	12'-6"			5	550	10
549B	12'-3"			5	550	10
550A	12'-6"			5	550	10
552A	13'-0"			5	550	10
553A	13'-3"			5	550	10
554	13'-6"			5	550	10
556A	14'-0"			5	550	10
558A	14'-0"			5	550	10
560	14'-0"			5	550	10
564A	15'-0"			5	550	10
568A	15'-3"			5	550	10
572A	16'-0"			5	550	10
609A	4'-0"			5	550	10
620	5'-0"			5	550	10
625A	6'-3"			5	550	10
627A	6'-6"			5	550	10
629A	7'-3"			5	550	10
645	11'-3"			5	550	10
677A	19'-3"			5	550	10
815A	1'-0"	3'-9"		20	30	20
826	6'-6"			5	550	10
829A	7'-3"			5	550	10
843A	10'-9"			5	550	10
845	11'-3"			5	550	10
877A	19'-3"			5	550	10



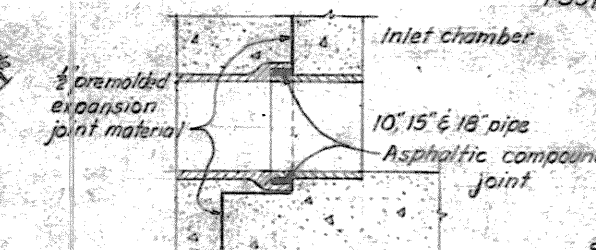
SECTION G-G



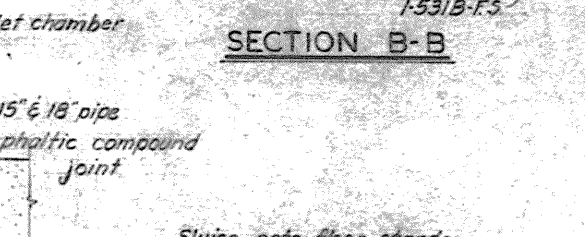
SECTIONAL PLAN



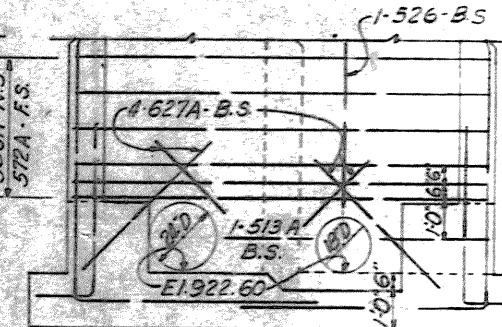
WEIR DETAIL



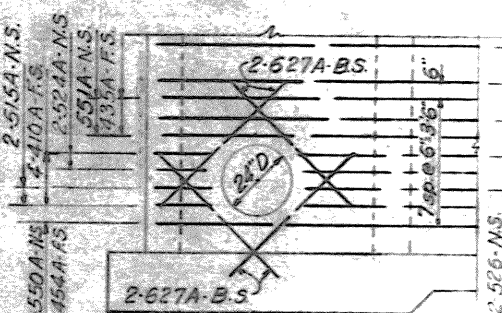
DETAIL A



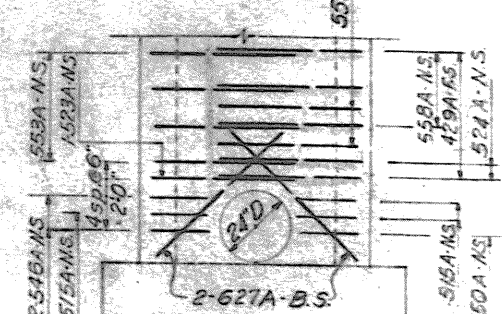
SECTION A-A



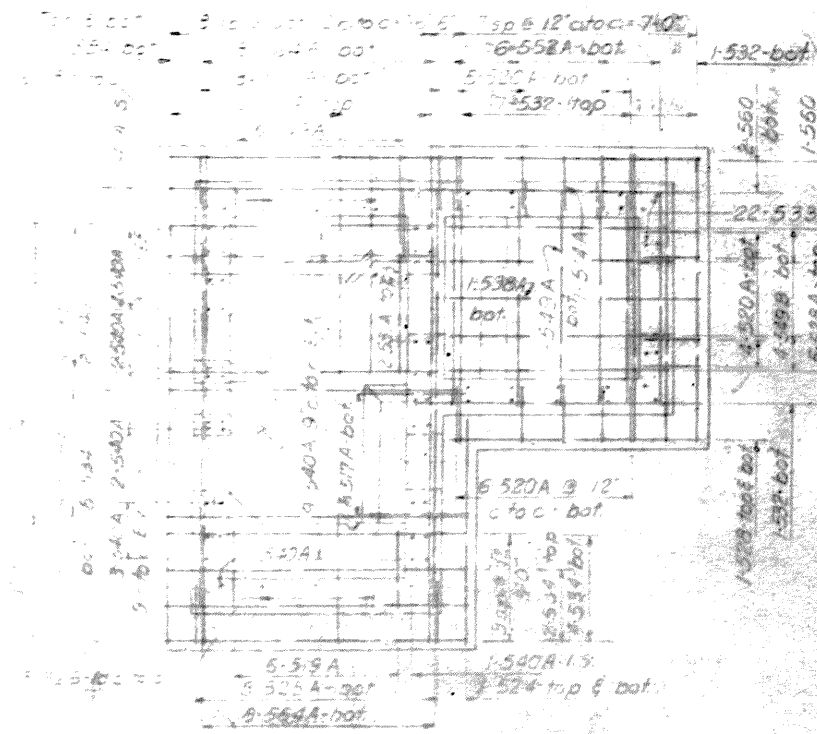
ELEVATION C-C



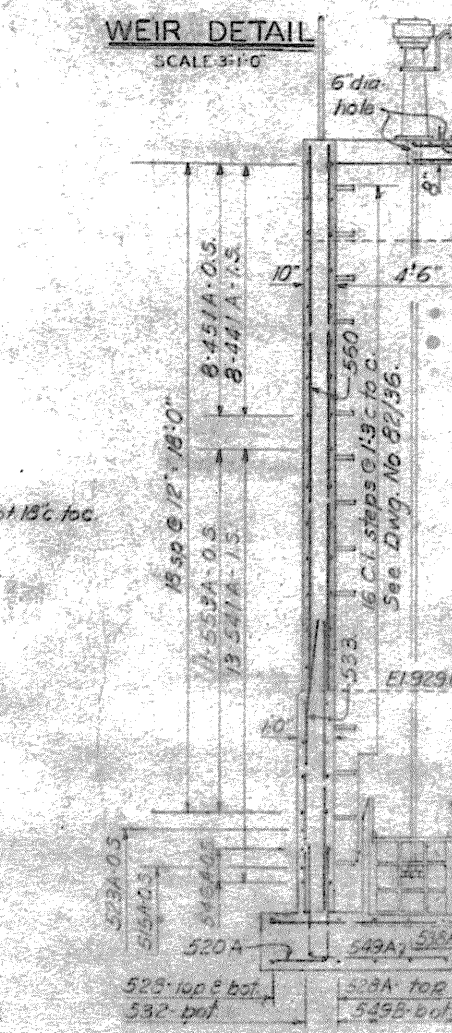
ELEVATION E-E



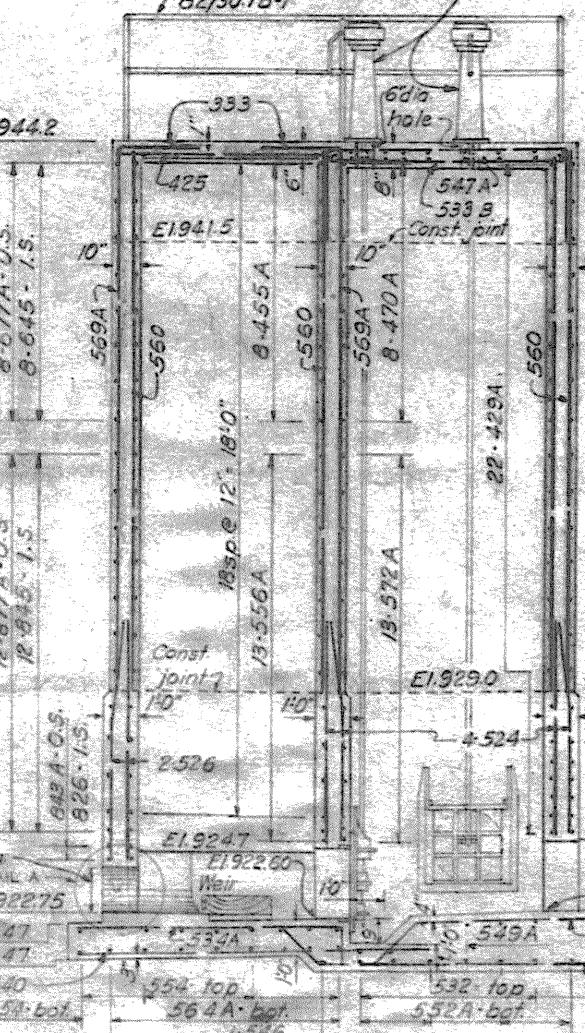
ELEVATION F-F



BASE PLAN



SECTION D-D



SECTION A-A

NOTES
For notes, see Dwg. No. 82/30.1B

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD SIPHON INLET STRUCTURE	
DRAWN BY: E.S.W.	DATE: NOV 1948
TRACED BY:	
CHECKED BY: DES-GOS	
APPROVED: [Signature]	
CHIEF ENGR. ASST.	
APPROVED FOR: [Signature]	
SCALE: 1" = 1'-0"	SPEC. NO.
DRAWING NUMBER 0271-PM2-2-82/301A	
SHEET OF	

WORK AS CONSTRUCTED THIS DRAWING SUPERSEDES DWG. NO. 82/30.

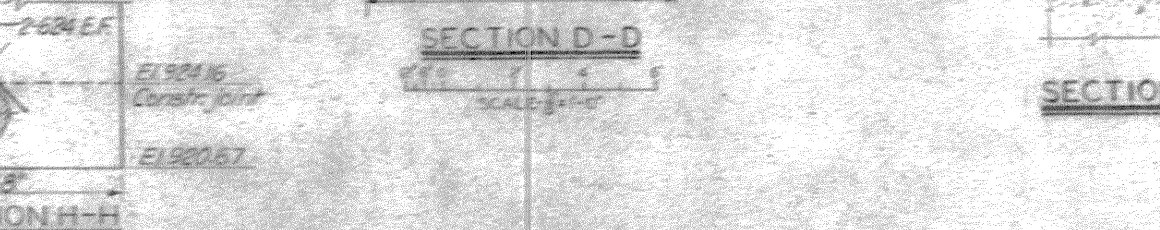
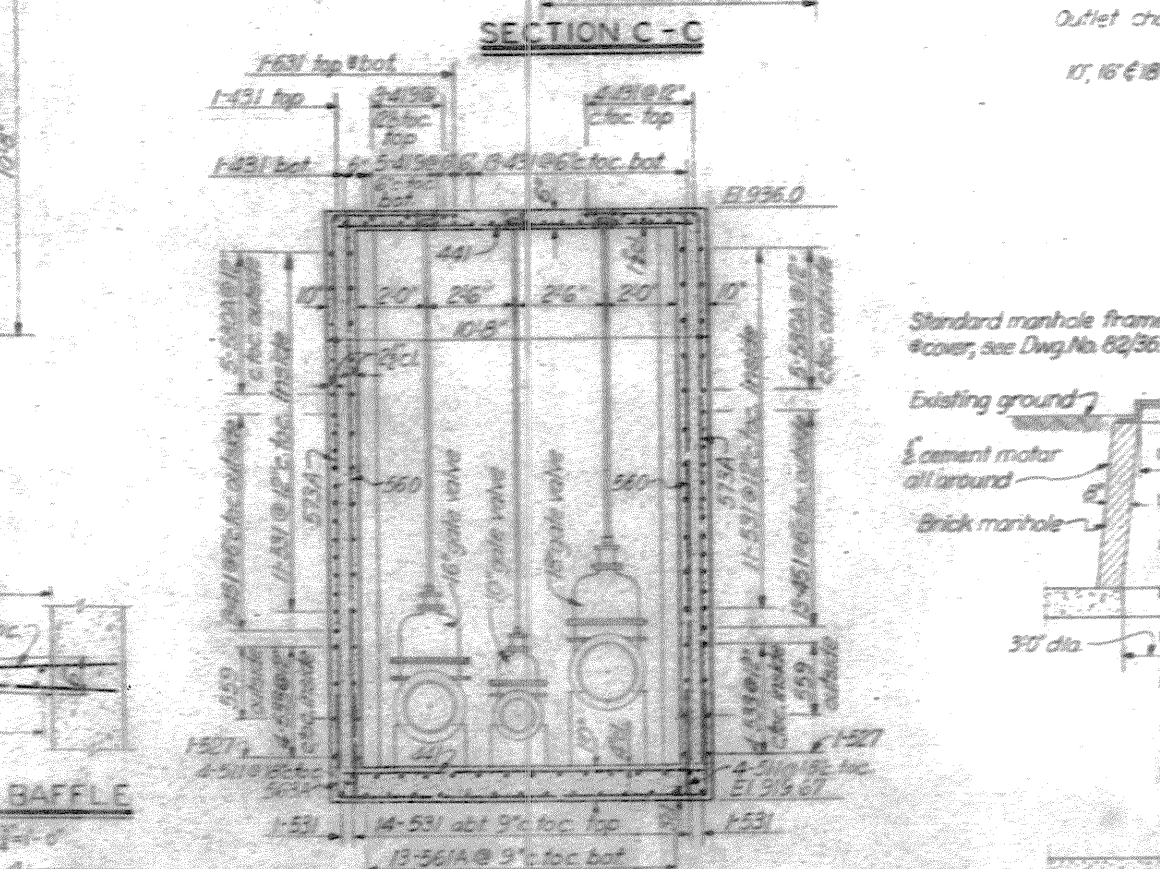
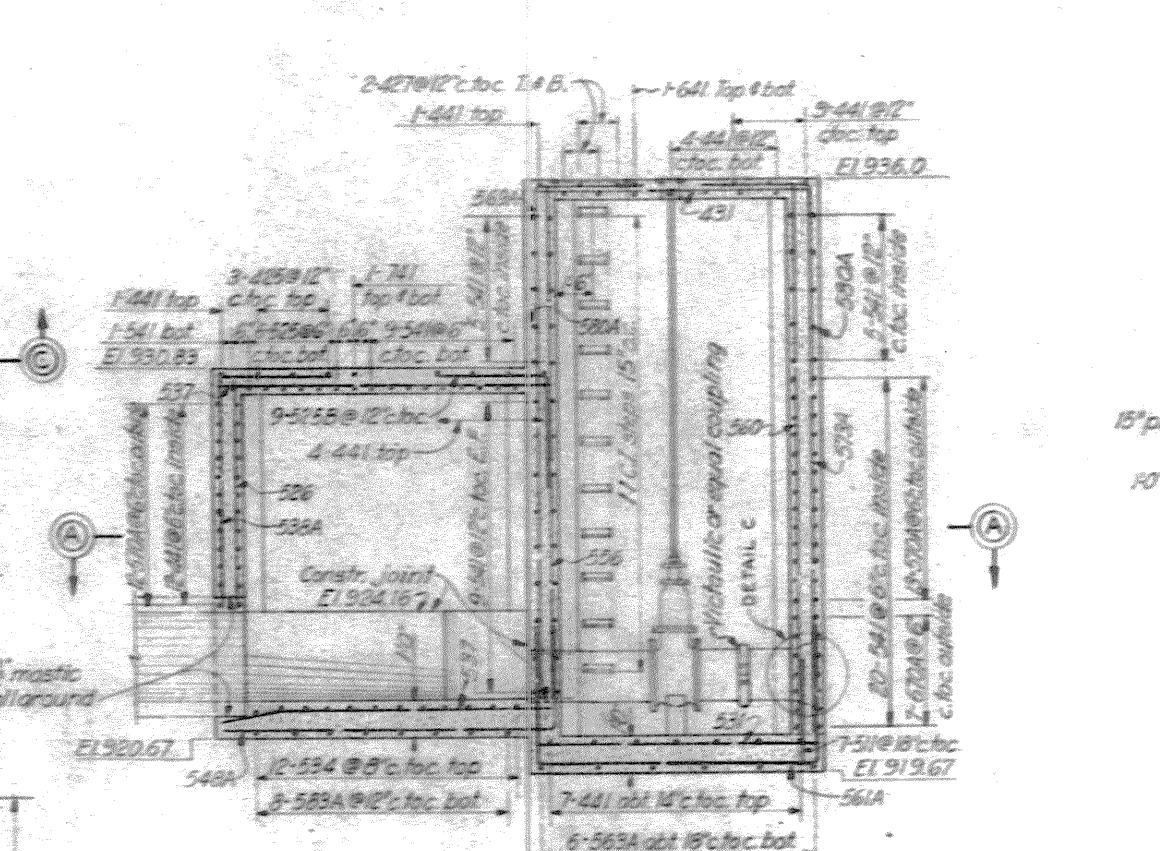
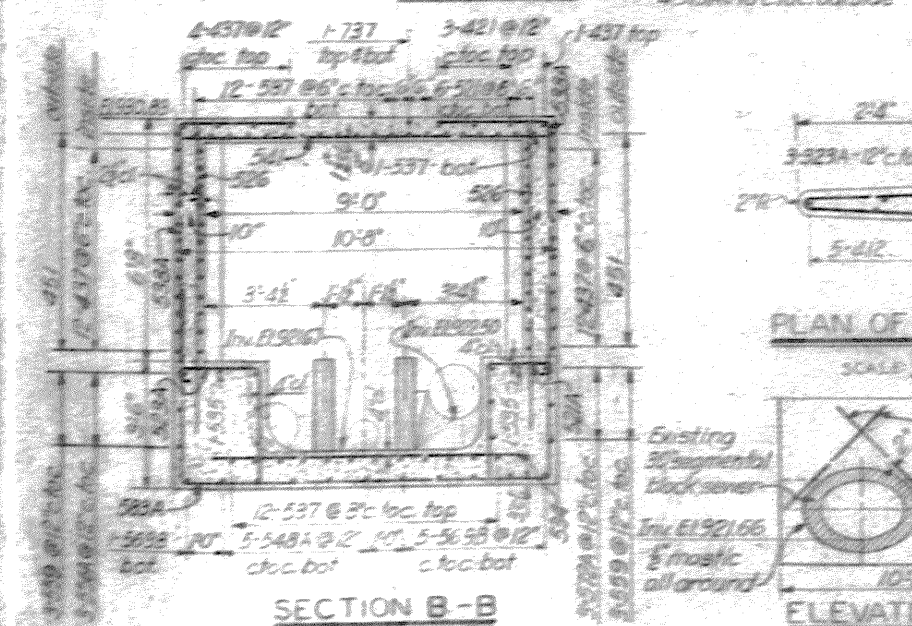
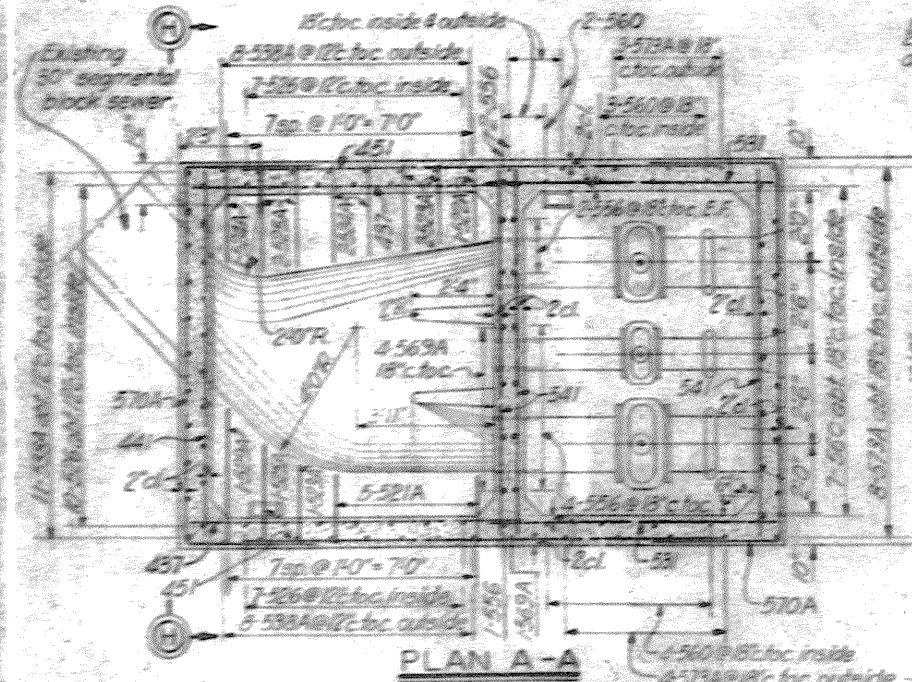
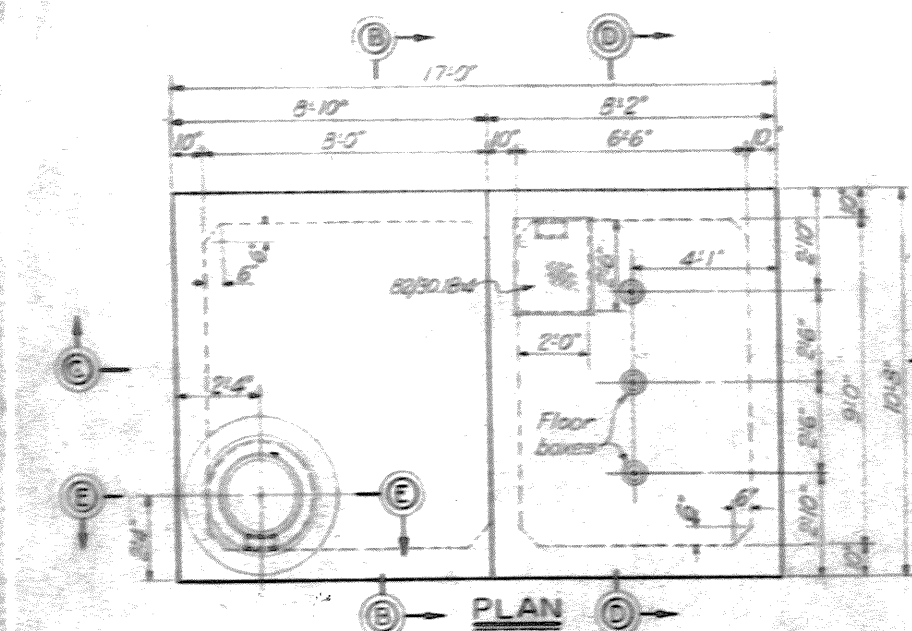
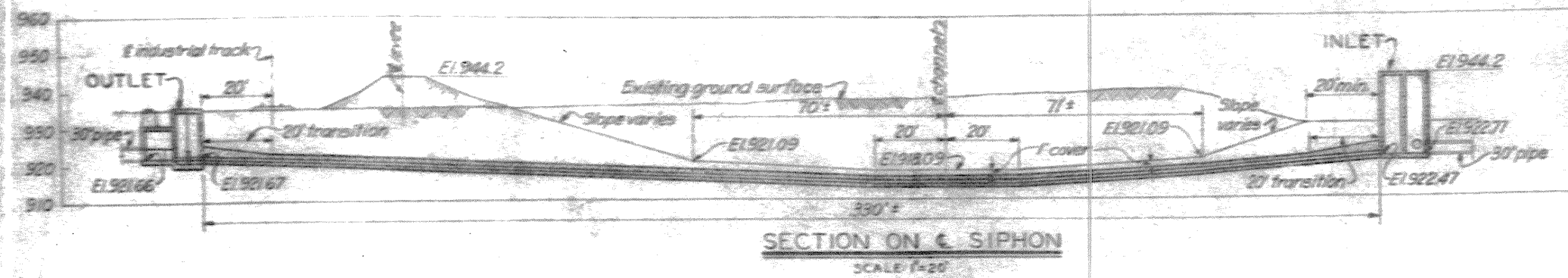
REINFORCING SCHEDULE

MARK	SIZE	LGTH	BENDING	DIAGRAM	NO	UNIT	TOTAL
						WT	WT
323A	6	5'-9"			6	2.16	13
412	18	9'-0"			10	2.00	20
419	18	4'-9"			8	3.17	25
421	18	5'-3"			3	3.51	11
423	18	6'-3"			3	4.18	13
427	18	6'-9"			4	4.51	16
431	18	7'-9"			19	5.18	97
437	18	9'-3"			29	6.18	179
441	18	10'-3"			32	6.85	219
451	18	12'-9"			26	8.82	232
511	18	2'-9"			15	2.67	40
521	18	5'-9"			5	5.45	28
521A	18	5'-9"			3	5.46	27
523A	18	5'-9"			7	5.74	40
524A	18	6'-0"			3	6.36	19
525	18	6'-3"			6	6.92	39
525A	18	6'-3"			3	6.92	20
525B	18	6'-3"			9	6.92	59
526	18	6'-6"			24	6.78	163
527	18	6'-9"			2	7.04	14
529A	18	7'-3"			1	7.96	8
531	18	7'-9"			36	8.08	307
533	18	8'-3"			9	8.80	69
534	18	8'-6"			12	8.87	106
535	18	8'-9"			2	9.15	18
537	18	9'-3"			25	9.65	241
538A	18	9'-6"			27	9.91	268
541	18	10'-3"			38	10.69	620
548A	18	12'-0"			5	12.82	65
556	18	14'-0"			11	14.60	161
556A	18	14'-0"			3	14.60	44
559	18	14'-9"			6	15.36	92
563B	18	17'-3"			6	17.99	108
561A	18	15'-3"			13	15.91	207
563A	18	15'-9"			6	16.43	39
560	18	15'-0"			16	15.65	250
562A	18	17'-3"			5	17.99	90
570A	18	17'-6"			25	18.25	456
572A	18	18'-0"			3	18.17	56
573A	18	18'-3"			15	19.03	283
580A	18	20'-0"			10	20.96	209
583A	18	20'-9"			8	21.64	173
670	18	22'-0"			1	19.02	3360
624	18	6'-0"			4	9.01	36
631	18	7'-9"			2	11.64	23
641	18	10'-3"			2	15.40	31
670A	18	17'-6"			7	26.25	184
737	18	9'-3"			2	18.91	38
741	18	10'-3"			2	20.96	42
Total						8925	

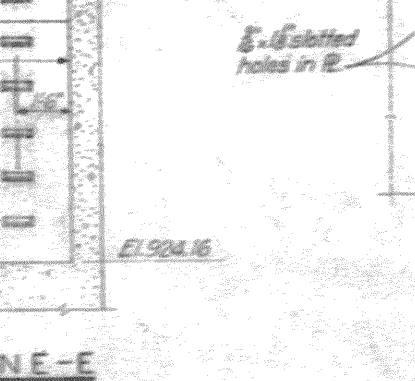
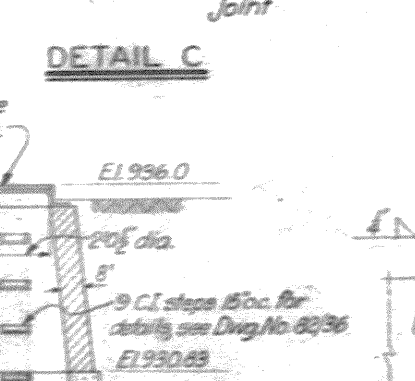
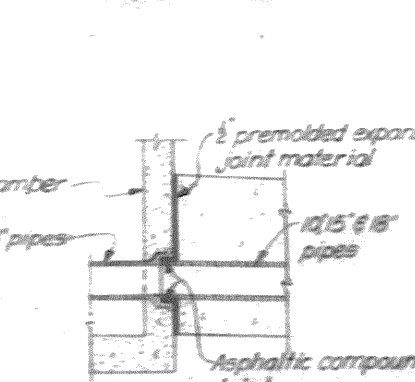
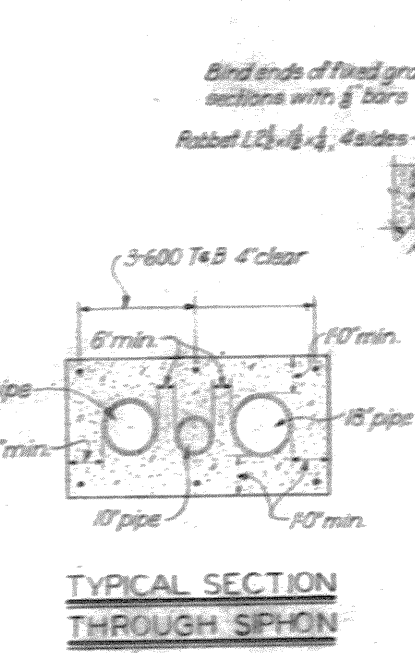
NOTES

For general plan, see Dwg. No. 16/2.
 For general utility plan, see Dwg. No. 82/21.
 For details of sewer changes, see Dwg. No. 82/25.
 For details of inlet, see Dwg. No. 82/30.1A.
 For location of inlet handrail, frame and grating, see Dwg. No. 82/30.1A.
 For detail A, hook bolt and hinge details, see Dwg. No. 20/7.
 For details of handrail posts, see section B-B Dwg. No. 20/7.
 Reinforcing bars may be rotated, bent or cut in field to clear pipes.
 For reinforcing steel code and masonry notes, see Dwg. No. 20/1.

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 CHERRY ROAD SIPHON OUTLET STRUCTURE	
DRAWN BY H.F.B.	CHECKED BY A.A.G.-FBI-GGS	APPROVED BY [Signature]	DATE NOV. 1948
APPROVED FOR [Signature]		SCALE: 1"=1'-0" SHEET NO. 0271-PM2-2-82/30.1B	



HANDRAIL - INLET
STEEL PIPE MARK 82/30.1B-1 MAKE 1
SCALE: 1"=1'-0"



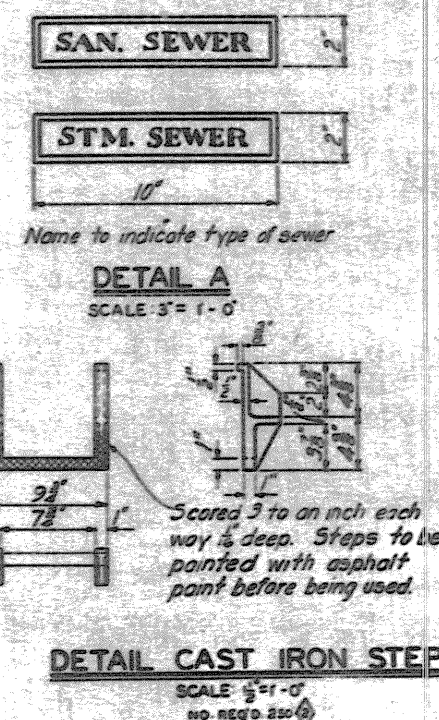
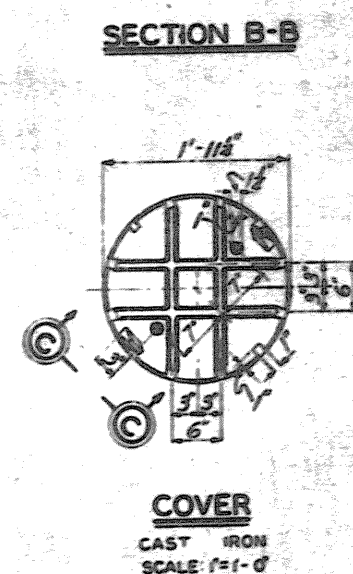
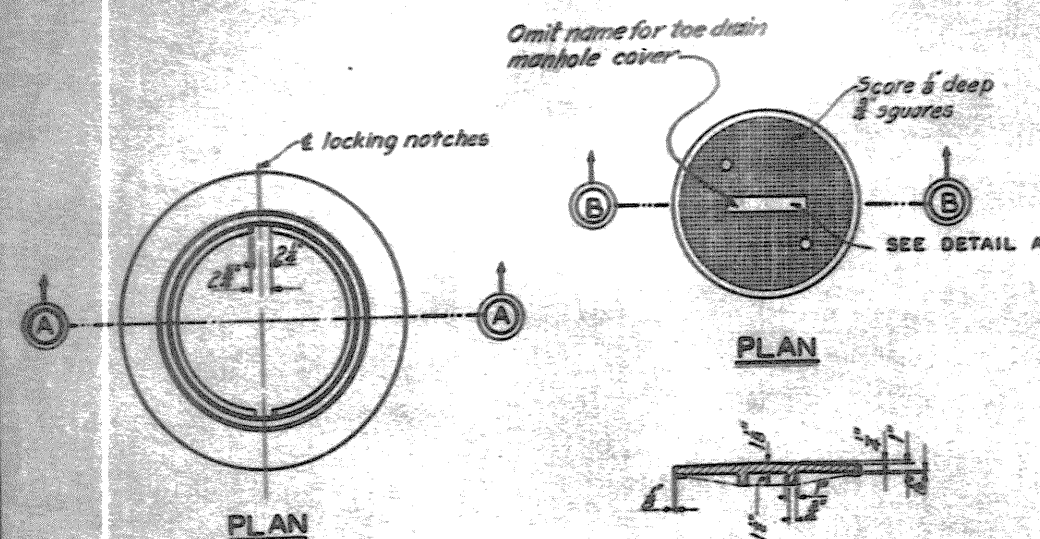


NOTES

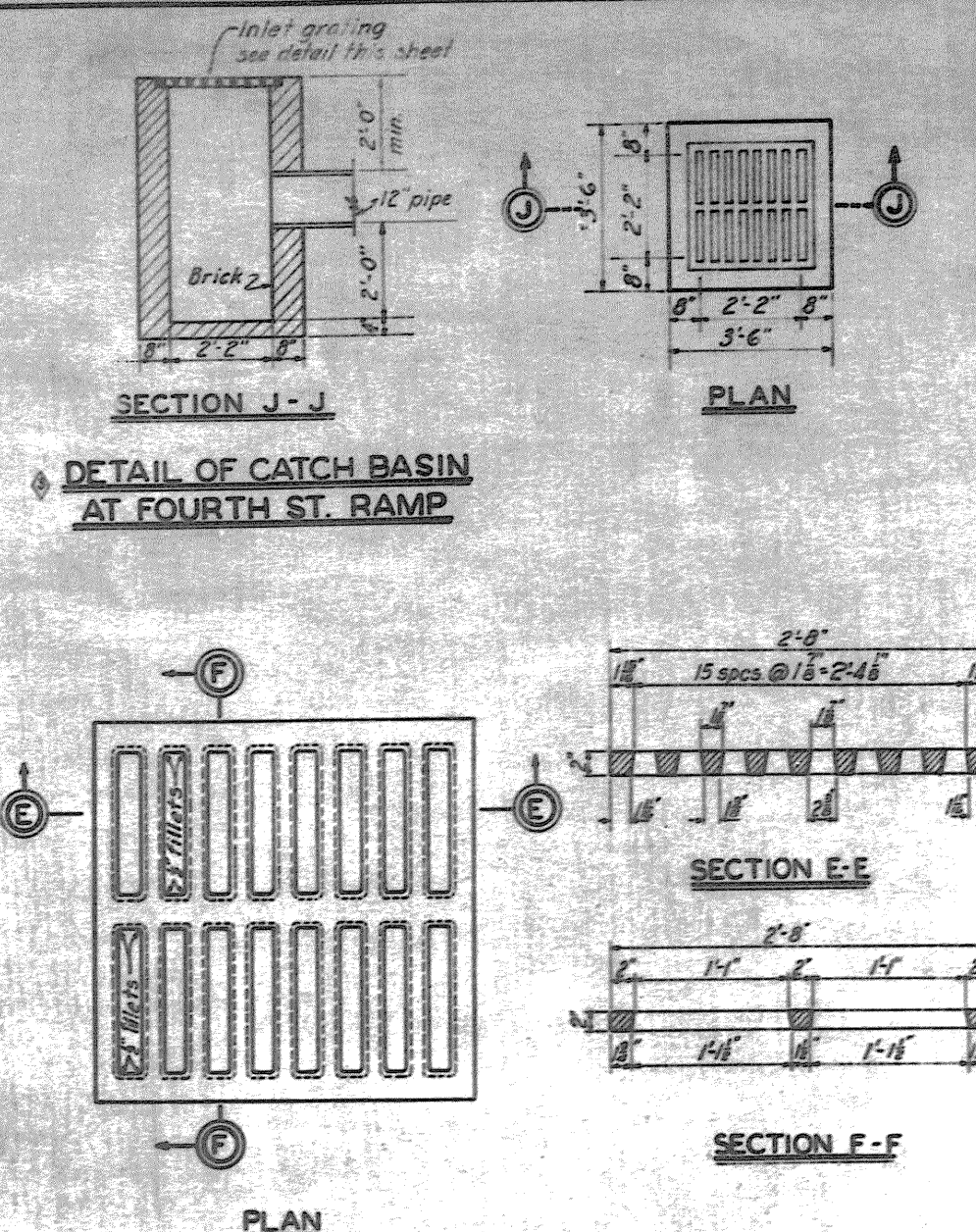
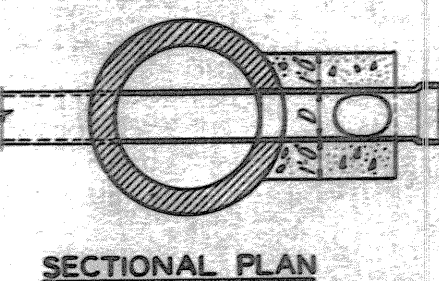
Copper water stop to be installed in all conduit monolith joints. Monoliths not to exceed 40 lin. ft.
All main reinforcing steel to be spaced a clear distance from concrete surfaces as shown.
For masonry notes and explanation of reinforcing steel code, see Dwg. No. 20/1
For general plan see Dwg. No. 16/2

11-10-68	CORRECTED OUTLET DIMENSION IN PROFILE - ALTERATION ARTICLE	N/A
REVISION	DATE	DESCRIPTION
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
DRAWN BY: W.C.S. - E.S.R. TRACED BY: H.A.E. - C.C.C. CHECKED BY: H.F.B. - G.O.S. SUPERVISED BY: <i>[Signature]</i> APPROVED: <i>[Signature]</i> DATE:	TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PRESSURE CONDUIT - SIPPO CREEK PLAN, PROFILE & DETAILS APPROVED: <i>[Signature]</i> TITLE: E.C. - DISTRICT ENGINEER DATE: OCT. 1968	SCALE: 1" = 2' SHEET NO. 0271-PM2-2-82/32 (SEE BT OF 32)
APPROVED FOR:		

WORK AS CONSTRUCTED



MANHOLE DEPTH	THICKNESS
From 0 to 16 feet	8 1/2 inches
From 16 to 22 feet	13 inches
Over 22 feet	18 inches



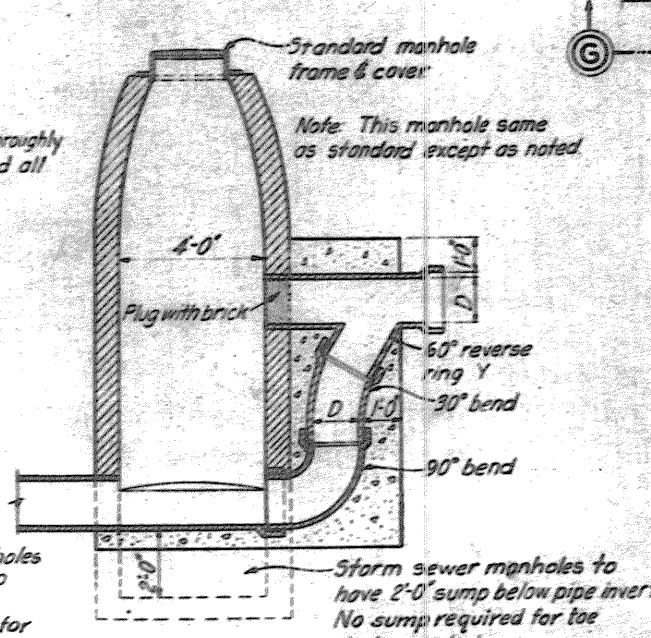
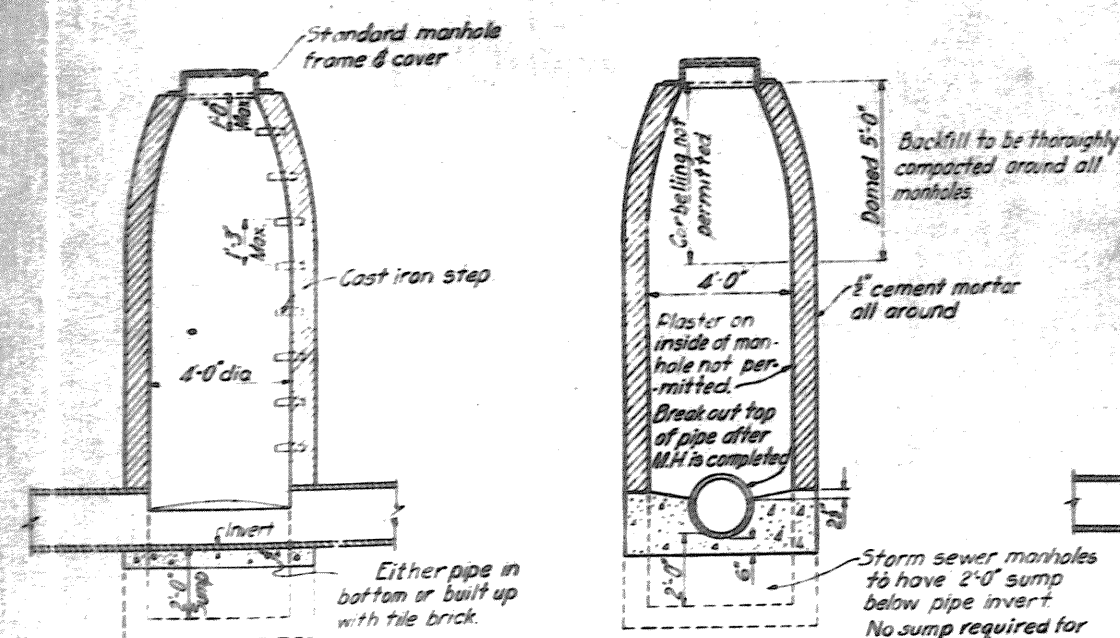
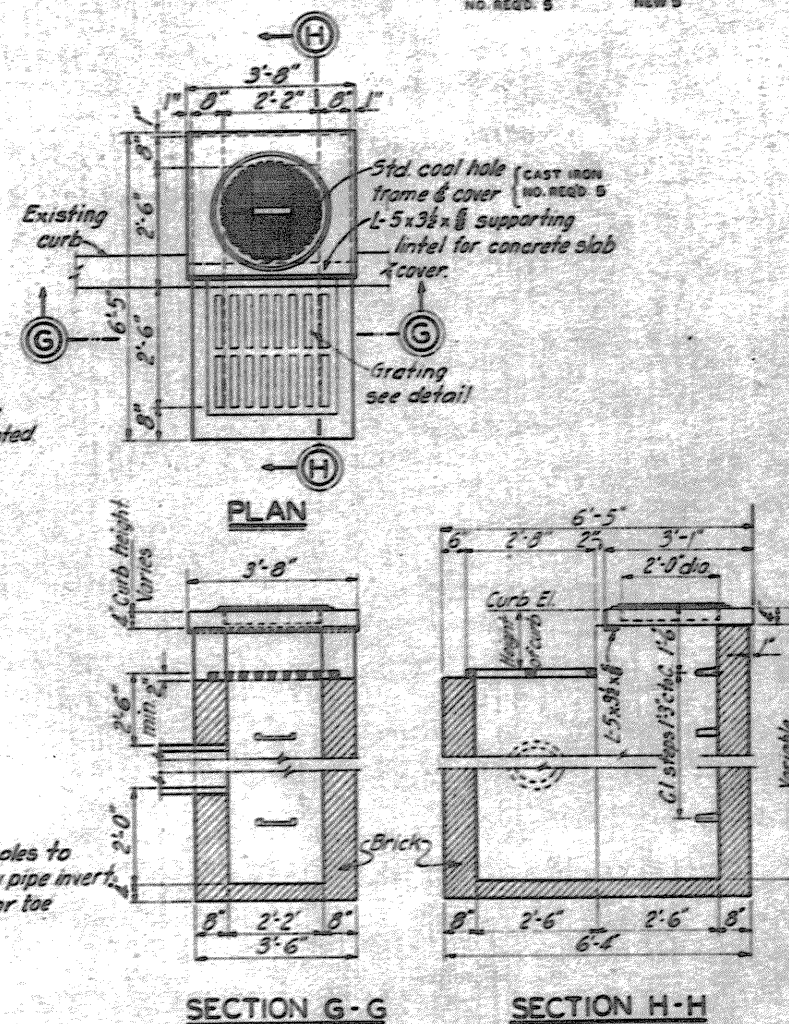
INLET GRATING

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

CAST IRON

NO. REQ'D 5

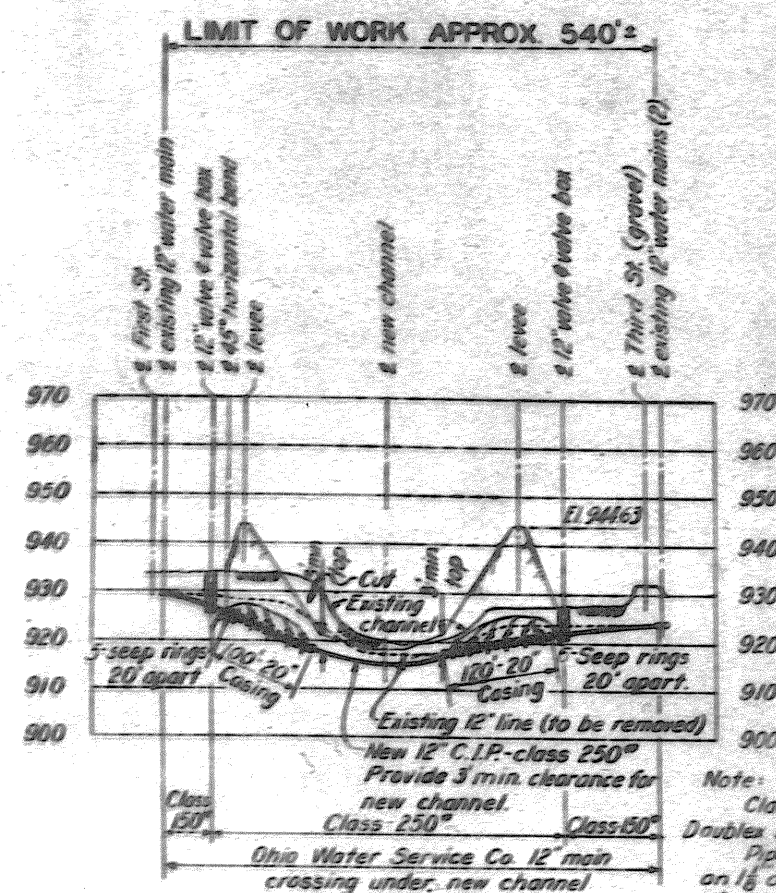
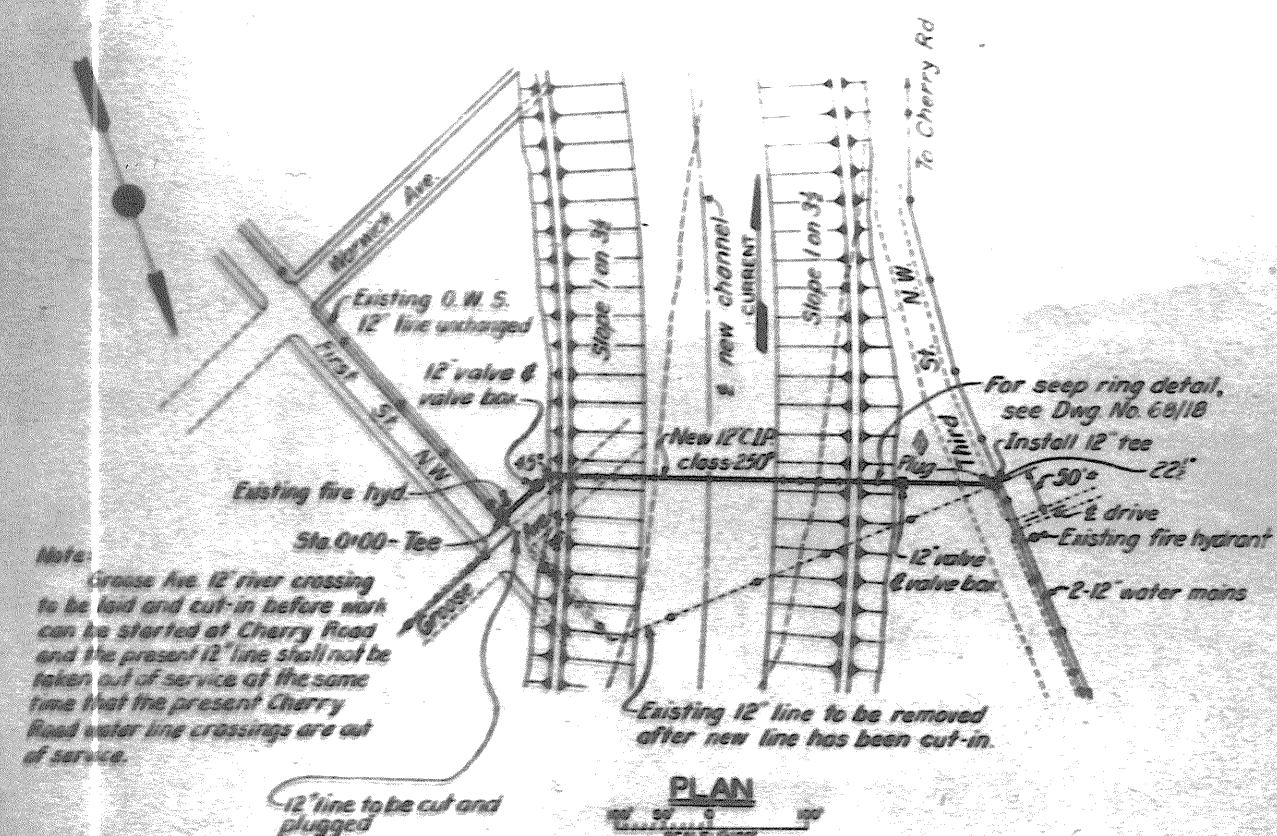
NEW 5



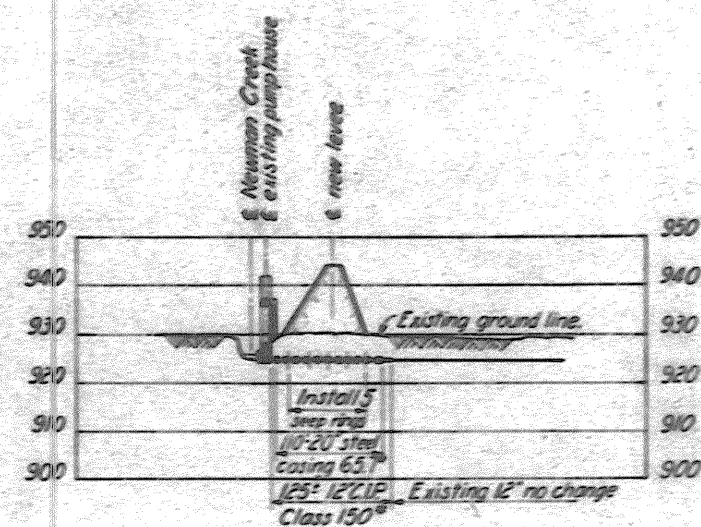
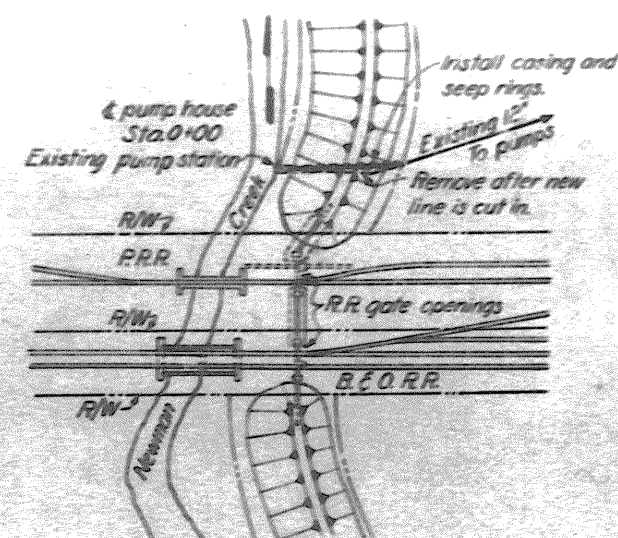
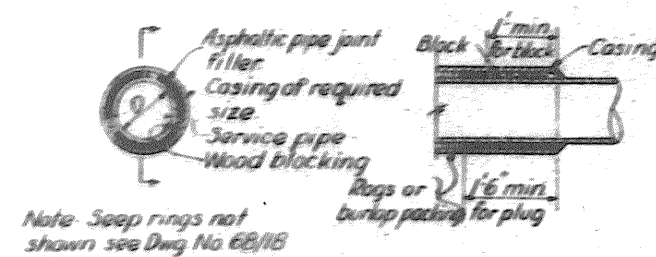
STORM AND SANITARY SEWER MANHOLES

SCALE: 1"=1'-0"

0-20-51	ADDED CATCH BASIN DETAIL	R.S.B.
3-10-49	REVISED MANHOLE FRAME & COVER AND C.I. STEP QUANTITIES	R.S.B.
11-10-49	REMOVED SPOON DETAILS-ADDENDUM NO. 1	R.S.B.
REVISION	DATE	DESCRIPTION
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 MISCELLANEOUS SEWER DETAILS		
DRAWN BY:	R.L.E.	
TRACED BY:	A.P.	
CHECKED BY:	E.S.M.-G.O.S.	
SUBMITTED BY:	M. J. L.	
APPROVED:	M. J. L.	
CHIEF ENG. ASST.		
APPROVED FOR:		
DATE:		
SCALE: AS SHOWN	SPEC. NO.	
0271-PM2-2-82/36		
SHEET 58 OF 60		



THIRD ST. TO GROOSE AVE.



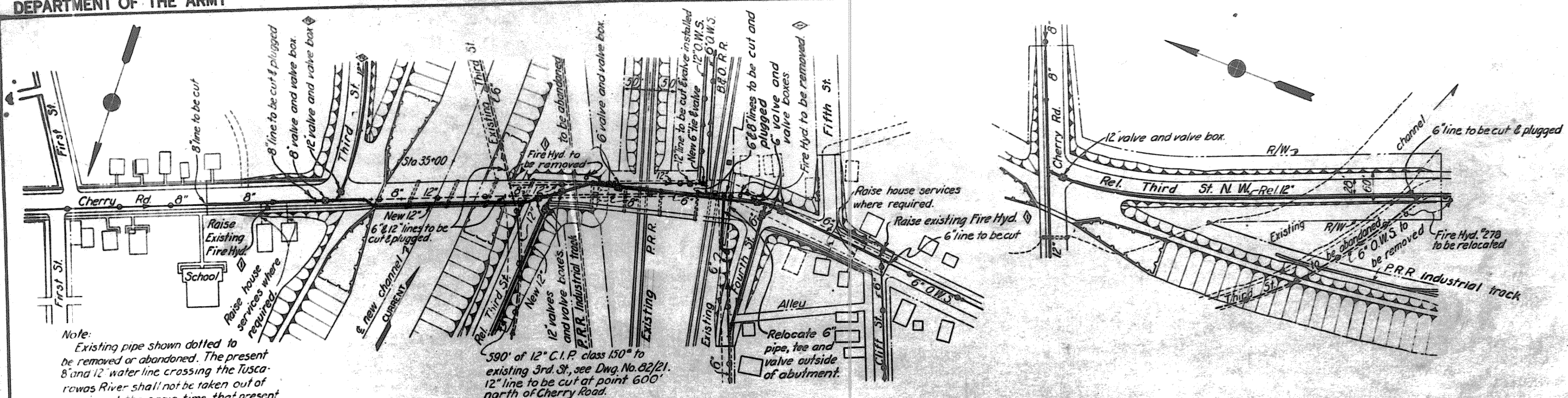
NEWMAN CREEK-12 LINE UNDER LEVEE

NOTES

For general plans, see Dwg. Nos. 16/1 and 16/2.
For utility location plans, Dwg. Nos. 62/20 and 62/21.
For details of seep rings, see Dwg. No. 68/118.

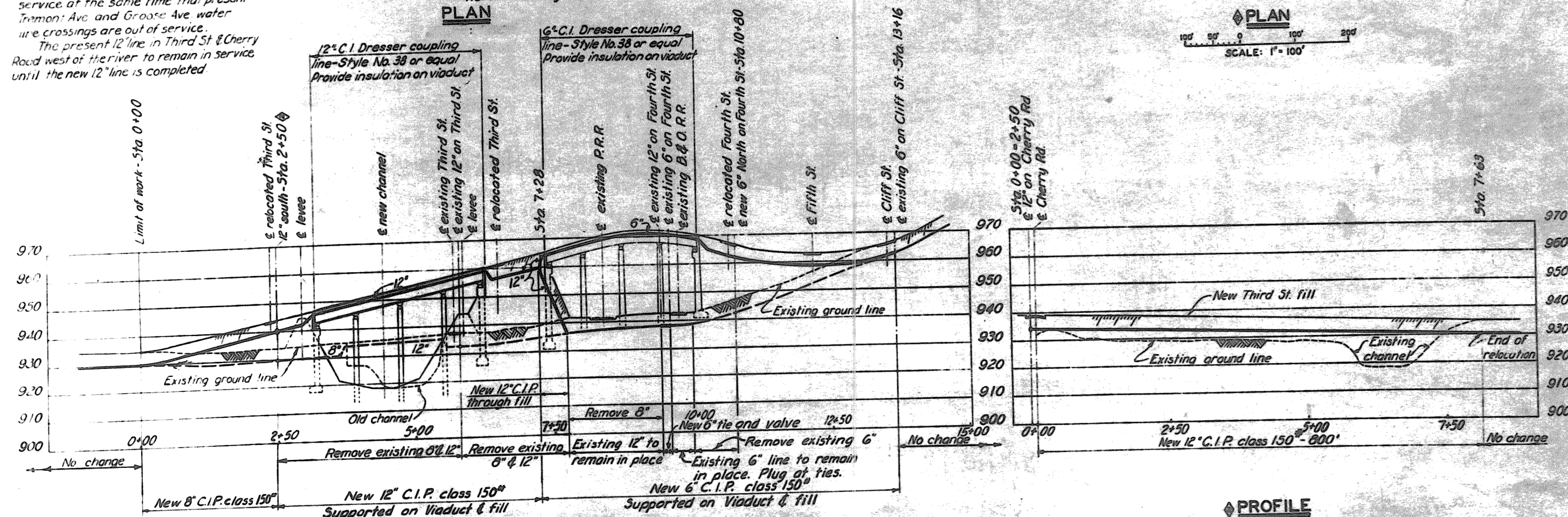
11-2-48	REVISED TEE CONNECTION AT THIRD ST. NEW - ALTERATION ARTICLE	R.S.B.
REVISION	DATE	DESCRIPTION
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.		
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 OHIO WATER SERVICE CO. CHANGES GROOSE AVE. & NEWMAN CREEK		
DRAWN BY: R.A.E.-T.C.G.	TRACED BY: E.C.B.-T.C.G.	CHECKED BY: D.S.J.-E.S.W.
APPROVED BY: [Signature]	APPROVED BY: [Signature]	DATE: OCT. 1948
APPROVED FOR:	SCALE: 1"=100'	SPEC. NO.
DATE:	DRAWING NUMBER 0271-PM2-2-82/37 SHEET 28 OF 30	

WORK AS CONSTRUCTED



Note:
Existing pipe shown dotted to be removed or abandoned. The present 8 and 12" water line crossing the Tuscarawas River shall not be taken out of service at the same time that present Tramon Ave and Goose Ave water line crossings are out of service.
The present 12" line in Third St & Cherry Road west of the river to remain in service until the new 12" line is completed

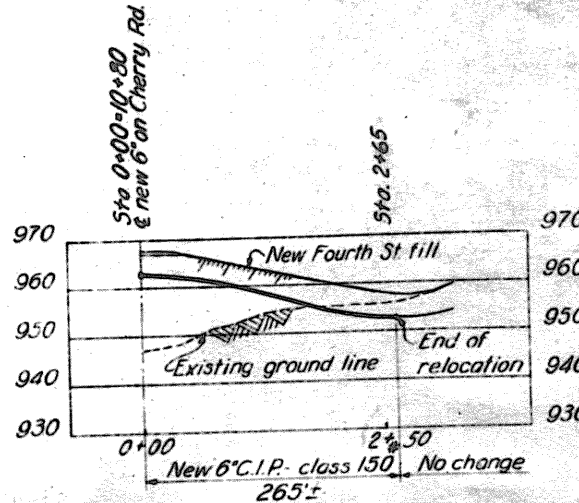
PLAN



PROFILE

MAIN LINE CHANGES ON CHERRY RD.

12" LINE ON THIRD ST. RELOCATION



PROFILE

6" LINE ON FOURTH ST. RELOCATION

NOTES

For general plan, see Dwg. No. 15/2
For general utility plan, see Dwg. No. 82/21.
For Cherry Road Viaduct, see Dwg. No. 68/1.
For detail of plug at end of casing, see Dwg. No. 62/37.

REVISION	DATE	DESCRIPTION	BY
1-20-30		INCREASED PIPE FROM 6" TO 12" AT THIRD ST. RELOCATION	N.S.B.
1-2-40		REVISED TREATMENT OF FIRE HYDRANTS	N.S.B.
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.			
TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 OHIO WATER SERVICE CO. CHANGES CHERRY ROAD			
DRAWN BY: R.L.E. - T.C.G.		DATE: OCT. 1948	
CHECKED BY: R.C.H. - T.C.G.		APPROVED BY: COL. E.E. DISTRICT ENGINEER	
SUBMITTED BY: D.G.A. - E.S.W.		SCALE: 1" = 100'	
APPROVED FOR:		SHEET NO. 38	
DATE:		SHEET 60 OF 60	



DRILLED HOLES ☒
AUGER HOLES ☐

DRAWN BY: W.D.S.		DEPARTMENT OF THE ARMY CORPS OF ENGINEERS OFFICE OF THE DISTRICT ENGINEER HUNTINGTON, W. VA.	
TRACED BY: RAE - C.C.C.		TUSCARAWAS RIVER LOCAL PROTECTION PROJECT MASSILLON, OHIO SECTION 2, UNIT 2 PLAN OF FOUNDATION EXPLORATIONS	
CHECKED BY: C.C.M.-D.S.S.			
SUBMITTED BY: <i>[Signature]</i> CHIEF ENG. DIV.			
APPROVED: <i>[Signature]</i> CHIEF ENG. ADST.		APPROVED: <i>[Signature]</i> COL. C.E., DISTRICT ENGINEER	
APPROVED FOR: DATE: _____		SCALE: 1" = 40' DRAWING NUMBER 027i-PM2-2-10/2 SHEET 1-1 OF 6	
		SPEC. NO. DATE: 0CT. 1948	

WORK AS CONSTRUCTED FOR INFORMATION PURPOSES ONLY