AUGLAIZE COUNTY AUG-33-13.44	OHIO	1 / 345
	FHWA REGION 5	
100% STATE	FEDERAL PROJECT	

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
AUG-33-13.44

WIDENING OF EXISTING AND CONSTRUCTION OF PROPOSED
GRADE SEPERATION STRUCTURE OVER CSX TRANSPORTATION, INC.

CITY OF WAPAKONETA
DUCHOQUET, MOULTON AND
PUSHETA TOWNSHIPS
AUGLAIZE COUNTY

MICROFILMED
MAR 9 1994

DESIGN DESIGNATION

CURRENT ADT(1988)	6690
DESIGN YEAR ADT(2008)	9360
D.H.V.	656
D	52%
T	22%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL

CONVENTIONAL SIGNS

County Line
Township Line
Section Line
Corporation Line or
Fence Line (existing) (proposed)
Center Line 352 353
Trees, Stumps, (to be removed)
Utility Poles: Telephone, Power, Light
Limited Access (only) LA
Right of Way (only) RW
Limited Access & Right of Way LA&RW
Existing Right of Way
Property Line (in existing fence)
Railroad or
Guardrail (existing) (proposed)

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LINE DATA

BEGIN PROJECT = STA. 680+00.00
END PROJECT = STA. 781+72.97
LENGTH OF PROJECT = 10,172.97 LIN. FT. = 1.927 MILES

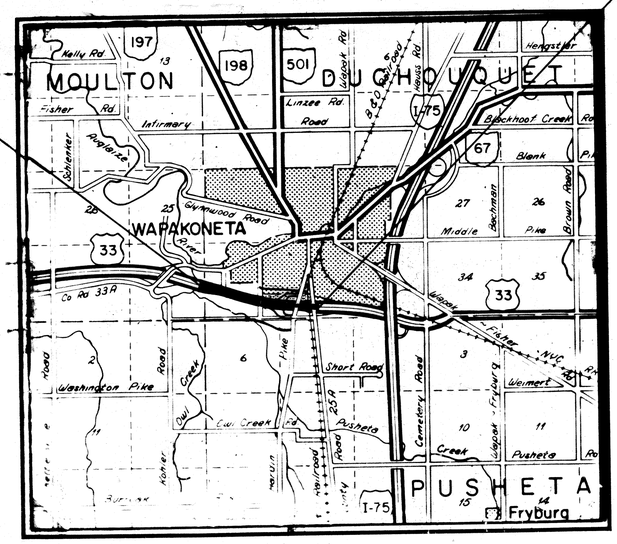
BEGIN WORK = STA. 590+00.00
END WORK = STA. 799+37.19
LENGTH OF WORK = 20,937.19 LIN. FT.

ADD WORK LENGTH ASHLAND AVE. = 2783.16 LIN. FT.
ADD WORK LENGTH HARDIN PIKE = 3245.41 LIN. FT.
ADD WORK LENGTH CANNING FACTORY RD. = 2168.14 LIN. FT.
ADD WORK LENGTH NEW STREET = 302.97 LIN. FT.

LENGTH OF WORK = 29,436.87 LIN. FT. = 5.575 MILES

BEGIN PROJECT
AUG-33-13.44
STA. 680+00.00

END PROJECT
AUG-33-13.44
STA. 781+72.97



LOCATION MAP
SCALE IN MILES
0 1 2 3 4

Portion to be Improved
State & Federal Routes
Other Roads

SCALES

Plan: 0 25 50 100
Profile: Horizontal 0 10 20 50 75 100, Vertical 0 1 2 3 4 5 10
Cross Section: Horizontal 0 1 2 3 4 5 10, Vertical 0 1 2 3 4 5 10

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02 of the Revised Code of the State of Ohio.

1989 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway, except as noted on sheets 22-23, and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved D. Kenneth Copella, P.E.
Date 2/13/89 District Deputy Director of Transportation

Approved B.D. Hahlamm / WTL
Date ____ Engineer, Bureau of Bridges and Structural Design

Approved Theodore J. Stitt
Date 2/14/90 Chief Engineer, Planning & Design

Approved Bernard B. Hunt
Date 2/14/90 Director, Department of Transportation

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call...800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL SPECIFICATIONS			
802	5-4-88	841	5-16-84
836	11-12-85	843	7-29-88
839	12-21-87	942	11-27-89
840	5-16-84		
940	6-10-87		
847	10-17-83		
947	10-17-83		
931	6-18-85		
944	6-24-89		

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-1 6-1-65	F-1 11-10-83	MC-1 6-13-69	TC-35.10 8-29-84	BP-2 1-11-85	
BP-3 12-6-76	F-2 5-1-76	MC-4 7-26-76	TC-41.10 8-29-84	HL-50.11 5-1-87	
BP-4 10-1-87	F-3 5-1-76	MC-6 1-30-84	TC-41.20 3-26-79	MC-10 5-1-76	
BP-5 10-1-87	F-5 5-1-76	MC-7 10-15-76	TC-41.50 3-26-79	MH-5 6-12-75	
BP-6 10-1-87	F-6 5-1-76	MC-9A 1-11-85	TC-42.10 8-19-77	BP-10 1-30-84	
BP-7 10-1-87	GR-1 1-11-85	MC-11 8-1-78	TC-42.20 3-26-79		
BP-9 12-6-76	GR-2B 2-5-82	MH-1 12-18-84	TC-51.10 1-20-84		
CB-2-2-B 5-1-79	GR-3 1-21-85	MH-3 12-18-84	TC-51.11 1-20-84		
CB-2-3 5-1-79	GR-4 2-5-82	MT-95.30 4-1-87	TC-52.10 4-3-79	EXT-4-87 1-5-89	
CB-3 5-1-79	GR-4A 1-30-84	LA-1 6-1-79	TC-52.20 4-3-79	AS-1-81 11-27-81	
CB-4 11-10-83	GR-5 2-5-82			BR-1 5-29-79	
CB-5 11-10-83	GR-6 2-5-82	MT-97.10 4-29-88	TC-61.10 4-5-82	FB-1-82 5-10-82	
CB-8 11-10-83	HW-4A 4-1-80	MT-99.10 11-14-86		RB-1-55 2-2-59(REV.)	
CB-458A 5-1-79	HW-4B 4-1-80	MT-99.20 4-29-88	TC-72.20 2-26-82	SD-1-69 6-12-69	

Project: AUG-33-13.44
Date of Letting ____ 19__ Contract No. ____

Plan Prepared By:
DISTRICT NO. 7
OHIO DEPARTMENT OF TRANSPORTATION

SEAL

FHWA REGION	STATE	PROJECT	
5	OHIO		

2/345

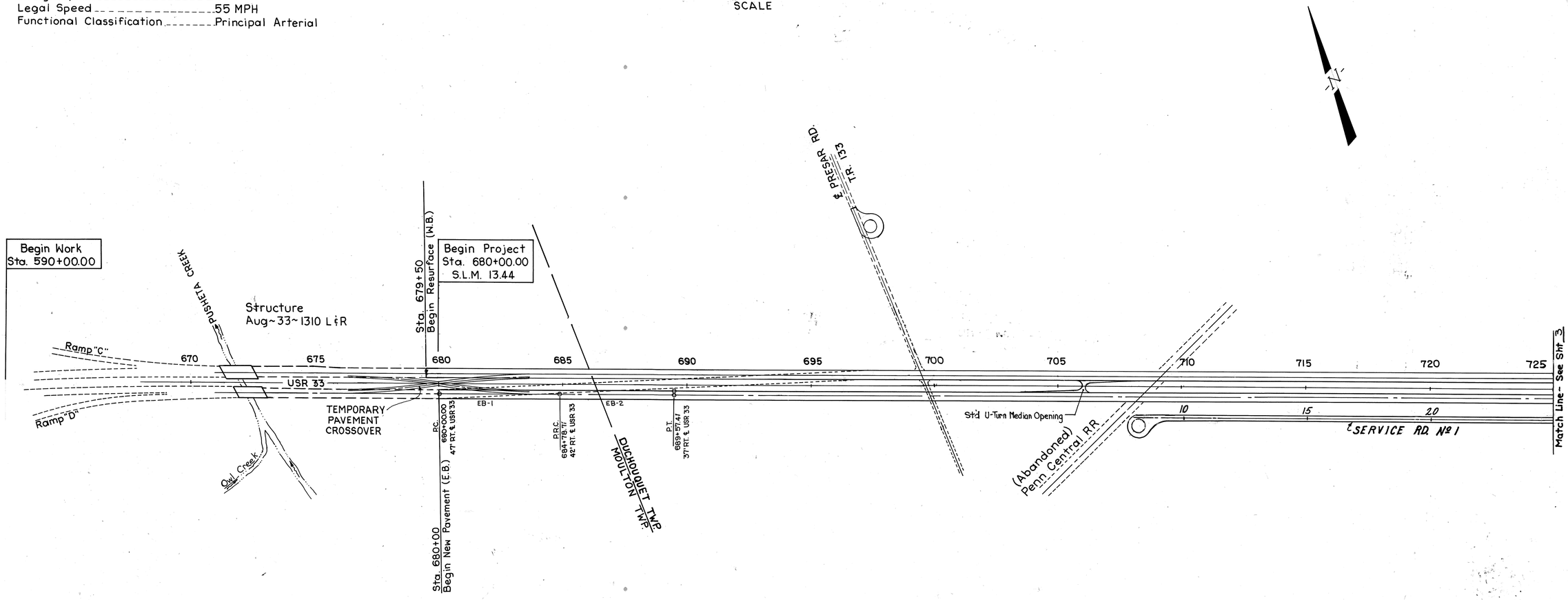
AUGLAIZE COUNTY
AUG~33~13.44

SCHEMATIC PLAN

DESIGN DESIGNATION

Current A.D.T. (1988)	6690
Design Year A.D.T. (2008)	9360
D.H.V.	656
D	52%
T	22%
Design Speed	60 MPH
Legal Speed	55 MPH
Functional Classification	Principal Arterial

0 50 100 200 400 600
SCALE



CURVE DATA EB-1 & EB-2
$\Delta = 1°-11'-49''$
$R = 22918.31$
$D_c = 0°-15'-00''$
$T = 239.38'$
$L_c = 478.74'$
$E = 1.25'$

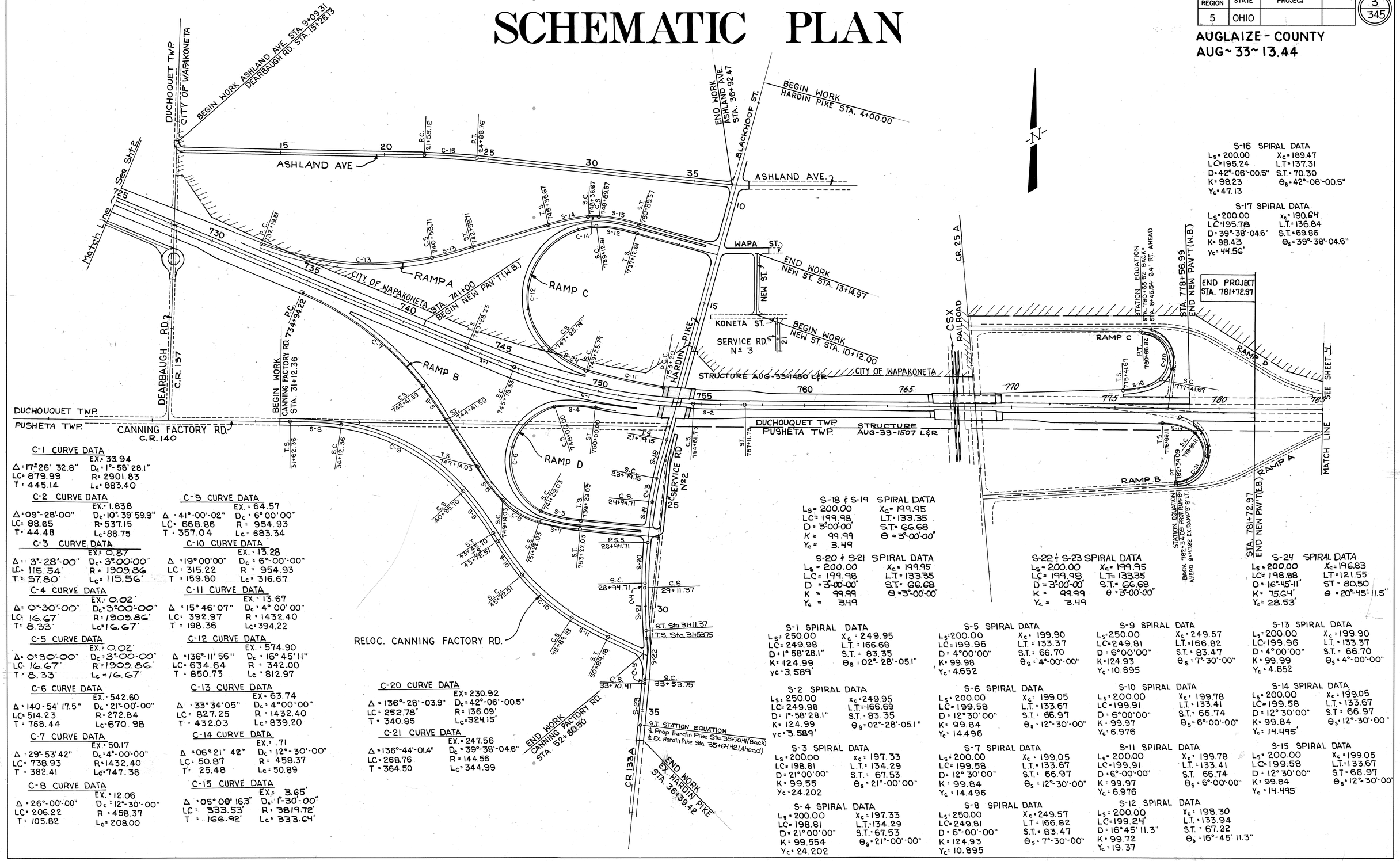
AUG~33~13.44 SCHEMATIC PLAN

SCHEMATIC PLAN

FHWA REGION	STATE	PROJECT	
5	OHIO		

3
345

AUGLAIZE - COUNTY
AUG~33~13.44



C-1 CURVE DATA

	EX.= 33.94
Δ = 17°26' 32.8"	D_c = 1°-58' 28.1"
LC = 879.99	R = 2901.83
T = 445.14	L_c = 883.40

C-2 CURVE DATA

	EX.= 1.838
Δ = 09°-28'-00"	D_c = 10°-39'59.9"
LC = 88.65	R = 537.15
T = 44.48	L_c = 88.75

C-3 CURVE DATA

	EX.= 0.87
Δ = 3°-28'-00"	D_c = 3°-00'-00"
LC = 115.54	R = 1909.86
T = 57.80	L_c = 115.56'

C-4 CURVE DATA

	EX.= 0.02
Δ = 0°-30'-00"	D_c = 3°-00'-00"
LC = 16.67	R = 1909.86'
T = 8.33	L_c = 16.67'

C-5 CURVE DATA

	EX.= 0.02
Δ = 0°-30'-00"	D_c = 3°-00'-00"
LC = 16.67	R = 1909.86'
T = 8.33	L_c = 16.67'

C-6 CURVE DATA

	EX.= 542.60
Δ = 140°-54' 17.5"	D_c = 21°-00'-00"
LC = 514.23	R = 272.84
T = 768.44	L_c = 670.98

C-7 CURVE DATA

	EX.= 50.17
Δ = 29°-53'42"	D_c = 4°-00'-00"
LC = 738.93	R = 1432.40
T = 382.41	L_c = 747.38

C-8 CURVE DATA

	EX.= 12.06
Δ = 26°-00'-00"	D_c = 12°-30'-00"
LC = 206.22	R = 458.37
T = 105.82	L_c = 208.00

C-9 CURVE DATA

	EX.= 64.57
Δ = 41°-00'-02"	D_c = 6°00'00"
LC = 668.86	R = 954.93
T = 357.04	L_c = 683.34

C-10 CURVE DATA

	EX.= 13.28
Δ = 19°00'00"	D_c = 6°-00'-00"
LC = 315.22	R = 954.93
T = 159.80	L_c = 316.67

C-11 CURVE DATA

	EX.= 13.67
Δ = 15°46'07"	D_c = 4° 00' 00"
LC = 392.97	R = 1432.40
T = 198.36	L_c = 394.22

C-12 CURVE DATA

	EX.= 574.90
Δ = 136°-11' 56"	D_c = 16° 45' 11"
LC = 634.64	R = 342.00
T = 850.73	L_c = 812.97

C-13 CURVE DATA

	EX.= 63.74
Δ = 33°34'05"	D_c = 4°00'00"
LC = 827.25	R = 1432.40
T = 432.03	L_c = 839.20

C-14 CURVE DATA

	EX.= .71
Δ = 06°21' 42"	D_c = 12°-30'-00"
LC = 50.87	R = 458.37
T = 25.48	L_c = 50.89

C-15 CURVE DATA

	EX.= 3.65'
Δ = 05°00' 16.3"	D_c = 1°-30'-00"
LC = 333.53'	R = 3819.72'
T = 166.92'	L_c = 333.64'

C-20 CURVE DATA

Δ = 136°-28'-03.9"	EX.= 230.92
LC = 252.78'	D_c = 42°-06'-00.5"
T = 340.85	R = 136.09'
	L_c = 324.15'

C-21 CURVE DATA

Δ = 136°-44'-01.4"	EX.= 247.56
LC = 268.76	D_c = 39°-38'-04.6"
T = 364.50	R = 144.56
	L_c = 344.99

S-16 SPIRAL DATA

L_s = 200.00	X_c = 189.47
LC = 195.24	L.T. = 137.31
D = 42°-06'-00.5"	S.T. = 70.30
K = 98.23	θ_s = 42°-06'-00.5"
Y_c = 47.13	

S-17 SPIRAL DATA

L_s = 200.00	x_c = 190.64
LC = 195.78	L.T. = 136.84
D = 39°-38'-04.6"	S.T. = 69.86
K = 98.43	θ_s = 39°-38'-04.6"
Y_c = 44.56'	

S-18 & S-19 SPIRAL DATA

L_s = 200.00	X_c = 199.95
LC = 199.98	L.T. = 133.35
D = 3°00'00"	S.T. = 66.68
K = 99.99	θ = 3°-00'-00"
Y_c = 3.49	

S-20 & S-21 SPIRAL DATA

L_s = 200.00	X_c = 199.95
LC = 199.98	L.T. = 133.35
D = 3°-00'-00"	S.T. = 66.68
K = 99.99	θ = 3°-00'-00"
Y_c = 3.49	

S-22 & S-23 SPIRAL DATA

L_s = 200.00	X_c = 199.95
LC = 199.98	L.T. = 133.35
D = 3°00'-00"	S.T. = 66.68
K = 99.99	θ = 3°-00'-00"
Y_c = 3.49	

S-24 SPIRAL DATA

L_s = 200.00	X_c = 196.83
LC = 198.88	LT = 121.55
D = 16°-45'-11"	ST = 80.50
K = 75.64'	θ = 20°-45'-11.5"
Y_c = 28.53'	

S-1 SPIRAL DATA

L_s = 250.00	X_c = 249.95
LC = 249.98	L.T. = 166.68
D = 1°58'28.1"	S.T. = 83.35
K = 124.99	θ_s = 02°-28'-05.1"
yc = 3.589'	

S-2 SPIRAL DATA

L_s = 250.00	x_c = 249.95
LC = 249.98	L.T. = 166.69
D = 1°-58'28.1"	S.T. = 83.35
K = 124.99	θ_s = 02°-28'-05.1"
yc = 3.589'	

S-3 SPIRAL DATA

L_s = 200.00	x_c = 197.33
LC = 198.81	L.T. = 134.29
D = 21°00'00"	S.T. = 67.53
K = 99.55	θ_s = 21°-00'-00"
Y_c = 24.202	

S-4 SPIRAL DATA

L_s = 200.00	X_c = 197.33
LC = 198.81	L.T. = 134.29
D = 21°00'00"	S.T. = 67.53
K = 99.554	θ_s = 21°-00'-00"
Y_c = 24.202	

S-5 SPIRAL DATA

L_s = 200.00	X_c = 199.90
LC = 199.96	L.T. = 133.37
D = 4°00'00"	S.T. = 66.70
K = 99.98	θ_s = 4°-00'-00"
Y_c = 4.652	

S-6 SPIRAL DATA

L_s = 200.00	X_c = 199.05
LC = 199.58	L.T. = 133.67
D = 12°30'00"	S.T. = 66.97
K = 99.84	θ_s = 12°-30'-00"
Y_c = 14.496	

S-7 SPIRAL DATA

L_s = 200.00	X_c = 199.05
LC = 199.58	L.T. = 133.67
D = 12°30'00"	S.T. = 66.97
K = 99.84	θ_s = 12°-30'-00"
Y_c = 14.496	

S-8 SPIRAL DATA

L_s = 250.00	X_c = 249.57
LC = 249.81	L.T. = 166.82
D = 6°-00'-00"	S.T. = 83.47
K = 124.93	θ_s = 7°-30'-00"
Y_c = 10.895	

S-9 SPIRAL DATA

L_s = 250.00	X_c = 249.57
LC = 249.81	L.T. = 166.82
D = 6°00'00"	S.T. = 83.47
K = 124.93	θ_s = 7°-30'-00"
Y_c = 10.895	

S-10 SPIRAL DATA

L_s = 200.00	X_c = 199.78
LC = 199.91	L.T. = 133.41
D = 6°00'00"	S.T. = 66.74
K = 99.97	θ_s = 6°-00'-00"
Y_c = 6.976	

S-11 SPIRAL DATA

L_s = 200.00	X_c = 199.78
LC = 199.91	L.T. = 133.41
D = 6°-00'-00"	S.T. = 66.74
K = 99.97	θ_s = 6°-00'-00"
Y_c = 6.976	

S-12 SPIRAL DATA

L_s = 200.00	X_c = 198.30
LC = 199.24'	L.T. = 133.94
D = 16°45' 11.3"	S.T. = 67.22
K = 99.72	θ_s = 16°-45' 11.3"
Y_c = 19.37	

S-13 SPIRAL DATA

L_s = 200.00	X_c = 199.90
LC = 199.96	L.T. = 133.37
D = 4°00'00"	S.T. = 66.70
K = 99.99	θ_s = 4°-00'-00"
Y_c = 4.652	

S-14 SPIRAL DATA

L_s = 200.00	X_c = 199.05
LC = 199.58	L.T. = 133.67
D = 12°30'00"	S.T. = 66.97
K = 99.84	θ_s = 12°-30'-00"
Y_c = 14.495'	

S-15 SPIRAL DATA

L_s = 200.00	X_c = 199.05
LC = 199.58	L.T. = 133.67
D = 12°30'00"	S.T. = 66.97
K = 99.84	θ_s = 12°-30'-00"
Y_c = 14.495	

FHWA REGION	STATE	PROJECT	
5	OHIO		

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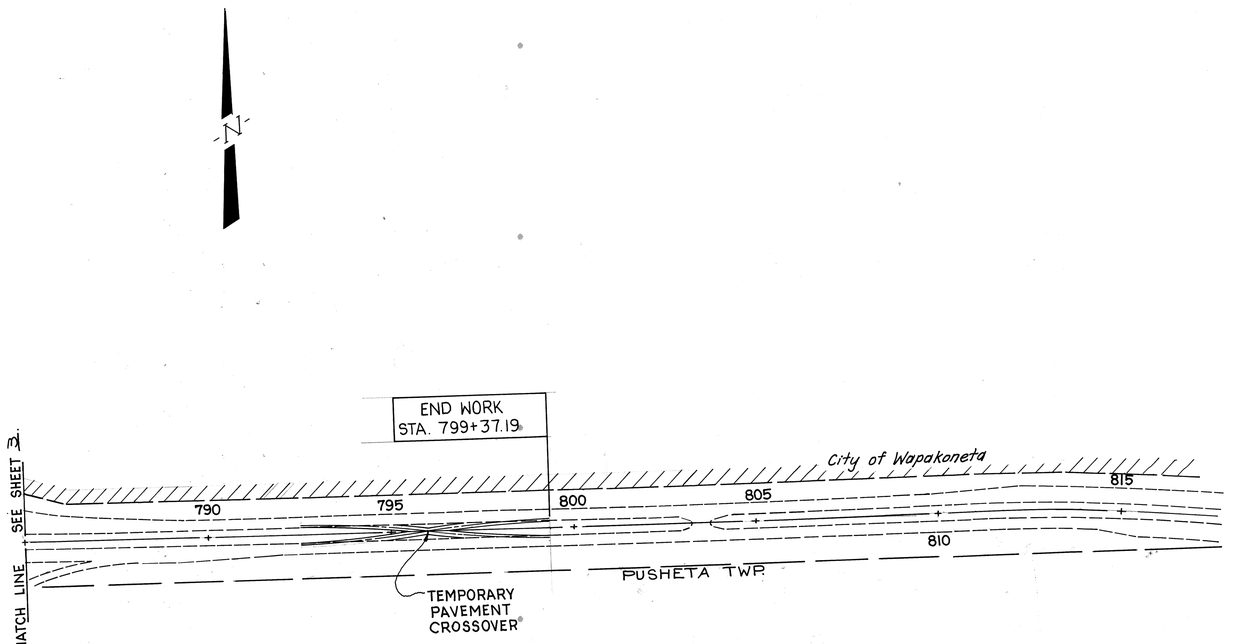
AUGLAIZE COUNTY
AUG~33~13.44

SCHEMATIC PLAN



FHWA REGION	STATE	PROJECT	
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AUGLAIZE COUNTY
AUG-33-13.44

SCALE
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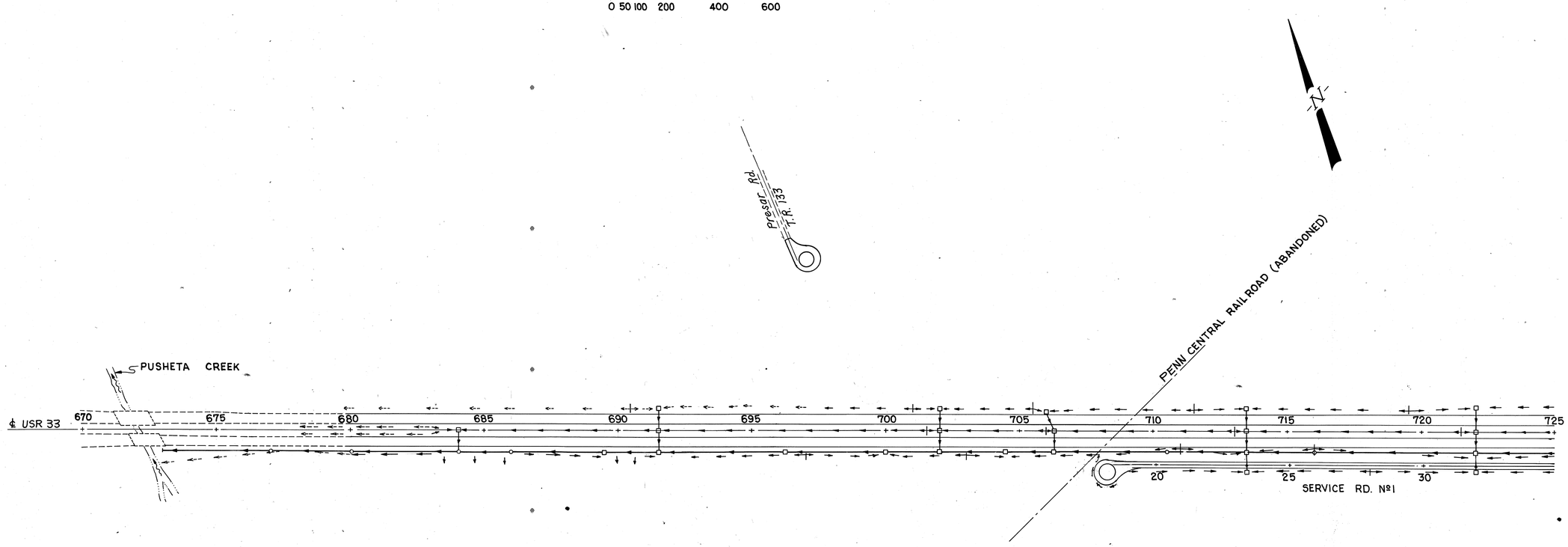

For Temporary Erosion & Sediment Control Quantities, Notes, & Legend ~ See Sht 6

DRAINAGE SCHEMATIC AND TEMPORARY EROSION & SEDIMENT CONTROL PLAN

FHWA REGION	STATE	PROJECT	
5	OHIO		

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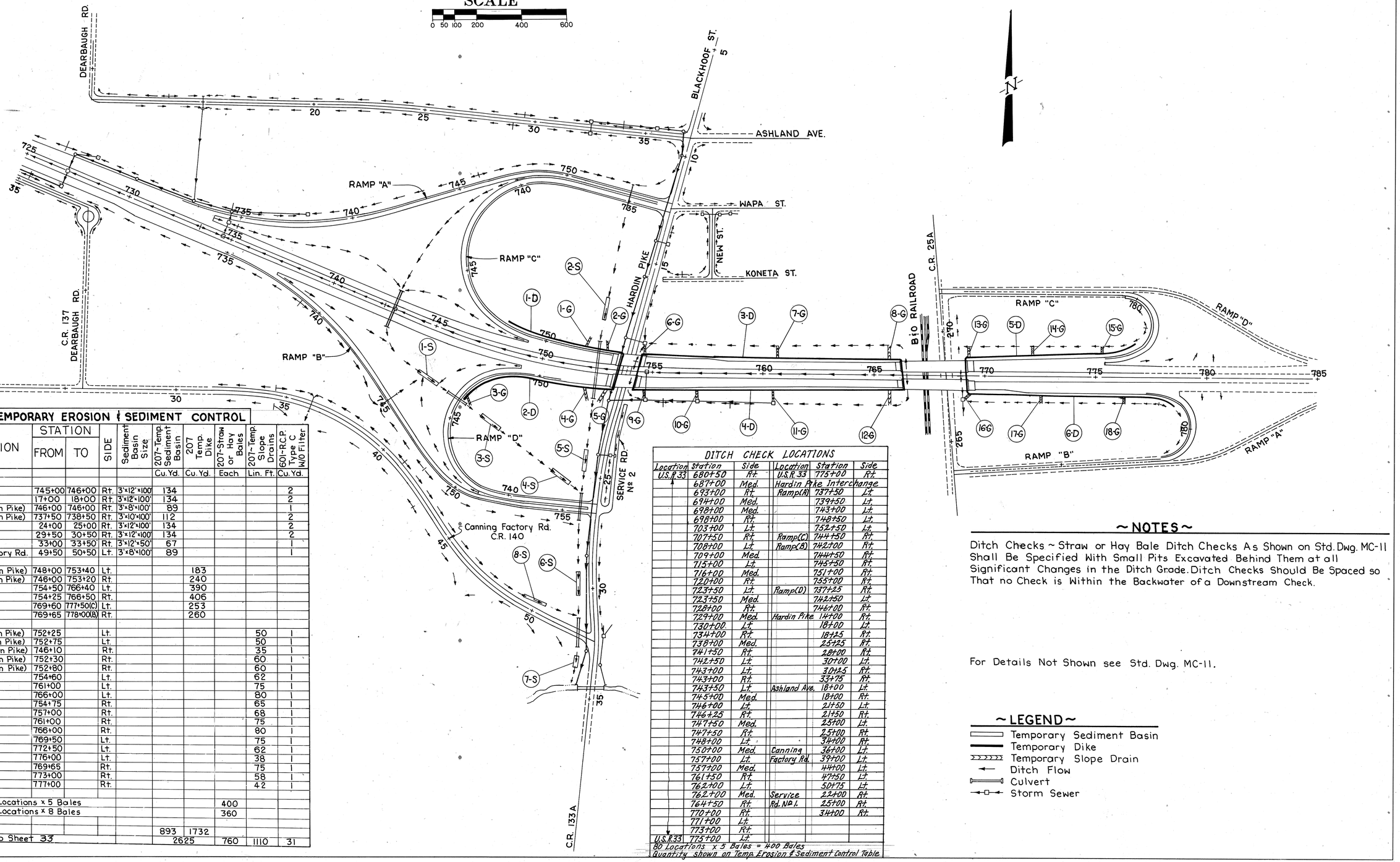
AUGLAIZE COUNTY
AUG-33-13.44



TEMPORARY EROSION & SEDIMENT CONTROL

REF.	LOCATION	STATION FROM	STATION TO	SIDE	Sediment Basin Size	207-Temp. Sediment Basin	207 Temp. Dike	207-Straw or Hay Bales	207-Temp. Slope Drains	601-RCP Type C W/O Filter
						Cu. Yd.	Cu. Yd.	Each	Lin. Ft.	Cu. Yd.
1-S	USR 33	745+00	746+00	Rt.	3'×12'×100'	134				2
2-S	Hardin Pike	17+00	18+00	Rt.	3'×12'×100'	134				2
3-S	Ramp D(Hardin Pike)	746+00	746+00	Rt.	3'×8'×100'	89				1
4-S	Ramp D (Hardin Pike)	737+50	738+50	Rt.	3'×10'×100'	112				2
5-S	Hardin Pike	24+00	25+00	Rt.	3'×12'×100'	134				2
6-S	Hardin Pike	29+50	30+50	Rt.	3'×12'×100'	134				2
7-S	Hardin Pike	33+00	33+50	Rt.	3'×12'×50'	67				1
8-S	Canning Factory Rd.	49+50	50+50	Lt.	3'×8'×100'	89				1
1-D	Ramp C(Hardin Pike)	748+00	753+40	Lt.			183			
2-D	Ramp D(Hardin Pike)	746+00	753+20	Rt.			240			
3-D	USR 33	754+50	766+40	Lt.			390			
4-D	USR 33	754+25	766+50	Rt.			406			
5-D	USR 33	769+60	777+50(C)	Lt.			253			
6-D	USR 33	769+65	778+00(B)	Rt.			260			
1-G	Ramp C(Hardin Pike)	752+25		Lt.					50	1
2-G	Ramp C(Hardin Pike)	752+75		Lt.					50	1
3-G	Ramp D(Hardin Pike)	746+10		Rt.					35	1
4-G	Ramp D(Hardin Pike)	752+30		Rt.					60	1
5-G	Ramp D(Hardin Pike)	752+80		Rt.					60	1
6-G	USR 33	754+60		Lt.					62	1
7-G	USR 33	761+00		Lt.					75	1
8-G	USR 33	766+00		Lt.					80	1
9-G	USR 33	754+75		Rt.					65	1
10-G	USR 33	757+00		Rt.					68	1
11-G	USR 33	761+00		Rt.					75	1
12-G	USR 33	766+00		Rt.					80	1
13-G	USR 33	769+50		Lt.					75	1
14-G	USR 33	772+50		Lt.					62	1
15-G	USR 33	776+00		Lt.					38	1
16-G	USR 33	769+65		Rt.					75	1
17-G	USR 33	773+00		Rt.					58	1
18-G	USR 33	777+00		Rt.					42	1
Ditch Checks : 80 Locations x 5 Bales								400		
Catch Basins : 45 Locations x 8 Bales								360		
Totals Carried to Sheet 33						893	1732			
						2625		760	1110	31

DITCH CHECK LOCATIONS

Location	Station	Side	Location	Station	Side
U.S.R.33	680+50	Rt.	U.S.R. 33	775+00	Rt.
	687+00	Med.	Hardin Pike Interchange		
	693+00	Rt.	Ramp(A)	737+50	Lt.
	694+00	Med.		739+50	Lt.
	698+00	Med.		743+00	Lt.
	698+00	Rt.		748+50	Lt.
	703+00	Lt.		752+50	Lt.
	707+50	Rt.	Ramp(C)	744+50	Rt.
	708+00	Lt.	Ramp(B)	742+00	Rt.
	709+00	Med.		744+50	Rt.
	715+00	Lt.		745+50	Rt.
	716+00	Med.		751+00	Rt.
	720+00	Rt.		755+00	Rt.
	723+50	Lt.	Ramp(D)	737+25	Rt.
	723+50	Med.		742+50	Lt.
	728+00	Rt.		746+00	Rt.
	729+00	Med.	Hardin Pike	14+00	Rt.
	730+00	Lt.		18+00	Lt.
	734+00	Rt.		18+25	Rt.
	738+00	Med.		25+25	Rt.
	741+50	Rt.		28+00	Rt.
	742+50	Lt.		30+00	Lt.
	743+00	Lt.		30+25	Rt.
	743+00	Rt.		33+75	Rt.
	743+50	Lt.	Ashland Ave.	18+00	Lt.
	745+00	Med.		18+00	Rt.
	746+00	Lt.		21+50	Lt.
	746+25	Rt.		21+50	Rt.
	747+50	Med.		25+00	Lt.
	747+50	Rt.		25+00	Rt.
	748+00	Lt.		34+00	Rt.
	750+00	Med.	Canning	36+00	Lt.
	757+00	Lt.	Factory Rd.	39+00	Lt.
	757+00	Med.		44+00	Lt.
	761+50	Rt.		47+50	Lt.
	762+00	Lt.		50+75	Lt.
	762+00	Med.	Service	22+00	Rt.
	764+50	Rt.	Rd. № 1	25+00	Rt.
	770+00	Rt.		34+00	Rt.
	771+00	Lt.			
	773+00	Rt.			
U.S.R.33	775+00	Lt.			

80 Locations x 5 Bales = 400 Bales
Quantity Shown on Temp Erosion & Sediment Control Table

~NOTES~

Ditch Checks ~ Straw or Hay Bale Ditch Checks As Shown on Std. Dwg. MC-11 Shall Be Specified With Small Pits Excavated Behind Them at all Significant Changes in the Ditch Grade. Ditch Checks Should Be Spaced so That no Check is Within the Backwater of a Downstream Check.

For Details Not Shown see Std. Dwg. MC-11.

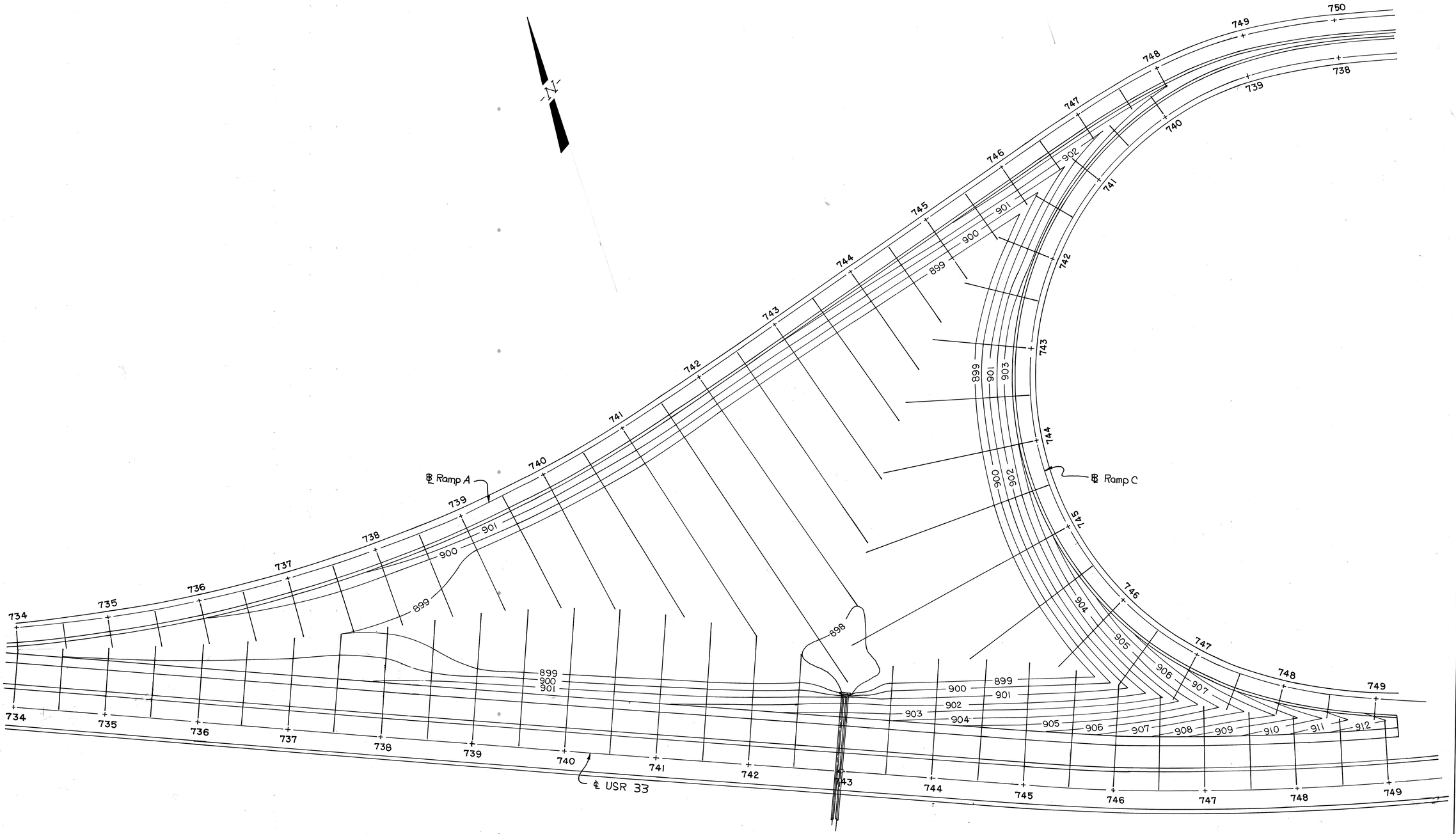
~LEGEND~

- Temporary Sediment Basin
- Temporary Dike
- Temporary Slope Drain
- Ditch Flow
- Culvert
- Storm Sewer

DRAINAGE SCHEMATIC AND TEMPORARY EROSION & SEDIMENT CONTROL PLAN

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		



X-SECTIONS LAYOUT & CONTOUR DETAIL AUG-33-13.44

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

8/345

N

℄ RAMP A

℄ RAMP C

℄ SURVEY U.S.R 33

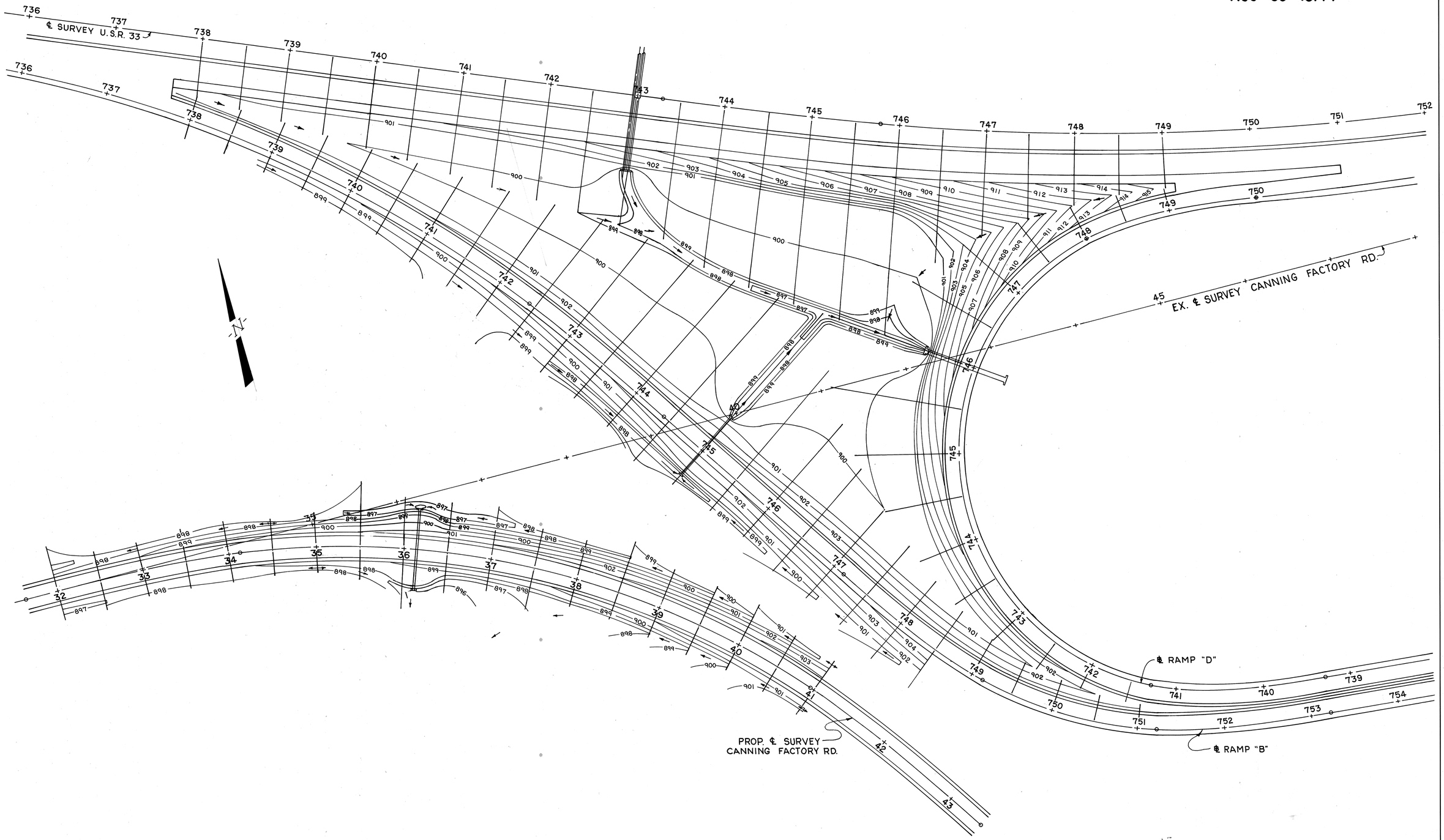
℄ HARDIN PIKE

X-SECTION LAYOUT & CONTOUR DETAIL AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

9
345

AUGLAIZE COUNTY
AUG~33~13.44



CROSS-SECTION LAYOUT & CONTOUR DETAIL AUG~33~13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

10
345

AUGLAIZE COUNTY
AUG~33~13.44

PROP. ℄
RAMP "D"

PROP. ℄
RAMP "B"

℄ SURVEY U.S.R. 33

EXISTING ℄ HARDIN PIKE

PROP ℄
HARDIN PIKE

Service Rd №2

House

X-SECTION LAYOUT & CONTOUR DETAIL AUG~33~13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

11
345

AUGLAIZE COUNTY
AUG-33-13.44

PROP. ℄ SURVEY
CANNING FACTORY RD.

℄ RAMP "B"

℄ RAMP "D"

PROP. ℄ SURVEY HARDIN PIKE

℄ SURVEY HARDIN PIKE

EXISTING

℄ DITCH

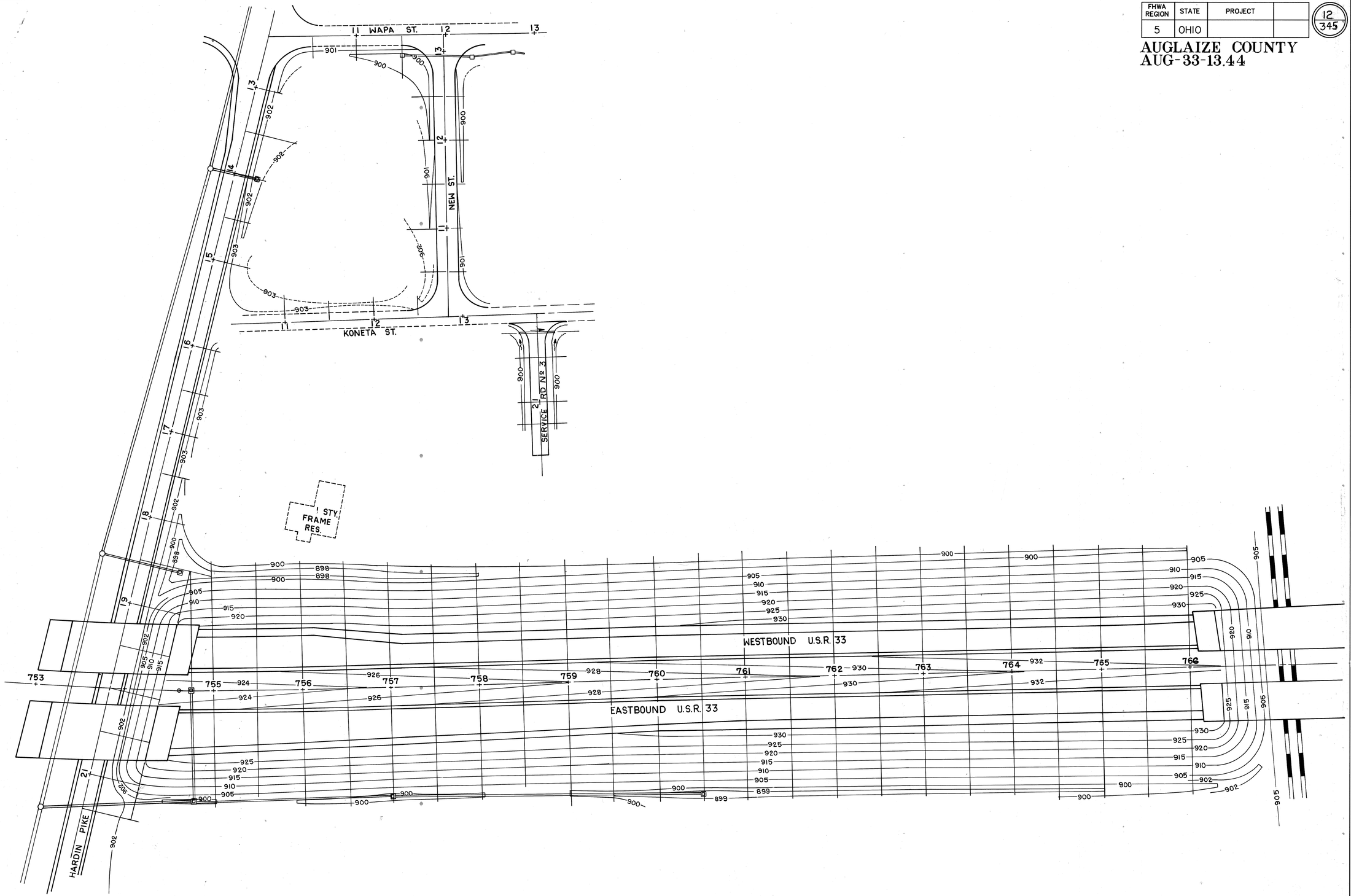
N

X-SECTION LAYOUT & CONTOUR DETAIL AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

12/345

AUGLAIZE COUNTY
AUG-33-13.44



X-SECTION LAYOUT & CONTOUR DETAIL AUG~33~13.44

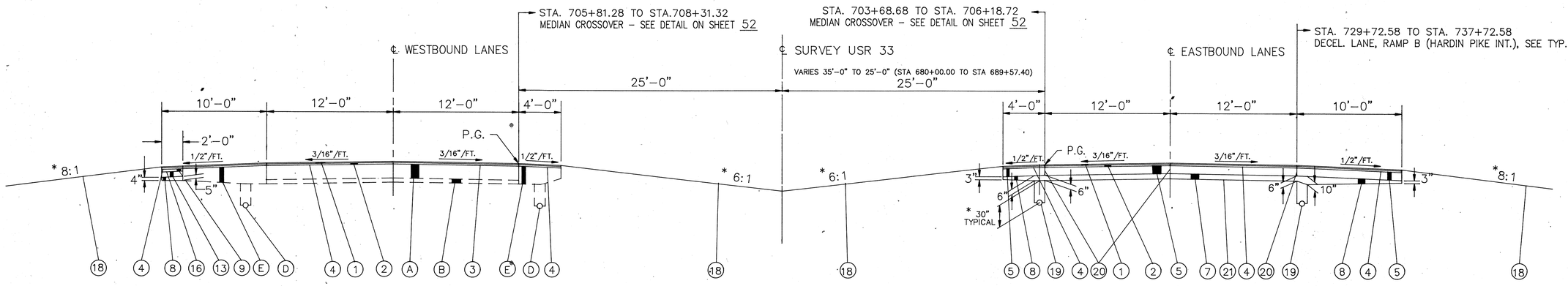
TYPICAL SECTIONS

TYPE 446 ON 305

AUGLAIZE COUNTY
AUG–33–13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

13
345



NO. 1

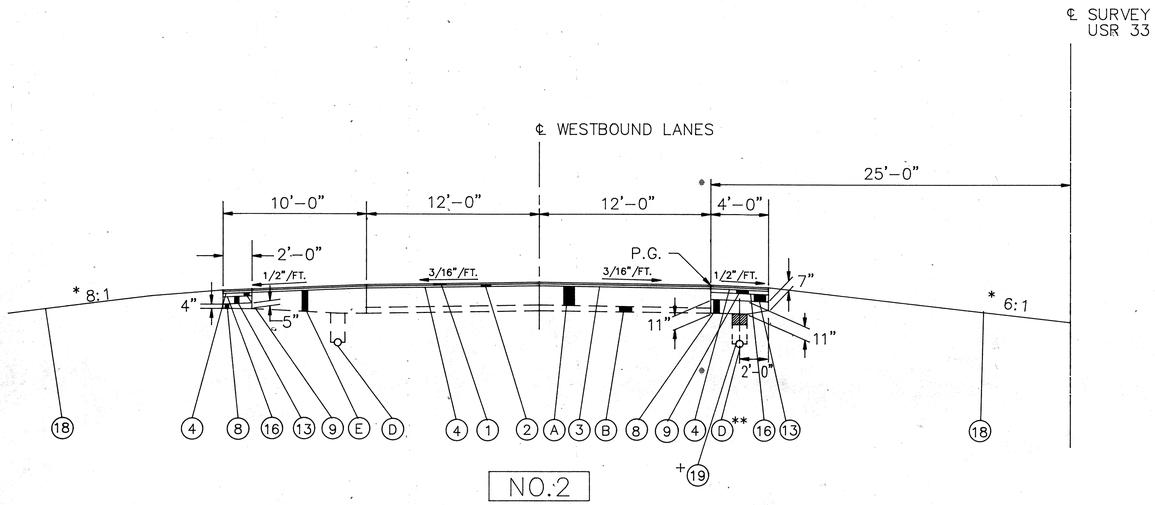
NORMAL SECTION

LIMITING STATIONS
STA. 681+00.00 TO STA. 688+48.07 W.B.
STA. 680+00.00 TO STA. 742+53.33 E.B.

* UNLESS OTHERWISE SHOWN ON PLANS OR CROSS–SECTIONS

** BEFORE PLACING NEW SUBBASE, ANY CONTAMINATED BACKFILL OVER EXISTING PIPE UNDERDRAIN SHALL BE REPLACED WITH NO. 8 AGGREGATE. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 310 – SUBBASE.

\+ NEW UNDERDRAINS FROM STA. 690+00 TO STA. 696+97.32



NO.2

NORMAL SECTION

LIMITING STATIONS
STA. 688+48.07 TO STA. 696+97.32 W.B.

CODE

1. ITEM 446, 1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC–20
2. ITEM 446, 1 3/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, AC–20
3. ITEM 448, 0" MIN., ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, (1/2" AVE.), AC–20
4. ITEM 407, TACK COAT (SEE GENERAL NOTE)
5. ITEM 305, 10" CONCRETE BASE
6. ITEM 305, 8" CONCRETE BASE
7. ITEM 310, 6" SUBBASE, TYPE II
8. ITEM 310, SUBBASE, TYPE II
9. ITEM 301, 3" BITUMINOUS AGGREGATE BASE, AC–20
10. ITEM 301, 3 1/2" BITUMINOUS AGGREGATE BASE, AC–20
11. ITEM 301, 8 3/4" BITUMINOUS AGGREGATE BASE, AC–20
12. ITEM 304, 4" AGGREGATE BASE
13. ITEM 304, 6" AGGREGATE BASE
14. ITEM 304, AGGREGATE BASE
15. ITEM 612, CONCRETE MEDIAN (SEE STD. DWG. MC–6)
16. ITEM 408, PRIME COAT APPLIED AT THE RATE OF 0.4 GAL. PER SQ. YD.
17. ITEM 409, SEAL COAT APPLIED AT THE RATE OF 0.3 GAL. PER SQ.YD. WITH COVER AGGREGATE APPLIED AT THE RATE OF 0.008 CU.YD. PER SQ.YD.
18. ITEM 659, SEEDING AND MULCHING
19. ITEM 605, 6" PIPE UNDERDRAINS,
20. STANDARD LONGITUDINAL JOINT (SEE STD. DWG. BP–3)
21. ITEM 203, SUBGRADE COMPACTION

EXISTING

- (A) 3" ASPHALT SURFACE ON 2" ASPHALT INTERMEDIATE ON 3" BITUMINOUS AGGREGATE BASE ON 8" MACADAM.
- (B) 4" SUBBASE
- (C) AGGREGATE DRAIN
- (D) 6" PIPE UNDERDRAIN
- (E) 3" BITUMINOUS AGGREGATE BASE ON 6" AGGREGATE BASE ON SUBBASE
- (F) 3" ASPHALT SURFACE ON 9" REINF. CONC. PAVEMENT ON 6" SUBBASE

TYPICAL SECTIONS

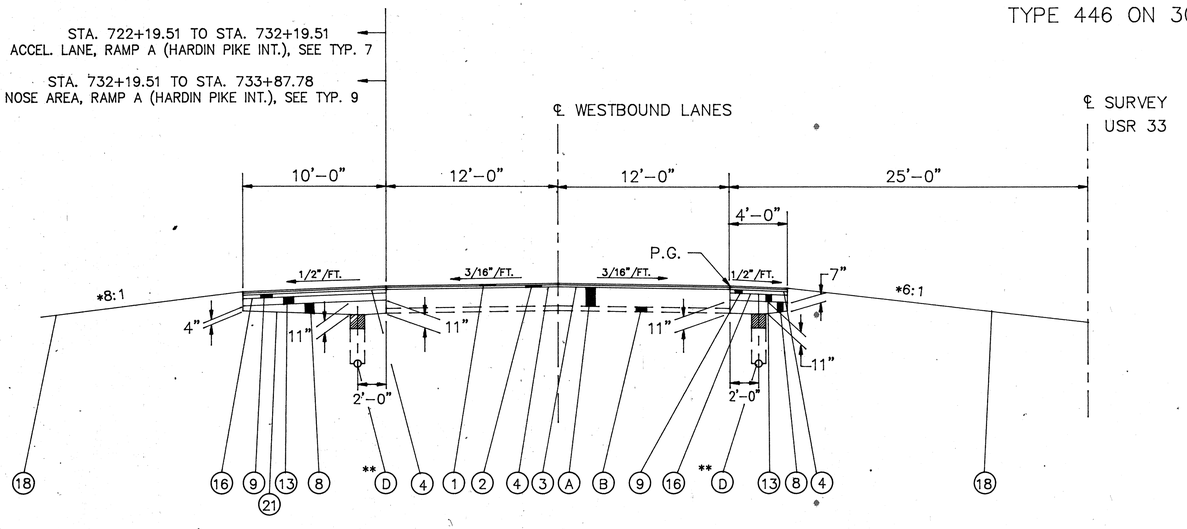
AUGLAIZE COUNTY
AUG–33–13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

TYPE 446 ON 305

STA. 722+19.51 TO STA. 732+19.51
ACCEL. LANE, RAMP A (HARDIN PIKE INT.), SEE TYP. 7

STA. 732+19.51 TO STA. 733+87.78
NOSE AREA, RAMP A (HARDIN PIKE INT.), SEE TYP. 9



NO. 3

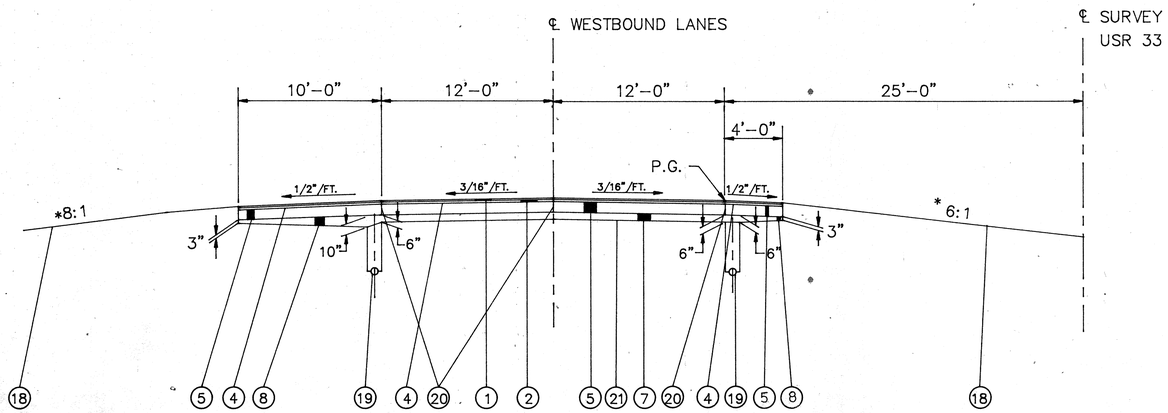
NORMAL SECTION

LIMITING STATIONS

STA. 696+97.32 TO STA. 741+00.00

*UNLESS OTHERWISE SHOWN ON PLANS OR CROSS–SECTIONS

** BEFORE PLACING NEW SUBBASE, ANY CONTAMINATED BACKFILL OVER EXISTING PIPE UNDERDRAIN SHALL BE REPLACED WITH NO. 8 AGGREGATE. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 310 – SUBBASE.



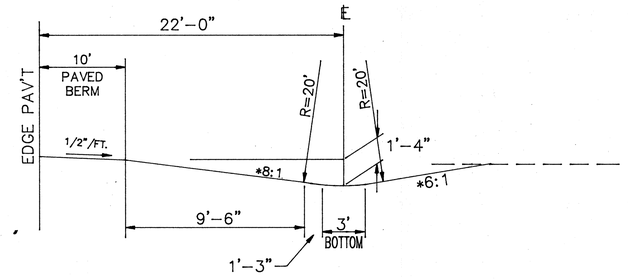
NO.4

NORMAL SECTION

LIMITING STATIONS

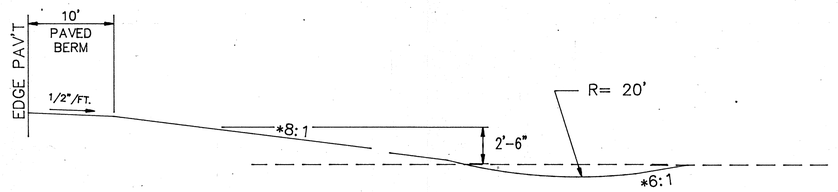
STA. 741+00.00 TO STA. 742+53.33

NOTE: SEE PAVEMENT CODES ON SHEET 13.



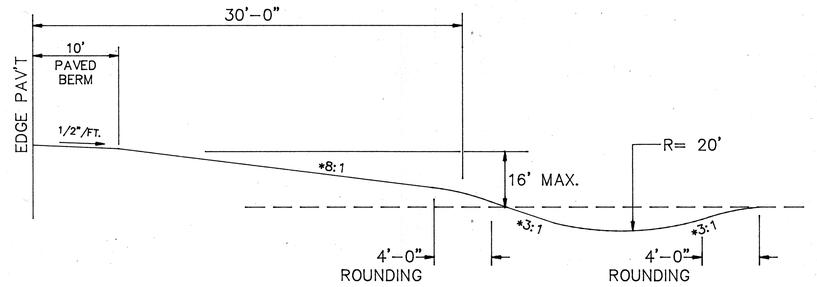
TYPICAL CUT SECITON

USR 33 & RAMPS



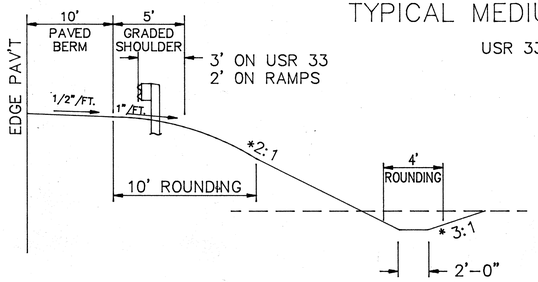
TYPICAL LOW FILL SECTION

USR 33 & RAMPS



TYPICAL MEDIUM FILL SECTION

USR 33 & RAMPS



TYPICAL DEEP FILL SECTION
OR GUARDRAIL SECTION

USR 33 & RAMPS

TYPICAL SECTIONS

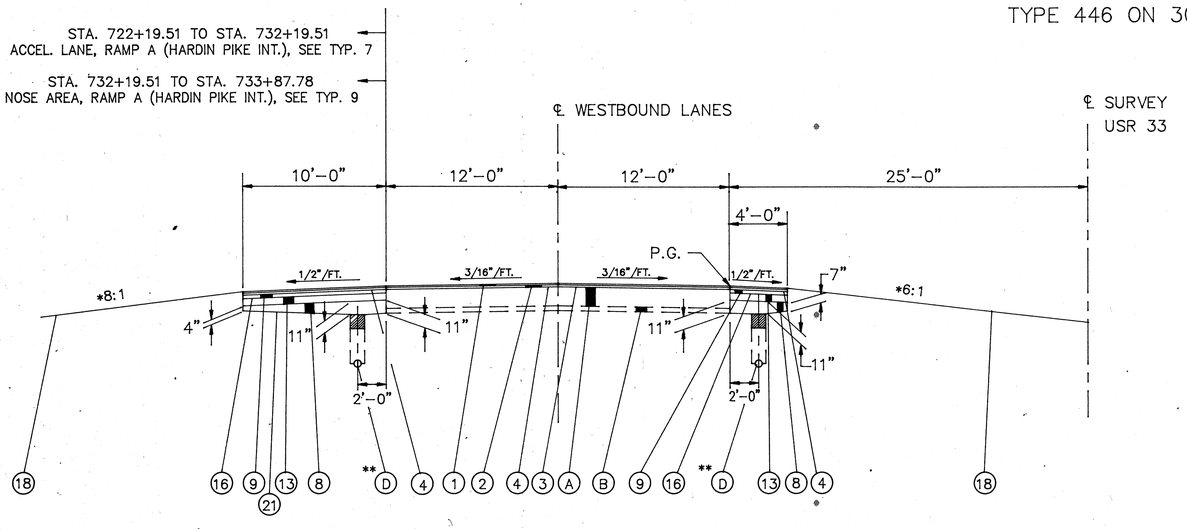
AUGLAIZE COUNTY
AUG–33–13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

TYPE 446 ON 305

STA. 722+19.51 TO STA. 732+19.51
ACCEL. LANE, RAMP A (HARDIN PIKE INT.), SEE TYP. 7

STA. 732+19.51 TO STA. 733+87.78
NOSE AREA, RAMP A (HARDIN PIKE INT.), SEE TYP. 9



NO. 3

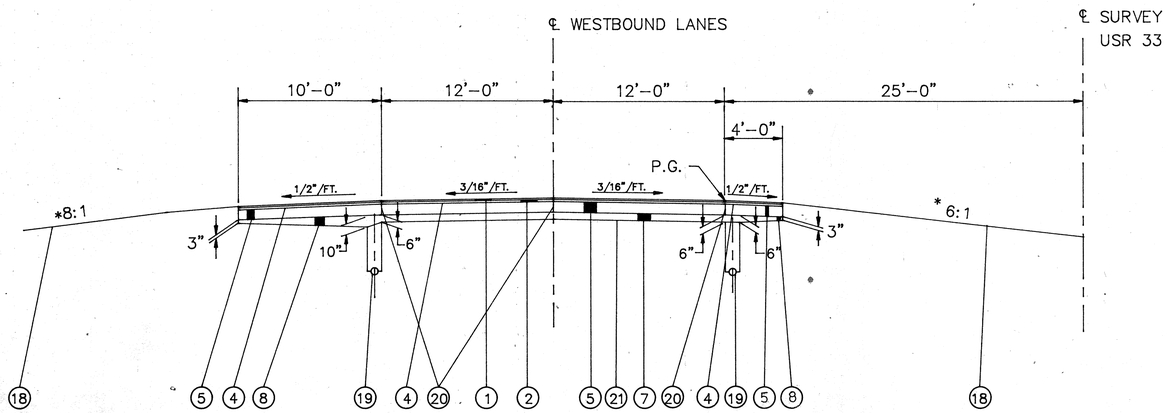
NORMAL SECTION

LIMITING STATIONS

STA. 696+97.32 TO STA. 741+00.00

*UNLESS OTHERWISE SHOWN ON PLANS OR CROSS–SECTIONS

** BEFORE PLACING NEW SUBBASE, ANY CONTAMINATED BACKFILL OVER EXISTING PIPE UNDERDRAIN SHALL BE REPLACED WITH NO. 8 AGGREGATE. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 310 – SUBBASE.



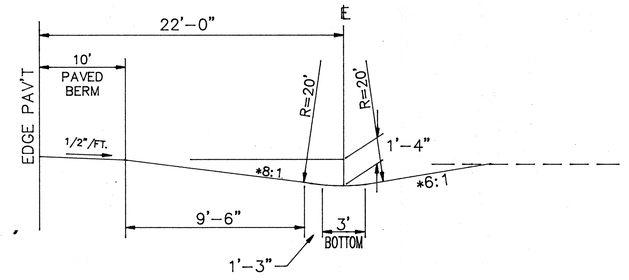
NO.4

NORMAL SECTION

LIMITING STATIONS

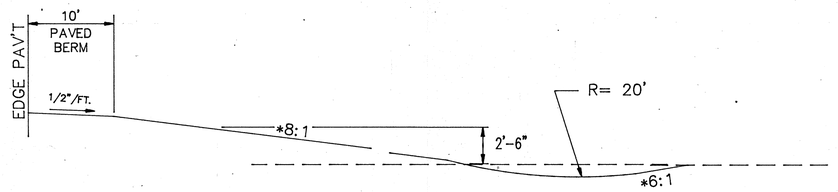
STA. 741+00.00 TO STA. 742+53.33

NOTE: SEE PAVEMENT CODES ON SHEET 13.



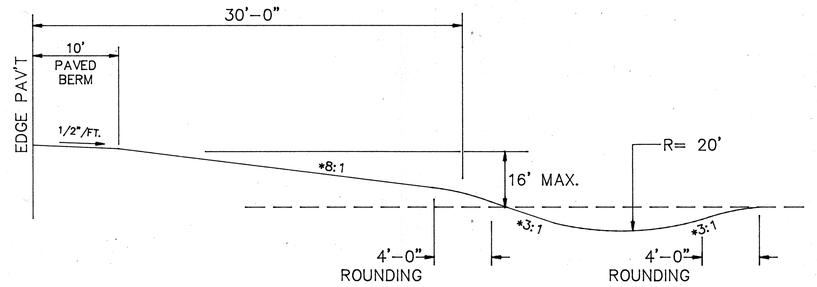
TYPICAL CUT SECITON

USR 33 & RAMPS



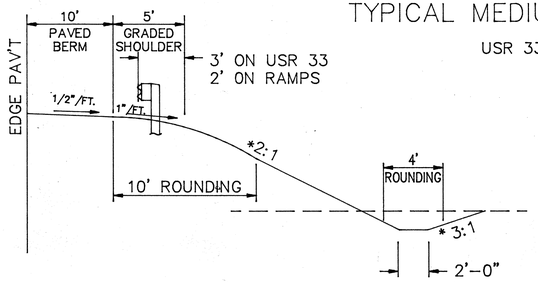
TYPICAL LOW FILL SECTION

USR 33 & RAMPS



TYPICAL MEDIUM FILL SECTION

USR 33 & RAMPS



TYPICAL DEEP FILL SECTION
OR GUARDRAIL SECTION

USR 33 & RAMPS

TYPICAL SECTIONS

TYPE 446 ON 305

AUGLAIZE COUNTY
AUG–33–13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

15
345

STA. 749+15.07 TO STA. 757+15.07
DECEL. LANE, RAMP C (HARDIN PIKE INT.), SEE TYP. 8

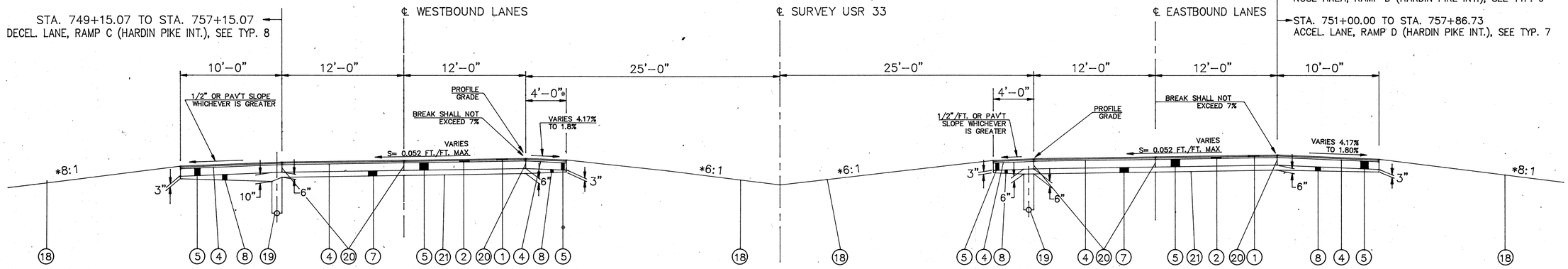
℄ WESTBOUND LANES

℄ SURVEY USR 33

℄ EASTBOUND LANES

STA. 749+08.55 TO STA.751+00.00
NOSE AREA, RAMP D (HARDIN PIKE INT.), SEE TYP. 9

STA. 751+00.00 TO STA. 757+86.73
ACCEL. LANE, RAMP D (HARDIN PIKE INT.), SEE TYP. 7



NO.5

SUPERELEVATED SECTION

LIMITING STATIONS

STA. 742+53.33	TO	STA. 752+91.37	
STA. 752+91.37	TO	STA. 754+75.96	= BRIDGE & APPROACH SLABS (SEE TYPICAL NO. 6–A)
STA. 754+75.96	TO	STA. 757+86.73	

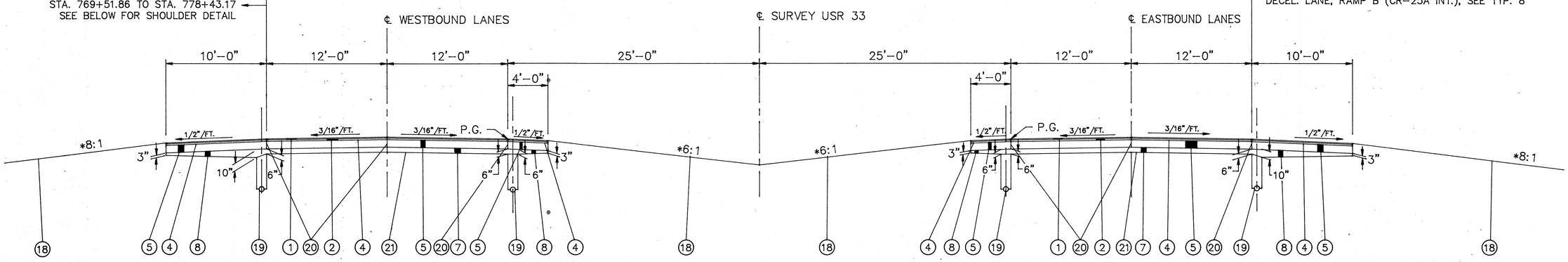
STA. 765+04.17 TO STA. 775+41.67
ACCEL. LANE, RAMP C (CR–25A INT.), SEE TYP. 7

STA. 775+41.67 TO STA. 776+64.82
NOSE AREA, RAMP C (CR–25A INT.), SEE TYP. 9

STA. 769+51.86 TO STA. 778+43.17
SEE BELOW FOR SHOULDER DETAIL

STA. 757+86.73 TO STA. 761+00.00
ACCEL. LANE, RAMP D (HARDIN PIKE INT.), SEE TYP. 7

STA. 770+57.77 TO STA.778+57.77
DECEL. LANE, RAMP B (CR–25A INT.), SEE TYP. 8

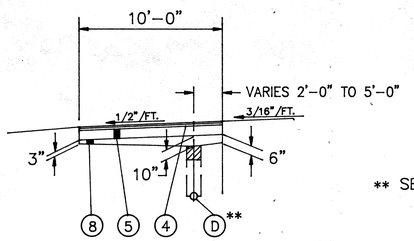


NO. 6

NORMAL SECTION

LIMITING STATIONS

STA. 757+86.73	TO	STA. 766+08.61	(EB & WB)
STA. 766+08.61	TO	STA. 769+51.86	= BRIDGE & APPROACH SLABS (SEE TYPICAL NO. 6–A)
STA. 769+51.86	TO	STA.778+56.99 (WB) & STA. 781+72.97 (EB)	



** SEE SHEET 14

STA. 769+51.86 TO STA. 778+43.17

* UNLESS OTHERWISE SHOWN ON PLANS OR CROSS SECTIONS

NOTE: SEE PAVEMENT CODES ON SHEET 13

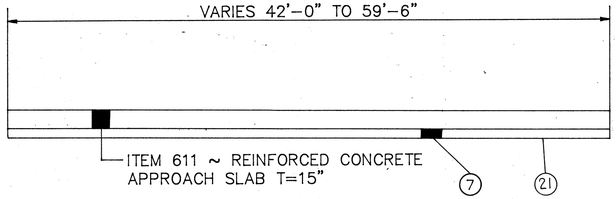
TYPICAL SECTIONS

TYPE 446 ON 305

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

16
345

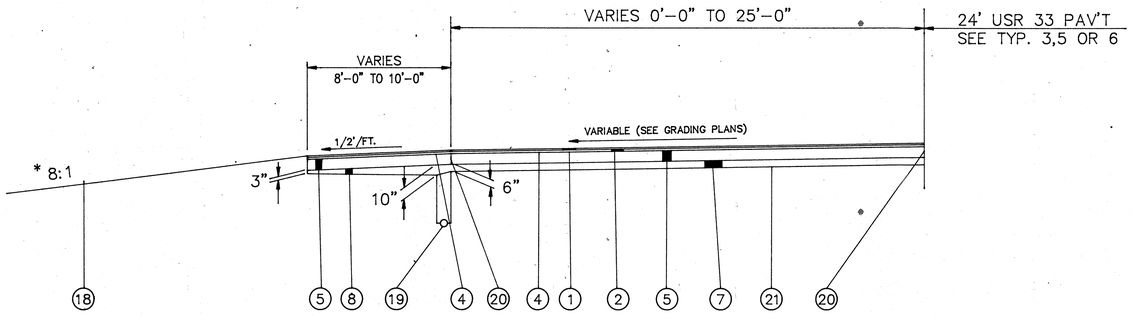


NO. 6-A

APPROACH SLAB SECTION

LIMITING STATIONS

USR 33 STA. 752+91.37 TO STA. 753+16.37
USR 33 STA. 754+50.96 TO STA. 754+75.96
USR 33 STA. 766+08.61 TO STA. 766+33.61
USR 33 STA. 769+26.86 TO STA. 769+51.86

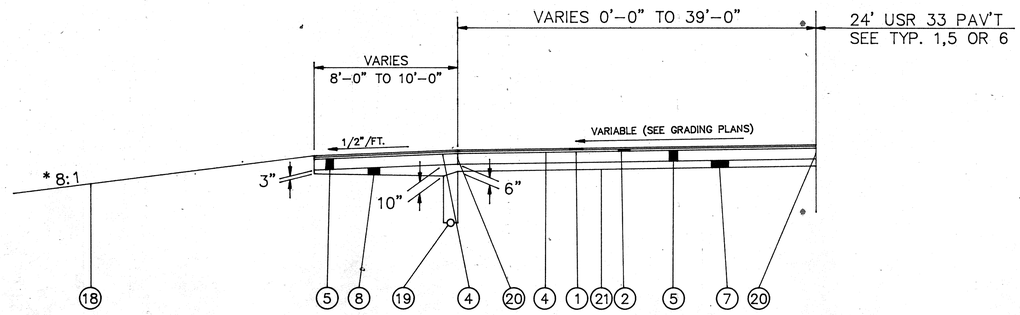


NO. 7

ACCELERATION LANE

LIMITING STATIONS

USR 33 STA. 722+19.51 TO STA. 732+19.51
USR 33 STA. 751+00.00 TO STA. 761+00.00 (OPPOSITE HAND) **
USR 33 STA. 765+04.17 TO STA. 775+41.67

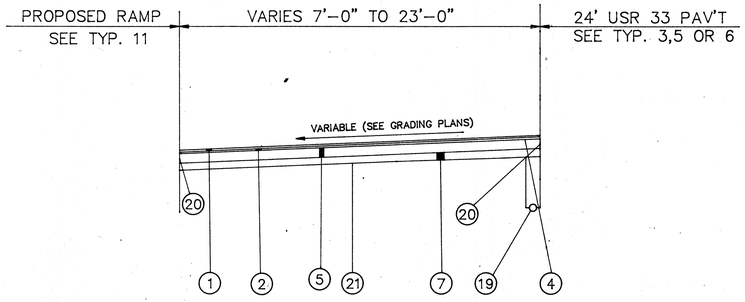


NO. 8

DECELERATION LANE

LIMITING STATIONS

USR 33 STA. 729+72.58 TO STA. 737+72.58 (OPPOSITE HAND)
USR 33 STA. 749+15.07 TO STA. 757+15.07
USR 33 STA. 770+57.77 TO STA. 778+57.77 (OPPOSITE HAND)



NO. 9

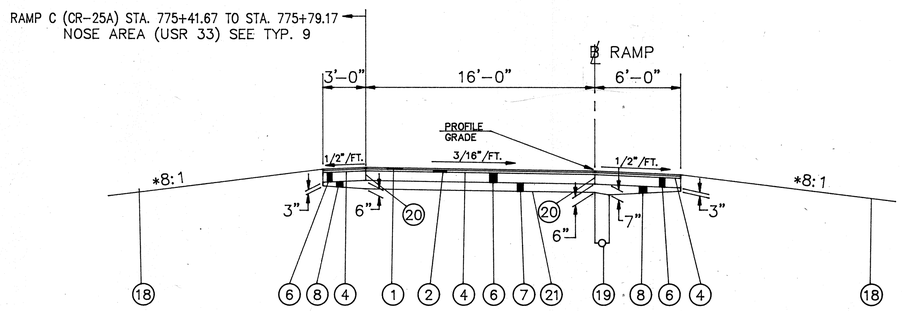
LIMITING STATIONS

USR 33 STA. 732+19.51 TO STA. 733+87.78
USR 33 STA. 749+08.55 TO STA. 751+00.00 (OPPOSITE HAND)
USR 33 STA. 775+41.67 TO STA. 776+64.82

NOTE: SEE PAVEMENT CODES ON SHEET 13

* UNLESS OTHERWISE SHOWN ON PLANS OR CROSS SECTIONS

** NO UNDERDRAINS REQUIRED AT THIS LOCATION



NO. 10

NORMAL SECTION

LIMITING STATIONS

RAMP A (HARDIN PIKE)	USR 33 STA. 742+58.71 TO STA. 745+63.67 (OPPOSITE HAND)
RAMP B (HARDIN PIKE)	USR 33 STA. 744+41.59 TO STA. 746+39.03
RAMP C (CR-25A)	USR 33 STA. 775+41.67 TO STA. 775+79.17 (OPPOSITE HAND)

USR 33 & RAMP TYPICAL SECTIONS

TYPICAL SECTIONS

TYPE 446 ON 305

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

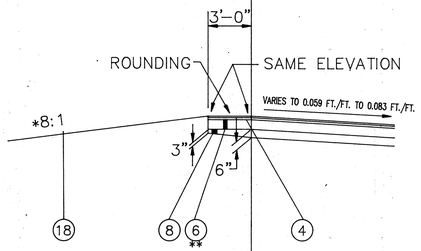
17
345

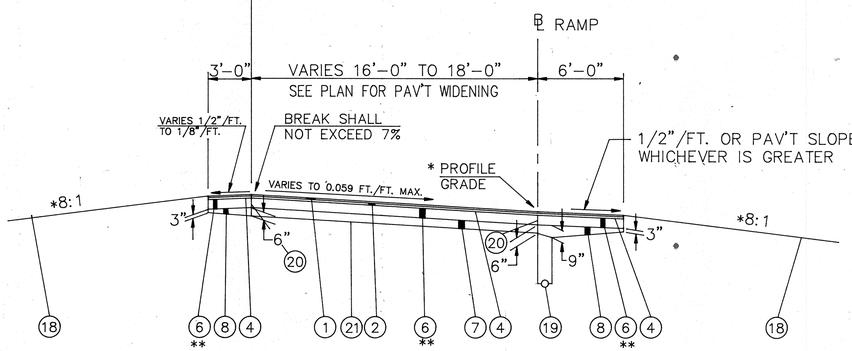
RAMP A (HARDIN PIKE) STA. 732+19.51 TO STA. 733+86.20
NOSE AREA (USR 33) SEE TYP. 9

RAMP D (HARDIN PIKE) STA. 749+05.46 TO STA. 751+00.00
NOSE AREA (USR 33) SEE TYP. 9

RAMP C (CR-25A) STA. 775+79.17 TO STA. 776+60.85
NOSE AREA (USR 33) SEE TYP. 9

** AT THESE LOCATIONS THE RAMP & BERM PAV'T HAS A 10" CONCRETE BASE INSTEAD OF 8" CONCRETE BASE



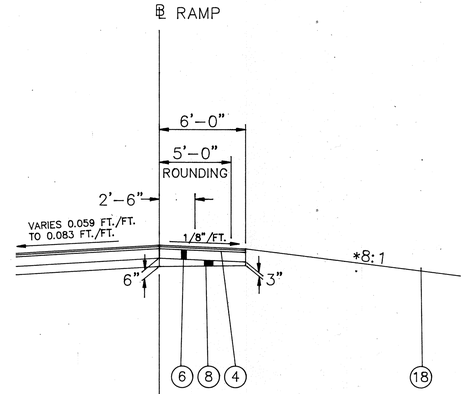


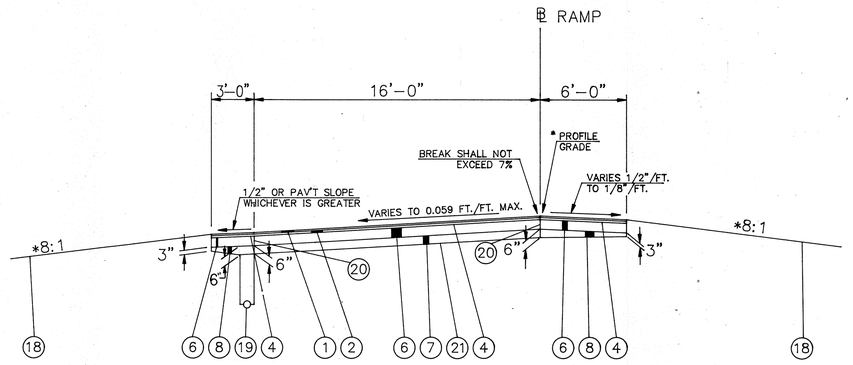
NO. 11

SUPERELEVATED SECTION

LIMITING STATIONS

USR 33 X HARDIN PIKE INT.	RAMP A	STA. 732+19.51	TO	STA. 742+58.71	(OPPOSITE HAND)
	RAMP A	STA. 745+63.67	TO	STA. 746+38.67	(OPPOSITE HAND)
	RAMP B	STA. 737+71.23	TO	STA. 744+41.59	
	RAMP B	STA. 746+39.03	TO	STA. 747+14.03	
	RAMP C	STA. 739+60.66	TO	STA. 749+25.79	(OPPOSITE HAND)
	RAMP D	STA. 741+11.92	TO	STA. 751+00.00	
USR 33 X CR-25A INT.	RAMP B	STA. 778+53.21	TO	STA. 782+34.09	
	RAMP C	STA. 775+79.17	TO	STA. 780+81.44	(OPPOSITE HAND)





NO. 12

SUPERELEVATED SECTION

LIMITING STATIONS

USR 33 X HARDIN PIKE INT.	RAMP A	STA. 746+38.67	TO	STA. 748+23.99	(OPPOSITE HAND)
	RAMP B	STA. 747+14.03	TO	STA. 751+29.30	

* UNLESS OTHERWISE SHOWN ON PROFILE

NOTE: SEE PAVEMENT CODES ON SHEET 13

RAMP TYPICAL SECTIONS

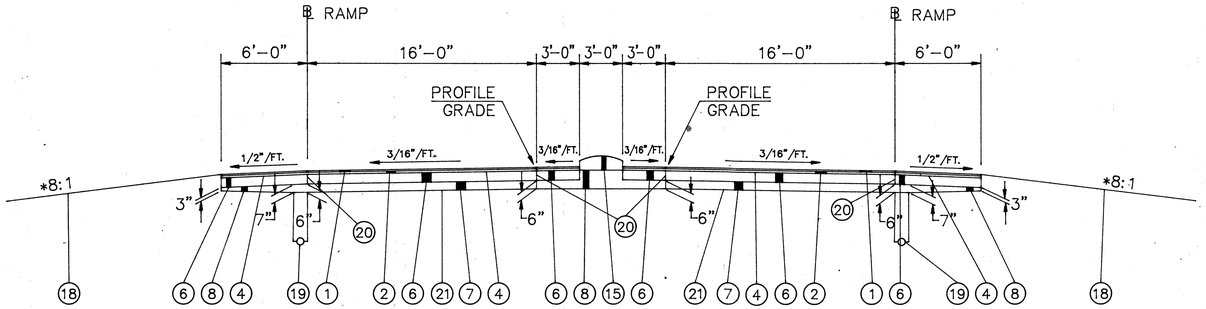
TYPICAL SECTIONS

TYPE 446 ON 305

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

18
345



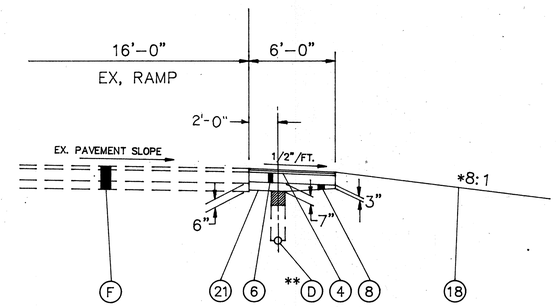
NO. 13

NORMAL SECTION

LIMITING STATIONS

USR 33 X HARDIN PIKE INT.

RAMP A	STA.	751+64.57	TO	STA.	754+80.24
RAMP B	STA.	753+97.03	TO	STA.	756+41.51
RAMP C	STA.	733+22.14	TO	STA.	737+12.81
RAMP D	STA.	736+09.99	TO	STA.	739+29.03



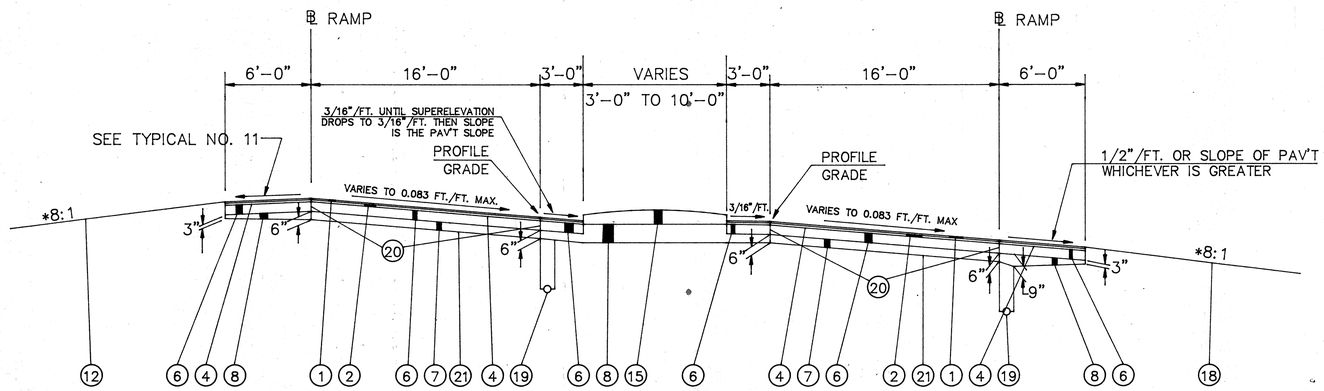
NO. 13-A

USR 33 & CR-25A INTERSECTION

RAMP B	STA.	0+45.43	TO STA.	9+47.82	(OPPOSITE HAND)
RAMP C	STA.	0+78.23	TO STA.	8+29.92	

*UNLESS OTHERWISE SHOWN ON PLANS OR CROSS SECTIONS

** BEFORE PLACING NEW SUBBASE, ANY CONTAMINATED BACKFILL OVER EXISTING PIPE UNDERDRAIN SHALL BE REPLACED WITH NO. 8 AGGREGATE. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 301 – SUBBASE



NO. 14

SUPERELEVATED SECTION

LIMITING STATIONS

USR 33 X HARDIN PIKE INT.

RAMP A	STA.	748+23.99	TO	STA.	750+89.57	
RAMP A	STA.	750+89.57	TO	STA.	751+64.57	(OPPOSITE HAND)
RAMP B	STA.	751+29.30	TO	STA.	753+22.03	(OPPOSITE HAND)
RAMP B	STA.	753+22.03	TO	STA.	753+97.03	
RAMP C	STA.	737+12.81	TO	STA.	739+60.66	(OPPOSITE HAND)
RAMP D	STA.	739+29.03	TO	STA.	741+11.72	

NOTE: FOR PAVEMENT CODES SEE SHEET 13 .

RAMP TYPICAL SECTIONS

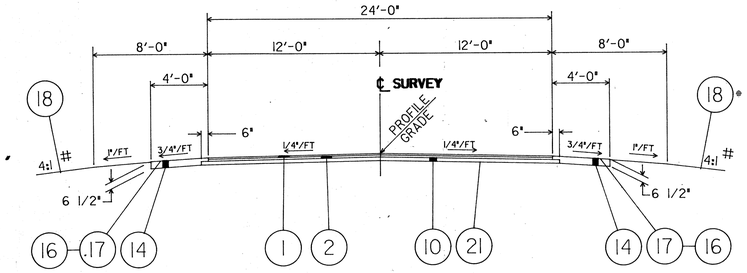
TYPICAL SECTIONS

TYPE 446 ON 301

FHWA REGION	STATE	PROJECT	
5	OHIO		

19
345

AUGLAIZE COUNTY
AUG-33-13.44



NO. 15

NORMAL SECTION

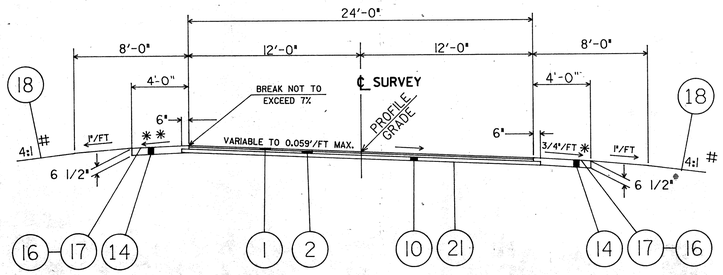
LIMITING STATIONS

CANNING FACTORY RD.	STA.51+89.18 TO STA.52+80.42
NEW STREET	STA.10+12.00 TO STA.13+14.97
WAPA STREET	STA.10+12.40 TO STA.12+45.13
SERVICE RD. NO.1	STA.17+08.00 TO STA.38+54.32
PRESAR RD.	STA. 3+56.50 TO STA. 5+42.44
DEARBAUGH RD.	STA. 21+75.73 TO STA. 22+78.14
DEARBAUGH RD.	STA. 15+26.13 TO STA. 16+50.91

} NO BERMS REQUIRED ON THESE ROADS

NOTE: SEE PAVEMENT CODES ON SHEET 13 .

* OR PAV'T. SLOPE WHICHEVER IS GREATER
** VARIES 3/4"/FT. TO 1/8"/FT.
*** VARIES 3/4"/FT. TO 1/4"/FT.
\# UNLESS OTHERWISE SHOWN ON X-SECTIONS

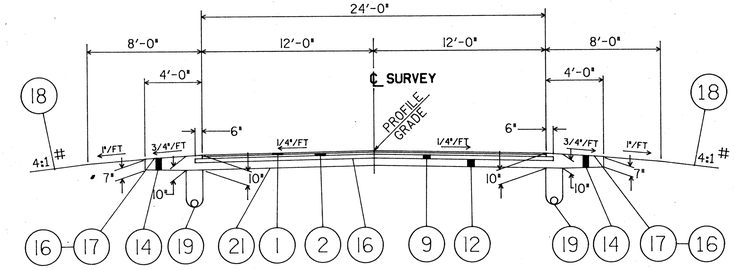


NO. 16

SUPERELEVATED SECTION

LIMITING STATIONS

CANNING FACTORY RD.	STA.31+62.36 TO STA.43+34.10	
CANNING FACTORY RD.	STA.43+34.10 TO STA.51+89.18	(OPPOSITE HAND)

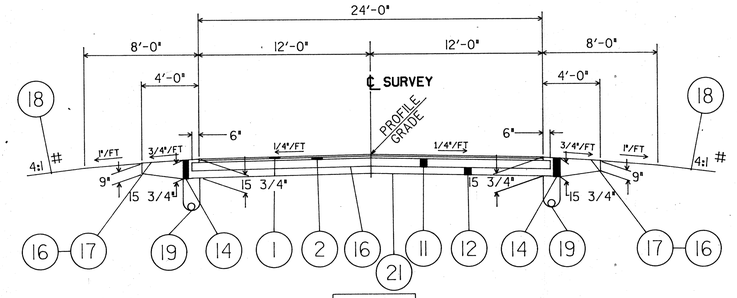


NO. 17

NORMAL SECTION

LIMITING STATIONS

ASHLAND STREET STA. 9+09.31 TO STA.36+92.47
ASHLAND STREET STA.37+17.03 TO STA.37+64.53

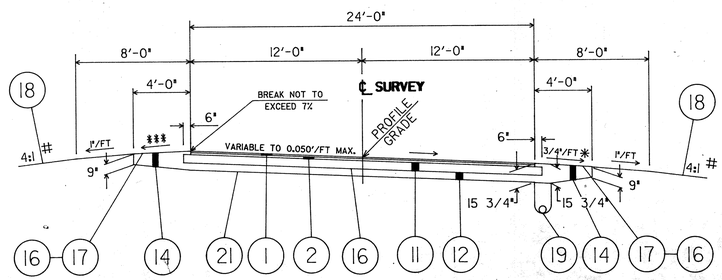


NO. 18

NORMAL SECTION

LIMITING STATIONS

HARDIN PIKE STA.8+00.00 TO STA.20+79.15



NO. 19

SUPERELEVATED SECTION

LIMITING STATIONS

HARDIN PIKE	STA.20+79.15 TO STA.31+32.56	(OPPOSITE HAND)
HARDIN PIKE	STA.31+32.56 TO STA.35+70.41	

GENERAL NOTES

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 800 SQ. FT. OF FLOOR SPACE. PAYMENT SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

UNDERGROUND UTILITIES

THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

ELECTRIC	OHIO POWER CO. P.O. BOX 210 LIMA, OHIO 45802 (419) 222–9010 J.D. MEYERS	GAS	WEST OHIO GAS CO. 150 S. JACKSON STREET LIMA, OHIO 45801 (419) 226–4700 VERN SCHULTE
ELECTRIC	CITY OF WAPAKONETA LIGHT DEPT. 102 S. PERRY STREET WAPAKONETA, OHIO 45895 (419) 738–7713 LOUIS KNOCK	GAS	MID VALLEY PIPELINE CO. 985 W. BUCKEYE RD. LIMA, OHIO 45804 (419) 229–4100 GEORGE FLETCHER
TELEPHONE	WAPAK TELEPHONE SERVICE CO. 2 WILLIPIE STREET WAPAKONETA, OHIO 45895 (419) 738–2118 V.G. HUDSON	RAILROAD	CSX TRANSPORTATION MANAGER ENGINEERING P.O. BOX 3316 LIVONIA, MICHIGAN 48150 (313) 464–5662
WATER	CITY OF WAPAKONETA WATER DEPT. 102 S. PERRY STREET WAPAKONETA, OHIO 45895 (419) 738–7713 LOUIS KNOCK	CABLE T.V.	WARNER CABLE T.V. 120 W. AUGLAIZE STREET WAPAKONETA, OHIO 45895 (419) 738–4728 BILL LAMBERT

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING COURSES WITHIN THE LIMITS OF RESURFACE ONLY SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PREVIOUS CONSTRUCTION PLANS SHOWING THE ORIGINAL ALIGNMENT AND PROFILE GRADE ARE ON FILE FOR INSPECTION IF NECESSARY AT THE ODOT DISTRICT 7 OFFICE AS PROJECT NO. AUG–33–(11.50) (16.49).

PROJECT TRANSITIONS AND FEATHERS

THE LENGTH OF PROJECT TRANSITIONS AND FEATHERS ARE INDICATED ON THE PLAN SHEETS OR DETAIL SHEET. THE FEATHER TYPE, BUTT–TYPE JOINT, ARE SHOWN ON THE PLANS. REFER TO STANDARD CONSTRUCTION DRAWING BP–5 FOR FEATHERING DETAILS.

ITEM 407, TACK COAT

THE RATE OF APPLICATION OF 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT, AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATED PURPOSES ONLY.

JOINT SEALERS

ALL REFERENCES TO 705.01 OR 705.02, APPEARING ON STANDARD DRAWINGS OR ON THE PLANS, SHALL BE CONSIDERED TO READ 705.04.

ACCESS TO PROJECT AREA

PRIOR TO THE START OF ANY OPERATIONS REQUIRING THE ENTRY OR EXITING FROM U.S.R. 33 OR CONTIGUOUS ROADWAYS, THE CONTRACTOR MUST SUBMIT AND HAVE HIS PLANS FOR TRAFFIC CONTROL APPROVED BY THE DIRECTOR. ALL CONSTRUCTION TRAFFIC MUST USE THE DESIGNATED ENTRY AND EXIT POINTS UNLESS OTHERWISE APPROVED BY THE DIRECTOR. IF ENTRY THROUGH AN EXISTING L/A LINE IS TO BE MADE, A PERMIT WILL BE REQUIRED BY THE CONTRACTOR FROM O.D.O.T.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN TEN (10) FEET OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT–OF–WAY LINE, IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS .

WATERING AND MOWING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

659	WATER	400 M GAL.
659	MOWING	800 M SQ. FT.

LOCATION OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER, FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

207	TEMPORARY SEEDING AND MULCHING	75,000 SQ. YD.
207	STRAW OR HAY BALES	200 EACH
207	TEMPORARY SLOPE DRAINS	200 LIN. FT.
207	TEMPORARY BENCHES, DIKES DAMS AND SEDIMENT BASINS	500 CU. YD.
601	TYPE C ROCK CHANNEL PROTECTION WITHOUT FILTER.	20 CU. YD.
659	MOWING	800 M SQ. FT.
659	COMMERCIAL FERTILIZER	16 TON
659	REPAIR SEEDING AND MULCHING	20,000 SQ. YD.
659	WATER	200 M. GAL.

EROSION CONTROL

ITEMS 601, 660 & 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS, AND TURF OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE 660. THE ENGINEER SHALL CHECK AND NON–PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

CONDUIT END TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE RIPRAP, ROCK CHANNEL PROTECTION, SODDING, ETC.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS ON STANDARD DRAWING MC–1, FOR MONUMENT LOCATIONS SEE SHEET 327.

ITEM 203, PROOF ROLLING

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

124,264/3000 = 41 HRS.

EXTENSION OVER ONE CONSTRUCTION SEASON

IF THIS PROJECT EXTENDS OVER MORE THAN ONE CONSTRUCTION SEASON, THE SURFACE COURSE MUST BE IN PLACE OVER THE WINTER. NO BINDER COURSE, LEVELING COURSE, BASE COURSE OR INTERMEDIATE COURSE WILL BE PERMITTED TO BE EXPOSED OVER THE WINTER MONTHS BETWEEN CONSTRUCTION SEASONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE PAVEMENT WORK TO MEET THESE CONDITIONS.

CONNECTION TO EXISTING PIPE

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED CONDUIT.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS.

EROSION CONTROL PADS AND ANIMAL GUARDS

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF FARM DRAINS, AS PER STANDARD CONSTRUCTION DRAWING MC–4, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND THE ANIMAL GUARDS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 603,SIZE CONDUIT, TYPE F.

CONTRACTION AND EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN EXPANSION AND CONTRACTION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL, IN ALL CASES, BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS AND THE SPECIFICATIONS.

GENERAL NOTES

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS UNDER THE DIRECTION OF THE ENGINEER. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY ITEM 603 CONDUIT, TYPE B, ONE (1) COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF THE ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603 CONDUIT, TYPE F. THE OPTIMUM OUTLET ELEVATION SHALL BE, IF POSSIBLE, ONE (1) FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILE WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY ITEM 603, TYPE E, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION, AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

NECESSARY BENDS AND BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE.

ITEM 603	6" CONDUIT, TYPE E	100 LIN. FT.
ITEM 603	6" CONDUIT, TYPE F	300 LIN. FT.

QUANTITIES CARRIED TO SHEET 33

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

THE CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT–OF–WAY FOR SALVAGE BY COUNTY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 202 ITEM.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE, THE CONTRACTOR AND ANY LOCAL OFFICIALS INVOLVED WITH THE PROJECT SHALL MAKE AN INSPECTION OF THE EXISTING DRAINAGE SYSTEM AND SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS AND CONDUITS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT CONDUIT ITEMS OF THE CONTRACT.

PROPOSED CATCH BASINS, INLETS AND MANHOLES

PROPOSED INVERT AND LID ELEVATIONS AND HORIZONTAL LOCATIONS WERE DEVELOPED FROM THE BEST FIELD INFORMATION AVAILABLE AT THE TIME. TO ENSURE THAT THE ELEVATIONS AND LOCATIONS BLEND TO THE FIELD CONDITIONS AND PROVIDE A FUNCTIONAL SYSTEM, THE ENGINEER SHALL RE–EVALUATE THE LAYOUT AFTER A PRELIMINARY STAKING AND MAKE APPROPRIATE FIELD ADJUSTMENTS BEFORE ANY PROPOSED WORK PROCEDES.

REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING, EXCEPT THAT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED:

SIZES	NO. TREES	NO. STUMPS	TOTAL
12" TO 24"	14	0	14
24" TO 36"	2	1	3
36" TO 60"	1	0	1

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE OF THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT–OF–WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

(QUANTITIES CARRIED TO SHEET 33)

ITEM SPECIAL SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS, 705.04

LOCATION	DESCRIPTION	PAV'T LENGTH	SPACING	NO. OF CUT	PAV'T WIDTH	TOTAL CUT LENGTH
USR 33 W.B.	PAV'T & BERMS	9229	20'	462	38'	17,556'
USR 33 E.B.	PAV'T & BERMS	9645	20'	483	38'	18,354'
RAMP A (H.P.)	PAV'T & BERMS	2094	20'	105	25'	2,625'
RAMP A (H.P.)	ACCEL.. LANE & NOSE	1168	20'	59	14.32'	845'
RAMP B (H.P.)	PAV'T & BERMS	1870	20'	94	25'	2,350'
RAMP B (H.P.)	DECEL. LANE & NOSE	800	20'	40	12.12'	485'
RAMP C (H.P.)	PAV'T & BERMS	1604	20'	81	25'	2,025'
RAMP C (H.P.)	DECEL. LANE & NOSE	615	20'	31	17'	527'
RAMP D (H.P.)	PAV'T & BERMS	1296	20'	65	25'	1,625'
RAMP D (H.P.)	ACCEL. LANE & NOSE	927	20'	47	11.6'	545'
RAMP B (CR–25A)	PAV'T & BERMS	381	20'	20	27'	540'
RAMP B (CR–25A)	DECEL. LANE & NOSE	800	20'	40	13.98'	559'
RAMP C (CR–25A)	PAV'T & BERMS	421	20'	22	27'	594'
RAMP C (CR–25A)	ACCEL. LANE & NOSE	817	20'	41	15.12'	620'
TOTAL CARRIED TO SHEET 33						49,250'

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR ACTUAL TIME NECESSARY TO REMOVE, GRADE, AND REINSTALL GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS REFERENCES TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 861, 957, 958 AND 961 ON THE TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS IN THESE PLANS SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEMS 630, 631, 633, 730, 731 AND 733.

ITEM SPECIAL – TEMPORARY IMPACT ATTENUATOR, G.R.E.A.T. SYSTEM MODEL NO. 200200 NF6G-CZ BIDERECTIONAL BIP

This work shall consist of providing, maintaining, and subsequently removing an impact attenuator unit and accessories supplied by Energy Absorption Systems Inc., IBM Plaza, Chicago, Illinois 60611, placed in accordance with the manufacturer's specifications and plan detail sheets or as directed by the Engineer.

The nose of the attenuator shall be marked with three evenly spaced 4" horizontal stripes of white reflective material. The fender panels shall be marked with white reflective material in 2 vertical stripes 4" in width. The center of the first stripe shall be located 8" from the rear edge of each panel and the center of the second stripe shall be located 2'11" from the rear edge of each panel. The unit shall be bi-directional and is identified as model number G.R.E.A.T. SYSTEM 200200 NF6G-CZ with transition panel.

In addition to the quantities listed in the General Summary, at least one additional complete unit shall be on hand at all times to replace damages units. In any case, when a unit is damaged it shall be repaired or replaced within 12 hours.

Payment shall be at the unit price bid for each, Item Special, which shall be full payment for furnishing, installing at the specified locations, including all labor, tools, equipment and miscellaneous hardware and materials necessary to complete this item of work in place. Also included in the above cost shall be the removal of the temporary impact attenuator and installation at the location specified for the next Phase of construction.

ITEM SPECIAL - DITCH EROSION PROTECTION TYPE I
FOR DETAILS SEE SUPPLEMENTAL SPECS. 839 OR 840

GENERAL NOTES

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WHERE ITEM 605 PIPE UNDERDRAINS, AS PER PLAN ARE SHOWN ON PLAN

~~ITEM 605 PIPE UNDERDRAINS, AS PER PLAN~~

~~THE BACKFILL FOR ALL UNDERDRAINS WITH THE ABOVE DESCRIPTION SHALL BE EXCLUSIVELY #8 NATURAL AGGREGATE. NO SAND OR SLAG WILL BE PERMITTED.~~

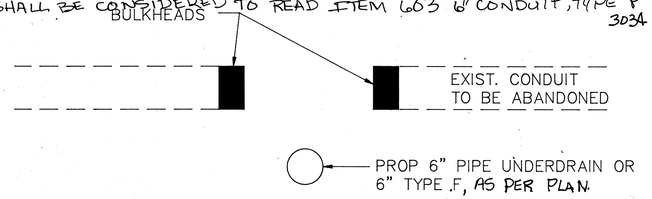
~~THE OUTLETS FOR THE UNDERDRAIN SYSTEM SHALL BE CONSTRUCTED AS SOON AS POSSIBLE AFTER THE UNDERDRAIN IS INSTALLED.~~

IT SHALL BE CONSIDERED TO READ ITEM 605 PIPE UNDERDRAINS

BULKHEADS

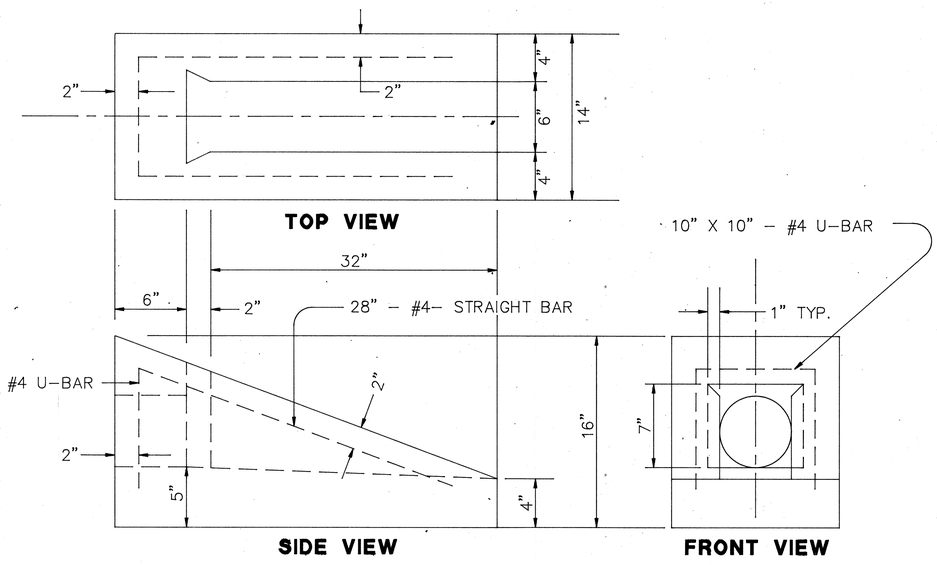
EXISTING CONDUITS, WHICH ARE TO BE ABANDONED, MAY BE CUT OPEN WHILE TRENCHING TO INSTALL THE 6" CONDUITS. BULKHEADS SHALL BE CONSTRUCTED AT THESE OPEN ENDS OF THE EXISTING PIPES. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES. LOCATIONS FOR BULKHEADS HAVE BEEN SHOWN BELOW AND HAVE BEEN INDICATED ON THE PLANS. THE COST OF THE BULKHEADS SHALL BE INCLUDED IN THE COST OF THE 6" CONDUIT.

WHERE ITEM ITEM 603 6" CONDUIT, TYPE F, AS PER PLAN IS SHOWN ON PLAN IT SHALL BE CONSIDERED TO READ ITEM 603 6" CONDUIT, TYPE F 707.17 NON-PERFORATED, ASTM 3034 SDR 35 OR SUPL. SPEC. 931



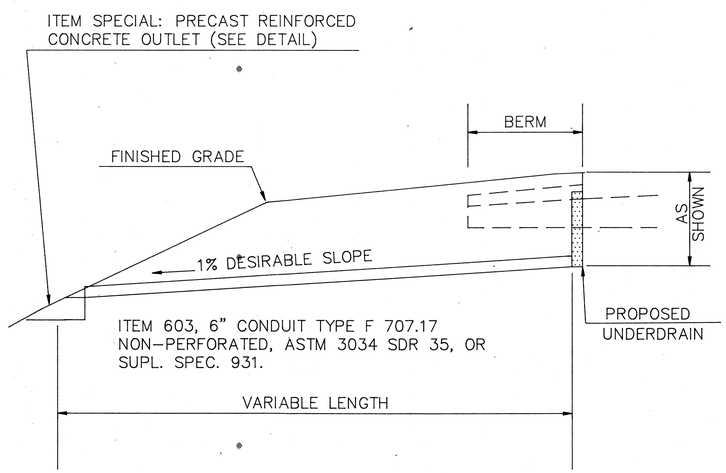
BULKHEAD LOCATIONS

U.S.R. 33 STATION	SIDE	EX. PIPE SIZE	NO. BULKHEADS
701+05	LT. & RT.	TWIN 21" CONC.	8
710+05	LT. & RT.	15" CONC.	4
727+65	RT.	15" CONC.	2
728+55	RT.	21" CONC.	2
738+56	LT. & RT.	TWIN 30"X19" CONC.	8



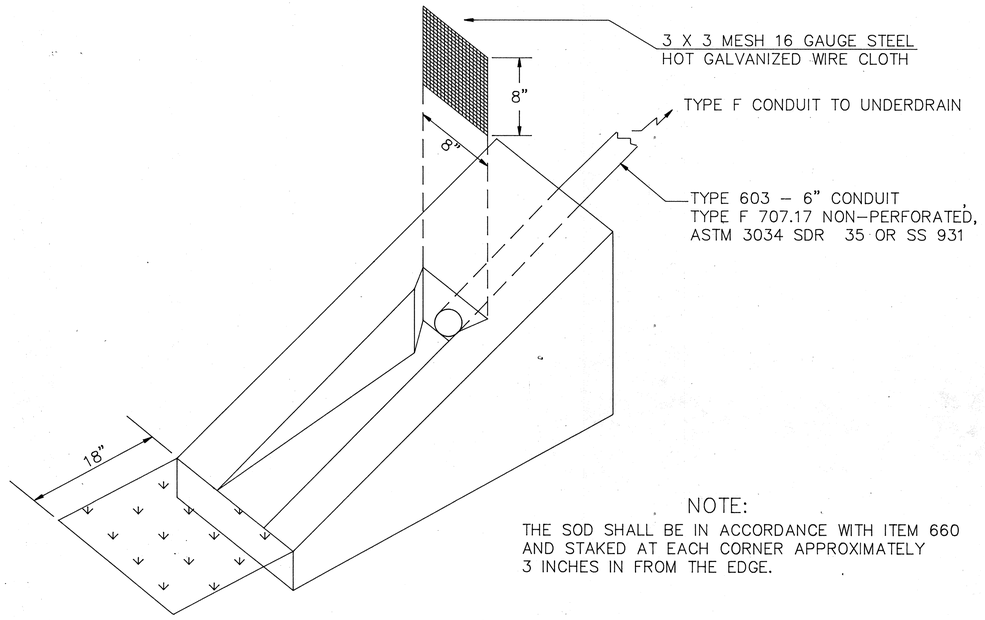
ITEW SPECIAL – PRECAST REINFORCED CONCRETE OUTLET

THE CONCRETE OUTLET SHALL MEET THE REQUIREMENTS OF ITEM 604 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS. PAYMENT SHALL BE MADE ON AN EACH BASIS. PAYMENT SHALL INCLUDE THE COST OF THE SOD AND WIRE CLOTH.



NOTE:

FOR UNDERDRAIN OUTLETS INTO CATCH BASINS THE ABOVE TYPE F CONDUIT SHALL BE USED ENTIRELY BETWEEN THE UNDERDRAIN AND CATCH BASIN.



NOTE:

THE SOD SHALL BE IN ACCORDANCE WITH ITEM 660 AND STAKED AT EACH CORNER APPROXIMATELY 3 INCHES IN FROM THE EDGE.

MAINTENANCE OF TRAFFIC

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GENERAL

IT IS THE INTENTION TO PERFORM THE REQUIRED WORK WITH THE LEAST INCONVENIENCE TO, AND THE MAXIMUM SAFETY OF THE CONTRACTOR AND THE TRAVELING PUBLIC. IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE BELOW PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED IN EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING, BY THE DIRECTOR.

TRAFFIC IS TO BE MAINTAINED IN A UNIFORM PATTERN THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT AND IS NOT TO BE SUBJECTED TO CONSTANT LANE SHIFTS. TRAFFIC SHALL ALSO BE MAINTAINED AT ALL RAMPS AND CROSSROADS EXCEPT AS DIRECTED IN THESE NOTES.

THE CONTRACTOR SHALL FURNISH AND INSTALL "ROAD CONSTRUCTION NEXT ( ) MILES" SIGNS (OC–6) AT THE BEGINNING AND END OF THE PROJECT.

BEFORE THE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED TWENTY–FOUR (24) HOURS PER DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR PLACING OR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

THE STANDARD DEVICES FOR CLOSING ANY LANES TO TRAFFIC SHALL BE WEIGHTED, PROPERLY REFLECTORIZED DRUMS OR TEMPORARY PRECAST CONCRETE BARRIERS AS DESIGNATED HEREIN. STEEL DRUMS PLACED ON NEWLY PAVED SURFACE SHALL BE PLACED ON ONE–HALF INCH (1/2") PLYWOOD. CONES MAY BE USED IN DAYTIME IN LIEU OF DRUMS OR CONCRETE BARRIERS IF APPROVED BY THE ENGINEER.

CONES MUST BE WEIGHTED TO INCREASE STABILITY BY DOUBLE STACKING, SANDBAGS OR OTHER METHODS APPROVED BY THE ENGINEER. METAL RINGS OF ANY TYPE OVER THE CONE WILL NOT BE PERMITTED.

THE USE OF BERMS TO MAINTAIN TRAFFIC, UNLESS NOTED ELSEWHERE IN THESE PLANS OR APPROVED BY THE ENGINEER, IS PROHIBITED. SHOULD ANY EXISTING OR NEW BERM AREAS BECOME DAMAGED OR DESTROYED DUE TO THE CONTRACTOR'S NEGLIGENCE OR FAILURE TO PROVIDE ADEQUATE SIGNS, BARRICADES, CONES, FLAGGERS OR THE TRAFFIC CONTROL DEVICES, THE RESTORATION OF THE BERMS WILL BE AT THE CONTRACTOR'S EXPENSE.

WHEN ONE LANE OF A DIRECTIONAL PAVEMENT IS TO BE CLOSED OR WHEN A MEDIAN CROSSOVER IS TO BE PUT INTO OPERATION, A LAW ENFORCEMENT OFFICER WITH PATROL CAR SHALL BE PRESENT DURING THE TIME THAT TRAFFIC CONTROL DEVICES ARE BEING SETUP OR BEING REMOVED AND ALSO WHEN THERE IS A SUBSTANTIAL SHIFT IN THE CLOSURE POINT OR WHEN A NEW LANE CLOSURE ARRANGEMENT OR CROSSOVER ARRANGEMENT IS INITIATED.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF ANY LANE CLOSURE. INFORMATION REGARDING ARRANGEMENTS BY THE CONTRACTOR FOR A LAW ENFORCEMENT OFFICER WITH A PATROL CAR MAY BE OBTAINED BY CONTACTING THE OHIO HIGHWAY PATROL, 660 EAST MAIN STREET, COLUMBUS, OHIO, TELEPHONE (614) 466–2660.

LATERAL RAMPING

THE CONTRACTOR SHALL NOT PERMIT TRAFFIC TO MOVE LATERALLY ACROSS PAVEMENTS OF TWO DIFFERENT ELEVATIONS, WHICH HAS RESULTED FROM EITHER PLANING OR PAVING OPERATIONS, WITHOUT PROVIDING ASPHALT RAMPING. THE RAMPING SHALL HAVE A MAXIMUM SLOPE OF SIX TO ONE. RAMPING WILL NOT BE REQUIRED FOR ELEVATION DIFFERENCES OF ONE HALF INCH OR LESS OR AS DIRECTED BY THE ENGINEER.

ITEM SPECIAL – REPLACEMENT SIGNS

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC, FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR, SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE BID PRICE PER SQUARE FOOT FOR "ITEM SPECIAL – REPLACEMENT SIGNS", AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED SIGNS, HARDWARE, SUPPORTS, ETC. REPLACEMENT SIGNS SHALL BE NEW, BUT OTHER MATERIALS MAY BE USED, SUBJECT TO APPROVAL BY THE ENGINEER

ITEM SPECIAL · REPLACEMENT SIGNS 100 SQ. FT.

ITEM SPECIAL – REPLACEMENT DRUMS

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLAN, SPECIFICATIONS, AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER AND PAID FOR UNDER "ITEM SPECIAL – REPLACEMENT DRUMS". PAYMENT FOR EACH NEW DRUM SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM AND PROVIDING AND MAINTAINING NEW DRUMS IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUMS.

ITEM SPECIAL REPLACEMENT DRUMS 200 EACH

QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 404	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	100 CU. YD.
ITEM 410	TRAFFIC COMPACTED SURFACE TYPE A OR B	100 CU. YD.
ITEM 616	CALCIUM CHLORIDE	100 TON
ITEM 616	WATER	200 M. GAL
ITEM SPECIAL	LAW ENFORCEMENT OFFICER WITH PATROL CAR	750 HOURS

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES REQUIRED BY THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION, SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PAVEMENT WORK

EASTBOUND AND WESTBOUND TRAFFIC ON U.S.R. 33 SHALL BE MAINTAINED AT ALL TIMES BY THE USE OF EXISTING AND PROPOSED PAVEMENT, BERMS, AND CROSSOVERS AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS. THE TRAFFIC ON HARDIN PIKE SHALL BE MAINTAINED USING A DETOUR VIA THE PROPOSED EXTENSION OF ASHLAND AVENUE, DEARBAUGH ROAD, AND CANNING FACTORY ROAD. THE WORK ON THIS PROJECT WILL BE DONE IN FOUR (4) PHASES TO PROVIDE THE MAXIMUM TRAFFIC FLOW CONTINUITY WITH THE MINIMUM INCONVENIENCE TO THE PUBLIC AND STILL PERMIT THE CONTRACTOR THE FLEXIBILITY NEEDED TO EXPEDITE COMPLETION OF CONSTRUCTION, THE FOLLOWING SEQUENCE OF OPERATIONS WILL BE USED:

PHASE I

PHASE I SHALL INCLUDE:

1. THE CONSTRUCTION OF ASHLAND AVENUE EXTENDED FROM HARDIN PIKE WESTWARD TO DEARBAUGH ROAD.
2. THE CONSTRUCTION OF RELOCATED CANNING FACTORY ROAD FROM DEARBAUGH ROAD EASTWARD TO HARDIN PIKE.
3. THE CONSTRUCTION OF THE INTERSECTION OF HARDIN PIKE AND RELOCATED CANNING FACTORY AND ALL WORK ON HARDIN PIKE SOUTH OF THIS INTERSECTION INCLUDING THE STRUCTURE REPLACEMENT AT STATION 34+30 ON HARDIN PIKE. THE TRAFFIC ON HARDIN PIKE SOUTH OF EXISTING CANNING FACTORY ROAD WILL BE DETOURED DURING THE TIME OF CONSTRUCTION OF THE INTERSECTION OF CANNING FACTORY ROAD AND HARDIN PIKE. THIS DETOUR WILL BE IN EFFECT A MAXIMUM OF THIRTY (30) DAYS.
4. THE CONSTRUCTION OF THE INTERSECTION OF HARDIN PIKE AND ASHLAND AVENUE. TRAFFIC SHALL BE MAINTAINED DURING THE CONSTRUCTION OF THIS INTERSECTION. THE CONTRACTOR MAY REDUCE HARDIN PIKE TO ONE LANE DURING PERIODS OF CONSTRUCTION AT THIS INTERSECTION USING FLAGGERS, BUT TWO LANES OF TRAFFIC WILL BE MAINTAINED AT ALL TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
5. THE CONSTRUCTION OF U.S.R. 33 EASTBOUND FROM STATION 727+00 TO STATION 729+00. THE TRAFFIC ON DEARBAUGH ROAD SHALL BE DETOURED FOR A MAXIMUM OF 30 CALENDAR DAYS DURING THE CONSTRUCTION OF THIS SECTION OF U.S.R. 33. IT WILL BE NECESSARY TO COMPLETE PHASE I. SECTIONS 1–4, AND TO KEEP HARDIN PIKE OPEN TO SERVE AS THE DETOUR FOR DEARBAUGH ROAD DURING THIS CONSTRUCTION. WHEN THIS SECTION OF U.S.R. 33 IS COMPLETE, DEARBAUGH ROAD WILL BE REOPENED TO TRAFFIC AND SERVE AS A DETOUR DURING CONSTRUCTION ON HARDIN PIKE AND EASTBOUND U.S.R. 33. SEE SHEET 26 PLAN I FOR DEARBAUGH ROAD PLAN DURING CONSTRUCTION.
6. THE CONSTRUCTION OF NEW STREET FROM KONETA STREET NORTHWARD TO WAPAK STREET.
7. THE CONSTRUCTION OF SERVICE ROAD NO. 1 FROM DEARBAUGH ROAD WEST. THIS ROAD MUST BE COMPLETED TO PROVIDE ACCESS TO THE BERRES PROPERTY BEFORE WORK BEGINS ON U.S.R. 33 IN THIS AREA.

PHASE II

PHASE II SHALL INCLUDE:

1. THE CONSTRUCTION OF U.S.R. 33 EASTBOUND FROM STATION 693+00 TO STATION 773+00.
2. THE CONSTRUCTION OF THE U.S.R. 33 EASTBOUND BRIDGE OVER HARDIN PIKE.
3. THE CONSTRUCTION OF THE U.S.R. 33 EASTBOUND BRIDGE OVER CR–25A AND THE B&O RAILROAD.
4. THE CONSTRUCTION OF RAMP "B" FROM U.S.R. 33 TO HARDIN PIKE.
5. THE CONSTRUCTION OF RAMP "D" FROM U.S.R. 33 TO HARDIN PIKE.

PHASE III

PHASE III SHALL INCLUDE:

1. THE CONSTRUCTION OF THE TEMPORARY CROSSOVER AT STATION 680+00 ON U.S.R. 33 TO MOVE THE EASTBOUND TRAFFIC OF U.S.R. 33 TO THE WESTBOUND SOUTH LANE OF U.S.R. 33. SEE ITEM 1, PHASE IV.
2. THE CONSTRUCTION OF THE TEMPORARY CROSSOVER AT STATION 796+00 ON U.S.R. 33 TO MOVE EASTBOUND TRAFFIC OF U.S.R. 33 FROM THE WESTBOUND SOUTH LANE TO THE EASTBOUND LANES OF U.S.R. 33. SEE ITEM 2 PHASE IV.
3. THE CONSTRUCTION OF U.S.R. 33 EASTBOUND FROM STATION 680+00 TO STATION 693+00.
4. THE CONSTRUCTION OF U.S.R. 33 EASTBOUND FROM STATION 772+00 TO STATION 781+73.41.
5. THE CONSTRUCTION OF THE IMPROVEMENTS FOR RAMP "B" AT THE U.S.R. 33 AND CR–25A INTERCHANGE. RAMP "B" MAY BE CLOSED ONCE FOR A PERIOD NOT TO EXCEED 60 CALENDAR DAYS.

MAINTENANCE OF TRAFFIC

AUGLAIZE COUNTY
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PHASE IV

PHASE IV SHALL INCLUDE:

1. THE CONSTRUCTION OF THE TEMPORARY CROSSOVER AT STATION 680+00 ON U.S.R. 33 TO MOVE THE WESTBOUND TRAFFIC OF U.S.R. 33 FROM THE EASTBOUND NORTH LANE TO THE WESTBOUND LANES OF U.S.R. 33. THIS CROSSOVER WILL BE CONSTRUCTED IN CONJUNCTION WITH ITEM 1 OF PHASE III
2. THE CONSTRUCTION OF THE TEMPORARY CROSSOVER AT STATION 796+00 ON U.S.R. 33 TO MOVE THE WESTBOUND TRAFFIC OF U.S.R. 33 TO THE EASTBOUND NORTH LANE OF U.S.R. 33. THIS CROSSOVER WILL BE CONSTRUCTED IN CONJUNCTION WITH ITEM 2 OF PHASE III.
3. THE CONSTRUCTION OF U.S.R. 33 WESTBOUND FROM STATION 727+00 TO STATION 729+00. THE TRAFFIC ON DEARBAUGH ROAD WILL BE DETOURED FOR A MAXIMUM OF 30 CALENDAR DAYS DURING THE CONSTRUCTION OF THIS SECTION OF U.S.R. 33. HARDIN PIKE MUST BE OPEN FOR THESE 30 DAYS TO SERVE AS A DETOUR FOR DEARBAUGH ROAD. WHEN THIS SECTION OF U.S.R. 33 IS COMPLETE, DEARBAUGH ROAD WILL BE OPENED TO TRAFFIC AND HARDIN PIKE CAN BE CLOSED FOR CONSTRUCTION. SEE SHEET 26, PLAN II.
4. THE CONSTRUCTION OF THE WESTBOUND LANES OF U.S.R. 33 FROM STATION 680+00 TO STATION 727+00 AND FROM STATION 729+00 TO STATION 781+73.41.
5. THE CONSTRUCTION OF THE U.S.R. 33 WESTBOUND BRIDGE OVER HARDIN PIKE.
6. THE CONSTRUCTION OF THE U.S.R. 33 WESTBOUND BRIDGE OVER CR–25A AND THE B&O RAILROAD.
7. THE CONSTRUCTION OF RAMP "A" FROM U.S.R. 33 TO HARDIN PIKE.
8. THE CONSTRUCTION OF RAMP "C" FROM U.S.R. 33 TO HARDIN PIKE.
9. THE CONSTRUCTION OF THE IMPROVEMENTS FOR RAMP "C" AT THE U.S.R. 33 AND CR–25A INTERCHANGE. RAMP "C" MAY BE CLOSED ONCE FOR A PERIOD NOT TO EXCEED 60 CALENDAR DAYS.
10. THE CONSTRUCTION OF HARDIN PIKE FROM ASHLAND AVENUE SOUTH TO RELOCATED CANNING FACTORY ROAD. HARDIN PIKE MAY BE CLOSED DURING PHASE II, III, AND IV FOR HARDIN PIKE AND RELATED CONSTRUCTION. THE CLOSURE OF HARDIN PIKE OTHER THAN UNDER PHASE I SHALL BE LIMITED TO TWO SEPARATE CLOSURE PERIODS, THE SUM OF THE TWO CLOSURE PERIODS NOT TO EXCEED 90 CALENDAR DAYS.
11. THE CONSTRUCTION OF SERVICE ROAD NO. 2 MAY BE COMPLETED DURING PHASES II, III, OR IV.

GENERAL CONSTRUCTION WORK NOTES

1. ACCESS TO ALL PROPERTIES THAT ARE TO REMAIN ON HARDIN PIKE, ASHLAND AVENUE, KONETA STREET, WAPA STREET, AND DEARBAUGH ROAD MUST BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
2. WAPA STREET WILL BE THE MAJOR ENTRANCE TO THE DEVELOPMENT EAST OF HARDIN PIKE SO IT WILL BE NECESSARY FOR THE CONTRACTOR TO EXPEDITE CONSTRUCTION OF HARDIN PIKE BETWEEN ASHLAND AVENUE AND WAPA STREET. DURING THE CONSTRUCTION OF THIS PORTION OF HARDIN PIKE, ASHLAND AVENUE MUST REMAIN OPEN FOR ENTRANCE TO THE AREA EAST OF HARDIN PIKE. THE CONTRACTOR MAY CLOSE HARDIN PIKE BETWEEN ASHLAND AVENUE AND WAPA STREET ONCE FOR A PERIOD NOT TO EXCEED THIRTY (30) CALENDAR DAYS FOR PURPOSES OF CONSTRUCTION.

GENERAL PAVEMENT WORK

THE PASSING LANES OF U.S.R. 33 MAY BE CLOSED WHILE THE CONTRACTOR IS CONSTRUCTING OR REMOVING CROSSOVERS AS SHOWN ON THE PLANS. THE LENGTH OF CLOSURE SHALL BE RESTRICTED TO THE LENGTH NECESSARY FOR THE CONSTRUCTION OF THE CROSSOVERS.

THE PLACEMENT OF THE SUBBASE AND PAVEMENT ITEMS FOR THE CROSSOVERS SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS AND NO TRENCH SHALL BE LEFT OPEN OVERNIGHT. WHEN WORK IS SUSPENDED BECAUSE OF INCLEMENT WEATHER OR FOR ANY OTHER REASON, THE EXCAVATION FOR THE UNCOMPLETED CROSSOVER SHALL BE BACKFILLED AS DIRECTED BY THE ENGINEER AND THE ROAD OPENED TO FULL TRAFFIC.

THE CONTRACTOR MAY CLOSE ONE LANE OF ONE DIRECTION OF U.S.R. 33 TO PLACE THE TEMPORARY PAVEMENT MARKINGS, DRUMS, AND OTHER TRAFFIC CONTROL DEVICES THAT ARE REQUIRED TO BE IN PLACE BEFORE BEGINNING THE TWO–WAY TRAFFIC OPERATION DESCRIBED HEREIN. THE DRUMS AND CONCRETE BARRIERS SHALL BE PLACED IN THE DIRECTION OF TRAVEL. ONE LAW ENFORCEMENT OFFICER WITH PATROL CAR SHALL BE PRESENT AT THE BEGINNING OF THE LANE CLOSURE AND ONE LAW ENFORCEMENT OFFICER WITH PATROL CAR SHALL BE PRESENT IN THE AREA WHERE THE TRAFFIC CONTROL DEVICES ARE BEING PLACED.

UPON COMPLETION OF THE TEMPORARY CROSSOVERS AND PLACEMENT OF THE TRAFFIC CONTROL DEVICES, THE CONTRACTOR WILL CLOSE EITHER THE PROPOSED EASTBOUND LANES OR THE PROPOSED WESTBOUND LANES OF U.S.R. 33 AS DESIGNATED IN THE PHASE DESCRIPTIONS. WHILE BOTH LANES ARE CLOSED IN ONE DIRECTION, THE CONTRACTOR SHALL MAINTAIN TWO–WAY TRAFFIC BY USE OF THE OTHER PAIR OF LANES OF U.S.R. 33 AND THE CROSSOVERS.

A LAW ENFORCEMENT OFFICER WITH PATROL CAR SHALL PATROL THE PROJECT DURING THE FIRST THREE (3) HOURS THAT THE TWO–WAY TRAFFIC IS IN OPERATION. THIS APPLIES ONLY WHEN THE TEMPORARY CROSSOVERS ARE BEING UTILIZED AND DOES NOT APPLY TO THE EXISTING CROSSOVER BEING USED IN PHASE I. AT LEAST TWO (2) LAW ENFORCEMENT OFFICERS WITH PATROL CARS WILL BE PRESENT WHEN TWO–WAY OPERATION IS BEING CHANGED FROM ONE PAIR OF LANES TO THE OTHER PAIR OF LANES.

ITEM 625 TEMPORARY LIGHTING, AS PER PLAN

THE CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING FOR THE TEMPORARY MEDIAN CROSSOVERS ON U.S.R. 33 WITHIN THE APPROXIMATE STATION LIMITS AS FOLLOWS:

LOCATION	FROM	TO
U.S.R. 33	STATION 676+00	STATION 684+00
U.S.R. 33	STATION 786+00	STATION 794+00

TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF ONE AND TWO–TENTHS (1.2) FOOT CANDLES AND SHALL BE INSTALLED BEFORE THE DESIGNATED AREA ARE USED FOR THE MAINTENANCE OF TRAFFIC.

THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF HIS PROPOSED DETAILED TEMPORARY LIGHTING PLANS TO THE ENGINEER FOR REVIEW AND APPROVAL. THESE PLANS SHALL SHOW LOCATION OF POLES, LENGTH OF BRACKET ARMS, TYPE AND SIZE OF LUMINARIES AND LAMPS, MOUNTING HEIGHT, POWER SOURCE, AND OTHER PERTINENT INFORMATION.

RECONDITIONED OR APPROVED USED MATERIALS MAY BE FURNISHED FOR THE TEMPORARY LIGHTING SYSTEM. CONSTRUCTION MAY BE WITH WOOD POLES AND OVERHEAD WIRING EXCEPT IN AREAS WITHIN 30 FEET FROM EDGE OF PAVEMENT WHERE BREAKAWAY POLES WITH UNDERGROUND WIRING WILL BE REQUIRED. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE A FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. MOUNTING HEIGHT FOR TEMPORARY LUMINARIES SHALL NOT BE LESS THAN TWENTY–SEVEN (27) FEET AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE TWENTY (20) FEET. THE TEMPORARY LIGHTING INSTALLATIONS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN NO LONGER NEEDED.

THE CONTRACTOR SHALL FURNISH ALL ELECTRICAL ENERGY, MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO INSTALL, OPERATE, MAINTAIN AND REMOVE THE TEMPORARY LIGHTING.

THE LUMP SUM BID PRICE FOR "ITEM 625 – TEMPORARY LIGHTING AS PER PLAN" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO PROVIDE AND REMOVE THE TEMPORARY LIGHTING AS SPECIFIED.

ITEM 622 TEMPORARY CONCRETE BARRIER, AS PER PLAN

ITEM 622 TEMPORARY CONCRETE BARRIER, AS PER PLAN HAS BEEN PROVIDED FOR MAINTAINING TRAFFIC AS SHOWN ON SHEET 27–28. THE QUANTITIES SHOWN ARE FOR ONE PHASE OF MAINTAINING TRAFFIC ONLY. THE CONTRACTOR SHALL UTILIZE THE SAME BARRIERS IN BOTH PHASES OF CONSTRUCTION. MOVEMENT OF THE BARRIERS BETWEEN PHASES SHALL BE ACCOMPLISHED IN ONE WORKING DAY. FLAGGERS SHALL BE UTILIZED FOR PROTECTION OF VEHICULAR TRAFFIC UNTIL MOVEMENT OF THE BARRIERS IS COMPLETE AND TRAFFIC IS MAINTAINED. ALL COSTS INVOLVED IN THE REMOVING AND RE–ERECTING THE BARRIERS FOR MAINTAINING TRAFFIC SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 622 TEMPORARY CONCRETE BARRIER, AS PER PLAN.

THE END TERMINALS FOR THE TEMPORARY CONCRETE BARRIER ARE ALSO TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 622 TEMPORARY CONCRETE BARRIER, AS PER PLAN.

ITEM 614 BARRIER REFLECTORS* ARE TO BE PROPERLY INSTALLED ON ALL TEMPORARY INSTALLATIONS OF BARRIERS, THE REFLECTORS WILL BE PAID SEPARATELY UNDER ITEM 614, BARRIER REFLECTORS, TYPE B.

ITEM 615 TEMPORARY PAVEMENT, AS PER PLAN

THE TEMPORARY PAVEMENT AREA IS COMPUTED USING THE PAVED SURFACE AREA. THE COST OF CONSTRUCTING THE 2' WIDE BERMS (ITEM 617 – 6" COMPACTED AGGREGATE) SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD FOR ITEM 615 TEMPORARY PAVEMENT, AS PER PLAN.

PAYMENT

PAYMENT FOR ALL MAINTENANCE OF TRAFFIC EXCEPT FOR ITEMS DESIGNATED AS "ITEM 404, BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC", "ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B", "ITEM 614, BARRIER REFLECTORS", "ITEM 614, WORK ZONE MARKING SIGNS", "ITEM 614, TEMPORARY PAVEMENT MARKINGS", "ITEM 614, TEMPORARY RAISED PAVEMENT MARKERS", "ITEM 615 TEMPORARY PAVEMENT, AS PER PLAN", "ITEM 616, CALCIUM CHLORIDE", "ITEM 616, WATER", "ITEM 622, TEMPORARY CONCRETE BARRIER, AS PER PLAN", "ITEM 625 TEMPORARY LIGHTING, AS PER PLAN", "ITEM SPECIAL, LAW ENFORCEMENT OFFICER WITH PATROL CAR", " ITEM SPECIAL, REPLACEMENT SIGNS", "ITEM SPECIAL, REPLACEMENT DRUMS", AND "ITEM SPECIAL, ATTENUATORS (G.R.E.A.T.)" SHALL BE INCLUDED IN THE LUMP "ITEM 614, MAINTAINING TRAFFIC". ESTIMATED QUANTITIES CARRIED TO THE GENERAL SUMMARY SHEET NO. 32.

*614 BARRIER REFLECTORS
THESE REFLECTORS AND THERE MOUNTING SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 802 EXCEPT THAT SPACING SHALL BE AS SHOWN IN THE SUBSUMMARY TABLE.

614 TEMPORARY RAISED PAVEMENT MARKERS

FHWA REGION	STATE	PROJECT	
5	OHIO		

24
345

AUGLAIZE COUNTY
AUG- 33 -13.44

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING, AND SUBSEQUENTLY REMOVING TEMPORARY RAISED PAVEMENT MARKERS (TRPM'S). THE TRPM'S SHALL BE YELLOW OR WHITE, AS DESCRIBED IN THE PLAN.

MATERIAL

ALL UNITS SHALL BE OF SUFFICIENT STRENGTH AND PROPERLY SHAPED SO AS NOT TO BE DISLODGED OR BROKEN, OR THE REFLECTOR DISLODGED OR BROKEN, OR THE REFLECTOR DISLODGED OR DAMAGED BY IMPACTS FROM VEHICLES TIRES, INCLUDING THOSE OF HIGH PRESSURE TRUCK TIRES LOADED TO 4500 POUNDS.

RETROREFLECTORS SHALL BE PROVIDED IN ONE OR TWO DIRECTIONS ON EACH UNIT AS REQUIRED BY THE USAGE AND SHALL RETURN WHITE OR YELLOW LIGHT AS IS APPROPRIATED FOR THE APPLICATION.

THE REFLECTOR SHALL HAVE AN EFFECTIVE AREA OF 0.35 SQUARE INCH FOR TYPE A OR 3.0 SQUARE INCH FOR TYPE B. ITS BRIGHTNESS OR SPECIFIC INTENSITY (WHEN TESTED AT 0.2 DEGREE ANGLE OF OBSERVATION AND THE FOLLOWING ANGLES OF INCIDENCE) SHALL MEET OR EXCEED THE FOLLOWING:

SPECIFIC INTENSITY

TYPE A

INCIDENCE ANGLE (DEGREES)	WHITE	YELLOW
0	1.0	0.6
20	0.4	0.24
45	–	–

TYPE B

	WHITE	YELLOW
0	3.0	1.8
20	1.2	0.72
45	0.3	0.2

ANGLE OF INCIDENCE FORMED BY A RAY FROM LIGHT SOURCE TO THE MARKER AND THE NORMAL TO THE LEADING EDGE OF THE MARKER FACE (ALSO HORIZONTAL ENTRANCE ANGLE).

ANGLE OF OBSERVATION FORMED BY A RAY FROM LIGHT SOURCE TO THE MARKER AND THE RETURNED RAY FROM THE MARKER TO THE MEASURING RECEPTOR.

SPECIFIC INTENSITY IS THE MEAN CANDLEPOWER OF THE REFLECTED LIGHT (AT GIVEN INCIDENCE AND DIVERGENCE ANGLES) FOR EACH FOOT-CANDLE AT THE REFLECTOR (ON A PLANE PERPENDICULAR TO THE INCIDENT LIGHT).

TYPE A UNITS ARE INTENDED TO PROVIDE HIGH VISIBILITY BOTH AT NIGHT AND DURING DAYLIGHT. THEIR DAY TIME VISIBILITY SHALL BE ASSURED BY SIZE, SHAPE AND COLOR AS FOLLOWS:

1) THE UNITS SHALL BE A HIGH VISIBILITY YELLOW OR WHITE COLOR WHICH WILL NOT DEGRADE SUBSTANTIALLY DUE TO TRAFFIC WEAR AND WHICH WILL MATCH THE COLOR OF THE REFLECTOR.

2) WHEN VIEWED FROM ABOVE, THE UNITS SHALL HAVE A VISIBLE AREA OF NOT LESS THAN 14 SQUARE INCHES.

3) WHEN VIEWED FROM THE FRONT, PARALLEL TO THE PAVEMENT, AS FROM APPROACHING TRAFFIC, THE UNIT SHALL HAVE A WIDTH OF APPROXIMATELY 4 INCHES AND A VISIBLE AREA OF NOT LESS THAN 1.5 SQUARE INCHES.

TYPE B UNITS ARE INTENDED TO PROVIDE HIGH VISIBILITY AT NIGHT BY RETRO-REFLECTING AUTOMOTIVE HEADLIGHT BACK TO THE DRIVER.

INSTALLATION: THEY SHALL BE ATTACHED TO CLEAN, DRY PAVEMENT BY A BUTYL ADHESIVE PAD, A BITUMINOUS ADHESIVE OR OTHER CONSTRUCTION GRADE ADHESIVES (SUCH AS FRANKLIN PANEL AND METAL ADHESIVE) SUITABLE TO ANCHOR THE UNIT UNDER THE ABOVE CONDITIONS. WHEN IT IS NECESSARY TO ATTACH UNITS TO NEW CONCRETE WITH CURING COMPOUND REMAINING, THE CURING COMPOUND MEMBRANE SHALL BE REMOVED BY SANDBLASTING OR OTHER MECHANICAL CLEANING METHOD. THEY SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL IMMEDIATELY REPLACE, AT HIS COST, ANY UNITS WHICH FAIL (BROKEN HOUSING, HOUSING WORN TO THE EXTENT THAT DAYTIME VISIBILITY IS SIGNIFICANTLY DIMINISHED OR OF AN UNACCEPTABLE COLOR, DETACHED OR BROKEN REFLECTOR, HOUSING DETACHED FROM ADHESIVE).

TRPM'S ARE LIKELY TO BE REMOVED BY SNOW PLOWING OPERATIONS, THUS THEY ARE NOT CONSIDERED SUITABLE FOR USE DURING THE PERIOD FROM OCTOBER 15 UNTIL APRIL 30. THE CONTRACTOR IS ADVISED TO SCHEDULE HIS WORK AND/OR THE USE OF THESE DEVICES TO AVOID THIS PERIOD. SHOULD THE CONTRACTOR CHOOSE TO USE TRPM'S DURING THIS PERIOD AND THEY ARE SUBSEQUENTLY REMOVED OR DESTROYED BY SNOW AND ICE CONTROL ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY, AT HIS COST, PROVIDE A SUBSTITUTE TRAFFIC GUIDANCE SYSTEM EFFECTIVE DURING LIGHT AND DARK AND WHICH IS ACCEPTABLE TO THE ENGINEER.

THE UNITS SHALL BE PLACED ACCURATELY TO DEPICT STRAIGHT OR UNIFORMLY CURVING LINES. WHEN USED TO SUPPLEMENT TEMPORARY PAVEMENT MARKINGS, THEY MAY BE PLACED ON OR IMMEDIATELY ADJACENT TO THE PAVEMENT MARKING. LOCATIONS SHALL BE ADJUSTED UP TO ONE FOOT LONGITUDINALLY OR SIX INCHES LATERALLY TO AVOID PLACEMENT ON JOINTS, CRACKED OR DETERIORATED PAVEMENT. THEY SHALL NOT BE PLACED DIRECTLY ON PAVEMENT MARKINGS IF THIS WILL DETRACT FROM THEIR ABILITY TO REMAIN ATTACHED TO THE PAVEMENT.

APPLICATION

1) WHEN REQUIRED TO SUPPLEMENT PAVEMENT MARKING; THEY SHALL BE PLACED AS FOLLOWS:

LINE	TYPE	SPACING
EDGE LINE	A OR B	20' C/C
LANE LINE	A OR B	40' C/C*
CENTER LINE (SINGLE/BROKEN)	A OR B	40' C/C *
CENTER LINE (DOUBLE/SOLID)	A OR B	2 UNITS SIDE BY SIDE 4 INCHES APART 20' C/C
CHANNELIZING LINE (INCLUDES EXIT GORE NOSE)	A OR B	10' C/C

* CENTERED IN GAP

2) WHEN USED TO SIMULATE (REPLACE) PAVEMENT MARKING THEY SHALL BE PLACED AS FOLLOWS:

LINE	TYPE	SPACING
EDGE LINE	A	5' C/C
LANE LINE	A	4@3.33' C/C 30' GAP (40' CYCLE)
CENTER LINE (DOUBLE SOLID)	A	2 UNITS SIDE BY SIDE 5' C/C
CENTER LINE (SINGLE BROKEN).	A	4@3.33' C/C 30' GAP (40' CYCLE)
CHANNELIZING LINE (INCLUDES EXIT GORE NOSE)	A	5' C/C
EDGE LINE (TWO COLOR) (WHITE/YELLOW)	A	BACK TO BACK 5' C/C

YELLOW TRPM'S USED TO SEPARATE OPPOSITE FLOWS OF TRAFFIC (CENTER LINES) SHALL INCLUDE REFLECTIONS FOR BOTH DIRECTIONS. ALL OTHER YELLOW TRPM'S AND WHITE TRPM'S SHALL PROVIDE RETROREFLECTIVITY FOR ONE DIRECTION.

REMOVAL

REMOVAL SHALL BE ACCOMPLISHED IN A MANNER THAT LITTLE OR NONE OF THE ADHESIVE REMAINS ON THE PAVEMENT AND PERMANENT PAVEMENT SURFACES SHALL NOT BE SCARRED, BROKEN OR ROUGHENED SIGNIFICANTLY.

PAYMENT

BASIS OF PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER EACH TRPM AND SHALL INCLUDE ALL LABOR, EQUIPMENT, HARDWARE AND INCIDENTALS REQUIRED TO PERFORM THE WORK. IT SHALL ALSO INCLUDE REPLACEMENT AT NO ADDITIONAL COST OF ALL TRPM'S WHICH, IN THE JUDGEMENT OF THE ENGINEER, FAIL FOR ANY REASON, EXCEPT DUE TO FAILURE OF THE PAVEMENT TO WHICH THEY ARE ATTACHED.

ITEM	UNIT	DESCRIPTION
614	EACH	TEMPORARY RAISED PAVEMENT MARKERS

Quantities Are Included On Next Sheet

STATIONING (FROM-TO) (SIDE)	SPACING	TYPE A W	TYPE A Y	TYPE A Y/Y	TYPE B W	TYPE B Y	TYPE B Y/Y	REMARKS (LINE TYPE)
TOTALS								

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

614 TEMPORARY RAISED PAVEMENT MARKERS

DESIGNED	DRAWN	CHECKED	DATE	REVISED
			5-12-87	

CALC. BY T.K. DATE 12/88	CHKD. BY J.S. DATE 12/88

FHWA REGION	STATE	PROJECT	
5	OHIO		

25. 345

AUGLAIZE COUNTY
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MAINTENANCE OF TRAFFIC TABLES

614 BARRIER REFLECTORS

LOCATION	SIDE	FROM	TO	PHASE	SPACING	614 BARRIER REFLECTOR TYPE B YELLOW	
U.S.R.33 (W.B.)	LT.	680+13	684+43	III	50'	10	
U.S.R.33 (W.B.)	LT.	681+93	684+43	III	50'	6	
U.S.R.33 (W.B.)	LT.	791+84	794+34	III	50'	6	
U.S.R.33 (W.B.)	LT.	791+84	795+94	III	50'	9	
U.S.R.33 (E.B.)	RT.	680+00	684+60	IV	50'	10	
U.S.R.33 (E.B.)	RT.	682+10	684+60	IV	50'	6	
U.S.R.33 (E.B.)	RT.	791+84	794+34	IV	50'	6	
U.S.R.33 (E.B.)	RT.	791+84	795+84	IV	50'	9	
TOTAL TO GENERAL SUMMARY						62 EACH	

614 TEMP. RAISED PAV'T. MARKERS

LOCATION	SIDE	FROM	TO	PHASE	SPACING	614 TEMP. RAISED PAV'T. MARKERS WHITE	614 TEMP. RAISED PAV'T. MARKERS YELLOW
CROSSOVER	LT.& RT.	676+36	683+64	III	20'		38
CROSSOVER	LT.& RT.	676+36	684+64	III	20'	43	
CROSSOVER	LT.& RT.	795+94	799+37	III	20'		19
CROSSOVER	LT.& RT.	791+63	799+37	III	20'	40	
CROSSOVER	LT.& RT.	676+36	684+81	IV	20'	44	
CROSSOVER	LT.& RT.	676+36	680+00	III	20'		20
CROSSOVER	LT.& RT.	791+63	799+37	III	20'	40	
CROSSOVER	LT.& RT.	792+63	799+37	IV	20'		35
						167	112
TOTAL TO GENERAL SUMMARY						279 EACH	

614 TEMP. PAV'T. MARKINGS

LOCATION	STATION FROM	STATION TO	SIDE	PHASE	614 TEMP. EDGE LINE WHITE CLASS I	614 TEMP. EDGE LINE YELLOW CLASS I	614 TEMP. ℄ SOLID DOUBLE CLASS I	614 TEMP. STOP LINES CLASS I	
					LIN.FT.	LIN.FT.	LIN.FT.	LIN.FT.	
DEARBAUGH RD.	19+38		LT.	III				30	
DEARBAUGH RD.	19+82		RT.	III				28	
DEARBAUGH RD.	20+16		RT.	IV				20	
DEARBAUGH RD.	20+68		LT.	IV				16	
U.S.R. 33 (E.B.)	666+35	672+35	RT.	III	600				
U.S.R. 33 (E.B.)	669+36	676+36	RT.	III	700				
CROSSOVER	676+36	684+64	LT.& RT.	III	832				
CROSSOVER	676+36	684+64	LT.& RT.	III		832			
U.S.R. 33 (W.B.)	680+13	684+64	LT.	III		451			
U.S.R. 33 (W.B.)	684+64	791+63	LT.	III			10699		
U.S.R. 33 (W.B.)	684+64	791+63	LT.	III	10699				
CROSSOVER	791+63	799+37	LT.& RT.	III	778				
CROSSOVER	791+63	799+37	LT.& RT.	III		778			
U.S.R. 33 (W.B.)	791+63	807+87	LT.	III		1624			
U.S.R. 33 (E.B.)	667+86	684+81	RT.	IV		1695			
CROSSOVER	676+36	684+81	LT.& RT.	IV		849			
CROSSOVER	676+36	684+81	LT.& RT.	IV	849				
U.S.R. 33 (E.B.)	684+81	791+63	RT.	IV			10682		
U.S.R. 33 (E.B.)	684+81	791+63	RT.	IV	10682				
U.S.R. 33 (E.B.)	791+63	795+84	RT.	IV		421			
CROSSOVER	791+63	799+37	LT.& RT.	IV		778			
CROSSOVER	791+63	799+37	LT.& RT.	IV	778				
U.S.R. 33 (W.B.)	799+37	807+87	LT.	IV	850				
TOTALS CARRIED TO GENERAL SUMMARY					26768	7428	21381	94	
					6.48 MILE		4.05 MILE		

		622 TEMPORAY CONCRETE BARRIER, AS PER PLAN	SPECIAL ATTENUATOR G.R.E.A.T.	615 TEMPORARY PAVEMENT CLASS A FLEXIBLE AS PER PLAN
		LIN. FT.	EACH	SQ.YD.
FROM SHT. 27		460	2	1468
FROM SHT. 28		410	1*	1282
TOTALS TO GENERAL SUMMARY		870	3	2750

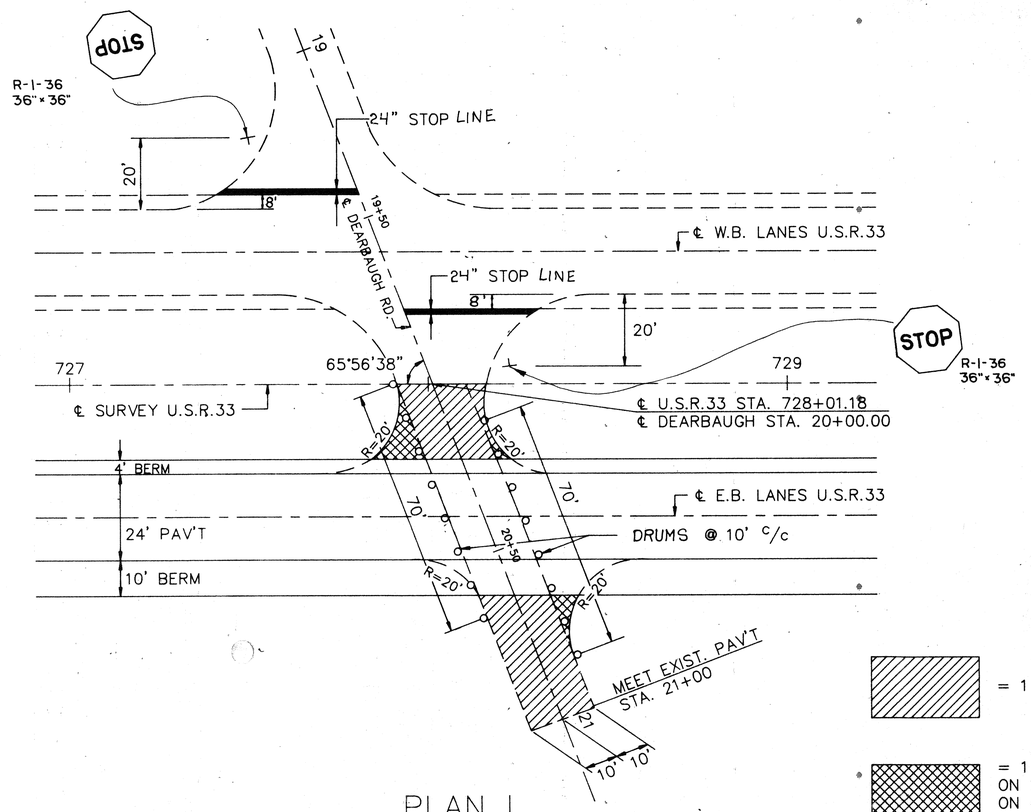
* Contingent quanity. To be used if one of the attenuator gets damaged by traffic.

ITEM 614 WORK ZONE MARKING SIGNS

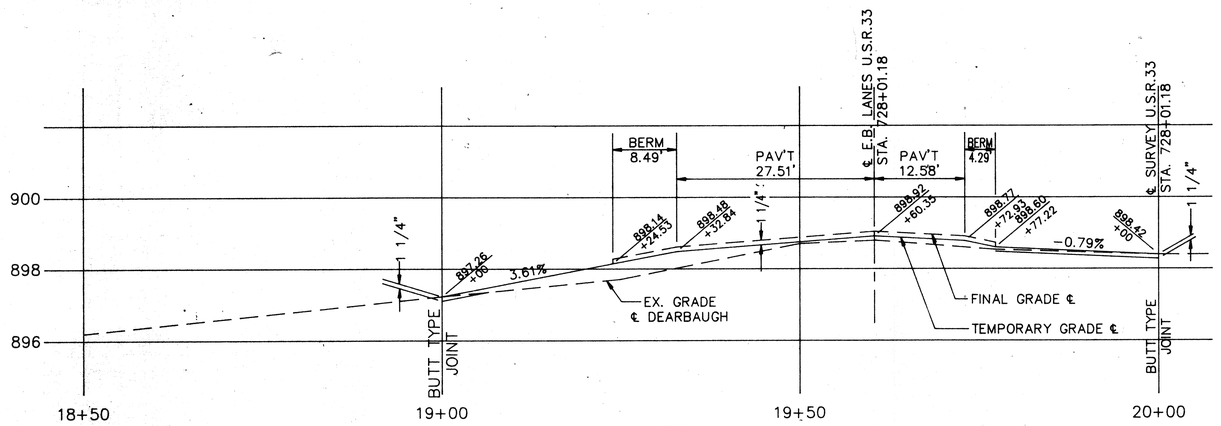
LOCATION	STATION	SIDE	PHASE	614 WORK ZONE MARKING SIGNS (OW-168-48)
				EACH
USR 33 (E.B.)	687+00	RT.	IV	1
USR 33 (E.B.)	745+00	LT.	IV	1
USR 33 (E.B.)	757+00	RT.	IV	1
USR 33 (E.B.)	788+00	LT.	IV	1
TOTALS CARRIED TO GENERAL SUMMARY				4

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		



PLAN I
DEARBAUGH ROAD TRAFFIC PLAN
DURING CONSTRUCTION OF E.B. U.S.R.33



PLAN II
DEARBAUGH ROAD PROFILE

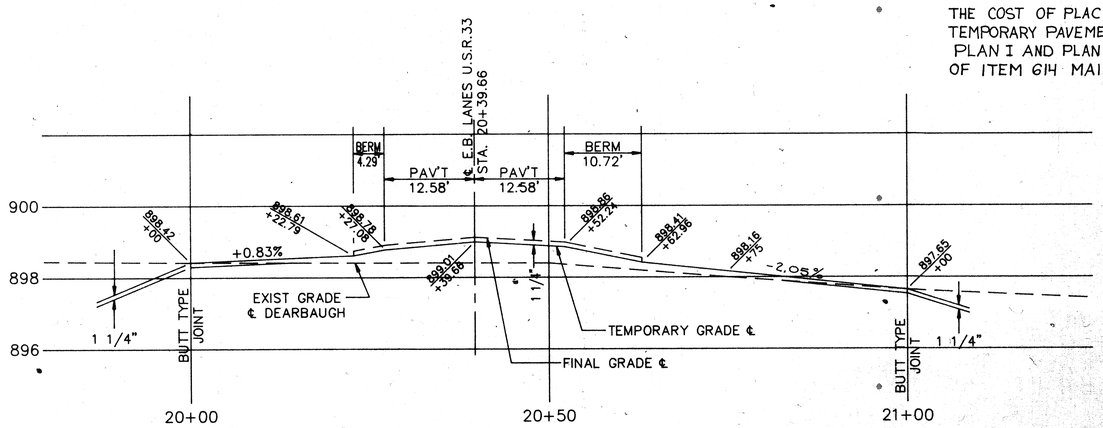
= 1 1/4" MINIMUM 404 ASPHALT CONCRETE

= 1 1/4" 404 ASPHALT CONCRETE
ON 1 3/4" 402 ASPHALT CONCRETE
ON 4" 301 BITUMINOUS
AGGREGATE BASE.

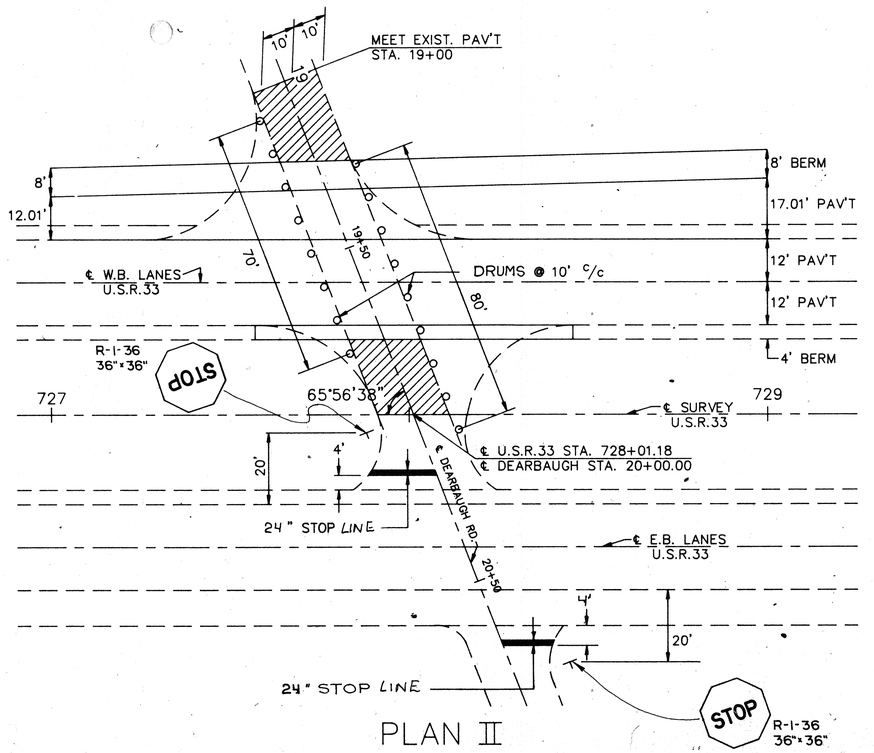
NOTES

ELEVATION BASED ON FINAL GRADE MINUS THE 1 1/4" SURFACE COURSE.

THE COST OF PLACING, MAINTAINING, AND REMOVING THE TEMPORARY PAVEMENT FOR THE DEARBAUGH ROAD TRAFFIC PLAN I AND PLAN II SHALL BE INCLUDED IN THE COST OF ITEM 614 MAINTAINING TRAFFIC.



PLAN I
DEARBAUGH ROAD PROFILE



PLAN II
DEARBAUGH ROAD TRAFFIC PLAN
DURING CONSTRUCTION OF W.B. U.S.R.33

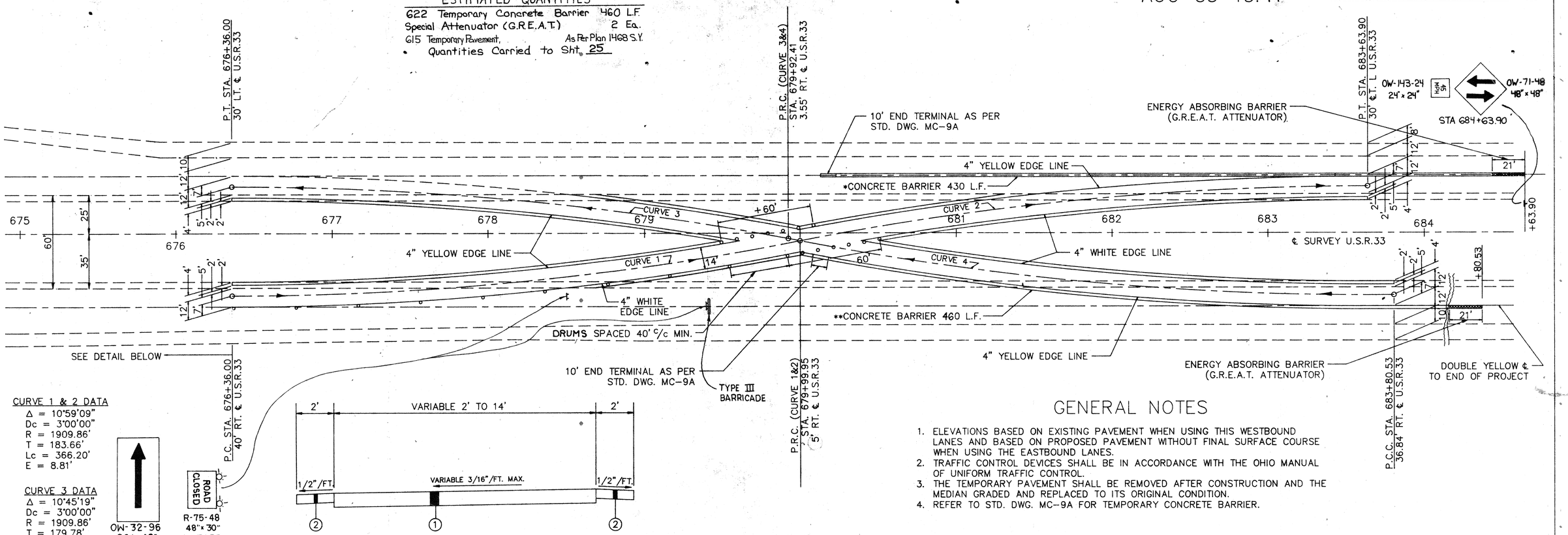
AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

27/345

ESTIMATED QUANTITIES

622 Temporary Concrete Barrier 460 L.F.
Special Attenuator (G.R.E.A.T.) 2 Ea.
615 Temporary Pavement, As Per Plan 1468 S.Y.
Quantities Carried to Sht. 25



CURVE 1 & 2 DATA
Δ = 10°59'09"
Dc = 3°00'00"
R = 1909.86'
T = 183.66'
Lc = 366.20'
E = 8.81'

CURVE 3 DATA
Δ = 10°45'19"
Dc = 3°00'00"
R = 1909.86'
T = 179.78'
Lc = 358.51'
E = 8.44'

CURVE 4 DATA
Δ = 11°42'25"
Dc = 3°00'00"
R = 1909.86'
T = 195.80'
Lc = 390.23'
E = 10.01'

TYPICAL SECTION TEMPORARY PAVEMENT

① ITEM 615 – TEMPORARY PAVEMENT, AS PER PLAN (SEE MAINT OF TRAFFIC NOTE SHEET 22 & 23)

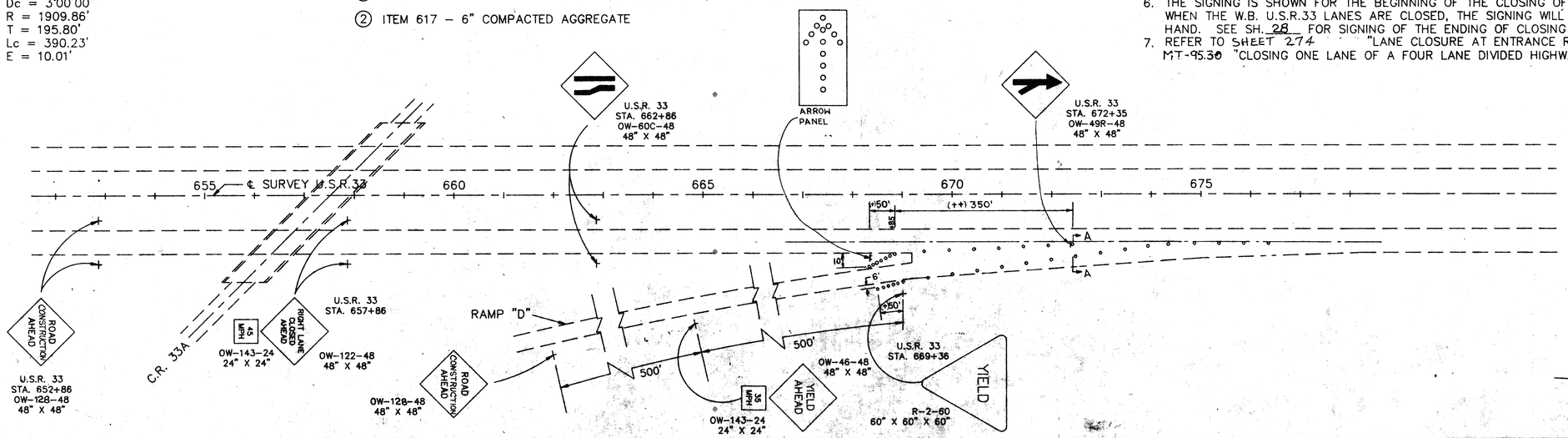
② ITEM 617 – 6" COMPACTED AGGREGATE

GENERAL NOTES

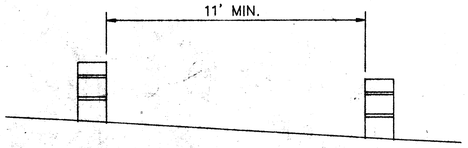
1. ELEVATIONS BASED ON EXISTING PAVEMENT WHEN USING THIS WESTBOUND LANES AND BASED ON PROPOSED PAVEMENT WITHOUT FINAL SURFACE COURSE WHEN USING THE EASTBOUND LANES.
2. TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL.
3. THE TEMPORARY PAVEMENT SHALL BE REMOVED AFTER CONSTRUCTION AND THE MEDIAN GRADED AND REPLACED TO ITS ORIGINAL CONDITION.
4. REFER TO STD. DWG. MC-9A FOR TEMPORARY CONCRETE BARRIER.
5. THE ENERGY ABSORBING BARRIERS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL – ATTENUATOR (G.R.E.A.T.)
6. THE SIGNING IS SHOWN FOR THE BEGINNING OF THE CLOSING OF E.B. U.S.R.33 WHEN THE W.B. U.S.R.33 LANES ARE CLOSED, THE SIGNING WILL BE OPPOSITE HAND. SEE SH. 28 FOR SIGNING OF THE ENDING OF CLOSING OF E.B. U.S.R.33
7. REFER TO SHEET 274 "LANE CLOSURE AT ENTRANCE RAMP PLAN B", MT-95.30 "CLOSING ONE LANE OF A FOUR LANE DIVIDED HIGHWAY."

(+) DRUMS SPACED @ 10' ℄c
(++) DRUMS SPACED @ 50' ℄c

* USE WHEN U.S.R.33 E.B. IS CLOSED
** USE WHEN U.S.R.33 W.B. IS CLOSED



NOTE : FOR PAVEMENT ELEVATIONS SEE SHEET 29.



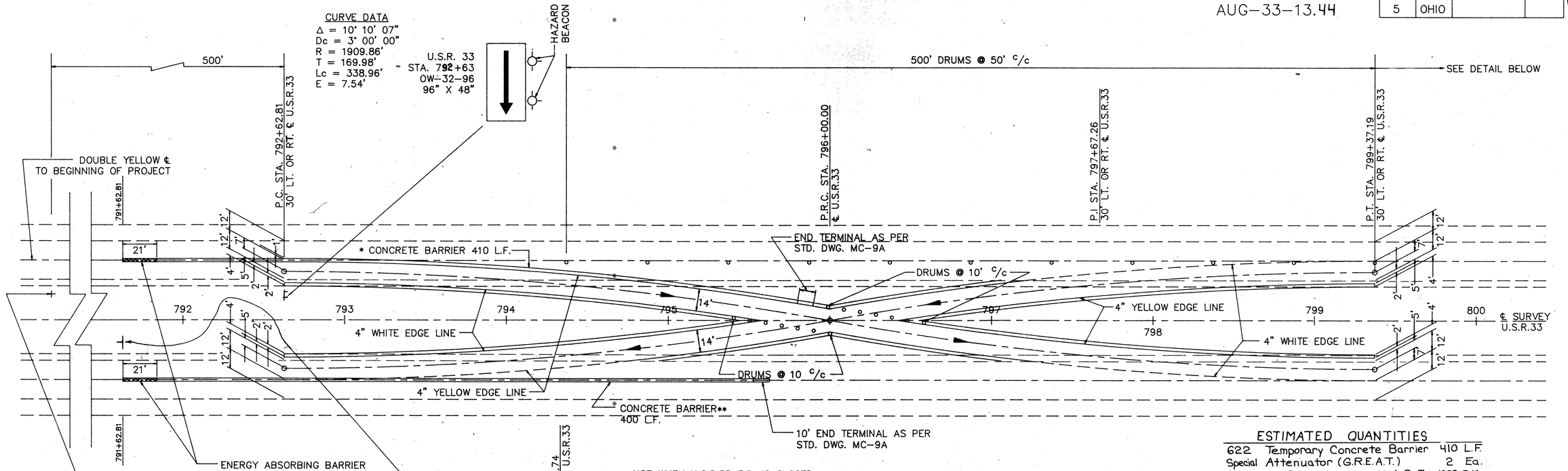
SECTION A–A

PAVEMENT CROSSOVER U.S.R. 33 STA. 680+00

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

CURVE DATA
Δ = 10° 10' 07"
Dc = 3° 00' 00"
R = 1909.86'
T = 169.98'
Lc = 338.96'
E = 7.54'

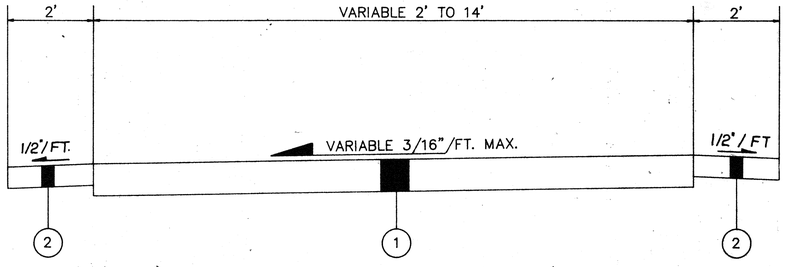


*USE WHEN U.S.R.33 E.B. IS CLOSED
**USE WHEN U.S.R.33 W.B. IS CLOSED

ESTIMATED QUANTITIES

622	Temporary Concrete Barrier	410 L.F.
Special	Attenuator (G.R.E.A.T.)	2 Ea.
615	Temporary Pavement,	As Per Plan 1282 S.Y.

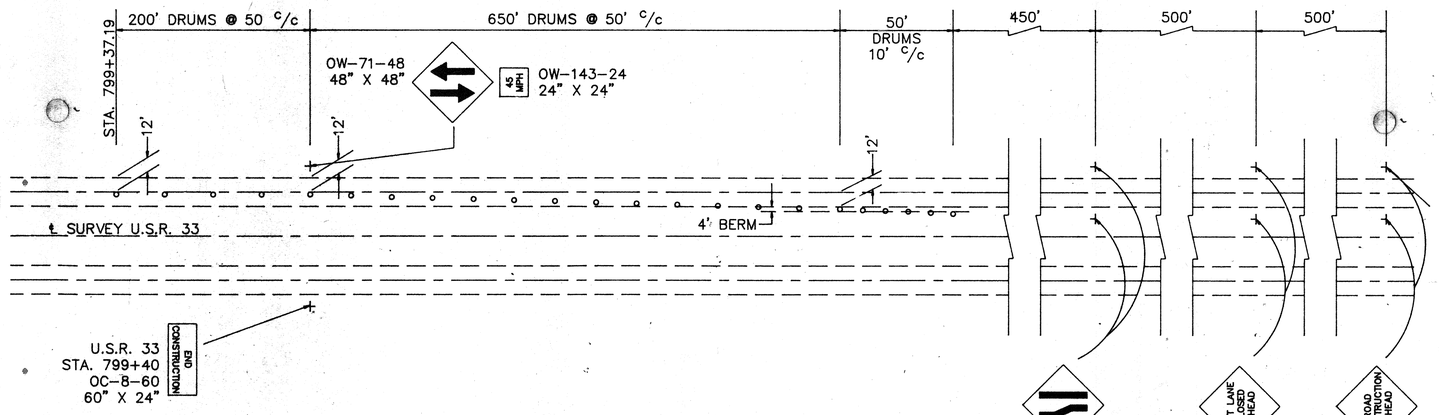
Quantities Carried to Sht 25



TYPICAL SECTION
TEMPORARY PAVEMENT

(1) ITEM 615 – TEMPORARY PAVEMENT, AS PER PLAN (SEE MAINT. OF TRAFFIC NOTE SHT. 22 & 23).

(2) ITEM 617 – 6" COMPACTED AGGREGATE



GENERAL NOTES

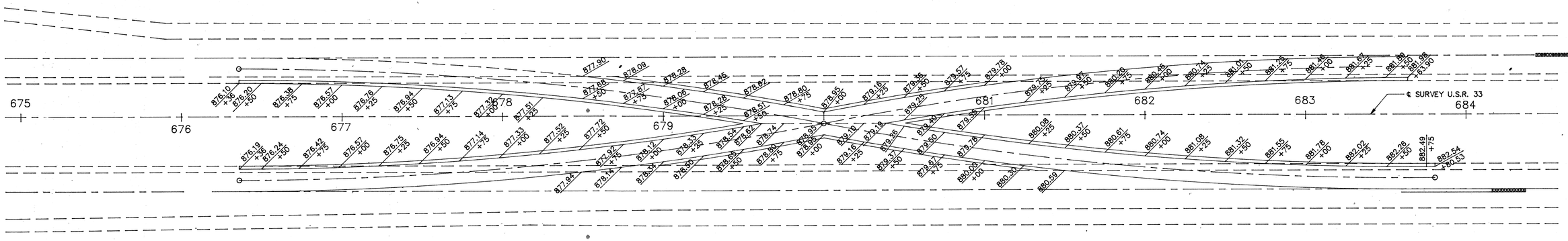
1. SEE GENERAL NOTES NO.2 THRU NO.5 ON SHEET 27.
2. ELEVATIONS ARE BASED ON EXISTING PAVEMENT.
3. THE SIGNING IS SHOWN FOR THE ENDING OF THE CLOSING OF E.B. U.S.R.33. WHEN THE W.B. U.S.R.33 LANES ARE CLOSED, THE SIGNING WILL BE OPPOSITE HAND. SEE SHEET 27, FOR SIGNING OF THE BEGINNING OF CLOSING OF E.B. U.S.R.33.

NOTE: FOR TEMPORARY PAVEMENT ELEVATIONS SEE SHEET 29.

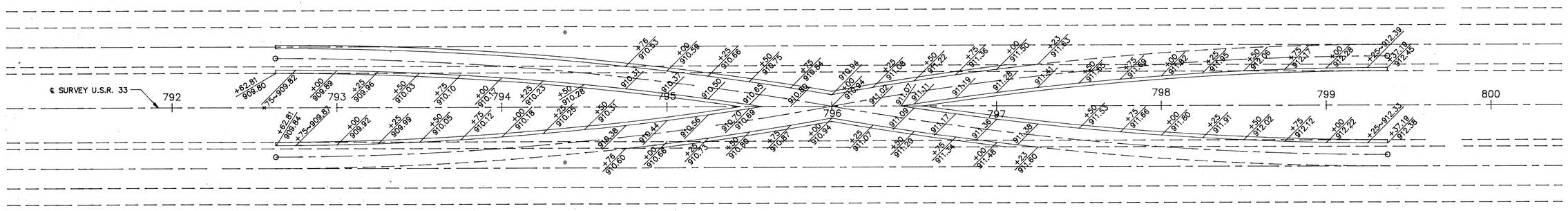
PAVEMENT CROSSOVER U.S.R.33 STA. 796+00

AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		



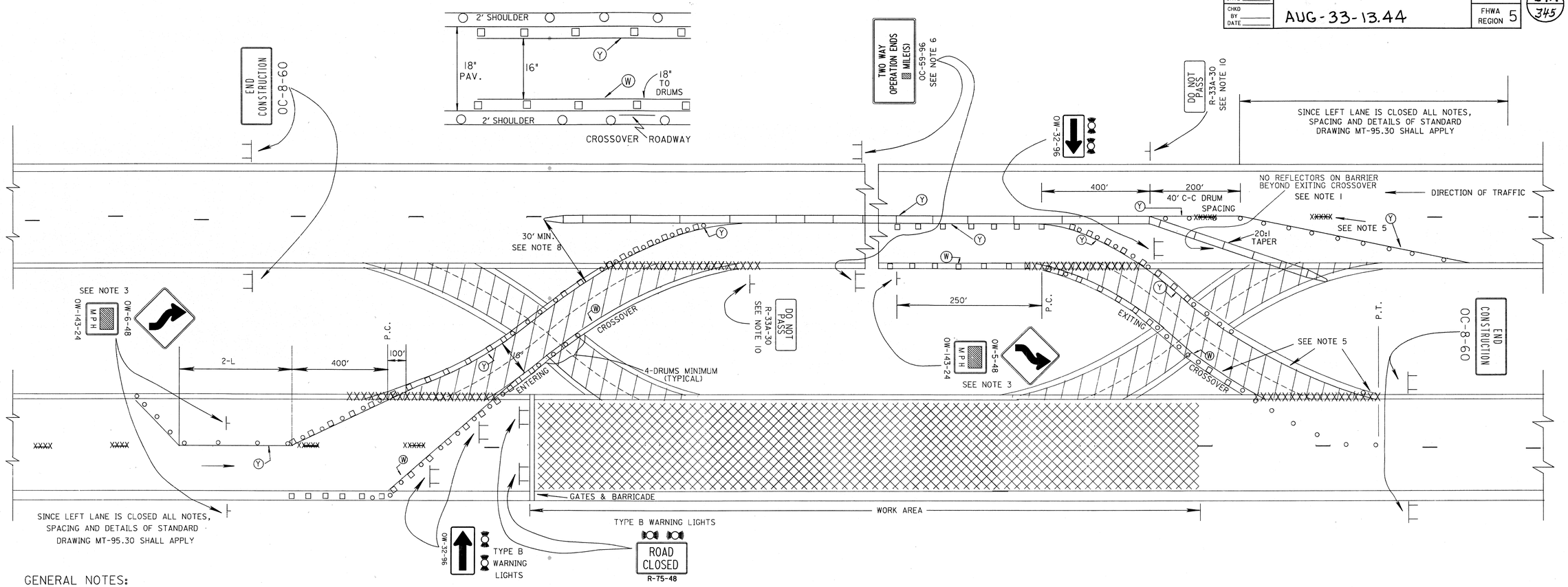
PAVEMENT CROSSOVER STA. 680+00 U.S.R. 33



PAVEMENT CROSSOVER STA. 796+00 U.S.R. 33

PAVEMENT CROSSOVER ELEVATIONS

CALC BY DATE	AUGLAIZE COUNTY	OHIO	29A 345
CHKD BY DATE	AUG-33-13.44	FHWA REGION 5	



GENERAL NOTES:

1. TEMPORARY BARRIER REFLECTORS (YELLOW) SHALL BE MOUNTED ON THE PORTABLE CONCRETE BARRIER AT A MINIMUM OF 50 FT. SPACING, (25' SPACING ON CURVES OF 5° OR SHARPER). NO REFLECTORS OR OTHER CHANNELIZING DEVICES SHALL BE PERMITTED ON THE FACE OF THE PCB FACING THE EXITING CROSSOVER, FROM THE PC TO END OF BARRIER.

2. THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED NOT TO CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS. IF SHOULDER IS USED AS A LANE, SET BACK ALL SIGNS TO 6' BEYOND THE SHOULDER.

3. THE ADVISORY SPEED SIGN (OW-143) SHALL BE USED WHEN SPECIFIED. THE ADVISORY SPEED SHALL BE AS CALLED FOR IN THE PLANS.

4. DRUMS SHALL BE SPACED AT 40' C-C UNLESS OTHERWISE SHOWN. TYPE C STEADY BURNING WARNING LIGHTS SHALL BE ERECTED ON EACH DRUM FOR NIGHT LANE CLOSURES.

5. THE EDGE LINES ADJACENT TO THE BARRIER MAY USE PAINT ONLY IF THEY WILL BE DESTROYED OR SURFACED OVER IN THE NEXT STAGE OF WORK. THEY SHALL BE INSTALLED WITH REMOVABLE TAPE IF ON THE FINAL SURFACE. INORDER TO CHANGE THE COLOR OF THE EDGE LINE NEXT TO THE MEDIAN, IT MAY BE HEAVILY PAINTED OVER (WITH SUBSEQUENT OVER PAINTING IF NECESSARY DURING THE LIFE OF THE WORK STAGE TO MAINTAIN DAY AND NIGHT COLOR) EXCEPT THAT THIS PROCEDURE WILL NOT BE PERMITTED FOR A LINE ON THE FINAL SURFACE.

5. CONT. THE EXISTING CONFLICTING PAVEMENT MARKINGS AND REFLECTORS FROM THE RAISED PAVEMENT MARKERS SHALL BE REMOVED AND THE APPROPRIATE COLOR TEMPORARY EDGE LINES SHALL BE APPLIED. THE RIGHT EDGE LINE IN THE TWO WAY TRAFFIC SECTION SHALL BE WHITE. ALL PAVEMENT MARKINGS WHICH WILL CROSS NORMAL TRAFFIC LANES SHALL BE INSTALLED USING REMOVABLE (947.03, TYPE C) TAPE, OR SIMULATED WITH TEMPORARY RAISED PAVEMENT MARKERS, UNLESS THE AREA WILL BE RESURFACED PRIOR TO IMPLEMENTING THE NEXT TRAFFIC STAGE. AFTER COMPLETION OF THE WORK, TEMPORARY MARKINGS SHALL BE REMOVED IN ACCORDANCE WITH 621.134 AND THE ORIGINAL MARKINGS AND RAISED PAVEMENT MARKER REFLECTORS SHALL BE RESTORED.

6. THE OC-59 SIGNS SHALL BE PLACED APPROXIMATELY 1 MILE APART ON WORK AREAS OVER 3 MILES.

7. THE PORTABLE CONCRETE BARRIER (PCB) NEAR THE EXITING CROSSOVER, SHALL EXTEND STRAIGHT ON THE PERMANENT ROADWAY TO 200 FT. BEYOND THE PC OF THE CROSSOVER AND THEN TAPER AT 20:1 ACROSS THE TRAFFIC LANE AND PAVED SHOULDER ENDING WITH A TAPERED END SECTION AT THE EDGE OF SHOULDER.

8. PCB NEAR THE ENTERING CROSSOVER SHALL EXTEND TO A POINT 30 FT. FROM THE EDGE OF THE CROSSOVER ROADWAY.

9. PCB SHALL BE 50" HIGH OR FITTED WITH GLARE SHIELDS WITHIN THE FOLLOWING LIMITS: (1) NEAR THE EXITING CROSSOVER FROM FLARED END TO 200' BEYOND PC. (2) NEAR THE EXTERINL CROSSOVER FROM 300' IN ADVANCE OF THE PC TO THE END OF THE BARRIER.

10. INTERVALS IN BOTH DIRECTIONS BEGINNING AT THE LOCATION SHOWN FOR THE FIRST SIGN TO THE END OF PCB.

LEGEND

~~XXXXX~~ —— PAVEMENT MARKING REMOVED

o —— DRUM

TEMPORARY PAVEMENT MARKINGS

(W) —— WHITE EDGE LINE

(Y) —— YELLOW EDGE LINE

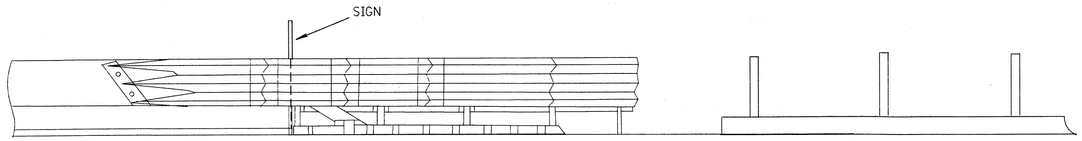
□ —— TEMP. RAISED PAVT. MARKER (TRPM)

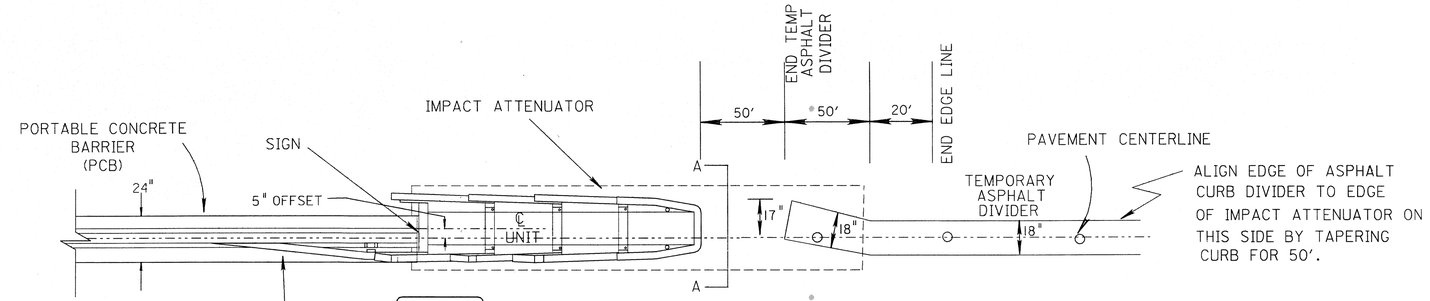
ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE C & M SPECIFICATIONS AS WELL AS IN ACCORDANCE WITH PART 7 OF OMUTCD. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS TO PROVIDE THIS METHOD OF TRAFFIC CONTROL SHALL BE INCIDENTAL TO THE LUMP SUM BID FOR 614 MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

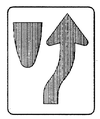
	DATE 08/31/89
TWO-LANE, TWO-WAY OPERATION FOR USE ON FOUR LANE DIVIDED ROADWAYS (PORTABLE CONCRETE BARRIER - PCB)	
PLAN INSERT SHEET	

CALC BY / DATE	AUGLAIZE COUNTY	OHIO
CHKD BY / DATE	AUG-33-13.44	FHWA REGION 5

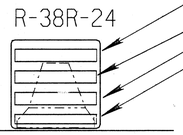
29B 345







R-38R-24



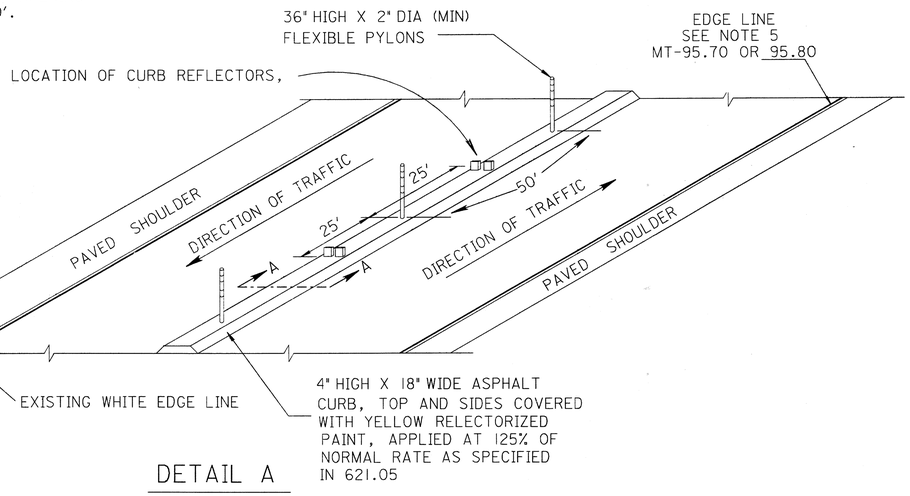
VIEW A - A

DETAIL B

4 EACH 6" TO 8" HORIZONTAL YELLOW REFLECTORIZED STRIPES OF SHEETING TYPE G-(730.19) AT 6" TO 8" SPACING

- OR -

16 EACH 3" DIA (OR EQUIV.) ORANGE CORNER CUBE REFLECTORS IN 4 X 4 ARRAY ATTACHED TO END OF ATTENUATOR



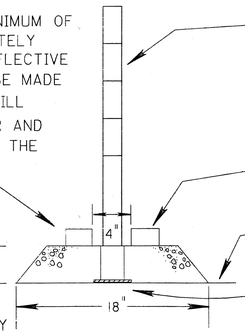
DETAIL A

CURB REFLECTORS SHALL BE A MINIMUM OF 4" X 4" VERTICAL SURFACE COMPLETELY COVERED WITH ORANGE TYPE G REFLECTIVE SHEETING (730.19). THEY SHALL BE MADE OF A RESILANT MATERIAL WHICH WILL RETURN TO VERTICAL IF RUN OVER AND SHALL BE SECURELY ATTACHED TO THE TOP OF CURB

PYLONS SHALL BE ORANGE WITH AT LEAST TWO 4 INCH WIDE CIRCUMFERENTIAL STRIPS OF WHITE HIGH INTENSITY (TYPE G-730.19) REFLECTIVE SHEETING, OR APPROVED EQUIVALENT SEPARATED BY A 4" STRIP OF ORANGE SHEETING TYPE G-(730.19).

LOCATION OF CURB REFLECTORS,

TOP OF PAVEMENT



THE SHAPE OF THE CURB SHALL BE FORMED AND DENSELY COMPACTED BY A VIBRATORY EXTRUDER

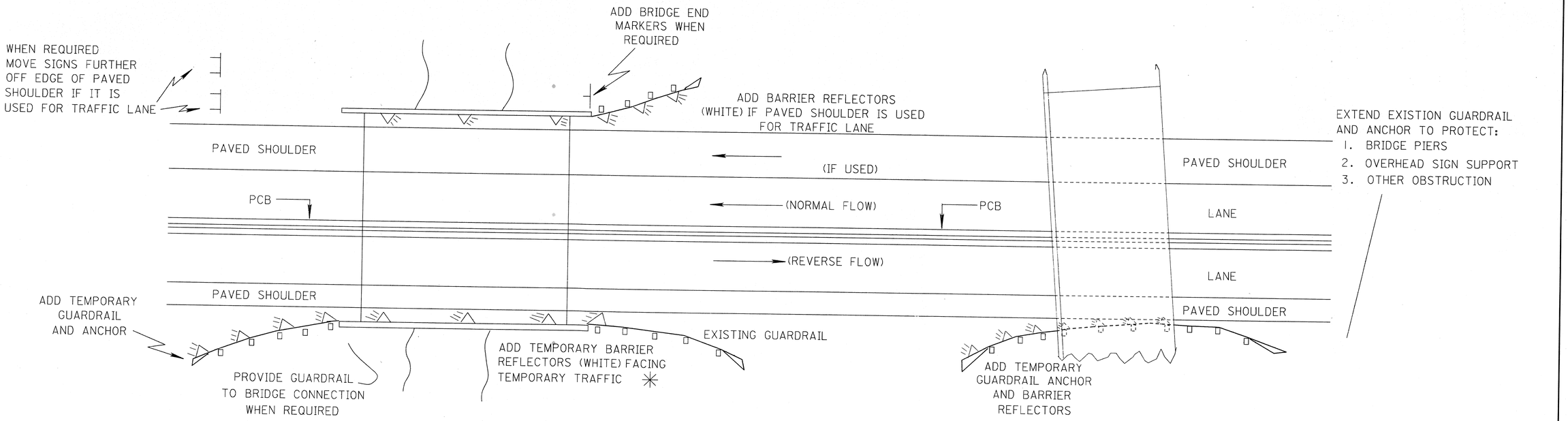
THE BASE OF THE PYLON SHALL INCORPORATE A "SHOE" OR FLAT PLATE ABOUT 4" X 4" TO STABILIZE AND ANCHOR THE PYLON.

DETAIL A-A

	DATE
TWO-LANE, TWO-WAY OPERATION FOR USE ON FOUR LANE DIVIDED ROADWAYS (ASPHALT CURB DIVIDER)	08/29/89
PLAN INSERT SHEET	

CALC BY ____ DATE ____	AUGLAIZE COUNTY	OHIO
CHKD BY ____ DATE ____	AUG-33-13.44	FHWA REGION 5

29C 345



✳ TEMPORARY BARRIER REFLECTORS SHALL BE LOCATED TO ASSURE THEY DO NOT BLOCK VISIBILITY, NOR ARE THEY BLOCKED BY EXISTING PERMANENT BARRIER REFLECTORS. REFLECTORS FACING REVERSE FLOW TRAFFIC SHALL BE REMOVED AT THE END OF THE PROJECT.

	DATE 07/31/89
TWO-LANE, TWO-WAY OPERATION	
PLAN INSERT SHEET	

GENERAL SUMMARY

CALC. BY T.K. DATE 12/88	AUGLAIZE COUNTY AUG- 33 -13.44	OHIO
CHKD. BY J.S. DATE 12/88		FHWA REGION 5
		FEDERAL PROJECT

30
345

SHEET NUMBER																														PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
20	22	25	33	35	36	37	38		56	57	58	59	60	61	62	63	64	65	327	154	155	156	175	177	201	204	226										
																																				ROADWAY
			LUMP																														201		LUMP		CLEARING AND GRUBBING
																																	202		LUMP		PARCEL NO. 5WL, DEMOLISH ONE 1½ STORY FRAME BARN, ONE GARAGE, & SHEDS
																																	202		LUMP		PARCEL NO. 9WL, DEMOLISH ONE 1½ STORY BRICK RESIDENCE W/ BASEMENT
																																	202		LUMP		PARCEL NO. 10WW DEMOLISH ONE 1 STORY FRAME & METAL SHED
													50										48														
					1416												232	4850								13							202		6511	SQ.YD.	PAVEMENT REMOVED
				1560																													202		1560	SQ.YD.	WEARING COURSE REMOVED
					67																												202		67	SQ.YD.	CONCRETE MEDIAN REMOVED
																858	1242	1788				176					350						202		4414	LIN.FT.	GUARDRAIL REMOVED
																	2																202		2	EACH	CATCH BASIN REMOVED
										1	2		4				1									1							202		1	EACH	INLET REMOVED
																																	202		8	EACH	CATCH BASIN ABANDONED
			LUMP																														202		LUMP		STRUCTURES REMOVED
			1303						2000	2000	1938	1982	2434	2000	2000	2034	1350						48										202		19,041	LIN.FT.	FENCE REMOVED
													50																				202		98	LIN.FT.	PIPE REMOVED 24" AND UNDER
			31,947						3031	1665	1475	3509	1968	1055	2159	3936	469	2517		9037	11,632	3606	779	158	306	184	142						203		79,575	CU.YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
			78,477						1433	7471	7094	1460	11,509	13,328	36,673	118,863	78,829	53,290		253	5433	1627	973	934	32	18	5373						203		423,070	CU.YD.	EMBANKMENT
				122,581	546											626	511																203		124,264	SQ.YD.	SUBGRADE COMPACTION
41																																	203		41	HOUR	PROOF ROLLING
																			5														604		5	EACH	MONUMENT ASSEMBLY
																			49														604		49	EACH	REFERENCE MONUMENTS
																525.0	2425.0	1587.5			712.5				25.0		625.0						606		5900	LIN.FT.	GUARDRAIL, TYPE 5
																50.0	25.0	25.0															606		100	LIN.FT.	GUARDRAIL, BARRIER DESIGN, TYPE 5
																1		1			4						4						606		10	EACH	ANCHOR ASSEMBLY, TYPE A
																2	1	1															606		4	EACH	ANCHOR ASSEMBLY, BARRIER DESIGN, TYPE A
																1		1															606		2	EACH	ANCHOR ASSEMBLY, TYPE T
																4	5	3															606		12	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE A
							7013																										607		7013	LIN.FT.	FENCE, TYPE 47
							14,187																										607		14,187	LIN.FT.	FENCE, TYPE CLT
							20																										625		20	EACH	GROUND RODS
																10		55			10						10						802		85	EACH	BARRIER REFLECTOR, TYPE A
																6		17															802		23	EACH	BARRIER REFLECTOR, TYPE B
																																					ROADWAY CONTINUED ON SHEET 33
																																					EROSION CONTROL
200			760																														207		960	EACH	STRAW OR HAY BALES
75000																																	207		75000	SQ.YD.	TEMPORARY SEEDING AND MULCHING
200			1110																														207		1310	LIN.FT.	TEMPORARY SLOPE DRAINS
500			2625																														207		3125	CU.YD.	TEMPORARY BENCHES, DIKES, DAMS AND SEDIMENT BASINS
			131																														601		131	SQ.YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB
			110																														601		110	CU.YD.	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
			15																														601		15	CU.YD.	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
20			31																														601		51	CU.YD.	ROCK CHANNEL PROTECTION, TYPE C, WITHOUT FILTER
1600																																	659		1600	M.SQ.FT.	MOWING
600																																	659		600	M.GAL.	WATER
20000																																	659		20000	SQ.YD.	REPAIR SEEDING AND MULCHING
			170,137						10,650	11932	11,929	12,096	12,667	13,535	18,396	18,511	18,652	17,932		14,564	14,035	7638	3000	2099	615	486	3695						659		362,569	SQ.YD.	SEEDING AND MULCHING
16			15.36						0.96	1.08	1.07	1.09	1.14	1.22	1.66	1.67	1.68	1.62		1.31	1.27	0.69	0.27	0.19	0.06	0.04	0.34						659		48.72	TON	COMMERCIAL FERTILIZER
					2098				235	396	758	500	1020	328	823	905	129			70	1242	1243		381									670		10128	SQ.YD.	DITCH EROSION PROTECTION
																60	300															660		360	SQ.YD.	REINFORCED SODDING
					401																												SPECIAL		401	SQ.YD.	DITCH EROSION PROTECTION, TYPE 1, AS PER SUPPL. SPEC. 839 OR 840

GENERAL SUMMARY

CALC. BY T.K. DATE 12/88	AUGLAIZE COUNTY AUG– 33 –13.44	OHIO
CHKD. BY J.S. DATE 12/88		FHWA REGION 5
		FEDERAL PROJECT

31/345

SHEET NUMBER																														* PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
20	22	25	33	35	36	37	38		56	57	58	59	60	61	62	63	64	65		154	155	156	175	177	201	204	226									
																																				DRAINAGE
			34.36																												602		34.4	CU.YD.	CONCRETE MASONRY
			94																												603		.94	LIN.FT.	21" CONDUIT, TYPE A, 706.02
			88																												603		88	LIN.FT.	24" CONDUIT, TYPE A, 706.02,706.08, OR 27" 707.05,707.21
			114																												603		114	LIN.FT.	30" CONDUIT, TYPE A, 706.02,706.08, OR 30" 707.05,707.21
			258																												603		258	LIN.FT.	42" CONDUIT, TYPE A, 706.02(2250 D–LOAD) OR 54" 707.07, 707.22 (0.075")
			98																												603		98	LIN.FT.	48" CONDUIT, TYPE A, 706.02 OR 54" 707.07, 707.22
			124																												603		124	LIN.FT.	60" CONDUIT, TYPE A, 706.02 OR 66" 707.07, 707.22
			50																												603		50	LIN.FT.	14" X 23" CONDUIT, TYPE A, 706.04, CLASS HE–II
			348																												603		348	LIN.FT.	22" X 34" CONDUIT, TYPE A, 706.04, CLASS HE–II
			128																												603		128	LIN.FT.	43" X 68" CONDUIT, TYPE A, 706.04, CLASS HE–II
			116																												603		116	LIN.FT.	12' X 6' CONDUIT, TYPE A, 706.05 (DESIGN EARTH COVER = 2 FEET)
						170																									603		170	LIN.FT.	6" CONDUIT, TYPE B
											190																				603		190	LIN.FT.	8" CONDUIT, TYPE B
																									78						603		78	LIN.FT.	12" CONDUIT, TYPE B
																138															603		138	LIN.FT.	15" CONDUIT, TYPE B, 707.13 (0.109")
											338	236	238	106						54	58										603		1030	LIN.FT.	15" CONDUIT, TYPE B
										172													54								603		226	LIN.FT.	18" CONDUIT, TYPE B
																					92										603		92	LIN.FT.	21" CONDUIT, TYPE B
																				10											603		10	LIN.FT.	24" CONDUIT, TYPE B
																	240														603		240	LIN.FT.	24" CONDUIT, TYPE B, 706.02 (3000 D–LOAD)
																175							10								603		185	LIN.FT.	30" CONDUIT, TYPE B
													158							512	294										603		964	LIN.FT.	42" CONDUIT, TYPE B
																					400	210									603		610	LIN.FT.	48" CONDUIT, TYPE B
																						10									603		10	LIN.FT.	6" CONDUIT, TYPE C
										10												10									603		30	LIN.FT.	8" CONDUIT, TYPE C
										10							30														603		88	LIN.FT.	12" CONDUIT, TYPE C
									10								40				12	10									603		72	LIN.FT.	15" CONDUIT, TYPE C
													108											300								603		408	LIN.FT.	21" CONDUIT, TYPE C
			420													525	50					200		120							603		1315	LIN.FT.	24" CONDUIT, TYPE C
														520																	603		520	LIN.FT.	27" CONDUIT, TYPE C
													300	274																	603		574	LIN.FT.	36" CONDUIT, TYPE C
												650	700						400	56											603		1806	LIN.FT.	42" CONDUIT, TYPE C
			696						1000	1000	1000	350								250	422										603		4718	LIN.FT.	48" CONDUIT, TYPE C
			112																				40		128	24					603		304	LIN.FT.	12" CONDUIT, TYPE D
			100																												603		100	LIN.FT.	6" CONDUIT, TYPE E
			300																												603		300	LIN.FT.	6" CONDUIT, TYPE F
						2076																									603		2086	LIN.FT.	6" CONDUIT, TYPE F, 707.17 NON–PERFORATED, ASTM 3034 SDR 35 OR SUPP. SPEC. 931
									1			2	2	2			2			3	3	3		1							604		19	EACH	MANHOLE, NO.3
																	1			1	1			1		2					604		6	EACH	CATCH BASIN, NO. 2–2–B
																								2							604		2	EACH	CATCH BASIN, NO. 2–3
																					1										604		1	EACH	CATCH BASIN, NO. 3
										1	2	1	1	1		2						1									604		9	EACH	CATCH BASIN, NO. 4
			1										1																		604		2	EACH	CATCH BASIN, NO. 4–A
																1	1				1										604		3	EACH	CATCH BASIN, NO. 5
										1	2	2	3	2																	604		10	EACH	CATCH BASIN, NO. 8
			1						1	3	3	1	2																		604		11	EACH	CATCH BASIN, NO.8–A
						23																									SPECIAL		23	EACH	PRECAST REINFORCED CONCRETE OUTLET
						35,629																									605		35,629	LIN.FT.	6" SHALLOW PIPE UNDERDRAINS (SEE SHT. 2/A)
						4640																									605		4640	LIN.FT.	6" UNCLASSIFIED PIPE UNDERDRAINS (SEE SHT. 2/A)
						264																									605		264	LIN.FT.	6" UNCLASSIFIED PIPE UNDERDRAINS, 707.01 TYPE III OR 707.21 TYPE III

GENERAL SUMMARY

CALC. BY T.K. DATE 12/88	AUGLAIZE COUNTY AUG-33-13.44	OHIO
CHKD. BY J.S. DATE 12/88		FHWA REGION 5
		FEDERAL PROJECT

32/345

SHEET NUMBER																										PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
20	22	25	33	35	36	37	38	23	56	57	58	59	60	61	62	63	64	65		154	155	156	175	177	201	204	226								
																																	PAVEMENT
				4768	30																										301		4798	CU.YD.	BITUMINOUS AGGREGATE BASE, AC-20
			17	4404	30															12			20		56	4						304		4543	CU.YD.	AGGREGATE BASE
				23,443																											305		23,443	SQ.YD.	8" CONCRETE BASE
				63,507																											305		63,507	SQ.YD.	10" CONCRETE BASE
																105	86														310		16,329	CU.YD.	SUBBASE, TYPE II
					2															4			5		19	2						404		32	CU.YD.	ASPHALT CONCRETE, AC-20 (DRIVEWAYS)
				8484																											407		8484	GAL.	TACK COAT
				11,348	13															28			30		135	9						408		11,563	GAL	BITUMINOUS PRIME COAT
				2092																											409		2092	GAL	SEAL COAT, BITUMINOUS MATERIAL
				57																											409		57	CU.YD.	SEAL COAT, COVER AGGREGATE No. 8
				5046																											446		5046	CU.YD.	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, AC-20
				6960																											446		6960	CU.YD.	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, AC-20
				223																											448		223	CU.YD.	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE I AC-20
																										13					452		13	SQ.YD.	6" PLAIN CONCRETE PAVEMENT
																20	60														609		80	LIN.FT.	CURB, TYPE 2A
					446											32	96														609		574	LIN.FT.	CURB, TYPE 6
																626	511														611		1137	SQ.YD.	REINFORCED CONCRETE APPROACH SLAB (T=15")
					546																										612		546	SQ.YD.	CONCRETE MEDIAN
			49,250																												SPECIAL		49,250	LIN.FT.	SAWING & SEALING ASPHALT CONCRETE PAVEMENT JOINTS, 705.04
																204	162														SPECIAL		366	LIN.FT.	PRESURE RELIEF JOINT, TYPE A
																																			MAINTENANCE OF TRAFFIC
	100																														404		100	CU.YD.	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC
	100																														410		100	CU. YD.	TRAFFIC COMPACTED SURFACE, TYPE A OR B
	100																														616		100	TON	CALCIUM CHLORIDE
	200																														616		200	M.GAL.	WATER
		62																													614		62	EACH	BARRIER REFLECTOR, TYPE B
		279																													614		279	EACH	TEMPORARY RAISED PAVEMENT MARKERS, TYPE A
		4																													614		4	EACH	WORK ZONE MARKING SIGNS
		6.48																													614		6.48	MILES	TEMPORARY EDGE LINES, CLASS I
		4.05																													614		4.05	MILES	TEMPORARY CENTER LINES, CLASS I
		94																													614		94	LIN.FT.	TEMPORARY STOP LINES, CLASS I
		2750																													615		2750	SQ.YD.	TEMPORARY PAVEMENT, CLASS A, FLEXIBLE, AS PER PLAN
		870																													622		870	LIN.FT.	TEMPORARY CONCRETE BARRIER, AS PER PLAN
								LUMP																							615		LUMP		TEMPORARY ROADS :
																															625		LUMP	LUMP	TEMPORARY LIGHTING, AS PER PLAN
		4																													SPEC.		4	EACH	TEMPORARY IMPACT ATTENUATOR G.R.E.A.T SYSTEM MODEL NO. 200 200 NFGG-CZ, Bidirectional
	750																														SPEC.		750	HOURS	LAW ENFORCEMENT OFFICER WITH PATROL CAR
	100																														SPEC.		100	SQ.FT.	REPLACEMENT SIGNS
	200																														SPEC.		200	EACH	REPLACEMENT DRUMS
																																			FOR STRUCTURES 20' & OVER ~ SEE SHEET 279
																																			FOR TRAFFIC CONTROL SUMMARY SEE SHEET 238 AND SHEETS 289, 302 & 315
	LUMP																														614		LUMP		MAINTAINING TRAFFIC
LUMP																															619		LUMP		FIELD OFFICE
																															623		LUMP		CONSTRUCTION LAYOUT STAKES
																															624		LUMP		MOBILIZATION

GENERAL / SUB SUMMARY

CALC. BY T.K. DATE 12/88	AUGLAIZE COUNTY AUG-33-13.44	OHIO
CHKD. BY J.S. DATE 12/88		FHWA REGION 5
		FEDERAL PROJECT

33 / 345

SHEET NUMBER																										PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
21	55	66	91	107	118	126	132	145	146	6	176	180	189	190	193	207	208	209	218	223	203A	232	233	234	235	236	237								
																																		ROADWAY
LUMP																															201		LUMP		CLEARING AND GRUBBING
	1303																•														202		1303	LIN.FT.	FENCE REMOVED
																									LUMP						202		LUMP		STRUCTURES REMOVED
																					LUMP										202		LUMP		BUILDINGS DEMOLISHED
	8	273		6382		18,861		1,027	492		568		749	1030		277	655	348	1088	43	48					98					203		31,947	CU.YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
	268	104		40,851		24,536		717	2,804		306		3826	2461		299	779	724	385	368	26					23					203		78,477	CU.YD.	EMBANKMENT
																																	PAVEMENT
49,250																															SPECIAL		49,250	LIN FT	SAWING & SEALING ASPHALT CONCRETE PAVEMENT JOINTS, 705.04
														17																	304		17	CU.YD	AGGREGATE BASE
																																	EROSION CONTROL
	5		8								5						•					12	16	14	57		14				601		131	SQ.YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB
										31																					601		31	CU.YD.	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER
	8																						12	9	72		9				601		110	CU.YD.	ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER
			4		2		2								2							5									601		15	CU.YD.	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER
	1059	1827		76995		50139		4143	5096		3160		6,139	6597		1333	5500	3757	2880	579	539					394					659		170,137	SQ.YD.	SEEDING AND MULCHING
	0.10	0.17		6.94		4.51		0.38	0.46		0.29		0.55	0.60		0.12	0.50	0.34	0.26	0.05	0.05					0.04					659		15.36	TON	COMMERCIAL FERTILIZER
										760																					207		760	EACH	STRAW OR HAY BALES
										1110																					207		1110	LIN.FT.	TEMPORARY SLOPE DRAINS
										2625							•														207		2625	CU.YD.	TEMPORARY BENCHES, DIKES, DAMS, AND SEDIMENT BASINS
																			1																
																																	DRAINAGE
	1.10		3.00		1.20		1.06					0.58			1.06							2.41	4.56	3.00	13.48		2.91				602		34.36	CU.YD.	CONCRETE MASONRY
															94																603		94	LIN.FT.	21" CONDUIT, TYPE A, 706.02
							88																								603		88	LIN.FT.	21" CONDUIT, TYPE A ,706.02,706.08, OR 27", 707.05,707.21
					114																										603		114	LIN.FT.	24" CONDUIT, TYPE A ,706.02,706.08, OR 30", 707.05,707.21
																	•																	
			258																												603		258	LIN.FT.	42" CONDUIT, TYPE A ,706.02(2250 D-LOAD) OR 54" 707.07, 707.22 (0.075")
																								98							603		98	LIN.FT.	48" CONDUIT, TYPE A , 706.02 OR 54" 707.07, 707.22
																							124								603		124	LIN.FT.	54" CONDUIT, TYPE A , 706.02 OR 66" 707.07, 707.22
												50																			603		50	LIN.FT.	14" X 23" CONDUIT, TYPE A, 706.04, CLASS HE-II
																						348									603		348	LIN.FT.	22" X 34" CONDUIT, TYPE A, 706.04, CLASS HE-II
																											128				603		128	LIN.FT.	43" X 68" CONDUIT, TYPE A, 706.04, CLASS HE-II
																									116						603		116	LIN.FT.	12' X 6' CONDUIT, TYPE A, 706.05 (DESIGN EARTH COVER= 2 FEET)
	1																•														604		1	EACH	CATCH BASIN, NO. 4-A
																						1									604		1	EACH	CATCH BASIN, NO. 8-A
												420																			603		420	LIN.FT.	24" CONDUIT, TYPE C
	696																														603		696	LIN.FT.	48" CONDUIT, TYPE C
													76								36										603		112	LIN.FT.	12" CONDUIT, TYPE D
100																															603		100	LIN.FT.	6" CONDUIT, TYPE E
300																															603		300	LIN.FT.	6" CONDUIT, TYPE F
																																	GENERAL SUMMARY (CONT'D)
																																	ROADWAY (CONTINUED)
																															202		LUMP		PARCEL NO. 3WL, DEMOLISH ONE WOOD SIGN 4X4' ON TWO WOOD POSTS; ONE WOOD SIGN 10'X3' ON WOOD POST
													17																		202		LUMP		PARCEL NO. 5WL, DEMOLISH ONE 1-½ STORY RESIDENCE, 2 CAR DETACHED FRAME GARAGE, 1 STORAGE BUILDING, 1 FRAME BUNK HOUSE, 1 FRAME UTILITY SHED, 1 FRAME CHICKEN COOP, 1 FRAME BARN, 1 CONCRETE BLOCK WAREHOUSE, 2 DUG WELLS, 2 DRILLED WELLS, SEPTIC SYSTEM, TV ANTENNAE, 1 ABOVE GROUND FUEL OIL TANK, 1 UNDERGROUND GASOLINE TANK (ABANDONED)
																	•														202		LUMP		PARCEL NO. 7WL, DEMOLISH TWO 4X8 SIGN PANELS ON THREE WOOD POSTS
																															202		LUMP		PARCEL NO. 9WL, DEMOLISH ONE 1-½ STORY BRICK AND FRAME RESIDENCE, SEPTIC SYSTEM
																															202		LUMP		PARCEL NO. 10WL, DEMOLISH ONE 1 STORY FRAME AND METAL SHED

CALCULATIONS

CALC. BY T.K. DATE 12/88	CHK'D. BY J.S. DATE 12/88

AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

CALC. BY T.K. 12/87
CHK'D. BY W.R. 12/87

LOCATION	STATION FROM	STATION TO	SIDE	LENGTH	AVE. PAV'T WIDTH	TYPICAL	DESCRIPTION	PAV'T AREA	BERM AREA	PAV'T & BERM AREA	202 WEARING COURSE REMOVED	203 SUBGRADE COMPACTION	301 BITUMINOUS AGGREGATE BASE AVERAGE THICKNESS	301 BITUMINOUS AGGREGATE BASE AC–20	304 AGGREGATE BASE AVERAGE THICKNESS	304 AGGREGATE BASE	305 8" CONCRETE BASE	305 10" CONCRETE BASE	310 SUBBASE TYPE II AVERAGE THICKNESS (BERM)	310 SUBBASE TYPE II (BERM)	310 6" SUBBASE TYPE II (PAV'T)	448 (1/2" AVE.) ASPH. CONC. INTERMEDIATE TYPE I AC–20	407 TACK COAT @0.075 GAL. PER SQ. YD.	408 PRIME COAT @ 0.4 GAL. PER SQ. YD.	409 BITUMINOUS SEAL COAT @ 0.3 GAL. /SQ. YD.	409 COVER AGGREGATE @0.008 CU. YD. /SQ. YD.	446 1 1/4" ASPH. CONC. SURFACE TYPE I AC–20	446 1 3/4" ASPH. CONC. INTERMEDIATE TYPE II AC–20
				LIN. FT.	LIN. FT.			SQ. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.	INCHES	CU. YD.	INCHES	CU. YD.	SQ. YD.	SQ. YD.	INCHES	CU. YD.	CU. YD.	CU. YD.	GAL.	GAL.	GAL.	CU. YD.	CU. YD.	CU. YD.
USR 33 (WB)	679+50.00	681+00.00	LT. & RT.	150.00	38		TRANSITION "A"	3,600	2,100	5,700	287.1		3	1.9	6	3.7			4.5	2.8			47.5	8.9			24.7	4.9
USR 33 (EB)	679+50.00	680+00.00	LT. & RT.	50.00	38		TRANSITION "B"	1,200	700	1,900	211.1												15.9				7.4	
USR 33 (WB)	681+00.00	741+00.00	LT. & RT.	6000.00	24	1,2,3	PAVEMENT	144,000		144,000												222.2	1200.0				555.6	777.8
USR 33 (WB)	741+00.00	752+98.59	LT. & RT.	1198.59	24	4,5	PAVEMENT	28,766		28,766		3196.3						3196.3			532.7		239.7				111.0	155.4
USR 33 (WB)	754+83.18	766+06.51	LT. & RT.	1123.33	24	5,6	PAVEMENT	26,960		26,960		2995.6						2995.6			499.3		224.7				104.0	145.6
USR 33 (WB)	769+49.76	778+56.99	LT. & RT.	907.23	24	6	PAVEMENT	21,774		21,774		2419.3						2419.3			403.2		181.5				84.0	117.6
USR 33 (EB)	680+00.00	752+84.21	LT. & RT.	7284.21	24	1,5	PAVEMENT	174,821		174,821		19424.6						19424.6			3237.4		1456.9				674.5	944.3
USR 33 (EB)	754+68.80	766+10.71	LT. & RT.	1141.91	24	5,6	PAVEMENT	27,406		27,406		3045.1						3045.1			507.5		228.4				105.7	148.1
USR 33 (EB)	769+53.96	781+72.97	LT. & RT.	1219.01	24	6	PAVEMENT	29,256		29,256		3250.7						3250.7			541.8		243.8				112.9	158.0
USR 33 (WB)	681+00.00	688+48.07	RT.	748.07	4	1	BERM		2,992	2,992													25.0				11.6	16.2
USR 33 (WB)	688+48.07	741+00.00	RT.	5251.93	4	2,3	BERM		21,008	21,008			3	194.5	6	389.1			10.25	664.6			175.1	933.7			81.1	113.5
USR 33 (WB)	741+00.00	742+53.33	RT.	153.33	4	4	BERM		613	613		68.2						68.2	4.88	9.3			5.1				2.4	3.3
USR 33 (WB)	742+53.33	752+98.59	RT.	1045.26	4	5	BERM		4,181	4,181		464.6						464.6	4.5	58.1			34.9				16.2	22.6
USR 33 (WB)	754+83.18	757+86.73	RT.	303.55	4	5	BERM		1,214	1,214		134.9						134.9	4.5	16.9			10.1				4.7	6.6
USR 33 (WB)	757+86.73	766+06.51	RT.	819.78	4	6	BERM		3,279	3,279		364.6						364.6	4.88	49.4			27.4				12.7	17.7
USR 33 (WB)	769+49.76	778+56.99	RT.	907.23	4	6	BERM		3,629	3,629		403.2						403.2	4.88	54.7			30.3				14.0	19.6
USR 33 (EB)	680+00.00	752+84.21	LT.	7284.21	4	1,5	BERM		29,137	29,137		3237.5						3237.5	4.88	438.9			242.8				112.4	157.4
USR 33 (EB)	754+68.80	766+10.71	LT.	1141.91	4	6	BERM		4,568	4,568		507.5						507.5	4.88	68.8			38.1				17.7	24.7
USR 33 (EB)	769+53.96	781+72.97	LT.	1219.01	4	6	BERM		4,876	4,876		541.8						541.8	4.88	73.5			40.7				18.8	26.4
USR 33	703+68.88	708+31.32	LT. & RT.				MEDIAN X–OVER		2857	2857		317.4						317.4	6	52.9			23.8				11.0	15.4
USR 33 (WB)	681+00.00	696+97.32	LT.	1597.32	10	1,2	BERM & WIDENING		15,973	15,973			3	29.6	6	59.2			4.5	44.4			133.1	142.0			61.6	86.3
USR 33 (WB)	696+97.32	722+19.51	LT.	2522.19	10	3	BERM		25,222	25,222		2802.5	3	233.6	6	467.1			8.38	652.4			210.2	1121.0			97.3	136.3
USR 33 (WB)	722+19.51	732+19.51	LT.	1000.00	20.58	7	BERM & ACCEL. LANE (RAMP A)	12,500	8,080	20,580		2286.7						2286.7	6.65	165.9	231.5		171.5				79.4	111.2
USR 33 (WB)	732+19.51	733+87.78	LT.	168.27	36.55	9	BERM & NOSE (RAMP A)	5,101	1,050	6,151		683.4						683.4	6.25	20.3	94.5		51.3				23.7	33.2
USR 33 (WB)	733+87.78	741+00.00	LT.	712.22	10	3	BERM		7,122	7,122		791.4	3	66.0	6	131.9			8.38	184.2			59.4	316.6			27.5	38.5
USR 33 (WB)	741+00.00	749+15.07	LT.	815.07	10	4,5	BERM		8,151	8,151		905.7						905.7	6.65	167.3			67.9				31.5	44.0
USR 33 (WB)	749+15.07	752+98.59	LT.	383.52	28.03	8	BERM & NOSE (RAMP C)	7,773	2,978	10,751		1194.6						1194.6	6.65	61.1	144.0		89.6				41.5	58.1
USR 33 (WB)	754+83.18	757+15.07	LT.	231.89	17.84	8	BERM & DECEL. LANE (RAMP C)	2,183	1,955	4,138		459.8						459.8	6.65	40.1	40.4		34.5				16.0	22.4
USR 33 (WB)	757+15.07	765+04.17	LT.	789.10	10	5,6	BERM		7,891	7,891		876.8						876.8	6.65	162.0			65.8				30.5	42.6
USR 33 (WB)	765+04.17	766+06.51	LT.	102.34	10.02	7	BERM & ACCEL. LANE (RAMP C)	126	899	1,025		113.9						113.9	6.65	18.5	2.4		8.6				4.0	5.6
USR 33 (WB)	769+49.76	775+41.67	LT.	591.91	25.87	7	BERM & ACCEL. LANE (RAMP C)	10,578	4,735	15,313		1701.4						1701.4	6.65	97.2	195.9		127.6				59.1	82.7
USR 33 (WB)	775+41.67	776+64.82	LT.	123.15	35.22	9	BERM & NOSE (RAMP C)	3,603	734	4,337		481.9						481.9	6.25	14.2	66.7		36.1				16.8	23.4
USR 33 (WB)	776+64.82	778+56.99	LT.	192.17	10	6	BERM		1,922	1,922		213.5						213.5	6.65	39.5			16.0				7.4	10.4
USR 33 (EB)	680+00.00	729+72.58	RT.	4972.58	10	1	BERM		49,726	49,726		5525.1						5525.1	6.65	1020.6			414.4				191.9	268.6
USR 33 (EB)	729+72.58	734+94.22	RT.	521.64	19.04	8	BERM & DECEL. LANE (RAMP B)	5,660	4,273	9,933		1103.7						1103.7	6.65	87.7	104.8		82.8				38.3	53.7
USR 33 (EB)	734+94.22	737+72.58	RT.	278.36	28.90	8	BERM & DECEL. LANE (RAMP B)	5,835	2,210	8,045		893.9						893.9	6.65	45.4	108.1		67.1				31.1	43.5
USR 33 (EB)	737+72.58	742+53.33	RT.	480.75	10	1	BERM		4,808	4,808		534.2						534.2	6.65	98.7			40.1				18.6	26.0
USR 33 (EB)	742+53.33	749+08.55	RT.	655.22	10	5	BERM		6,552	6,552		728.0						728.0	4.5	91.0			54.6				25.3	35.4
USR 33 (EB)	749+08.55	751+00.00	RT.	191.45	36.69	9	BERM & NOSE (RAMP D)	5,814	1,211	7,025		780.6						780.6	6.25	23.4	107.7		58.6				27.1	37.9
USR 33 (EB)	751+00.00	752+84.21	RT.	184.21	30.22	7	BERM & ACCEL. LANE (RAMP D)	4,093	1,474	5,566		618.5						618.5	6.65	30.3	75.8		46.4				21.5	30.1
USR 33 (EB)	754+68.80	757+86.73	RT.	317.93	20	7	BERM & ACCEL. LANE (RAMP D)	3,815	2,544	6,358		706.5						706.5	6.65	52.2	70.7		53.0				24.6	34.4
USR 33 (EB)	757+86.73	761+00.00	RT.	313.27	12.17	7	BERM & ACCEL. LANE (RAMP D)	1,227	2,586	3,813		423.7						423.7	6.65	53.1	22.8		31.8				14.7	20.6
USR 33 (EB)	761+00.00	766+10.71	RT.	510.71	10	6	BERM		5,107	5,107		567.5						567.5	6.65	104.8			42.6				19.7	27.6
USR 33 (EB)	769+53.96	770+57.77	RT.	103.81	10	6	BERM		1,038	1,038		115.4						115.4	6.65	21.3			8.7				4.0	5.6
USR 33 (EB)	770+57.77	771+57.77	RT.	100.00	15	8	BERM & DECEL. LANE (RAMP C)	600	900	1,500		166.7						166.7	6.65	18.5	11.1		12.5				5.8	8.1
USR 33 (EB)	771+57.77	776+89.11	RT.	531.34	20	8	BERM & DECEL. LANE (RAMP C)	6,376	4,251	10,627		1180.8						1180.8	6.65	87.3	118.1		88.6				41.0	57.4
USR 33 (EB)	776+89.11	778+57.77	RT.	168.66	26.33	8	BERM & NOSE (RAMP C)	3,150	1,291	4,441		493.4						493.4	6.65	26.5	58.4		37.0				17.1	24.0
USR 33 (EB)	778+57.77	781+72.97	RT.	315.20	10	6	BERM		3,152	3,152		350.3						350.3	6.65	64.7			26.3				12.2	17.0
USR 33 (WB)	778+56.99	779+81.99	LT. & RT.	125.00	38		TRANSITION "C"	3,000	1,750	4,750	527.8												39.6				18.4	
USR 33 (EB)	781+72.97	782+72.97	LT. & RT.	100.00	38		TRANSITION "D"	2,400	1,400	3,800	422.3												31.7				14.7	
TOTALS CARRIED FORWARD TO SHEET 35.											1448.3	67,071.2		525.6		1051.0		63,477.3		4982.5	7174.8	222.2	6699.1	2522.2			3104.7	4259.7

* BERM WIDENING TO SUPPORT TYPE 6 CURB FOR EROSION CONTROL AT BRIDGES
2' WIDE X 16' LONG X 8 LOCATIONS = 256 SQ. FT.

CALCULATIONS

CALC. BY T.K. DATE 12/88 | CHKD. BY J.S. DATE 12/88

AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

CALC. BY T.K. 12/87
CHKD. BY W.R. 12/87

LOCATION	STATION FROM	STATION TO	SIDE	LENGTH	AVE. PAV'T WIDTH	TYPICAL	DESCRIPTION	PAV'T AREA	BERM AREA	PAV'T & BERM AREA	202 WEARING COURSE REMOVED	203 SUBGRADE COMPACTION	301 BITUMINOUS AGGREGATE BASE AVERAGE THICKNESS	301 BITUMINOUS AGGREGATE BASE AC–20	304 AGGREGATE BASE AVERAGE THICKNESS	304 AGGREGATE BASE	305 8" CONCRETE BASE	305 10" CONCRETE BASE	310 SUBBASE TYPE II AVERAGE THICKNESS (BERM)	310 SUBBASE TYPE II (BERM)	310 6" SUBBASE TYPE II (PAV'T)	448 (1/2" AVE.) ASPH. CONC. INTERMEDIATE TYPE I AC–20	407 TACK COAT @0.075 GAL. PER SQ. YD.	408 PRIME COAT @ 0.4 GAL. PER SQ. YD.	409 BITUMINOUS SEAL COAT @ 0.3 GAL. /SQ. YD.	409 COVER AGGREGATE @0.008 CU. YD. /SQ. YD.	446 1 1/4" ASPH. CONC. SURFACE TYPE I AC–20	446 1 3/4" ASPH. CONC. INTERMEDIATE TYPE II AC–20
				LIN. FT.	LIN. FT.			SQ. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.	INCHES	CU. YD.	INCHES	CU. YD.	SQ. YD.	SQ. YD.	INCHES	CU. YD.	CU. YD.	CU. YD.	GAL.	GAL.	GAL.	CU. YD.	CU. YD.	CU. YD.
TOTALS BROUGHT FORWARD FROM SHEET 34											1448.3	67,071.2		525.6		1051.0		63,477.3		4982.5	7174.8	222.2	6699.1	2522.2			3104.7	4259.7
RAMP A (HARDIN PIKE)	733+86.20	753+82.51	LT. & RT.	1996.31	25.00	10,14	PAV'T & BERM	31,940	17,967	49,906		5545.2					5545.2		5.26	291.4	591.5		415.9				192.6	269.6
RAMP C (HARDIN PIKE)	733+79.51	749+25.79	LT. & RT.	1546.28	25.35	11,13,14	PAV'T & BERM	25,129	14,071	39,200		4355.5					4355.5		5.70	247.6	465.4		326.7				151.3	211.8
RAMP A (HARDIN PIKE)	753+82.51	754+80.24	LT. & RT.	97.73	43.09	13	PAV'T & BERM	3,081	1,131	4,211		468.0					468.0		5.39	18.8	57.0		35.1				16.3	22.8
RAMP C (HARDIN PIKE)	733+22.14	733+79.51	LT. & RT.	57.37	50.26	13	PAV'T & BERM	2,134	749	2,884		320.4					320.4		5.31	12.3	39.6		24.1				11.2	15.6
RAMP B (HARDIN PIKE)	737+71.23	755+84.12	LT. & RT.	1812.89	24.98	10,14	PAV'T & BERM	28,943	16,349	45,292		5032.5					5032.5		5.25	264.6	536.0		377.5				174.8	244.7
RAMP D (HARDIN PIKE)	737+06.75	749+05.46	LT. & RT.	1198.71	25.40	11,13,14	PAV'T & BERM	19,558	10,893	30,451		3383.5					3383.5		5.69	191.5	362.2		253.8				117.5	164.5
RAMP B (HARDIN PIKE)	755+84.12	756+41.68	LT. & RT.	57.56	50.42	13	PAV'T & BERM	2,145	756	2,902		322.4					322.4		5.31	12.4	39.8		24.2				11.2	15.7
RAMP D (HARDIN PIKE)	736+09.99	737+06.75	LT. & RT.	96.76	42.53	13	PAV'T & BERM	2,996	1,119	4,115		457.3					457.3		5.37	18.6	55.5		34.3				15.9	22.3
RAMP B (CR–25A)	778+53.21	782+34.09	LT. & RT.	380.88	27.74	11	PAV'T & BERM	7,206	3,360	10,566		1174.0					1174.0		5.67	58.8	133.5		88.1				40.8	57.1
RAMP B (CR–25A)	0+45.43	9+36.69	LT.	891.26	5.95	11	BERM		5,307	5,307		589.7					589.7		5.63	92.2			44.3				20.5	28.7
RAMP C (CR–25A)	776+60.84	780+65.82	LT. & RT.	404.98	28.63	11	PAV'T & BERM	7,917	3,676	11,593		1288.1					1288.1		5.68	64.5	146.6		96.6				44.8	62.6
RAMP C (CR–25A)	0+78.23	8+45.54	RT.	767.31	5.94	11	BERM		4,558	4,558		506.4					506.4		5.63	79.2			40.0				17.6	24.6
PRESAR ROAD	3+56.50	5+42.44	LT. & RT.	135.94	64.85	15	CUL–DE–SAC	8,816		8,816		979.6	3.5	98.6													34.0	47.6
SERVICE RD. NO. 1	17+50.00	18+65.93	LT. & RT.	115.93	59.86	15	CUL–DE–SAC	6,939		6,939		771.0	3.5	77.8													26.8	37.5
SERVICE RD. NO. 1	18+65.93	37+23.24	LT. & RT.	1857.31	24.00	15	PAVEMENT	44,575		44,575		4952.9	3.5	501.6													172.0	240.8
DEARBAUGH ROAD	21+75.73	22+78.14	LT. & RT.	102.41	107.87	15	CUL–DE–SAC	11,047		11,047		1227.5	3.5	123.0													42.6	59.7
CANNING FACTORY RD.	31+12.36	31+62.36	LT. & RT.	50.00	20.00		TRANSITION "E"	1,000		1,000	111.1													8.4			4.3	
CANNING FACTORY RD.	31+62.36	32+62.36	LT. & RT.	100.00	30.00	16	PAV'T TAPER & BERM	2,200	800	3,000		244.5	3.5	24.9	6.5	15.0									35.6	26.7	0.7	8.5	11.9
CANNING FACTORY RD.	32+62.36	51+93.56	LT. & RT.	1931.20	32.00	16	PAV'T & BERM	46,349	15,450	61,799		5149.9	3.5	521.6	6.5	289.1									686.7	515.0	13.8	178.8	250.4
CANNING FACTORY RD.	51+93.56	52+80.42	LT. & RT.	86.86	52.98	15	PAV'T & BERM	3,751	851	4,602		416.8	3.5	41.7	6.5	16.0									37.9	28.4	0.8	14.5	20.3
ASHLAND AVENUE	9+09.31	10+62.78	LT. & RT.	153.47	34.80	17	PAV'T & BERM	4,113	1,228	5,341		457.1	3.0	39.5	5.04	83.0									237.4	41.0	1.1	15.9	22.2
ASHLAND AVENUE	10+62.78	36+31.86	LT. & RT.	2569.08	32.00	17	PAV'T & BERM	61,658	20,553	82,211		6850.9	3.0	594.7	5.12	1300.4									3653.8	685.1	18.3	237.9	333.1
ASHLAND AVENUE	36+31.86	36+92.47	LT. & RT.	60.61	54.03	17	PAV'T & BERM	2,592	683	3,275		288.0	3.0	24.8	4.94	49.9									145.6	22.8	0.6	10.0	14.0
ASHLAND AVENUE	37+17.03	37+64.53	LT. & RT.	47.50	39.47	17	PAV'T & BERM	1,370	505	1,875		152.2	3.0	13.3	5.22	30.2									83.3	16.9	0.5	5.3	7.4
WAPA STREET	10+12.40	10+80.29	LT. & RT.	67.89	53.09	15	PAV'T & BERM	2,871	733	3,604		319.0	3.5	32.0	6.5	13.7									32.6	24.5	0.7	11.1	15.5
WAPA STREET	10+80.29	12+45.13	LT. & RT.	164.84	29.72	15	PAV'T & BERM	3,956	943	4,899		439.6	3.5	44.0	6.5	17.7									41.9	31.5	0.9	15.3	21.4
NEW STREET	10+12.00	10+47.00	LT. & RT.	35.00	50.89	15	PAV'T & BERM	1,366	415	1,781		151.8	3.5	15.3	6.5	7.8									18.5	13.9	0.4	5.3	7.4
NEW STREET	10+47.00	12+79.97	LT. & RT.	232.97	32.00	15	PAV'T & BERM	5,591	1,864	7,455		621.3	3.5	62.9	6.5	34.9									82.9	62.2	1.7	21.6	30.2
NEW STREET	12+79.97	13+14.97	LT. & RT.	35.00	50.89	15	PAV'T & BERM	1,366	415	1,781		151.8	3.5	15.3	6.5	7.8									18.5	13.9	0.4	5.3	7.4
HARDIN PIKE	8+00.00	8+55.83	LT. & RT.	55.83	30.45	18	PAV'T TAPER & BERM	1,253	447	1,700		139.3	8.75	35.3	6.14	32.2									75.6	14.9	0.4	4.9	6.8
HARDIN PIKE	8+55.83	34+20.41	LT. & RT.	2564.58	24.00	18,19	PAVEMENT	61,550		61,550		6838.9	8.75	1731.5	4.0	759.9									2735.6			237.5	332.5
HARDIN PIKE	9+44.75	11+59.72	LT.	214.97	4.00	18	BERM		860	860					12.13	32.2									38.2	28.7	0.8		
HARDIN PIKE	12+87.89	26+19.34	LT.	1331.45	3.99	18,19	BERM		5,311	5,311					12.13	198.8									236.1	177.1	4.8		
HARDIN PIKE	26+59.15	34+20.41	LT.	761.26	3.98	19	BERM		3,030	3,030					11.80	110.4									134.7	101.0	2.7		
HARDIN PIKE	8+55.83	8+59.83	RT.	4.00	4.00	18	BERM		16	16					12.13	0.6									0.7	0.6	0.1		
HARDIN PIKE	9+85.42	11+21.75	RT.	136.33	4.15	18	BERM		566	566					12.13	21.2									25.2	18.9	0.5		
HARDIN PIKE	13+52.58	25+22.64	RT.	1170.06	4.03	18,19	BERM		4,713	4,713					11.80	171.7									209.5	157.1	4.2		
HARDIN PIKE	27+51.76	31+20.36	RT.	368.60	4.03	19	BERM		1,487	1,487					11.28	51.8									66.1	49.6	1.4		
HARDIN PIKE	32+59.58	34+20.41	RT.	160.83	4.00	19	BERM		643	643					12.13	24.1									28.6	21.5	0.6		
HARDIN PIKE	34+20.41	35+70.41	LT. & RT.	150.00	30.00	19	PAV'T TAPER & BERM	3,300	1,200	4,500		366.7	8.75	93.2	6.06	84.2									200.0	40.0	1.1	12.8	17.9
STATION EQUATION: PROP. STA. 35+70.41 = EX. STA. 35+64.42																													
HARDIN PIKE	35+64.42	36+39.42	LT. & RT.	75.00	20.00		TRANSITION "F"	1,500		1,500														12.5			8.9	
SERVICE RD. NO. 2	21+58.00	22+47.04	LT.	89.04	19.75	15	PAVEMENT	1,759		1,759		195.5	3.5	19.5													6.8	9.5
SERVICE RD. NO. 2	22+47.04	26+03.49	LT.	356.45	19.64	15	PAVEMENT	7,002		7,002		778.1	3.5	77.5													27.0	37.9
SERVICE RD. NO. 2	26+03.49	26+54.91	LT. & RT.	51.42	33.06	15	PAVEMENT	1,700		1,700		188.9	3.5	19.3													6.6	9.2
SERVICE RD. NO. 3	20+07.30	21+60.82	LT. & RT.	153.52	19.75		PAVEMENT	3,032		3,032		355.5	3.5	34.6													11.7	16.4
USR 33	VARIES	VARIES	LT. & RT.	128.00	2.00	1	BERM WIDENING *		256	256		28.5						28.5	3.0	2.4			2.9				1.0	1.4
TOTALS CARRIED TO GENERAL SUMMARY											1,560	122,581		4,768		4,404	23,443	63,507		6,338	9,602	223	8,484	11,348	2,092	57	5,046	6960

CALC. BY T.K. DATE 12/88	FHWA REGION	STATE	PROJECT		36 345
CHKD. BY J.S. DATE 12/88	5	OHIO			

AUGLAIZE COUNTY
AUG– 33 –13.44

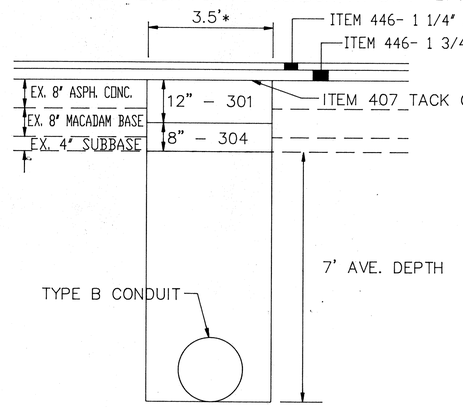
ESTIMATED QUANTITIES

REF.	LOCATION	SIDE	STATION FROM	STATION TO	SEE SHEET NO	202 PAVEMENT REMOVED	202 CONCRETE MEDIAN REMOVED	203 SUBGRADE COMPACTION	304 AGGREGATE BASE	310 SUBBASE TYPE II	404 ASPHALT CONCRETE AC–20 DRIVEWAYS	408 PRIME COAT	609 CURB TYPE 6	612 CONCRETE MEDIAN	670 DITCH EROSION PROTECTION	SPECIAL DITCH EROSION PROTECTION TYPE I AS PER SUPPL. SPEC. 839 OR 840	202 BUILDINGS DEMOLISHED			
						SQ. YD.	SQ. YD.	SQ. YD.	CU. YD.	CU. YD.	CU. YD.	GAL.	LIN. FT.	SQ. YD.	SQ. YD.	SQ. YD.				
R-1	RAMP D (HARDIN PIKE)	RT.	738+50		126															
R–2	RAMP B (C.R.–25A)	LT.	778+53.21	782+34.09	145	704											LUMP			
R–3	RAMP C (C.R.–25A)	L.& R.	779+00	780+81.44	146	712														
R-4	CANNING FACTORY RD.	LT.	48+20		190															
D–1	RAMP A (HARDIN PIKE)	RT.	745+74	748+24	107												LUMP			
D–2	RAMP A (HARDIN PIKE)	LT.	752+95	753+50	107											223				
D–3	U.S.R. 33	RT.	742+50	743+40	126										49					
D–4	RAMP D (HARDIN PIKE)	LT.	746+00		126										100					
D–5	RAMP D (HARDIN PIKE)	LT.	746+00	748+00	126										235					
															174					
D–6	RAMP B (HARDIN PIKE)	RT.	749+30	751+30	126															
D–7	RAMP D (HARDIN PIKE)	RT.	736+75	746+00	126											178				
D–8	CANNING FACTORY ROAD	LT.	48+50	50+89	190										1260					
D–9	SERVICE RD. NO 1	RT.	34+00	35+00	209										213					
															67					
P–1	RAMP A (HARDIN PIKE)	RT.	748+23.99	754+42.24	107			281.2		109.4				281.2						
P–2	RAMP B (HARDIN PIKE)	LT.	751+29.30	755+84.12	126			197.8		76.9				197.8						
P–3	RAMP B (CR–25A)	LT.	781+84.09	782+34.09	145		30.5	30.5		5.1				30.5						
P–4	RAMP C (C.R.–25A)	RT.	780+15.82	780+81.44	146		36.5	36.5		6.1				36.5						
P–5	SERVICE RD. NO 2	RT.	21+58	26+04	174								446							
P–6	PRESAR RD.	RT.	5+05	5+38	223				5.1		1.7	13								
P-7	CANNING FACTORY RD.	RT.	48+18		190				4.8											
TOTALS CARRIED TO GENERAL SUMMARY						1416	67	546	10	198	2	13	446	546	2098	401	LUMP			

ITEM 802 - BARRIER REFLECTORS, TYPE B

A QUANTITY OF 28, BARRIER REFLCTORS, TYPE B FOR BRIDGES, HAS BEEN CARRIED TO THE TRAFFIC CONTROL SUMMARY ON SHEET 238

* USE 7' WIDE TRENCH FOR 42" CONDUIT AT STA. 727+00



USR33 WB STATION	SEE SHEET	PIPE DIAMETER	CUT LENGTH	CUT WIDTH	301 BIT.AGGR. BASE	304 AGGR. BASE
					CU.YD.	CU.YD.
691+15	57	18"	32'	3.5'	4.2	2.8
702+00	58	15"	24'	3.5'	3.1	2.1
702+25	58	8"	26'	3.5'	3.4	2.3
706+15	58	15"	26'	3.5'	3.4	2.3
713+50	59	15"	24'	3.5'	3.1	2.1
722+00	60	15"	24'	3.5'	3.1	2.1
727+00	60	42"	24'	7'	6.3	4.2
734+50	61	15"	24'	3.5'	3.1	2.1
TOTALS CARRIED TO GENERAL SUMMARY					30	20

TYPICAL PAVEMENT CUT FOR INSTALLING CONDUIT UNDER EXIST. USR 33 WB

UNDERDRAIN QUANTITIES

FROM SHT.	LOCATION	STATION FROM	STATION TO	SIDE	BENDS & BRANCHES 6" X 90° BEND EACH	6" X 45° BEND EACH	6" TEE EACH	6" X 45° WYE EACH	603 6" TYPE B LIN. FT.	* 6" TYPE F AS PER PLAN LIN. FT.	605 6" PIPE UNDERDRAINS SHALLOW AS PER PLAN LIN. FT.	6" PIPE UNDERDRAINS UNCLASSIFIED AS PER PLAN LIN. FT.	SPECIAL PRECAST CONCRETE OUTLET (SEE SHT 21A) EACH
56	33 (E.B.)	680+00	683+95	LT.							345	50	
56	33 (E.B.)	680+00	683+95	RT.							345	50	
56	33 (E.B.)	684+00	690+00	LT.		1				44	569		
56	33 (E.B.)	684+00	690+00	RT.		1				33	577		
57	33 (W.B.)	690+00	691+45	RT.								145	
57	33 (E.B.)	690+00	691+65	RT.							165		
57	33 (E.B.)	690+00	691+45	LT.							145		
57	33 (W.B.)	691+45	691+55	LT.						10			
57	33 (W.B.)	691+50	696+97	RT.		1				35	522		
57	33 (E.B.)	691+50	700+00	LT.		1				35	825		
57	33 (E.B.)	691+50	700+00	RT.		1				52	813		
58	33 (E.B.)	700+00	702+25	RT.							225		
58	33 (E.B.)	700+00	702+10	LT.							210		
58	33 (W.B.)	700+94	701+14	RT.						20			
58	33 (W.B.)	700+94	701+14	LT.						20			
58	33 (W.B.)	702+00	702+30	LT.		1				42			
58	33 (W.B.)	702+00	702+23	RT.		1				33			
58	33 (E.B.)	702+00	710+00	LT.		1				35	775		
58	33 (E.B.)	702+00	710+00	RT.		1				54	762		
58	33 (W.B.)	706+05	706+15	LT.						10			
58	33 (W.B.)	706+16	706+26	RT.						10			
58	33 (W.B.)	708+87	710+00	RT.								113	
58	33 (W.B.)	709+17	710+00	LT.								83	
59	33 (W.B.)	710+00	710+09	RT.								9	
59	33 (W.B.)	710+00	710+09	LT.								9	
59	33 (E.B.)	710+00	713+65	LT.							365		
59	33 (E.B.)	710+00	713+75	RT.							375		
59	33 (W.B.)	713+50	713+83	LT.		1				47			
59	33 (W.B.)	713+50	713+73	RT.		1				43			
59	33 (E.B.)	713+50	720+00	LT.		1				35	625		
59	33 (E.B.)	713+50	720+00	RT.		1				52	613		
60	33 (E.B.)	720+00	721+95	LT.							195		
60	33 (E.B.)	720+00	721+95	RT.							195		
60	33 (E.B.)	722+00	727+26	RT.		1				58	485		
60	33 (E.B.)	727+00	730+00	RT.		1				54	262		
60	33 (E.B.)	722+00	726+90	LT.		1				35	465		
60	33 (E.B.)	727+00	730+00	LT.		1				35	275		
60	33 (W.B.)	722+00	722+23	RT.		1				33			
60	33 (W.B.)	727+00	729+09	RT.		1				33	184		
60	33 (W.B.)	729+09		LT.			1		20	30			1
60	33 (W.B.)	722+00	726+90	LT.		1				58	449		
60	33 (W.B.)	727+00	730+00	LT.		1				14	290		
61	33 (E.B.)	730+00	734+50	RT.							450		
61	RAMP B	734+94	740+40	RT.			1			31	356	190	1
61	33 (E.B.)	730+00	734+45	LT.							445		
61	33 (E.B.)	734+50	740+00	LT.		1				35	525		
61	33 (E.B.)	737+75(B)	740+00	RT.	1		1		40		220		
61	33 (W.B.)	734+50	734+73	RT.		1				33			
61	33 (W.B.)	738+44	738+62	RT.						18			
61	33 (W.B.)	738+44	738+62	LT.						18			
61	33 (W.B.)	734+50	734+80	LT.		1				42			
61	33 (W.B.)	730+00	731+50	LT.							150		
61	RAMP A	731+60	734+50	LT.		1				14	280		
61	RAMP A	734+50	738+27	LT.		1				14	367		
61	RAMP A	738+00	739+00	LT.		1				52	63		
62	33 (W.B.)	740+80	742+90	LT.							190	20	
62	33 (W.B.)	740+80	742+90	RT.							190	20	
62	33 (E.B.)	740+00	742+90	LT.							290		
62	33 (E.B.)	740+00	742+90	RT.							290		
62	33 (W.B.)	743+10	749+10	LT.	1					36	600		1
62	33 (E.B.)	743+03	750+00	LT.		1				35	672		
62	RAMP C	749+00	750+00	LT.							100		
62	RAMP D	748+00	750+00	RT.							200		
TOTALS CARRIED TO NEXT TABLE									60	1288	16,444	689	3

* 707.17 NON-PERFORATED, ASTM 3034 SDR 35 OR SUPP. SPEC. 931

** 707.01 TYPE III OR 707.21 TYPE III

CALC. BY T.K. DATE 12/88

CHKD. BY J.S. DATE 12/88

AUGLAIZE COUNTY
AUG- 33 -13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

37
345

UNDERDRAIN QUANTITIES

FROM SHT.	LOCATION	STATION FROM	STATION TO	SIDE	BENDS & BRANCHES 6" X 90° BEND EACH	6" X 45° BEND EACH	6" TEE EACH	6" X 45° WYE EACH	603 6" TYPE B LIN. FT.	* 6" TYPE F AS PER PLAN LIN. FT.	605 6" PIPE UNDERDRAINS SHALLOW AS PER PLAN LIN. FT.	6" PIPE UNDERDRAINS UNCLASSIFIED AS PER PLAN LIN. FT.	605 6" PIPE UNDERDRAINS UNCLASSIFIED ** LIN. FT.	SPECIAL PRECAST CONCRETE OUTLET EACH
TOTALS BROUGHT FORWARD FROM PREVIOUS TABLE									60	1288	16,444	689		3
63	RAMP D	750+00	751+00	RT.							100			
63	RAMP C	750+00	753+00	LT.			1				300		37	
63	33 (E.B.)	750+00	752+90	LT.			1				290		45	
63	33 (W.B.)	755+00	760+00	LT.	1		1			21	500		36	1
63	33 (W.B.)	754+75	760+00	RT.		1				35	500			
63	33 (E.B.)	754+75	760+00	LT.		1	1			35	500		38	
63	33 (E.B.)	757+80	760+00	RT.	1					24	220			1
64	33 (E.B.)	760+00	766+00	RT.			1				600		24	
64	33 (E.B.)	760+00	766+00	LT.							600			
64	33 (W.B.)	760+00	766+00	RT.							600			
64	33 (W.B.)	760+00	766+00	LT.			1				600		24	
64	33 (E.B.)	769+60	770+00	RT.			1				40		24	
64	33 (E.B.)	769+60	770+00	LT.							40			
64	33 (W.B.)	769+60	770+00	RT.			1				40			
64	33 (W.B.)	769+60	770+00	LT.							40		36	
65	33 (E.B.)	770+90	776+89	RT.							689			
65	33 (E.B.)	778+60	780+00	RT.							140			
65	33 (E.B.)	770+00	780+00	LT.							1000			
65	33 (W.B.)	770+00	778+57	RT.							825	32		
65	33 (W.B.)	770+00	775+42	LT.							542			
65	33 (W.B.)	775+50	778+57	LT.							275	32		
66	33 (E.B.)	780+00	782+20	LT.								220		
66	33 (E.B.)	780+00	782+20	RT.			1					220		
107	RAMP A	739+00	751+75	L&R		2			23		1259			
107	RAMP C	736+50	739+25	LT.	1					20	275			1
107	RAMP C	739+35	743+65	LT.			1			20	430			1
107	RAMP C	743+75	746+40	LT.	1					26	265			1
107	RAMP C	746+50	749+00	LT.	1					36	250			1
126	RAMP B	740+50	747+14	RT.	1					22	664			1
126	RAMP B	747+14	753+00	LT.			1		22	30	586			1
126	RAMP B	753+00	755+66	RT.	1					40		266		1
126	RAMP D	738+00	740+50	RT.	1					24	250			1
126	RAMP D	740+60	743+65	RT.			1			22	305			1
126	RAMP D	743+75	745+95	RT.	1					34	220			1
126	RAMP D	746+10	748+00	RT.	1					40	190			1
146	CR - 25A RAMP C	775+42	780+65	LT.	1					26	523			1
145	CR - 25A RAMP B	776+89	782+34	RT.	1					24	211	334		1
175	ASHLAND AVE	15+26 DEARBAUGH	14+65	LT.			1			14	265	254		1
175	ASHLAND AVE	14+75	21+00	LT.	1					12	625			1
175	ASHLAND AVE	14+75	17+95	RT.	1					12	320			1
176	ASHLAND AVE	18+00	32+45	RT.	1					14	1445			1
176	ASHLAND AVE	25+26	32+45	LT.		1		1	34		595	100		
177	ASHLAND AVE	32+50	36+52	LT.		1				21	387			
177	ASHLAND AVE	32+50	36+32	RT.		1				21	367			
154	HARDIN PIKE	9+25	11+65	LT.			1		31		165	75		
154	HARDIN PIKE	36+32 ASHLAND	753+05(A)	RT.							463			
154	HARDIN PIKE	12+75	14+00	LT.		1				21		110		
154	HARDIN PIKE	734+97(C)	14+00	RT.		1				21	118	154		
154	HARDIN PIKE	14+00	17+00	LT.		1				21		285		
154	HARDIN PIKE	14+00	17+00	RT.		1				21		285		
155	HARDIN PIKE	17+00	21+50	RT.	1					32		450		
155	HARDIN PIKE	17+00	23+90	LT.		1				26		672		
155	HARDIN PIKE	23+90	26+10	LT.		1				26		202		
156	HARDIN PIKE	26+67	32+33	LT.	1					26	566			
156	HARDIN PIKE	32+70	34+25	RT.	1					15		155		
156	HARDIN PIKE	34+45	35+50	RT.	1					16		105		1
TOTALS CARRIED TO GENERAL SUMMARY SH. 31									170	2086	35,629	4,640	264	23

UNDERDRAIN TABLE

FENCE TABLE

LOCATION	STATION	SIDE	DISTANCE FROM CENTER-LINE	ASSEMBLY CODE	607 FENCE TYPE 47	607 FENCE TYPE CLT	625 GROUND RODS	CROSSING SEE STD. DWG. F-6
					LIN. FT.	LIN. FT.	EACH	
USR 33 (E.B.)	673+21	RT.	88'	5				
					69			
	673+51	RT.	149.79'	2				
					550			
	679+00	RT.	131.88'	3				
					551			
	684+50	RT.	113.94'	3				
					551			
	690+00	RT.	96'	3				
					640			
	696+40	RT.	96.85'	3				
					640		1	
	702+80	RT.	94'	3				
					640			TYPE 3
	709+20	RT.	94'	3				
					640			
	715+60	RT.	94'	3				
					640			
	722+00	RT.	94'	3				
					640			
	728+38.14	RT.	94'	1				
					113			
	729+48.5	RT.	119'	4		377		
	733+25	RT.	119'	4				
						375		
	737+00	RT.	119'	4				
						204		
	739+00	RT.	154'	4				
						222		
	741+00	RT.	249'	4				
						285		
USR 33 (E.B.)	743+25	RT.	424.19'	4				
						653	3	
EX. HARDIN PIKE	27+19	RT.	699.5'	4				
						521	2	
	27+19	RT.	179'	4				
						161	1	
	28+72.1	RT.	129'	4				
						227		
EX. HARDIN PIKE	30+99	RT.	124	4				
EX. HARDIN PIKE	30+99	LT.	24'	4				
						414	2	
	26+86	LT.	24'	4				
						27		
	26+86	RT.	2.5'	4				
						30		
EX. HARDIN PIKE	26+56	RT.	2.5'	4				
EX. HARDIN PIKE	26+00	RT.	2.5'	4				
						446		
USR 33 (E.B.)	753+80.86	RT.	153.31'	4				
						570	2	
	759+40.27	RT.	139'	4				
						281		
	762+19.87	RT.	162'	4				
						458		
USR 33 (E.B.)	766+77.53	RT.	162'	4				
TOTALS CARRIED TO NEXT TABLE					5674	5251	11	

FENCE TABLE

LOCATION	STATION	SIDE	DISTANCE FROM CENTER-LINE	ASSEMBLY CODE	607 FENCE TYPE 47	607 FENCE TYPE CLT	625 GROUND RODS	CROSSING SEE STD. DWG. F-6
					LIN. FT.	LIN. FT.	EACH	
TOTALS BROUGHT FORWARD FROM OTHER TABLE					5674	5251	11	
USR 33 (W.B.)	672+59	LT.	73'	5				
					99			
	672+17	LT.	162.07'	2				
					585			
	678+00	LT.	122.54'	3				
					555			
	683+53.78	LT.	85'	1				
					100			
	684+53.78	LT.	86'	4				
						347		
	688+00	LT.	93.36'	4				
						454		
	692+53.98	LT.	103'	4				
						660		
	699+13.78	LT.	86'	4				
						511	1	
	704+25	LT.	86'	4				
						514		
	709+38.70	LT.	86'	4				
						561		
	715+00	LT.	91'	4				
						500		
	720+00	LT.	91'	4				
						201		
	722+00	LT.	109'	4				
						374		
	725+73.46	LT.	109'	4				
						348		
	729+21.25	LT.	124'	4				
						479		
	734+00	LT.	124'	4				
						317		
	737+00	LT.	224'	4				
						348		
	740+00	LT.	399'	4				
						400		
USR 33 (W.B.)	743+13.5	LT.	648.4'	4				
						407		
HARDIN PIKE	11+56	RT.	629.5'	4				
						525		
	11+56	RT.	104.5'	4				
						79		
	11+00	RT.	49'	4				
						41		
	10+60.14	RT.	43.56'	4				
						81		
	9+80	RT.	49'	4				
						39		
HARDIN PIKE	9+55.91	RT.	79'	4				
HARDIN PIKE	12+47.59	LT.	59'	4				
						62	1	
HARDIN PIKE	13+01.06	LT.	29'	4				
						448	2	
HARDIN PIKE	17+48.17	LT.	29'	4				
						130	1	
HARDIN PIKE	18+15.5	LT.	140'	4				
						559	2	
USR 33 (W.B.)	761+25	LT.	138.92'	4				
						551	2	
USR 33 (W.B.)	766+74.11	LT.	145.50'	4				
TOTALS CARRIED TO GENERAL SUMMARY					7013	14,187	20	

CALC. BY T.K. DATE 4/89

CHKD. BY J.S. DATE 12/88

AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

38
345

ASSEMBLY CODE

1. END POST ASSEMBLY
2. CORNER POST ASSEMBLY
3. INTERMEDIATE ANCHOR POST ASSEMBLY
4. BRACE AND TRUSS ASSEMBLY
5. ABUTMENT CONNECTION

FHWA REGION	STATE	PROJECT	
5	OHIO		

39/345

AUGLAIZE COUNTY
AUG– 33 –13.44

SUPERELEVATION TABLE WESTBOUND U.S.R. 33

LOCATION AND STATION	PROFILE GRADE RT. EDGE	RT. LANE SUPER. RATE FT./FT.	℄ PAV'T SUPER–ELEVATION	℄ PAV'T GRADE	LT. LANE SUPER. RATE FT./FT.	LT. EDGE SUPER–ELEVATION	LT. EDGE PAV'T GRADE
742 + 50	903.70	0.0156	0.19	903.89	-0.0156	0.00	903.70
+ 53.33	903.73	0.0156	0.19	903.92	-0.0156	0.00	903.73
+ 75	903.95	0.0111	0.14	904.09	-0.0156	–0.05	903.90
743 + 00	904.23	0.0059	0.07	904.30	-0.0156	–0.12	904.11
+ 25	904.53	0.0007	0.01	904.54	-0.0156	–0.18	904.35
+ 28.33	904.57	0.0000	0.00	904.57	-0.0156	–0.19	904.38
+ 50	904.86	-0.0045	–0.03	904.83	-0.0156	–0.22	904.64
+ 75	905.22	-0.0097	–0.12	905.10	-0.0156	–0.31	904.91
744 + 00	905.60	-0.0149	–0.18	905.42	-0.0156	–0.37	905.23
+ 03.33	905.65	-0.0156	–0.19	905.46	-0.0156	–0.38	905.27
+ 25	906.01	-0.0201	–0.24	905.77	-0.0201	–0.48	905.53
+ 50	906.45	-0.0253	–0.30	906.15	-0.0253	–0.60	905.85
+ 75	906.91	-0.0305	–0.37	906.54	-0.0305	–0.73	906.18
745 + 00	907.40	-0.0357	–0.43	906.97	-0.0357	–0.86	906.54
+ 25	907.91	-0.0409	–0.49	907.42	-0.0409	–0.98	906.93
+ 50	908.41	-0.0461	–0.55	907.86	-0.0461	–1.11	907.30
+ 75	908.92	-0.0513	–0.62	908.30	-0.0513	–1.23	907.69
+ 78.33	908.98	-0.0520	–0.62	908.36	-0.0520	–1.25	907.73
746 + 00	909.42	-0.0520	–0.62	908.80	-0.0520	–1.25	908.17
+ 25	909.92	-0.0520	–0.62	909.30	-0.0520	–1.25	908.67
+ 50	910.43	-0.0520	–0.62	909.81	-0.0520	–1.25	909.18
+ 75	910.93	-0.0520	–0.62	910.31	-0.0520	–1.25	909.68
747 + 00	911.44	-0.0520	–0.62	910.82	-0.0520	–1.25	910.19
+ 25	911.94	-0.0520	–0.62	911.32	-0.0520	–1.25	910.69
+ 50	912.45	-0.0520	–0.62	911.83	-0.0520	–1.25	911.20
+ 75	912.95	-0.0520	–0.62	912.33	-0.0520	–1.25	911.70
748 + 00	913.45	-0.0520	–0.62	912.83	-0.0520	–1.25	912.20
+ 25	913.96	-0.0520	–0.62	913.34	-0.0520	–1.25	912.71
+ 50	914.46	-0.0520	–0.62	913.84	-0.0520.	–1.25	913.21
+ 75	914.97	-0.0520	–0.62	914.35	-0.0520	–1.25	913.72
749 + 00	915.47	-0.0520	–0.62	914.85	-0.0520	–1.25	914.22
+ 25	915.97	-0.0520	–0.62	915.35	-0.0520	–1.25	914.72
+ 50	916.48	-0.0520	–0.62	915.86	-0.0520	–1.25	915.23
+ 75	916.98	-0.0520	–0.62	916.36	-0.0520	–1.25	915.73
750 + 00	917.49	-0.0520	–0.62	916.87	-0.0520	–1.25	916.24
+ 25	917.99	-0.0520	–0.62	917.37	-0.0520	–1.25	916.74
+ 50	918.50	-0.0520	–0.62	917.88	-0.0520	–1.25	917.25
+ 75	919.00	-0.0520	–0.62	918.38	-0.0520	–1.25	917.75
751 + 00	919.50	-0.0520	–0.62	918.88	-0.0520	–1.25	918.25
+ 25	920.01	-0.0520	–0.62	919.39	-0.0520	–1.25	918.76
+ 50	920.51	-0.0520	–0.62	919.89	-0.0520	–1.25	919.26
+ 75	921.02	-0.0520	–0.62	920.40	-0.0520	–1.25	919.77
752 + 00	921.52	-0.0520	–0.62	920.90	-0.0520	–1.25	920.27
+ 25	922.02	-0.0520	–0.62	921.40	-0.0520	–1.25	920.77
+ 50	922.53	-0.0520	–0.62	921.91	-0.0520	–1.25	921.28
+ 75	923.02	-0.0520	–0.62	922.40	-0.0520	–1.25	921.77
753 + 00	923.50	-0.0520	–0.62	922.88	-0.0520	–1.25	922.25
+ 25	923.97	-0.0520	–0.62	923.35	-0.0520	–1.25	922.72
+ 50	924.41	-0.0520	–0.62	923.79	-0.0520	–1.25	923.16
+ 75	924.84	-0.0520	–0.62	924.22	-0.0520	–1.25	923.59
754 + 00	925.25	-0.0520	–0.62	924.63	-0.0520	–1.25	924.00
+ 25	925.65	-0.0520	–0.62	925.03	-0.0520	–1.25	924.40
+ 50	926.03	-0.0520	–0.62	925.41	-0.0520	–1.25	924.78
+ 61.73	926.20	-0.0520	–0.62	925.58	-0.0520	–1.25	924.95
+ 75	926.39	-0.0492	–0.59	925.80	-0.0492	–1.18	925.21
755 + 00	926.74	-0.0440	–0.53	926.21	-0.0440	–1.06	925.68
+ 25	927.07	-0.0388	–0.47	926.60	-0.0388	–0.93	926.14
+ 50	927.38	-0.0337	–0.40	926.98	-0.0337	–0.81	926.57
+ 75	927.68	-0.0285	–0.34	927.34	-0.0285	-0.68	927.00
756 + 00	927.96	-0.0233	–0.28	927.68	-0.0233	–0.56	927.40
+ 25	928.23	-0.0181	–0.22	928.01	-0.0181	–0.43	927.80
+ 36.73	928.34	-0.1560	–0.19	928.15	-0.0156	–0.38	927.96
+ 50	928.47	-0.0129	–0.15	928.32	-0.0156	–0.34	928.13
+ 75	928.70	-0.0077	–0.09	928.61	-0.0156	–0.28	928.42
757 + 00	928.92	-0.0024	–0.03	928.89	-0.0156	–0.22	928.70
+ 11.73	929.01	0.0000	0.00	929.01	-0.0156	–0.19	928.82
+ 25	929.11	0.0028	0.03	929.14	-0.0156	–0.16	928.95
+ 50	929.30	0.0080	0.10	929.40	-0.0156	–0.09	929.21
+ 75	929.46	0.0132	0.16	929.62	-0.0156	–0.03	929.43
+ 86.73	929.55	0.0156	0.19	929.74	-0.0156	0.00	929.55
758 + 00	929.64	0.0156	0.19	929.83	-0.0156	0.00	929.64

SUPERELEVATION TABLE EASTBOUND U.S.R. 33

LOCATION AND STATION	PROFILE GRADE LT. EDGE	LT. LANE SUPER. RATE FT. / FT.	℄ PAV'T SUPER–ELEVATION	℄ PAV'T GRADE	RT. LANE SUPER. RATE FT. / FT.	RT. EDGE SUPER–ELEVATION	RT. EDGE PAV'T GRADE
742 + 50	903.70	0.0156	0.19	903.89	–0.0156	0.00	903.70
+ 53.33	903.73	0.0156	0.19	903.92	–0.0156	0.00	903.73
+ 75	903.95	0.0156	0.19	904.14	–0.0111	0.05	904.00
743 + 00	904.23	0.0156	0.19	904.42	–0.0059	0.12	904.35
+ 25	904.53	0.0156	0.19	904.72	–0.0007	0.18	904.71
+ 28.33	904.57	0.0156	0.19	904.76	0.0000	0.19	904.76
+ 50	904.86	0.0156	0.19	905.05	0.0045	0.22	905.08
+ 75	905.22	0.0156	0.19	905.41	0.0097	0.31	905.53
744 + 00	905.60	0.0156	0.19	905.79	0.0149	0.37	905.97
+ 03.33	905.65	0.0156	0.19	905.84	0.0156	0.38	906.03
+ 25	906.01	0.0201	0.24	906.25	0.0201	0.48	906.49
+ 50	906.45	0.0253	0.30	906.75	0.0253	0.60	907.05
+ 75	906.91	0.0305	0.37	907.28	0.0305	0.73	907.64
745 + 00	907.40	0.0357	0.43	907.83	0.0357	0.86	908.26
+ 25	907.91	0.0409	0.49	908.40	0.0409	0.98	908.89
+ 50	908.41	0.0461	0.55	908.96	0.0461	1.11	909.52
+ 75	908.92	0.0513	0.62	909.54	0.0513	1.23	910.15
+ 78.33	908.98	0.0520	0.62	909.60	0.0520	1.25	910.23
746 + 00	909.42	0.0520	0.62	910.04	0.0520	1.25	910.67
+ 25	909.92	0.0520	0.62	910.54	0.0520	1.25	911.17
+ 50	910.43	0.0520	0.62	911.05	0.0520	1.25	911.68
+ 75	910.93	0.0520	0.62	911.55	0.0520	1.25	912.18
747 + 00	911.44	0.0520	0.62	912.06	0.0520	1.25	912.69
+ 25	911.94	0.0520	0.62	912.56	0.0520	1.25	913.19
+ 50	912.45	0.0520	0.62	913.07	0.0520	1.25	913.70
+ 75	912.95	0.0520	0.62	913.57	0.0520	1.25	914.20
748 + 00	913.45	0.0520	0.62	914.07	0.0520	1.25	914.70
+ 25	913.96	0.0520	0.62	914.58	0.0520	1.25	915.21
+ 50	914.46	0.0520	0.62	915.08	0.0520	1.25	915.71
+ 75	914.97	0.0520	0.62	915.59	0.0520	1.25	916.22
749 + 00	915.47	0.0520	0.62	916.09	0.0520	1.25	916.72
+ 25	915.97	0.0520	0.62	916.59	0.0520	1.25	917.22
+ 50	916.48	0.0520	0.62	917.10	0.0520	1.25	917.73
+ 75	916.98	0.0520	0.62	917.60	0.0520	1.25	918.23
750 + 00	917.49	0.0520	0.62	918.11	0.0520	1.25	918.74
+ 25	917.99	0.0520	0.62	918.61	0.0520	1.25	919.24
+ 50	918.50	0.0520	0.62	919.12	0.0520	1.25	919.75
+ 75	919.00	0.0520	0.62	919.62	0.0520	1.25	920.25
751 + 00	919.50	0.0520	0.62	920.12	0.0520	1.25	920.75
+ 25	920.01	0.0520	0.62	920.63	0.0520	1.25	921.26
+ 50	920.51	0.0520	0.62	921.13	0.0520	1.25	921.76
+ 75	921.02	0.0520	0.62	921.64	0.0520	1.25	922.27
752 + 00	921.52	0.0520	0.62	922.14	0.0520	1.25	922.77
+ 25	922.02	0.0520	0.62	922.64	0.0520	1.25	923.27
+ 50	922.53	0.0520	0.62	923.15	0.0520	1.25	923.78
+ 75	923.02	0.0520	0.62	923.64	0.0520	1.25	924.27
753 + 00	923.50	0.0520	0.62	924.12	0.0520	1.25	924.75
+ 25	923.97	0.0520	0.62	924.59	0.0520	1.25	925.22
+ 50	924.41	0.0520	0.62	925.03	0.0520	1.25	925.66
+ 75	924.84	0.0520	0.62	925.46	0.0520	1.25	926.09
754 + 00	925.25	0.0520	0.62	925.87	0.0520	1.25	926.50
+ 25	925.65	0.0520	0.62	926.27	0.0520	1.25	926.90
+ 50	926.03	0.0520	0.62	926.65	0.0520	1.25	927.28
+ 61.73	926.20	0.0520	0.62	926.82	0.0520	1.25	927.45
+ 75	926.39	0.0492	0.59	926.98	0.0492	1.18	927.57
755 + 00	926.74	0.0440	0.53	927.27	0.0440	1.06	927.80
+ 25	927.07	0.0388	0.47	927.54	0.0388	0.93	928.00
+ 50	927.38	0.0337	0.40	927.78	0.0337	0.81	928.19
+ 75	927.68	0.0285	0.34	928.02	0.0285	0.68	928.36
756 + 00	927.96	0.0233	0.28	928.24	0.0233	0.56	928.52
+ 25	928.23	0.0181	0.22	928.45	0.0181	0.43	928.66
+ 36.73	928.34	0.0156	0.19	928.53	0.0156	0.38	928.72
+ 50	928.47	0.0156	0.19	928.66	0.0129	0.34	928.81
+ 75	928.70	0.0156	0.19	928.89	0.0077	0.28	928.98
757 + 00	928.92	0.0156	0.19	929.11	0.0024	0.22	929.14
+ 11.73	929.01	0.0156	0.19	929.20	0.0000	0.19	929.20
+ 25	929.11	0.0156	0.19	929.30	0.0028	0.16	929.27
+ 50	929.30	0.0156	0.19	929.49	0.0080	0.09	929.39
+ 75	929.46	0.0156	0.19	929.65	–0.0132	0.03	929.49
+ 86.73	929.55	0.0156	0.19	929.74	–0.0156	0.00	929.55
758 + 00	929.64	0.0156	0.19	929.83	–0.0156	0.00	929.64

SUPERELEVATION TABLE RAMP "C" (HARDIN PIKE)

LOCATION AND STATION	℄ LT. EDGE ELEVATION	SUPER RATE FT./FT.	℄ LT. EDGE SUPER–ELEVATION	P.G. 16' RT.
737 +00	904.09	–0.0156	–0.25	904.34
+12.81	904.07	–0.0156	–0.25	904.32
+25	903.98	–0.0197	–0.32	904.30
+50	903.78	–0.0282	–0.45	904.23
+75	903.55	–0.0367	–0.59	904.14
738 +00	903.33	–0.0451	–0.72	904.05
+25	903.11	–0.0536	–0.86	903.97
+50	902.89	–0.0620	–0.99	903.88
+75	902.67	–0.0705	–1.13	903.80
739 +00	902.44	–0.0792	–1.27	903.71
+12.81	902.34	–0.0833	–1.33	903.67
+25	902.29	–0.0833	–1.33	903.62
+50	902.21	–0.0833	–1.33	903.54
+60.66	902.17	–0.0833	–1.33	903.50
SWITCH PROFILE GRADE TO ℄ STA. 739+60.66				

SUPERELEVATION TABLE RAMP "C" (HARDIN PIKE CONT.)

LOCATION AND STATION	P.G.– ℄ LT. EDGE	SUPER RATE FT./FT.	16' RT. EDGE SUPER–ELEVATION	16' RT. EDGE PVM'T ELEVATION
739 +60.66	902.17	0.0833	1.33	903.50
+75	902.13	0.0833	1.33	903.46
740 +00	902.06	0.0833	1.33	903.39
+25	901.99	0.0833	1.33	903.32
+50	901.92	0.0833	1.33	903.25
+75	901.85	0.0833	1.33	903.18
741 +00	901.78	0.0833	1.33	903.11
+25	901.72	0.0833	1.33	903.05
+50	901.68	0.0833	1.33	903.01
+75	901.67	0.0833	1.33	903.00
742 +00	901.68	0.0833	1.33	903.01
+25	901.72	0.0833	1.33	903.05
+50	901.77	0.0833	1.33	903.10
+75	901.85	0.0833	1.33	903.18
743 +00	901.96	0.0833	1.33	903.29
+25	902.09	0.0833	1.33	903.42
+50	902.24	0.0833	1.33	903.57
+75	902.41	0.0833	1.33	903.74
744 +00	902.61	0.0833	1.33	903.94
+25	902.83	0.0833	1.33	904.16
+50	903.07	0.0833	1.33	904.40
+75	903.34	0.0833	1.33	904.67
745 +00	903.63	0.0833	1.33	904.96
+25	903.94	0.0833	1.33	905.27
+50	904.28	0.0833	1.33	905.61
+75	904.64	0.0833	1.33	905.97
746 +00	905.02	0.0833	1.33	906.35
+25	905.43	0.0833	1.33	906.76
+50	905.86	0.0833	1.33	907.19
+75	906.32	0.0833	1.33	907.65
747 +00	906.79	0.0833	1.33	908.12
+25	907.29	0.0833	1.33	908.62
+25.79	907.31	0.0833	1.33	908.64
+50	907.82	0.0795	1.27	909.09
+75	908.36	0.0756	1.21	909.57
748 +00	908.93	0.0717	1.15	910.08
+25	909.51	0.0678	1.08	910.59
+50	910.10	0.0639	1.02	911.12
+75	910.68	0.0599	0.96	911.64
749 +00	911.26	0.0560	0.90	912.16
+25	911.84	0.0521	0.83	912.67
+25.79	911.86	0.0520	0.83	912.69
+50	912.45	0.0520	0.83	913.28
+75	913.13	0.0520	0.83	913.96

SUPERELEVATION TABLE RAMP "A" (HARDIN PIKE)

LOCATION AND STATION	P.G.– ℄ LT. EDGE	SUPER RATE FT./FT.	16' RT. EDGE SUPER–ELEVATION	16' RT. EDGE PVM'T ELEVATION
731 +75	899.42	0.0156	0.25	899.67
+79.31	899.42	0.0156	0.25	899.67
732 +00	899.41	0.0199	0.32	899.73
+19.51	899.38	0.0240	0.38	899.76
+25	899.37	0.0263	0.42	899.79
+50	899.30	0.0367	0.59	899.89
+75	899.21	0.0471	0.75	899.96
+77.11	899.20	0.0480	0.77	899.97
733 +00	899.11	0.0480	0.77	899.88
+25	899.00	0.0480	0.77	899.77
+50	898.90	0.0480	0.77	899.67
+75	898.81	0.0480	0.77	899.58
734 +00	898.74	0.0480	0.77	899.51
+25	898.70	0.0480	0.77	899.47
+50	898.68	0.0480	0.77	899.45
+75	898.69	0.0480	0.77	899.46
735 +00	898.73	0.0480	0.77	899.50
+25	898.79	0.0480	0.77	899.56
+50	898.88	0.0480	0.77	899.65
+75	898.98	0.0480	0.77	899.75
736 +00	899.08	0.0480	0.77	899.85
+25	899.18	0.0480	0.77	899.95
+50	899.28	0.0480	0.77	900.05
+75	899.38	0.0480	0.77	900.15
737 +00	899.48	0.0480	0.77	900.25
+25	899.58	0.0480	0.77	900.35
+50	899.68	0.0480	0.77	900.45
+75	899.77	0.0480	0.77	900.54
738 +00	899.87	0.0480	0.77	900.64
+25	899.97	0.0480	0.77	900.74
+50	900.07	0.0480	0.77	900.84
+75	900.17	0.0480	0.77	900.94
739 +00	900.27	0.0480	0.77	901.04
+25	900.37	0.0480	0.77	901.14
+50	900.47	0.0480	0.77	901.24
+75	900.57	0.0480	0.77	901.34
740 +00	900.67	0.0480	0.77	901.44
+25	900.77	0.0480	0.77	901.54
+50	900.87	0.0480	0.77	901.64
+58.71	900.91	0.0480	0.77	901.68
+75	900.97	0.0454	0.73	901.70
741 +00	901.07	0.0413	0.66	901.73
+25	901.17	0.0373	0.60	901.77
+50	901.27	0.0332	0.53	901.80
+75	901.37	0.0292	0.47	901.84
742 +00	901.47	0.0251	0.40	901.87
+25	901.57	0.0211	0.34	901.91
+50	901.67	0.0170	0.27	901.94
+58.71	901.70	0.0156	0.25	901.95
+75	901.77	0.0156	0.25	902.02
+50	902.86	0.0156	0.25	903.11
+63.67	902.92	0.0156	0.25	903.17
+75	902.96	0.0132	0.21	903.17
746 +00	903.06	0.0080	0.13	903.19
+25	903.16	0.0028	0.05	903.21
+38.67	903.22	0.0000	0.00	903.22
+50	903.27	–0.0047	–0.08	903.19
+75	903.41	–0.0151	–0.24	903.17
747 +00	903.57	–0.0255	–0.41	903.16
+25	903.75	–0.0358	–0.57	903.18
+50	903.96	–0.0462	–0.74	903.22
+75	904.20	–0.0566	–0.91	903.29
748 +00	904.44	–0.0670	–1.07	903.37
+23.99	904.68	–0.0769	–1.23	903.45
SWITCH PROFILE GRADE TO RT. EDGE OF PVM'T. STA. 748+23.99				

SUPERELEVATION TABLE RAMP "A" (HARDIN PIKE CONT.)

LOCATION AND STATION	℄ LT. EDGE ELEVATION	SUPER RATE FT./FT.	℄ LT. EDGE SUPER–ELEVATION	P.G. 16' RT.
748 +23.99	904.68	0.0769	1.23	903.45
+25	904.70	0.0773	1.24	903.46
+38.67	904.84	0.0833	1.33	903.51
+50	904.88	0.0833	1.33	903.55
+75	904.96	0.0833	1.33	903.63
+89.57	905.01	0.0833	1.33	903.68
749 +00	904.98	0.0790	1.26	903.72
+25	904.90	0.0686	1.10	903.80
+50	904.82	0.0582	0.93	903.89
+75	904.74	0.0478	0.77	903.97
750 +00	904.66	0.0375	0.60	904.06
+25	904.57	0.0271	0.43	904.14
+50	904.50	0.0167	0.27	904.23
+75	904.40	0.0063	0.10	904.30
+89.57	904.33	0.0000	0.00	904.33
751 +00	904.31	–0.0022	–0.03	904.34
+25	904.24	–0.0074	–0.12	904.36
+50	904.16	–0.0126	–0.20	904.36
+64.57	904.09	–0.0156	–0.25	904.34
+75	904.08	–0.0156	–0.25	904.33

AUGLAIZE COUNTY
AUG–33–13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

41/345

SUPERELEVATION TABLE RAMP "D" (HARDIN PIKE)

LOCATION AND STATION	℄ RT. EDGE PVM'T	SUPER RATE FT./FT.	℄ RT. EDGE SUPER–ELEVATION	P.G. 16' LT. EDGE
739 +25	903.67	–0.0156	–0.25	903.92
+29.03	903.66	–0.0156	–0.25	903.91
+50	903.49	–0.0227	–0.36	903.85
+75	903.27	–0.0312	–0.50	903.77
740 +00	903.07	–0.0396	–0.63	903.70
+25	902.86	–0.0481	–0.77	903.63
+50	902.66	–0.0565	–0.90	903.56
+75	902.45	–0.0650	–1.04	903.49
741 +00	902.23	–0.0735	–1.18	903.41
+11.72	902.15	–0.0771	–1.23	903.38

SWITCH PROFILE GRADE TO LT. EDGE OF PAV'T STA. 741+11.72

	P.G. ℄ RT. EDGE PVM'T	SUPER RATE FT./FT.	16' LT. EDGE SUPER–ELEVATION	16' LT. EDGE PVM'T ELEVATION
741 +11.72	902.15	0.0771	1.23	903.38
+25	902.04	0.0819	1.31	903.35
+29.03	902.01	0.0833	1.33	903.34
+50	901.86	0.0833	1.33	903.19
+75	901.74	0.0833	1.33	903.07
742 +00	901.67	0.0833	1.33	903.00
+25	901.65	0.0833	1.33	902.98
+50	901.69	0.0833	1.33	903.02
+75	901.78	0.0833	1.33	903.11
743 +00	901.93	0.0833	1.33	903.26
+25	902.13	0.0833	1.33	903.46
+50	902.35	0.0833	1.33	903.68
+75	902.58	0.0833	1.33	903.91
744 +00	902.81	0.0833	1.33	904.14
+25	903.06	0.0833	1.33	904.39
+50	903.35	0.0833	1.33	904.68
+75	903.69	0.0833	1.33	905.02
745 +00	904.07	0.0833	1.33	905.40
+25	904.50	0.0833	1.33	905.83
+50	904.98	0.0833	1.33	906.31
+75	905.50	0.0833	1.33	906.83
746 +00	906.06	0.0833	1.33	907.39
+25	906.67	0.0833	1.33	908.00
+50	907.32	0.0833	1.33	908.65
+75	908.02	0.0833	1.33	909.35
747 +00	908.76	0.0833	1.33	910.09
+25	909.53	0.0833	1.33	910.86
+50	910.29	0.0833	1.33	911.62
+75	911.06	0.0833	1.33	912.39
748 +00	911.82	0.0833	1.33	913.15
+25	912.59	0.0749	1.20	913.79
+50	913.35	0.0664	1.06	914.41
+75	914.12	0.0579	0.93	915.05
749 +00	914.88	0.0495	0.79	915.67
+25	915.65	0.0410	0.66	916.31
+50	916.41	0.0326	0.52	916.93
+75	917.18	0.0241	0.39	917.57
750 +00	917.94	0.0156	0.25	918.19
+25	918.71	0.0117	0.19	918.90
+50	919.47	0.0078	0.12	919.59
+75	920.23	0.0039	0.06	920.29
751 +00	920.94	0.0000	0.00	920.94
+25	921.64	–0.0065	–0.10	921.54
+50	922.29	–0.0130	–0.21	922.08
+75	922.93	–0.0195	–0.31	922.62
752 +00	923.56	–0.0260	–0.42	923.14
+25	924.17	–0.0325	–0.52	923.65
+50	924.73	–0.0390	–0.62	924.11
+75	925.28	–0.0455	–0.73	924.55
753 +00	925.79	–0.0520	–0.83	924.96

SUPERELEVATION TABLE RAMP "B" (HARDIN PIKE)

LOCATION AND STATION	16' LT. EDGE PVM'T ELEVATION	SUPER RATE FT./FT.	16' LT. EDGE SUPER–ELEVATION	P.G.– ℄ RT. EDGE
734 +50	900.88	0.0156	0.25	900.63
+54.02	900.89	0.0156	0.25	900.64
+75	900.97	0.0200	0.32	900.65
+94.22	901.04	0.0240	0.38	900.66
735 +00	901.07	0.0264	0.42	900.65
+25	901.19	0.0368	0.59	900.60
+50	901.31	0.0472	0.76	900.55
+51.82	901.32	0.0480	0.77	900.55
+75	901.30	0.0480	0.77	900.53
736 +00	901.28	0.0480	0.77	900.51
+25	901.26	0.0480	0.77	900.49
+50	901.24	0.0480	0.77	900.47
+75	901.22	0.0480	0.77	900.45
737 +00	901.20	0.0480	0.77	900.43
+25	901.18	0.0480	0.77	900.41
+50	901.16	0.0480	0.77	900.39
+75	901.14	0.0480	0.77	900.37
738 +00	901.12	0.0480	0.77	900.35
+25	901.10	0.0480	0.77	900.33
+50	901.08	0.0480	0.77	900.31
+75	901.06	0.0480	0.77	900.29
739 +00	901.04	0.0480	0.77	900.27
+25	901.04	0.0480	0.77	900.27
+50	901.07	0.0480	0.77	900.30
+75	901.14	0.0480	0.77	900.37
740 +00	901.25	0.0480	0.77	900.48
+25	901.38	0.0480	0.77	900.61
+50	901.50	0.0480	0.77	900.73
+75	901.63	0.0480	0.77	900.86
741 +00	901.76	0.0480	0.77	900.99
+25	901.88	0.0480	0.77	901.11
+50	902.01	0.0480	0.77	901.24
+75.	902.13	0.0480	0.77	901.36
742 +00	902.26	0.0480	0.77	901.49
+25	902.39	0.0480	0.77	901.62
+41.59	902.47	0.0480	0.77	901.70
+50	902.49	0.0466	0.75	901.74
+75	902.55	0.0426	0.68	901.87
743 +00	902.61	0.0385	0.62	901.99
+25	902.67	0.0345	0.55	902.12
+50	902.74	0.0305	0.49	902.25
+75	902.79	0.0264	0.42	902.37
744 +00	902.86	0.0224	0.36	902.50
+25	902.91	0.0183	0.29	902.62
+41.59	902.96	0.0156	0.25	902.71
746 +39.03	903.95	0.0156	0.25	903.70
+25	903.97	0.0133	0.21	903.76
+50	904.01	0.0081	0.13	903.88
747 +00	904.06	0.0029	0.05	904.01
+14.03	904.08	0.0000	0.00	904.08
+25	904.07	–0.0046	–0.07	904.14
+50	904.02	–0.0150	–0.24	904.26
+75	903.98	–0.0254	–0.41	904.39
748 +00	903.94	–0.0358	–0.57	904.51
+25	903.90	–0.0462	–0.74	904.64
+50	903.85	–0.0563	–0.91	904.76
+75	903.78	–0.0670	–1.07	904.85
749 +00	903.68	–0.0775	–1.24	904.92
+14.03	903.62	–0.0833	–1.33	904.95
+25	903.64	–0.0833	–1.33	904.97
+50	903.67	–0.0833	–1.33	905.00
+75	903.68	–0.0833	–1.33	905.01
750 +00	903.66	–0.0833	–1.33	904.99
+25	903.62	–0.0833	–1.33	904.95
+50	903.57	–0.0833	–1.33	904.90
+75	903.49	–0.0833	–1.33	904.82

SUPERELEVATION TABLE RAMP "B" (HARDIN PIKE)

LOCATION AND STATION	16' LT. EDGE PVM'T ELEVATION	SUPER RATE FT./FT.	16' LT. EDGE SUPER–ELEVATION	P.G.– ℄ RT. EDGE
751 +00	903.40	–0.0833	–1.33	904.73
+22.03	903.31	–0.0833	–1.33	904.64
+25	903.32	–0.0821	–1.31	904.63
+29.30	903.35	–0.0796	–1.27	904.62

	P.G.–LT. EDGE PVM'T	SUPER RATE FT./FT.	RT. EDGE SUPER–ELEVATION	℄ ELEVATION
751 +29.30	903.35	0.0796	1.27	904.62
+50	903.41	0.0717	1.15	904.56
+75	903.48	0.0612	0.98	904.46
752 +00	903.55	0.0508	0.81	904.36
+25	903.63	0.0404	0.65	904.28
+50	903.70	0.0300	0.48	904.18
+75	903.77	0.0196	0.31	904.08
753 +00	903.84	0.0092	0.15	903.99
+22.03	903.91	0.0000	0.00	903.91
+25	903.91	–0.0006	–0.01	903.90
+50	903.99	–0.0058	–0.09	903.90
+75	904.05	–0.0110	–0.18	903.87
+97.03	904.08	–0.0156	–0.25	903.83
754 +00	904.08	–0.0156	–0.25	903.83

Switch Profile Grade To Left Edge of Pavement - Sta. 751+29.30

SUPERELEVATION TABLE
RAMP "C" – C.R.25A

LOCATION AND STATION	P.G. ℄ LT. EDGE PVM'T	SUPER RATE FT./FT.	18' RT. EDGE SUPER-ELEVATION	18' RT. EDGE PVM'T ELEVATION
775 +25	921.52	0.0156	0.28	921.80
+41.67	921.01	0.0156	0.28	921.29
+50	920.76	0.0156	0.28	921.04
+75	919.96	0.0156	0.28	920.24
+79.17	919.82	0.0156	0.28	920.10
776 +00	919.09	0.0243	0.44	919.53
+25	918.15	0.0347	0.62	918.77
+50	917.14	0.0451	0.81	917.95
+60.85	916.68	0.0497	0.89	917.57
+75	916.08	0.0556	1.00	917.08
777 +00	915.03	0.0660	1.19	916.22
+25	914.02	0.0764	1.37	915.39
+41.67	913.39	0.0833	1.50	914.89
+50	913.10	0.0833	1.50	914.60
+75	912.25	0.0833	1.50	913.75
778 +00	911.49	0.0833	1.50	912.99
+25	910.82	0.0833	1.50	912.32
+50	910.22	0.0833	1.50	911.72
+75	909.71	0.0833	1.50	911.21
779 +00	909.29	0.0833	1.50	910.79
+25	908.95	0.0833	1.50	910.45
+50	908.69	0.0833	1.50	910.19
+58.82	908.62	0.0833	1.50	910.12
+75	908.51	0.0766	1.38	909.89
780 +00	908.42	0.0661	1.19	909.61
+25	908.37	0.0557	1.00	909.37
+50	908.32	0.0452	0.81	909.13
+65.82	908.29	0.0386	0.69	908.98
+75	908.27	0.0386	0.69	908.96

SUPERELEVATION TABLE
RAMP "B" – C.R.25A

LOCATION AND STATION	P.G. ℄ RT. EDGE PVM'T	SUPER RATE FT./FT.	18' LT. EDGE SUPER-ELEVATION	18' LT. EDGE PVM'T ELEVATION
776 +75	917.18	0.0156	0.28	917.46
+89.11	916.71	0.0156	0.28	916.99
777 +00	916.34	0.0193	0.35	916.69
+25	915.44	0.0278	0.50	915.94
+50	914.48	0.0362	0.65	915.13
+75	913.49	0.0447	0.80	914.29
778 +00	912.50	0.0532	0.96	913.46
+25	911.57	0.0616	1.11	912.68
+50	910.77	0.0701	1.26	912.03
+53.21	910.67	0.0712	1.28	911.95
+75	910.09	0.0786	1.41	911.50
+89.11	909.76	0.0833	1.50	911.26
779 +00	909.53	0.0833	1.50	911.03
+25	909.10	0.0833	1.50	910.60
+50	908.79	0.0833	1.50	910.29
+75	908.60	0.0833	1.50	910.10
780 +00	908.54	0.0833	1.50	910.04
+25	908.54	0.0833	1.50	910.04
+50	908.54	0.0833	1.50	910.04
+75	908.54	0.0833	1.50	910.04
781 +00	908.53	0.0833	1.50	910.03
+25	908.50	0.0833	1.50	910.00
+28.49	908.50	0.0833	1.50	910.00
+50	908.45	0.0743	1.34	909.79
+75	908.39	0.0638	1.15	909.54
782 +00	908.31	0.0533	0.96	909.27
+25	908.24	0.0428	0.77	909.01
+34.09	908.21	0.0390	0.70	908.91
+50	908.16	0.0390	0.70	908.86

SUPERELEVATION TABLES
CANNING FACTORY ROAD

LOCATION AND STATION	12' LT. PVM'T ELEVATION	LT. LANE SUPER RATE FT./FT.	SUPER-ELEVATION 12' LT.	P.G. CENTER-LINE	RT. LANE SUPER RATE FT./FT.	SUPER-ELEVATION 12' RT.	12' RT. PVM'T ELEVATION
+62.36	898.14	0.0000	0.00	898.14	-0.0208	-0.21	897.93
+75	898.21	0.0026	0.03	898.18	-0.0208	-0.21	897.97
32 +00	898.32	0.0078	0.08	898.24	-0.0208	-0.22	898.02
+25	898.46	0.0130	0.15	898.31	-0.0208	-0.23	898.08
+50	898.58	0.0182	0.21	898.37	-0.0208	-0.24	898.13
+62.36	898.66	0.0208	0.25	898.41	-0.0208	-0.25	898.16
+75	898.76	0.0261	0.31	898.45	-0.0261	-0.31	898.14
33 +00	898.99	0.0365	0.44	898.55	-0.0365	-0.44	898.11
+25	899.24	0.0469	0.56	898.68	-0.0469	-0.56	898.12
+50	899.52	0.0573	0.69	898.83	-0.0573	-0.69	898.14
+75	899.80	0.0677	0.81	898.99	-0.0677	-0.81	898.18
34 +00	900.10	0.0781	0.94	899.16	-0.0781	-0.94	898.22
+12.36	900.24	0.0833	1.00	899.24	-0.0833	-1.00	898.24
+25	900.32	0.0833	1.00	899.32	-0.0833	-1.00	898.32
+50	900.48	0.0833	1.00	899.48	-0.0833	-1.00	898.48
+75	900.65	0.0833	1.00	899.65	-0.0833	-1.00	898.65
35 +00	900.81	0.0833	1.00	899.81	-0.0833	-1.00	898.81
+25	900.98	0.0833	1.00	899.98	-0.0833	-1.00	898.98
+50	901.14	0.0833	1.00	900.14	-0.0833	-1.00	899.14
+75	901.30	0.0833	1.00	900.30	-0.0833	-1.00	899.30
36 +00	901.47	0.0833	1.00	900.47	-0.0833	-1.00	899.47
+25	901.63	0.0833	1.00	900.63	-0.0833	-1.00	899.63
+50	901.80	0.0833	1.00	900.80	-0.0833	-1.00	899.80
+75	901.96	0.0833	1.00	900.96	-0.0833	-1.00	899.96
37 +00	902.13	0.0833	1.00	901.13	-0.0833	-1.00	900.13
+25	902.29	0.0833	1.00	901.29	-0.0833	-1.00	900.29
+50	902.45	0.0833	1.00	901.45	-0.0833	-1.00	900.45
+75	902.62	0.0833	1.00	901.62	-0.0833	-1.00	900.62
38 +00	902.78	0.0833	1.00	901.78	-0.0833	-1.00	900.78
+25	902.95	0.0833	1.00	901.95	-0.0833	-1.00	900.95
+50	903.11	0.0833	1.00	902.11	-0.0833	-1.00	901.11
+75	903.27	0.0833	1.00	902.27	-0.0833	-1.00	901.27
39 +00	903.44	0.0833	1.00	902.44	-0.0833	-1.00	901.44
+25	903.60	0.0833	1.00	902.60	-0.0833	-1.00	901.60
+50	903.77	0.0833	1.00	902.77	-0.0833	-1.00	901.77
+75	903.92	0.0833	1.00	902.92	-0.0833	-1.00	901.92
40 +00	904.05	0.0833	1.00	903.05	-0.0833	-1.00	902.05
+25	904.15	0.0833	1.00	903.15	-0.0833	-1.00	902.15
+50	904.23	0.0833	1.00	903.23	-0.0833	-1.00	902.23
+75	904.29	0.0833	1.00	903.29	-0.0833	-1.00	902.29
+95.70	904.32	0.0833	1.00	903.32	-0.0833	-1.00	902.32
41 +00	904.31	0.0815	0.98	903.33	-0.0815	-0.98	902.35
+25	904.19	0.0711	0.85	903.34	-0.0711	-0.85	902.49
+50	904.05	0.0607	0.73	903.32	-0.0607	-0.73	902.59
+75	903.89	0.0503	0.60	903.29	-0.0503	-0.60	902.69
42 +00	903.71	0.0399	0.48	903.23	-0.0399	-0.48	902.75
+25	903.49	0.0295	0.35	903.14	-0.0295	-0.35	902.79
+45.70	903.31	0.0208	0.25	903.06	-0.0208	-0.25	902.81
+50	903.28	0.0198	0.24	903.04	-0.0198	-0.24	902.80
+75	903.09	0.0139	0.17	902.92	-0.0139	-0.17	902.75
43 +00	902.90	0.0080	0.10	902.80	-0.0080	-0.10	902.70
+25	902.71	0.0021	0.03	902.68	-0.0021	-0.03	902.65
+45.70	902.55	-0.0027	-0.03	902.58	-0.0027	0.03	902.61
+50	902.52	-0.0037	-0.04	902.56	0.0037	0.04	902.60
+72.51	902.34	-0.0090	-0.11	902.45	0.0090	0.11	902.56
+75	902.32	-0.0096	-0.12	902.44	0.0096	0.12	902.56
44 +00	902.13	-0.0155	-0.19	902.32	0.0155	0.19	902.51
+22.51	901.96	-0.0208	-0.25	902.21	0.0208	0.25	902.46
+25	901.94	-0.0219	-0.26	902.20	0.0219	0.26	902.46
+50	901.69	-0.0323	-0.39	902.08	0.0323	0.39	902.47
+75	901.45	-0.0427	-0.51	901.96	0.0427	0.51	902.47
45 +00	901.20	-0.0531	-0.64	901.84	0.0531	0.64	902.48
+25	900.96	-0.0635	-0.76	901.72	0.0635	0.76	902.48

Edge of Pav't Elevations Are On Pav't Taper Width

SUPERELEVATION TABLES
CANNING FACTORY ROAD

LOCATION AND STATION	12' LT. PVM'T ELEVATION	LT. LANE SUPER RATE FT./FT.	SUPER-ELEVATION 12' LT.	P.G. CENTER-LINE	RT. LANE SUPER RATE FT./FT.	SUPER-ELEVATION 12' RT.	12' RT. PVM'T ELEVATION
+50	900.72	-0.0740	-0.89	901.61	0.0740	0.89	902.50
+72.51	900.50	-0.0833	-1.00	901.50	0.0833	1.00	902.50
+75	900.49	-0.0833	-1.00	901.49	0.0833	1.00	902.49
46 +00	900.37	-0.0833	-1.00	901.37	0.0833	1.00	902.37
+25	900.25	-0.0833	-1.00	901.25	0.0833	1.00	902.25
+50	900.13	-0.0833	-1.00	901.13	0.0833	1.00	902.13
+75	900.01	-0.0833	-1.00	901.01	0.0833	1.00	902.01
47 +00	899.89	-0.0833	-1.00	900.89	0.0833	1.00	901.89
+25	899.77	-0.0833	-1.00	900.77	0.0833	1.00	901.77
+50	899.65	-0.0833	-1.00	900.65	0.0833	1.00	901.65
+75	899.53	-0.0833	-1.00	900.53	0.0833	1.00	901.53
48 +00	899.41	-0.0833	-1.00	900.41	0.0833	1.00	901.41
+25	899.29	-0.0833	-1.00	900.29	0.0833	1.00	901.29
+50	899.18	-0.0833	-1.00	900.18	0.0833	1.00	901.18
+75	899.06	-0.0833	-1.00	900.06	0.0833	1.00	901.06
+89.18	898.99	-0.0833	-1.00	899.99	0.0833	1.00	900.99
49 +00	898.99	-0.0788	-0.95	899.94	0.0788	0.95	900.89
+25	899.00	-0.0684	-0.82	899.82	0.0684	0.82	900.64
+50	899.00	-0.0580	-0.70	899.70	0.0580	0.70	900.40
+75	899.01	-0.0476	-0.57	899.58	0.0476	0.57	900.15
50 +00	899.01	-0.0372	-0.45	899.46	0.0372	0.45	899.91
+25	899.02	-0.0267	-0.32	899.34	0.0267	0.32	899.66
+39.18	899.03	-0.0208	-0.25	899.28	0.0208	0.25	899.53
+50	898.97	-0.0208	-0.25	899.22	0.0163	0.20	899.42
+75	898.85	-0.0208	-0.25	899.10	0.0059	0.07	899.17
+89.18	898.79	-0.0208	-0.25	899.04	0.0000	0.00	899.04
51 +00	898.73	-0.0208	-0.25	898.98	-0.0023	-0.03	898.95
+25	898.61	-0.0208	-0.25	898.86	-0.0075	-0.09	898.77
+50	898.50	-0.0208	-0.25	898.75	-0.0127	-0.15	898.60
+75	898.38	-0.0208	-0.25	898.63	-0.0179	-0.21	898.42
+89.18	898.31	-0.0208	-0.25	898.56	-0.0208	-0.25	898.31
52 +00	898.26	-0.0208	-0.25	898.51	-0.0208	-0.25	898.26

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

SUPERELEVATION TABLE
HARDIN PIKE

LOCATION AND STATION	P.G. CENTER-LINE	LT. LANE SUPER RATE FT./FT.	LT. EDGE SUPER-ELEVATION	LT. EDGE PVM'T ELEVATION	RT. LANE SUPER RATE FT./FT.	RT. EDGE SUPER-ELEVATION	RT. EDGE PVM'T ELEVATION
20 +75	903.75	-0.02083	-0.25	903.50	-0.02083	-0.25	903.50
+79.15	903.74	-0.02083	-0.25	903.49	-0.02083	-0.25	903.49
21 +00	903.72	-0.02083	-0.25	903.47	-0.01649	-0.20	903.52
+25	903.69	-0.02083	-0.25	903.44	-0.01128	-0.14	903.55
+50	903.66	-0.02083	-0.25	903.41	-0.00607	-0.07	903.59
+75	903.64	-0.02083	-0.25	903.39	-0.00086	-0.01	903.63
+79.15	903.63	-0.02083	-0.25	903.38	0.00000	0.00	903.63
22 +00	903.61	-0.02083	-0.25	903.36	0.00434	0.05	903.66
+25	903.58	-0.02083	-0.25	903.33	0.00955	0.11	903.69
+50	903.55	-0.02083	-0.25	903.30	0.01476	0.18	903.73
+75	903.52	-0.02083	-0.25	903.27	0.01997	0.24	903.76
+79.15	903.51	-0.02083	-0.25	903.26	0.02083	0.25	903.76
23 +00	903.50	-0.02691	-0.32	903.18	0.02691	0.32	903.82
+25	903.47	-0.03400	-0.41	903.06	0.03400	0.41	903.88
+50	903.44	-0.04150	-0.50	902.94	0.04150	0.50	903.94
+75	903.41	-0.04879	-0.59	902.82	0.04879	0.59	904.00
+79.15	903.40	-0.05000	-0.60	902.80	0.05000	0.60	904.00
24 +00	903.39	-0.05000	-0.60	902.79	0.05000	0.60	903.99
+25	903.36	-0.05000	-0.60	902.76	0.05000	0.60	903.96
+50	903.33	-0.05000	-0.60	902.73	0.05000	0.60	903.93
+75	903.30	-0.05000	-0.60	902.70	0.05000	0.60	903.90
+94.71	903.28	-0.05000	-0.60	902.68	0.05000	0.60	903.88
25 +00	903.28	-0.04846	-0.58	902.70	0.04846	0.58	903.86
+25	903.25	-0.04116	-0.49	902.76	0.04116	0.49	903.74
+50	903.22	-0.03387	-0.41	902.81	0.03387	0.41	903.63
+75	903.19	-0.02658	-0.32	902.87	0.02658	0.32	903.51
+94.71	903.17	-0.02083	-0.25	902.92	0.02083	0.25	903.42
26 +00	903.17	-0.02083	-0.25	902.92	0.01973	0.24	903.41
+25	903.14	-0.02083	-0.25	902.89	0.01452	0.17	903.31
+50	903.11	-0.02083	-0.25	902.86	0.00931	0.11	903.22
+75	903.07	-0.02083	-0.25	902.82	0.00411	0.05	903.12
+94.71	903.03	-0.02083	-0.25	902.78	0.00000	0.00	903.03
27 +00	903.02	-0.02083	-0.25	902.77	0.00110	0.01	903.03
+25	902.94	-0.02083	-0.25	902.69	0.00631	0.08	903.02
+50	902.84	-0.02083	-0.25	902.59	0.01152	0.14	902.98
+75	902.73	-0.02083	-0.25	902.48	0.01672	0.20	902.93
+94.71	902.62	-0.02083	-0.25	902.37	0.02083	0.25	902.87
28 +00	902.59	-0.02237	-0.27	902.32	0.02237	0.27	902.86
+25	902.43	-0.02967	-0.36	902.07	0.02967	0.36	902.79
+50	902.26	-0.03696	-0.44	901.82	0.03696	0.44	902.70
+75	902.06	-0.04425	-0.53	901.53	0.04425	0.53	902.59
+94.71	901.90	-0.05000	-0.60	901.30	0.05000	0.60	902.50
29 +00	901.85	-0.05000	-0.60	901.25	0.05000	0.60	902.45
+11.37	901.75	-0.05000	-0.60	901.15	0.05000	0.60	902.35
+25	901.62	-0.04602	-0.55	901.07	0.04602	0.55	902.17
+50	901.36	-0.03873	-0.46	900.90	0.03873	0.46	901.82
+75	901.09	-0.03144	-0.38	900.71	0.03144	0.38	901.47
30 +00	900.79	-0.02415	-0.29	900.50	0.02415	0.29	901.08
+11.37	900.65	-0.02083	-0.25	900.40	0.02083	0.25	900.90
+25	900.48	-0.01849	-0.22	900.26	0.01849	0.22	900.70
+50	900.15	-0.01419	-0.17	899.98	0.01419	0.17	900.32
+75	899.80	-0.00989	-0.12	899.68	0.00989	0.12	899.92
31 +00	899.46	-0.00560	-0.07	899.39	0.00560	0.07	899.53
+11.37	899.31	-0.00364	-0.04	899.27	0.00364	0.04	899.35
+25	899.14	-0.00130	-0.02	899.12	0.00130	0.02	899.16
+50	898.86	0.00300	0.04	898.90	-0.00300	-0.04	898.82
+53.75	898.82	0.00364	0.04	898.86	-0.00364	-0.04	898.78
+75	898.63	0.00729	0.09	898.72	-0.00729	-0.09	898.54
32 +00	898.43	0.01159	0.14	898.57	-0.01159	-0.14	898.29
+25	898.28	0.01589	0.19	898.47	-0.01589	-0.19	898.09
+50	898.18	0.02019	0.24	898.42	-0.02019	-0.24	897.94
+53.75	898.16	0.02083	0.25	898.41	-0.02083	-0.25	897.91
+75	898.11	0.02703	0.32	898.43	-0.02703	-0.32	897.79
33 +00	898.09	0.03432	0.41	898.50	-0.03432	-0.41	897.68
+25	898.09	0.04161	0.50	898.59	-0.04161	-0.50	897.59
+50	898.09	0.04891	0.59	898.68	-0.04891	-0.59	897.50
+53.75	898.09	0.05000	0.60	898.69	-0.05000	-0.60	897.49
+70.41	898.09	0.05000	0.60	898.69	-0.05000	-0.60	897.49
+75	898.09	0.04866	0.58	898.67	-0.04866	-0.58	897.51

SUPERELEVATION TABLE
HARDIN PIKE (CONT.)

LOCATION AND STATION	P.G. CENTER-LINE	LT. LANE SUPER RATE FT./FT.	LT. EDGE SUPER-ELEVATION	LT. EDGE PVM'T ELEVATION	RT. LANE SUPER RATE FT./FT.	RT. EDGE SUPER-ELEVATION	RT. EDGE PVM'T ELEVATION
34 +00	898.09	0.04137	0.50	898.59	-0.04137	-0.50	897.59
+25	898.09	0.03408	0.41	898.50	-0.03408	-0.41	897.68
+50	898.09	0.02678	0.32	898.41	-0.02678	-0.31	897.78
+70.41	898.09	0.02083	0.24	898.33	-0.02083	-0.23	897.86
+75	898.09	0.01987	0.23	898.32	-0.02083	-0.23	897.86
35 +00	898.09	0.01467	0.17	898.26	-0.02083	-0.22	897.87
+25	898.09	0.00946	0.11	898.20	-0.02083	-0.21	897.88
+50	898.09	0.00425	0.05	898.14	-0.02083	-0.19	897.90
+70.41	898.09	0.00000	0.00	898.09	-0.02083	-0.18	897.91

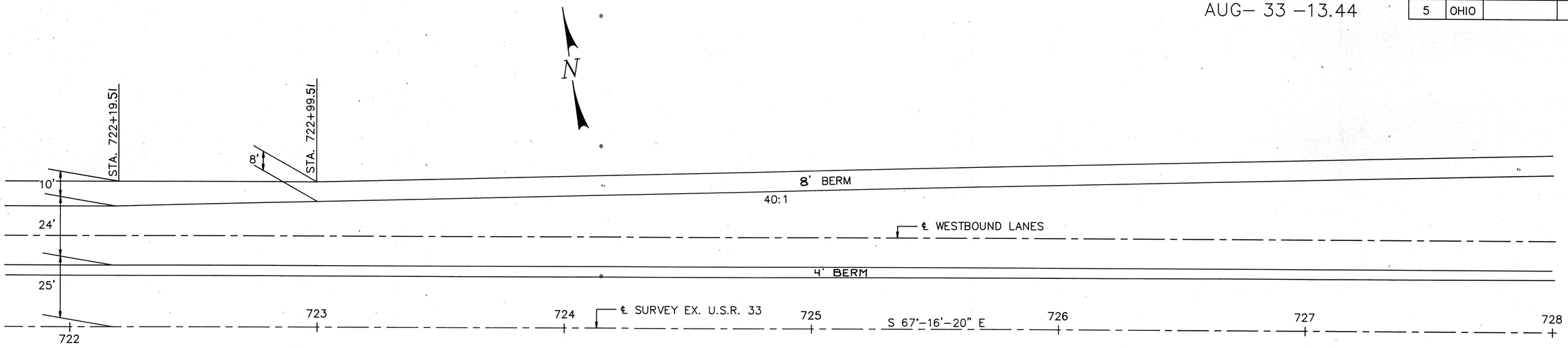
SUPERELEVATION TABLE
ASHLAND AVE. EXTENSION

LOCATION AND STATION	P.G. CENTER-LINE	LT. LANE SUPER RATE FT./FT.	12' LT. EDGE SUPER-ELEVATION	12' LT. EDGE PVM'T ELEVATION	RT. LANE SUPER RATE FT./FT.	12' RT. EDGE SUPER-ELEVATION	12' RT. EDGE PVM'T ELEVATION
19+75	896.82	-0.0208	-0.25	896.57	-0.0208	-0.25	896.57
+80.12	896.85	-0.0208	-0.25	896.60	-0.0208	-0.25	896.60
20+00	896.98	-0.0167	-0.20	896.78	-0.0208	-0.25	896.73
+25	897.15	-0.0115	-0.14	897.01	-0.0208	-0.25	896.90
+50	897.31	-0.0063	-0.08	897.23	-0.0208	-0.25	897.06
+75	897.48	-0.0011	-0.01	897.47	-0.0208	-0.25	897.23
+80.12	897.51	0.0000	0.00	897.51	-0.0208	-0.25	897.26
21+00	897.64	0.0041	0.05	897.69	-0.0208	-0.25	897.39
+25	897.81	0.0093	0.11	897.92	-0.0208	-0.25	897.56
+50	897.97	0.0146	0.17	898.14	-0.0208	-0.25	897.72
+55.12	898.00	0.0156	0.19	898.19	-0.0208	-0.25	897.75
+75	898.13	0.0198	0.24	898.37	-0.0208	-0.25	897.88
+80.12	898.16	0.0208	0.25	898.41	-0.0208	-0.25	897.91
+97.32	898.26	0.0280	0.34	898.60	-0.0280	-0.34	897.92
22+00	898.28	0.0280	0.34	898.62	-0.0280	-0.34	897.94
+25	898.42	0.0280	0.34	898.76	-0.0280	-0.34	898.08
+50	898.55	0.0280	0.34	898.89	-0.0280	-0.34	898.21
+75	898.66	0.0280	0.34	899.00	-0.0280	-0.34	898.32
23+00	898.77	0.0280	0.34	899.11	-0.0280	-0.34	898.43
+25	898.87	0.0280	0.34	899.21	-0.0280	-0.34	898.53
+50	898.95	0.0280	0.34	899.29	-0.0280	-0.34	898.61
+75	899.03	0.0280	0.34	899.37	-0.0280	-0.34	898.69
24+00	899.10	0.0280	0.34	899.44	-0.0280	-0.34	898.76
+25	899.15	0.0280	0.34	899.49	-0.0280	-0.34	898.81
+46.56	899.19	0.0280	0.34	899.53	-0.0280	-0.34	898.85
+50	899.20	0.0266	0.32	899.52	-0.0266	-0.32	898.88
+63.76	899.22	0.0208	0.25	899.47	-0.0208	-0.25	898.97
+75	899.23	0.0185	0.22	899.45	-0.0208	-0.25	898.98
+88.76	899.26	0.0156	0.19	899.45	-0.0208	-0.25	899.01
25+00	899.27	0.0133	0.16	899.43	-0.0208	-0.25	899.02
+25	899.31	0.0080	0.10	899.41	-0.0208	-0.25	899.06
+50	899.35	0.0028	0.03	899.38	-0.0208	-0.25	899.10
25+63.76	899.37	0.0000	0.00	899.37	-0.0208	-0.25	899.12
+75	899.39	-0.0023	-0.03	899.36	-0.0208	-0.25	899.14
26+00	899.43	-0.0075	-0.09	899.34	-0.0208	-0.25	899.18
+25	899.47	-0.0128	-0.15	899.32	-0.0208	-0.25	899.22
+50	899.51	-0.0180	-0.22	899.29	-0.0208	-0.25	899.26
+63.76	899.53	-0.0208	-0.25	899.28	-0.0208	-0.25	899.28
+75	899.55	-0.0208	-0.25	899.30	-0.0208	-0.25	899.30

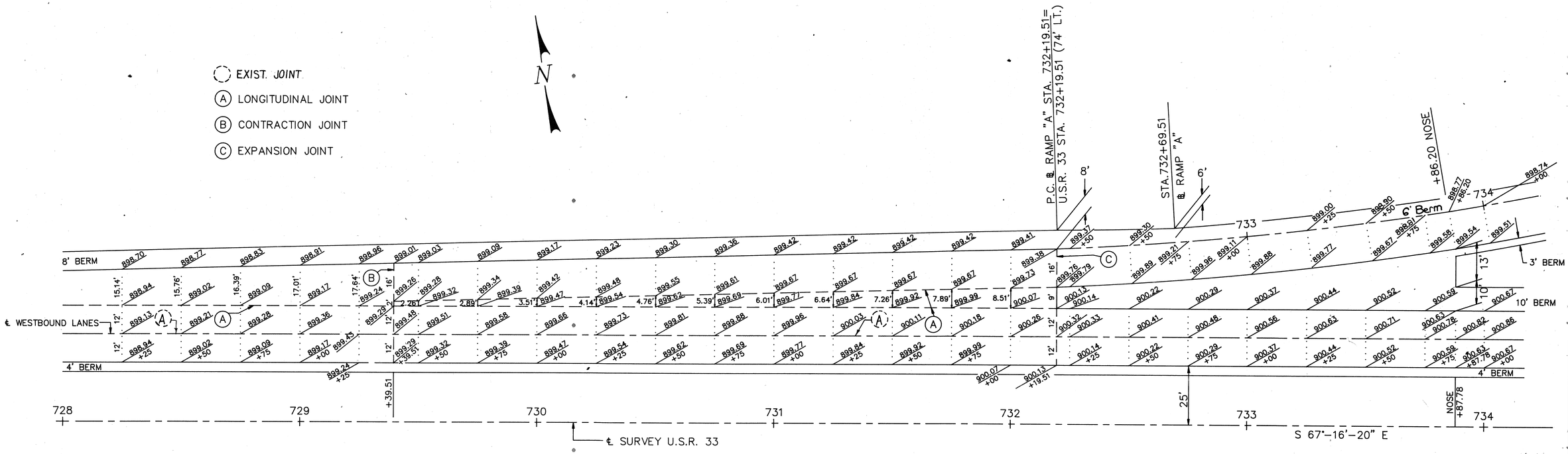
AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

44
345



RAMP "A" ENTRANCE TO U.S.R. 33 W.B.



RAMP "A" ENTRANCE TO U.S.R. 33 W.B.

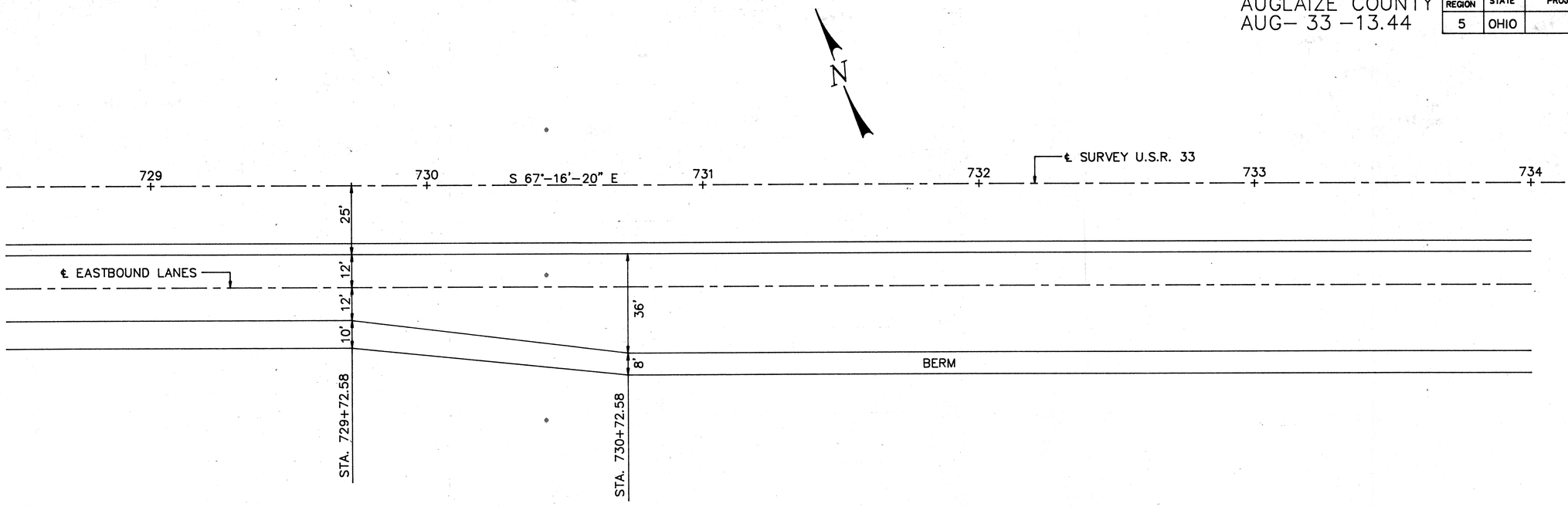
INTERCHANGE DETAIL W.B. U.S.R. 33 & RAMP "A" AT HARDIN PIKE

AUG33D1

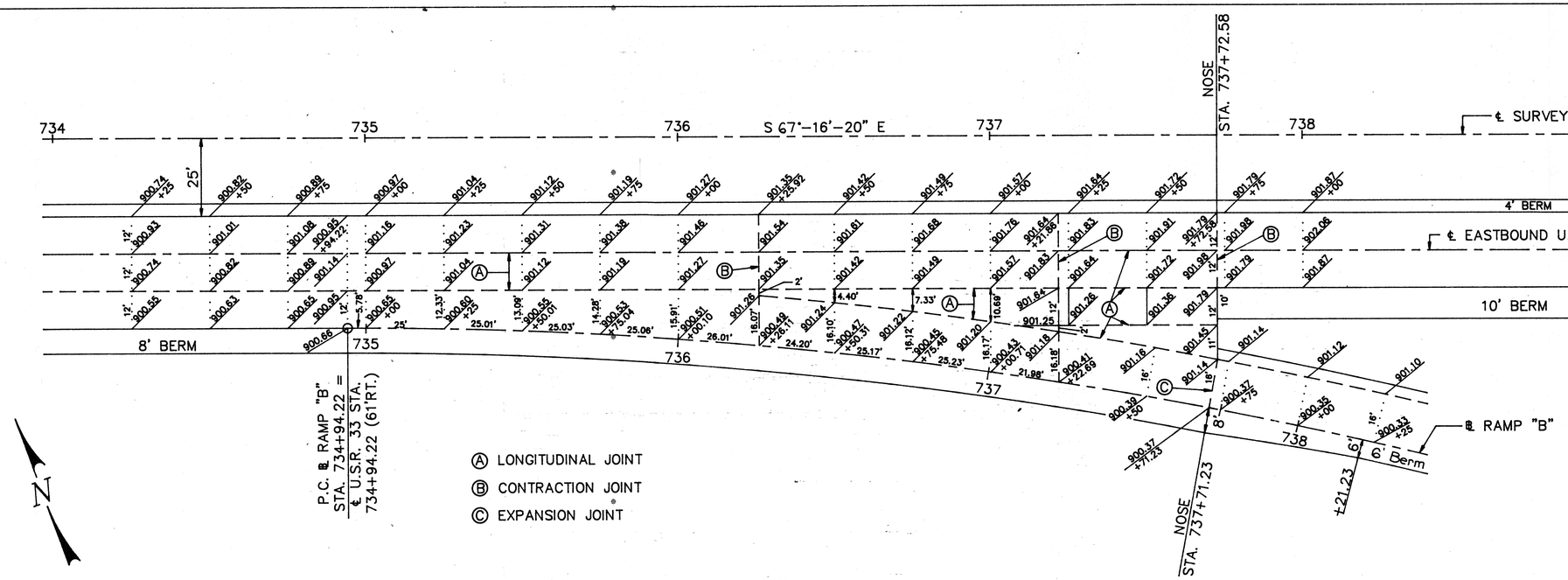
AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

45
345



RAMP "B" EXIT FROM E.B. U.S.R. 33

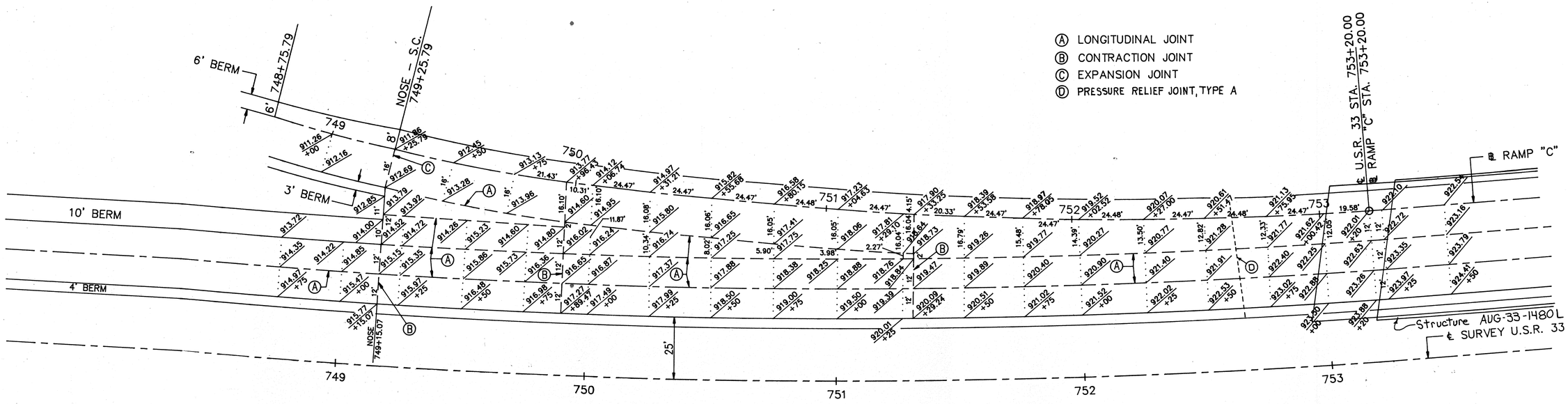


RAMP "B" EXIT FROM E.B. U.S.R. 33

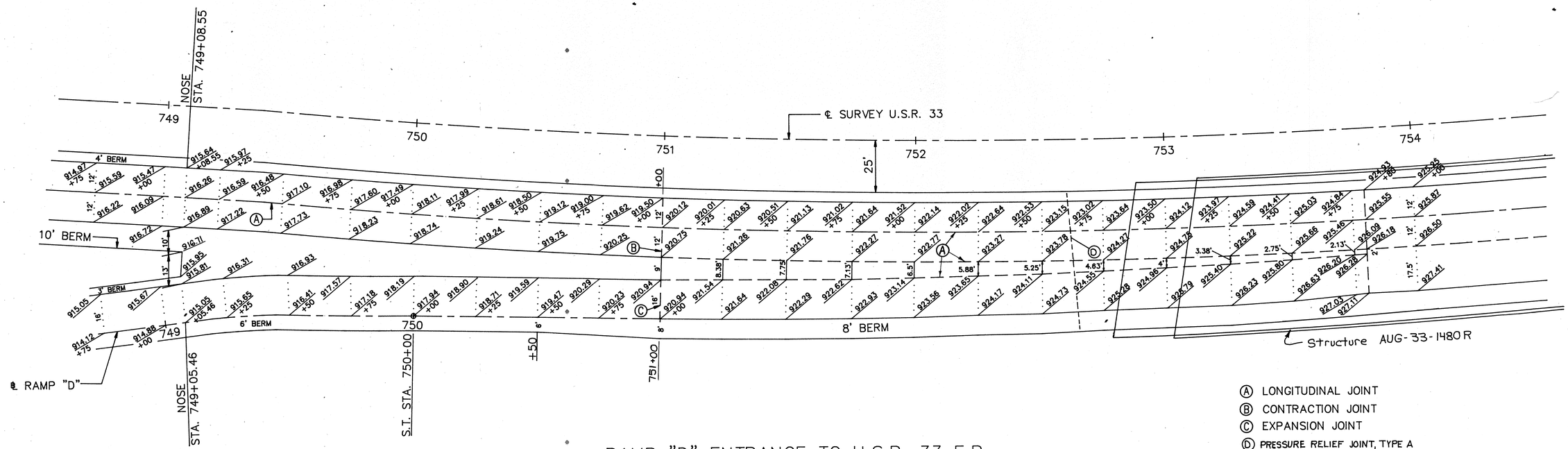
INTERCHANGE DETAIL E.B. U.S.R 33 & RAMP "B" AT HARDIN PIKE

AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		



RAMP "C" EXIT FROM W.B. U.S.R. 33



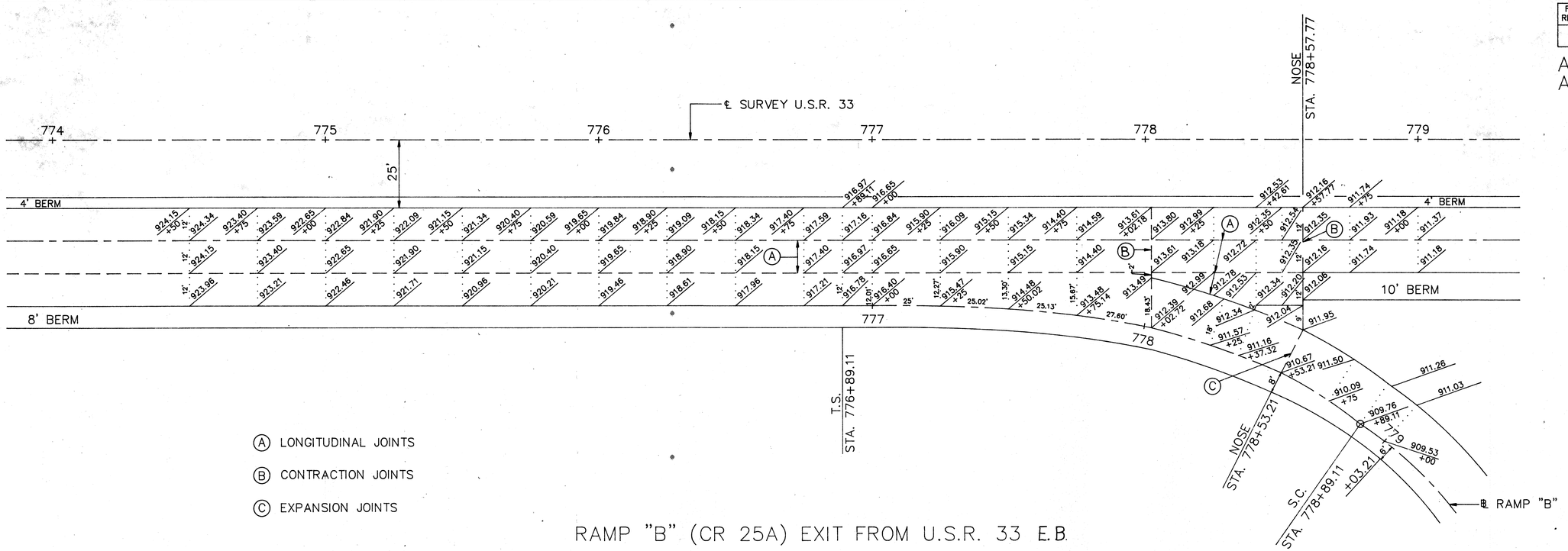
RAMP "D" ENTRANCE TO U.S.R. 33 E.B.

INTERCHANGE DETAILS W.B. U.S.R.33 & RAMP "C" AND E.B. U.S.R. 33 & RAMP "D" AT HARDIN PIKE

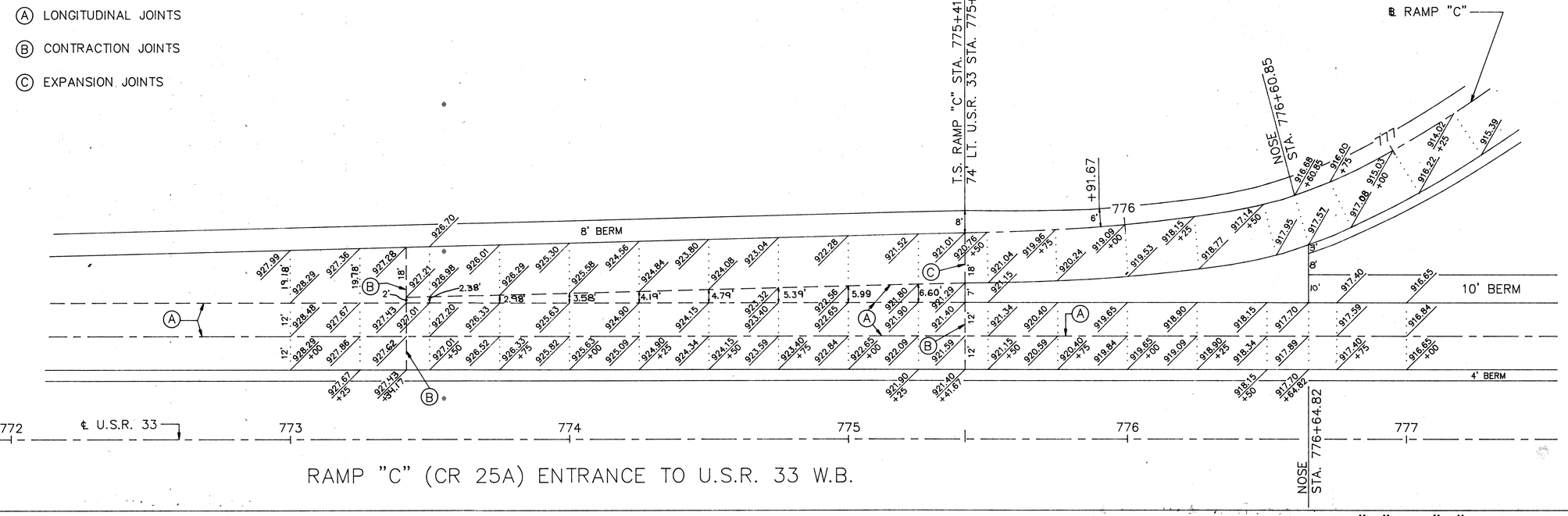
FHWA REGION	STATE	PROJECT	
5	OHIO		

47
345

AUGLAIZE COUNTY
AUG– 33 –13.44



RAMP "B" (CR 25A) EXIT FROM U.S.R. 33 E.B.



RAMP "C" (CR 25A) ENTRANCE TO U.S.R. 33 W.B.

INTERCHANGE DETAILS FOR RAMPS "B" & "C" AT C.R. 25A

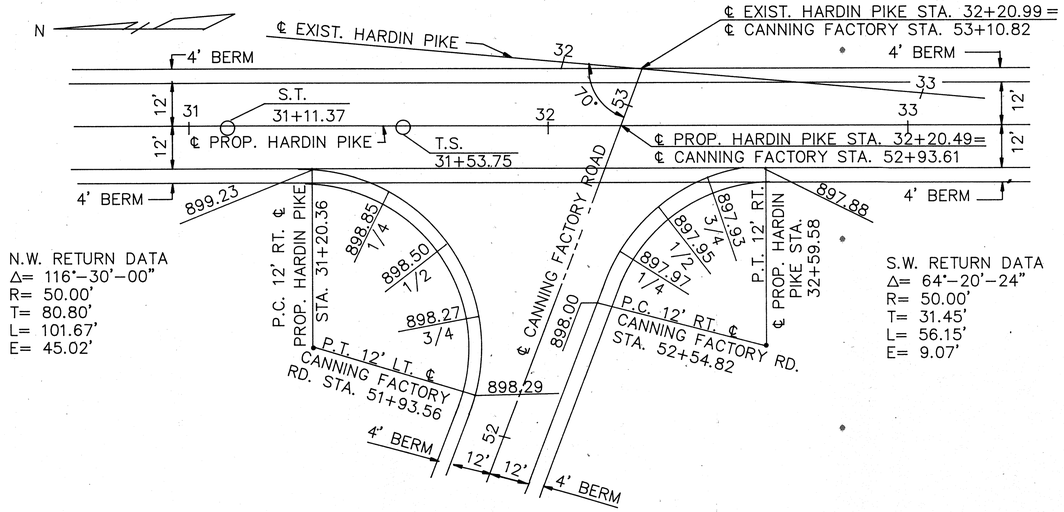
AUG 33 13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

48
345

AUGLAIZE COUNTY
AUG – 33 – 13.44

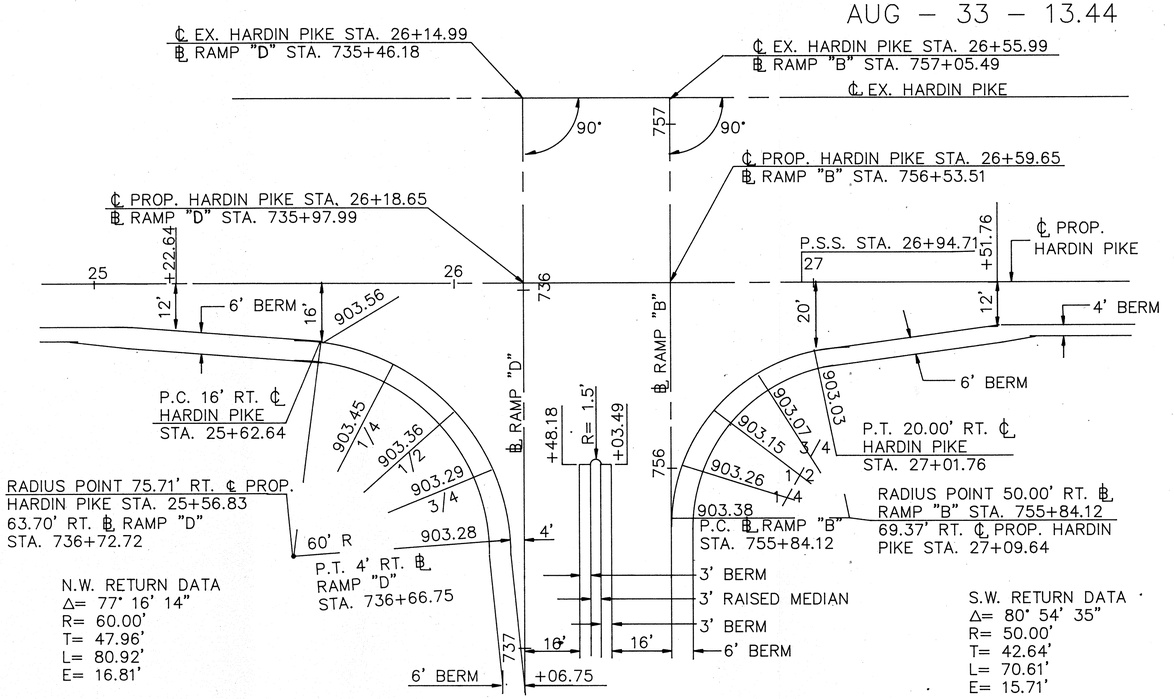
INTERSECTION DETAIL CANNING FACTORY RD. WITH HARDIN PIKE



N.W. RETURN DATA
Δ= 116°–30'–00"
R= 50.00'
T= 80.80'
L= 101.67'
E= 45.02'

S.W. RETURN DATA
Δ= 64°–20'–24"
R= 50.00'
T= 31.45'
L= 56.15'
E= 9.07'

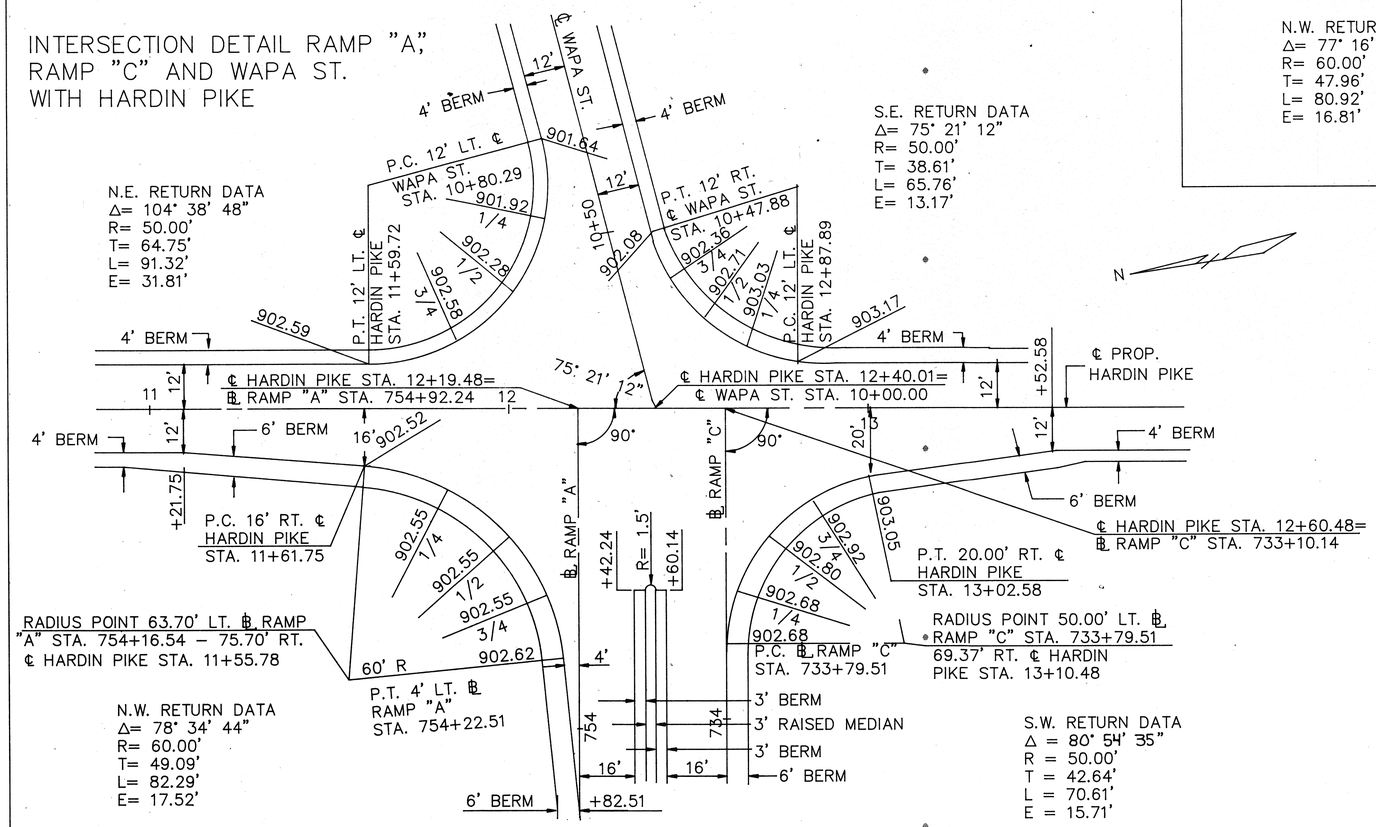
INTERSECTION DETAIL RAMP "B" AND RAMP "D" WITH HARDIN PIKE



N.W. RETURN DATA
Δ= 77° 16' 14"
R= 60.00'
T= 47.96'
L= 80.92'
E= 16.81'

S.W. RETURN DATA
Δ= 80° 54' 35"
R= 50.00'
T= 42.64'
L= 70.61'
E= 15.71'

INTERSECTION DETAIL RAMP "A," RAMP "C" AND WAPA ST. WITH HARDIN PIKE



N.E. RETURN DATA
Δ= 104° 38' 48"
R= 50.00'
T= 64.75'
L= 91.32'
E= 31.81'

S.E. RETURN DATA
Δ= 75° 21' 12"
R= 50.00'
T= 38.61'
L= 65.76'
E= 13.17'

N.W. RETURN DATA
Δ= 78° 34' 44"
R= 60.00'
T= 49.09'
L= 82.29'
E= 17.52'

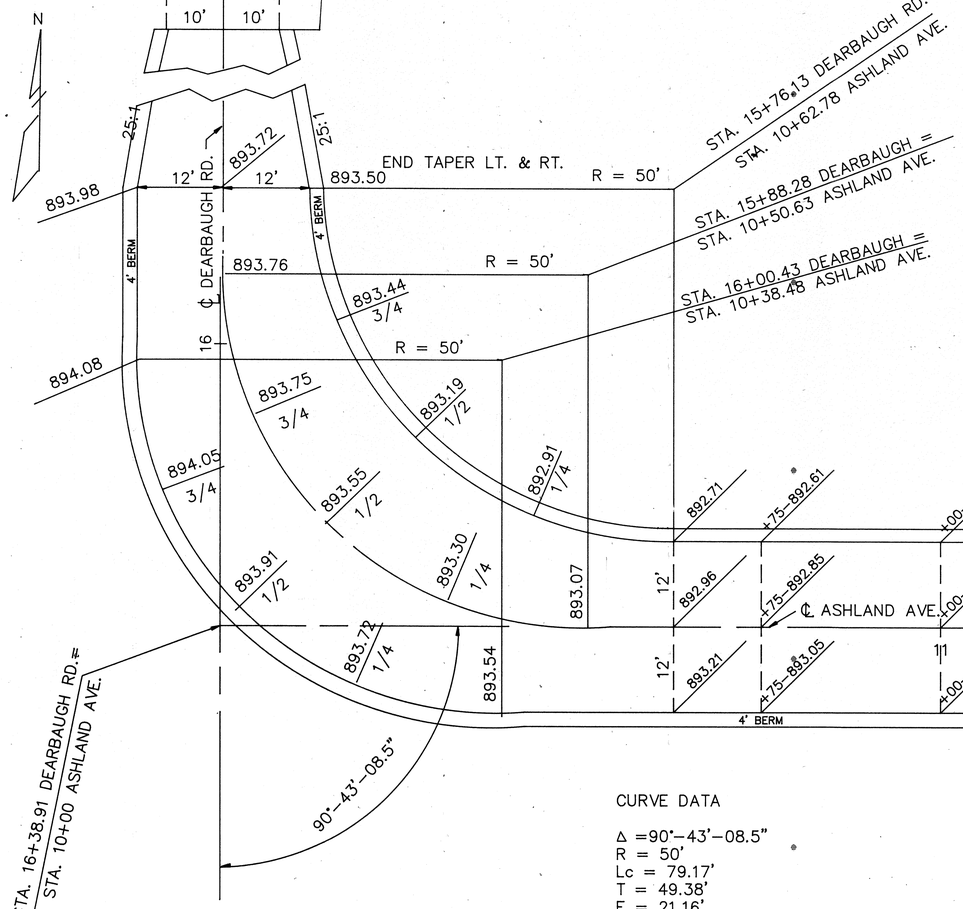
S.W. RETURN DATA
Δ = 80° 54' 35"
R = 50.00'
T = 42.64'
L = 70.61'
E = 15.71'

FHWA REGION	STATE	PROJECT	
5	OHIO		

49
345

RADIUS OF ASHLAND AVE. AND DEARBAUGH RD.

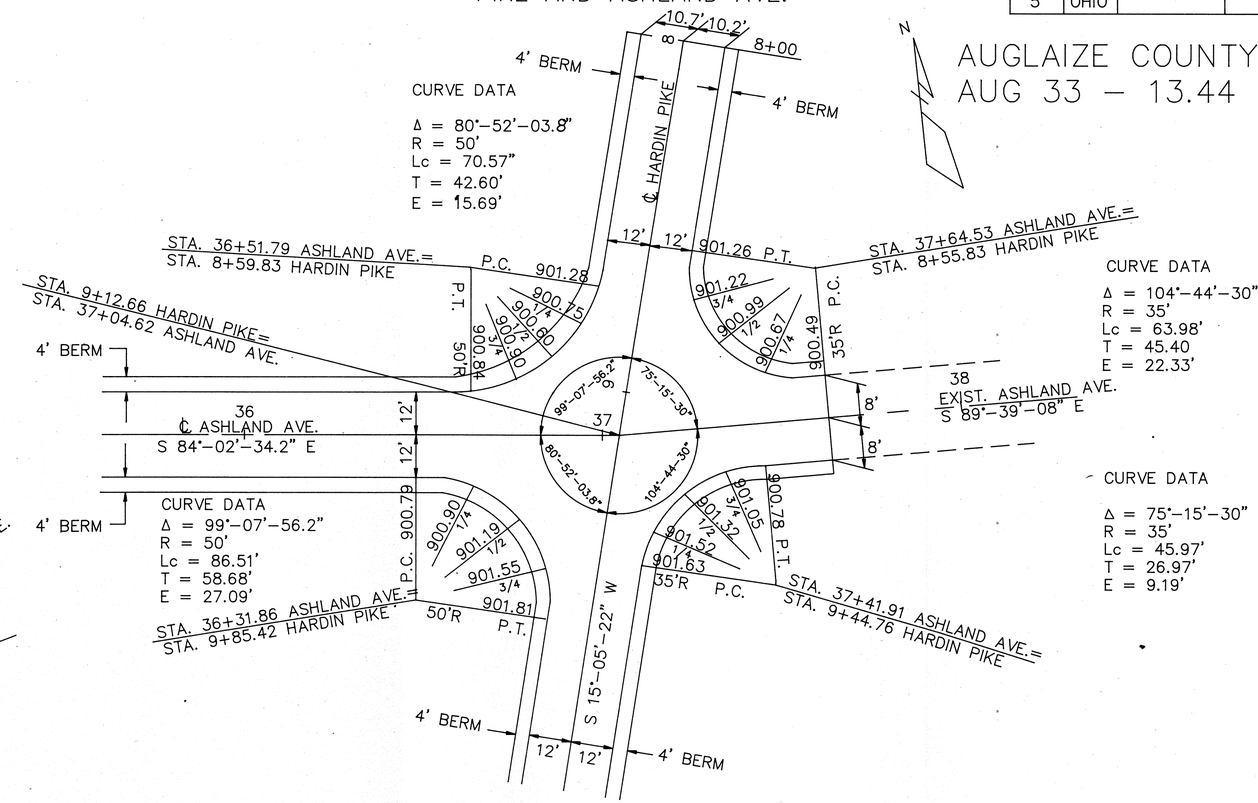
STATION EQUATION
DEARBAUGH RD. STA. 15+26.13=
ASHLAND AVE. STA. 9+09.31
BEGIN TAPER LT. & RT.
MEET EXISTING PAV'T. ELEV.



CURVE DATA

Δ =90°-43'-08.5"
R = 50'
Lc = 79.17'
T = 49.38'
E = 21.16'

INTERSECTION DETAIL OF HARDIN PIKE AND ASHLAND AVE.



ASHLAND AVE. INTERSECTION DETAILS.

FHWA REGION	STATE	PROJECT	
5	OHIO		

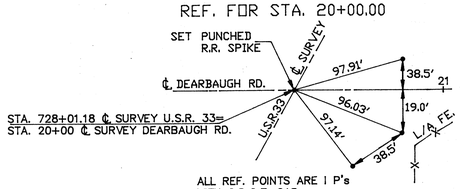
50
34.5

CUL-DE-SAC DETAIL DEARBAUGH RD.

0 10 20 30 40 50
SCALE IN FEET

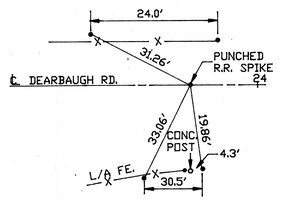
AUGLAIZE COUNTY
AUG-33-13.44

REF. FOR STA. 20+00.00



ALL REF. POINTS ARE I P's WITH O.D.O.T. CAP

REF. FOR P.O.T. 23+59.79



All REF. POINTS ARE I P's WITH O.D.O.T. CAP

N

21' BERM
24'
10' BERM
EASTBOUND LANES
℄ SURVEY U.S.R.33
S 67°-16'-20" E
729
EXIST. 12" CONC.
EXIST. 21" CONC.
EXIST. C.B.
℄ SERVICE RD. NO. 1 STA. 38+54.32 ~ 12' LT.
U.S.R. 33 STA. 728+64.32 ~ 114' RT.
P.R.C. STA. 22+09.87
36.53' LT.
STA. 22+78.14
109.6' LT.
100' R
43°-03'-27.7"
P.C.
P.T.
895.17
895.69
895.22
895.44
895.49
895.42
895.47
22.74'
25.15'
25'
1/4" /1'
1.12'-00'-05.8"
50'R
21+75.73
46°-56'-32.3"
SIGN
68°-56'-38"
728
STA. 728+01.18 ℄ SURVEY U.S.R.33=
STA. 20+00 ℄ SURVEY DEARBAUGH RD.
21
22
23
24
℄ SURVEY
DEARBAUGH RD.
S 1°-40'-18" W
9.6'
10.5'
CONC. POST
℄ DEARBAUGH RD. STA: 21+35.01
℄ SERVICE RD. NO. 1 STA. 38+09.69
29.32'
29.69'
25'R
47°-26'-53.5"
34°-02'-52.8"
29.71'
30.49'
895.17
895.42
50R
1/4" /1'
EXIST. 15" CONC.
126'
727
28.16'
12'
37
38
℄ SURVEY SERVICE RD. NO.1
S 67°-16'-20" E
P.R.C. STA. 21+83.12
49.45' RT.
100'R
P.R.C. STA. 22+08.81
36.83' RT.
42°-33'-06.5"
60°-26'-24.4"
STA. 22+77.17
110.5' RT.

DEARBAUGH RD. STA. 21+97.91 ~ 148.35' RT.
SERVICE RD. NO. 1 STA. 37+23.84 ~ 112' RT.

B.M.#145 4' SIGN POST SET FLUST 114.5' RT.
STA. 729+48 ELEV. 894.98

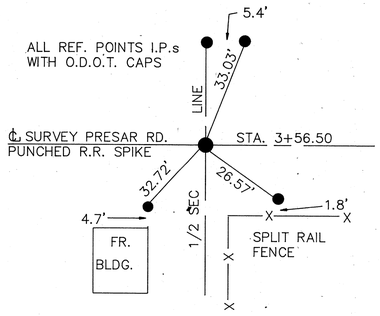
CUL-DE-SAC DETAIL DEARBAUGH RD.

CUL-DE-SAC DETAIL PRESAR RD.

FHWA REGION	STATE	PROJECT	
5	OHIO		

51/345

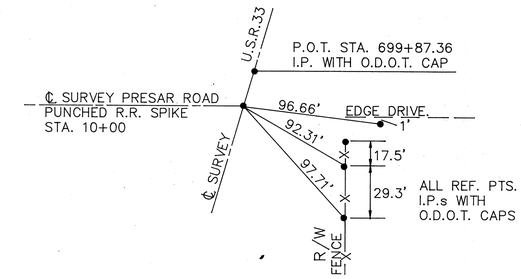
AUGLAIZE COUNTY
AUG-33-13.44



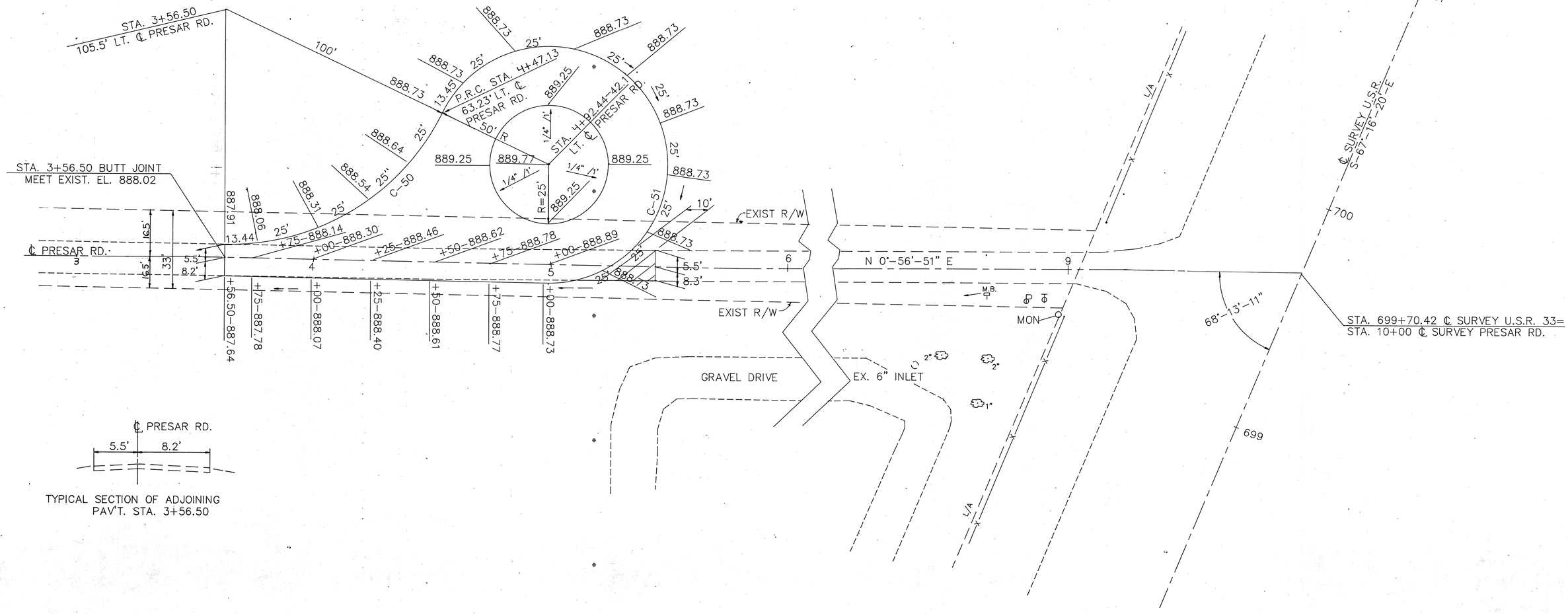
C-50 CURVE DATA
Δ= 64°-59'-49"
R= 100'
L= 113.44'
E= 18.57'
T= 63.70'

0 10 20 30 40
SCALE IN FEET

N



C-51 CURVE DATA
Δ= 244°-59'-49"
R=50'
L= 213.80



TYPICAL SECTION OF ADJOINING PAV'T. STA. 3+56.50

B.M.#139: 4' SIGN POST SET FLUSH
86.4' LT. STA. 699+00 (1' NORTH OF L/A FENCE)
ELEV. 887.43

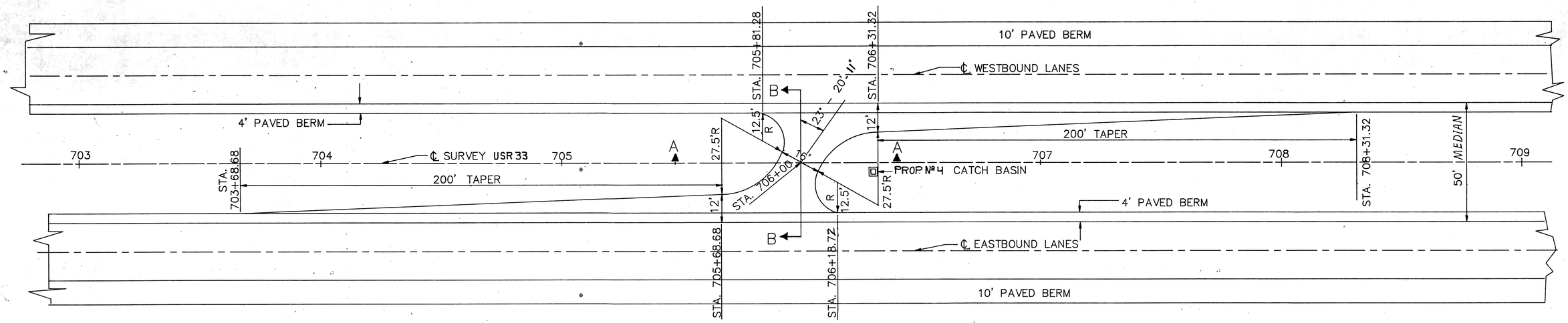
CUL-DE-SAC DETAIL PRESAR RD.

FHWA REGION	STATE	PROJECT	
5	OHIO		

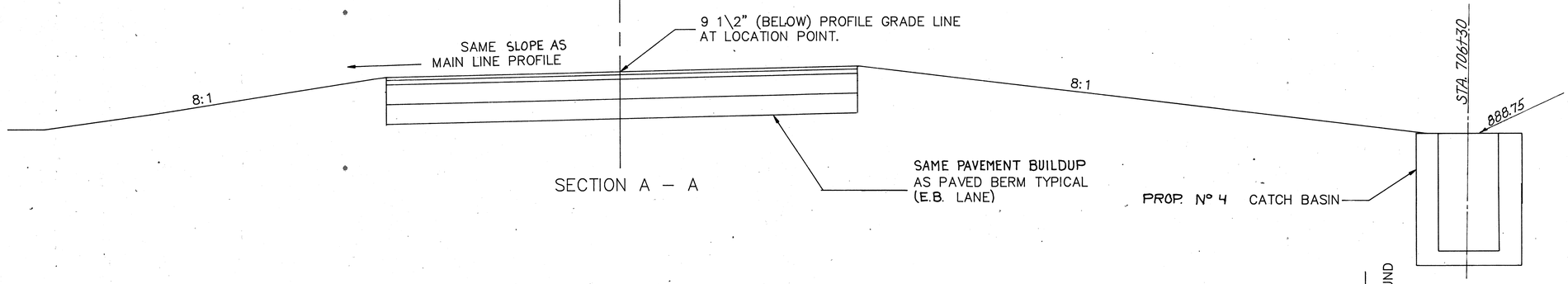
52
345

AUGLAIZE COUNTY
AUG 33 – 13.44

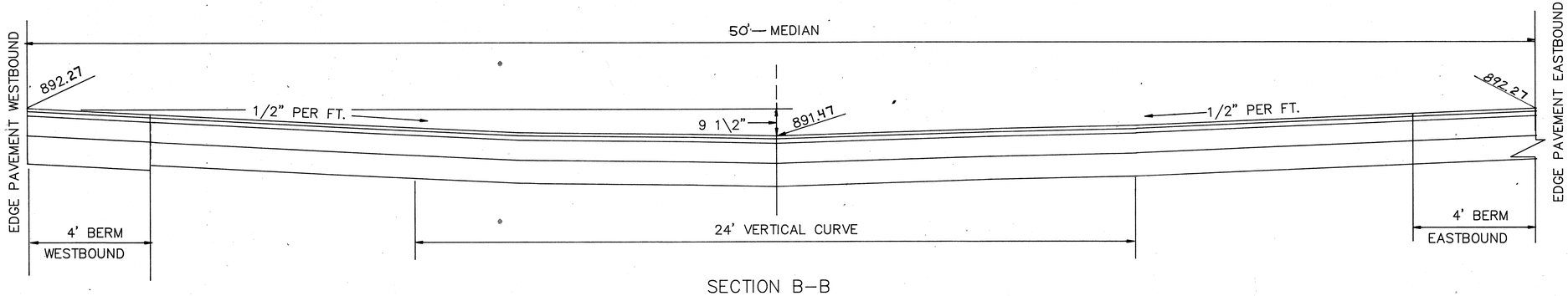
STANDARD U–TURN MEDIAN OPENING



TYPICAL CROSSOVER



SECTION A – A



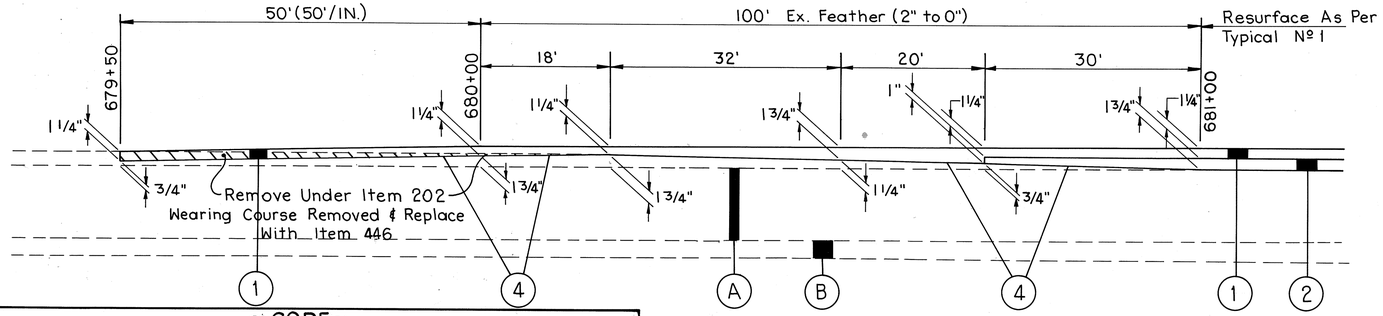
SECTION B–B

AUG -33-13.44 DETAIL FOR U–TURN MEDIAN OPENING STA. 706+00

AUGLAIZE COUNTY
AUG~33~13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

53/345



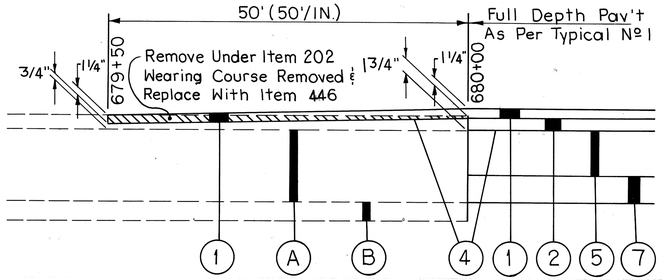
~CODE~

1. Item 446, 1¼" Asphalt Concrete, Surface Course, Type 1, AC-20
2. Item 446, 1¾" Asphalt Concrete, Intermediate Course, Type 2, AC-20
4. Item 407, Tack Coat
5. Item 305, 10" Concrete Base
7. Item 310, 6" Subbase, Type II EXISTING
- A. 3" Asphalt Surface on 2" Asphalt Intermediate on 3" Bituminous Aggregate Base on 8" Macadam
- B. 4" Subbase

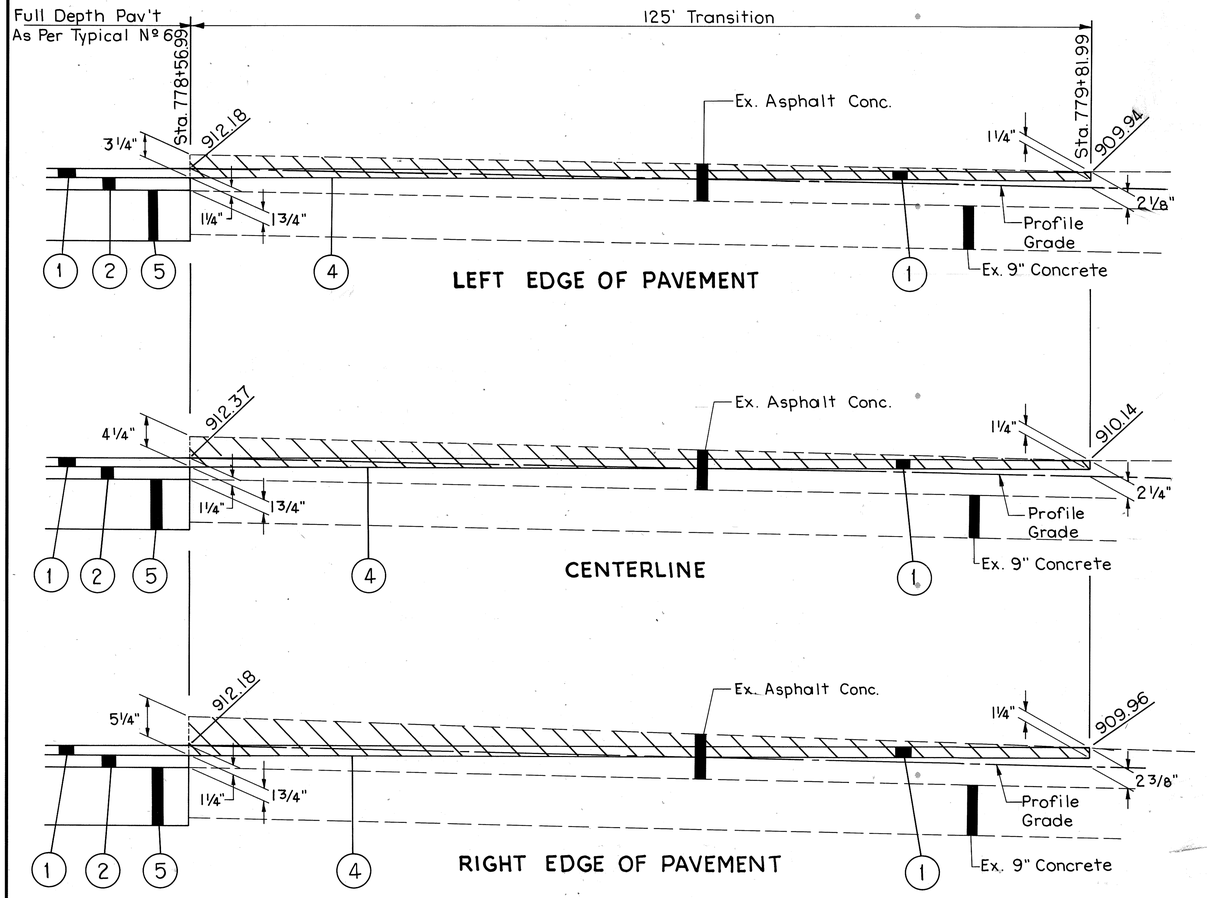
TRANSITION DETAIL "A"
Begin Work On U.S.R. 33 (W.B.)

Removed Under Item 202
Wearing Course Removed

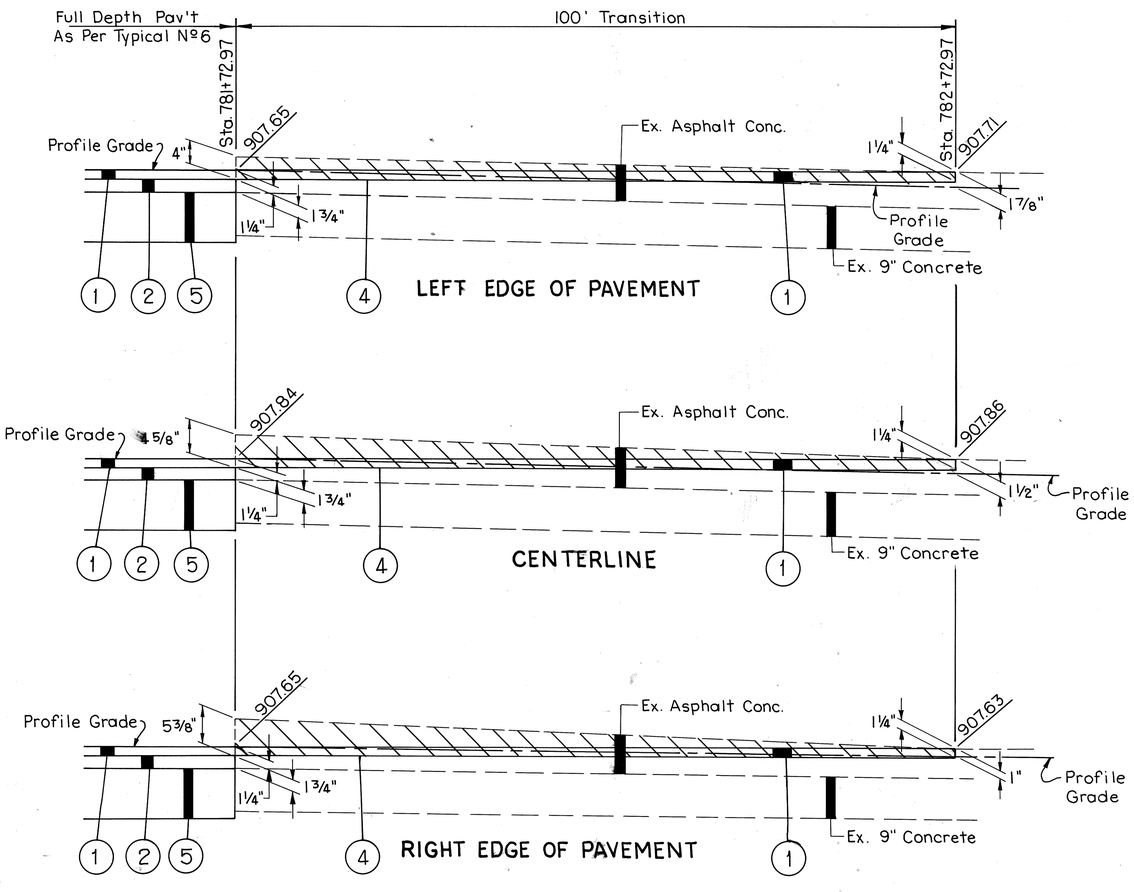
DETAILS NOT DRAWN TO SCALE



TRANSITION DETAIL "B"
Begin Work On U.S.R. 33 (E.B.)

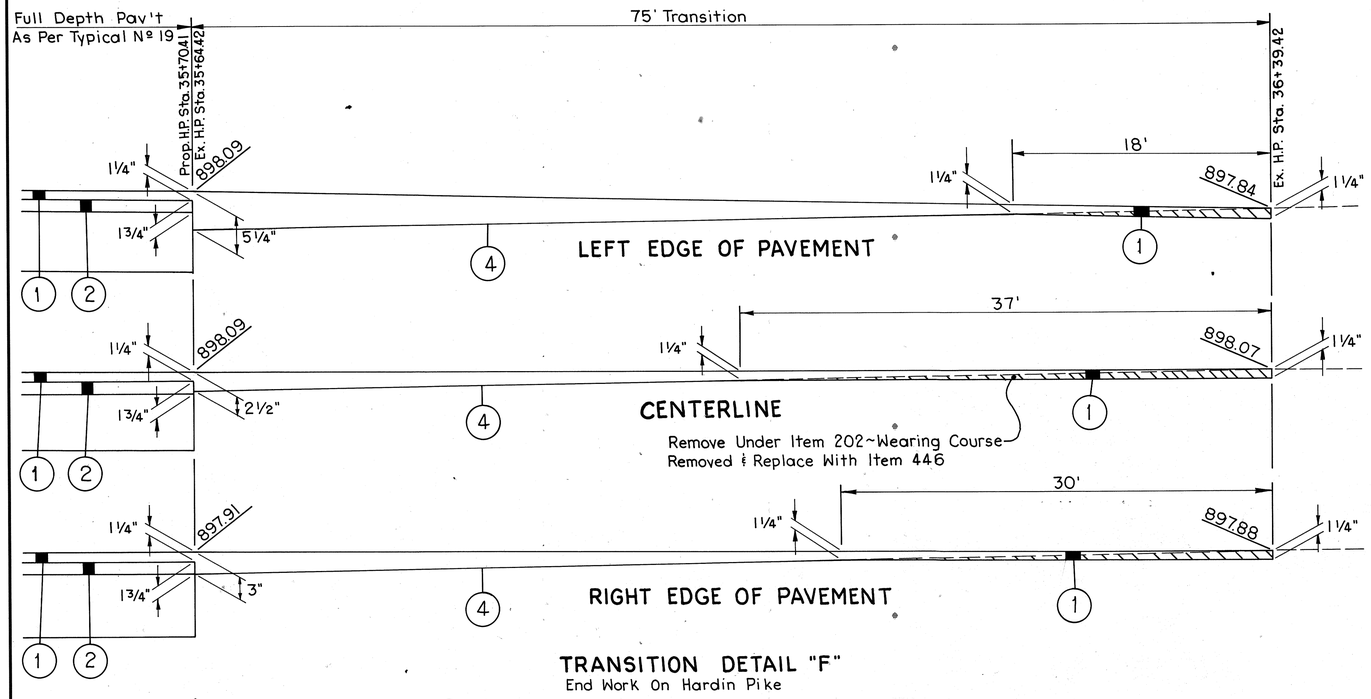


TRANSITION DETAIL "C"
End Work On U.S.R. 33 (W.B.)

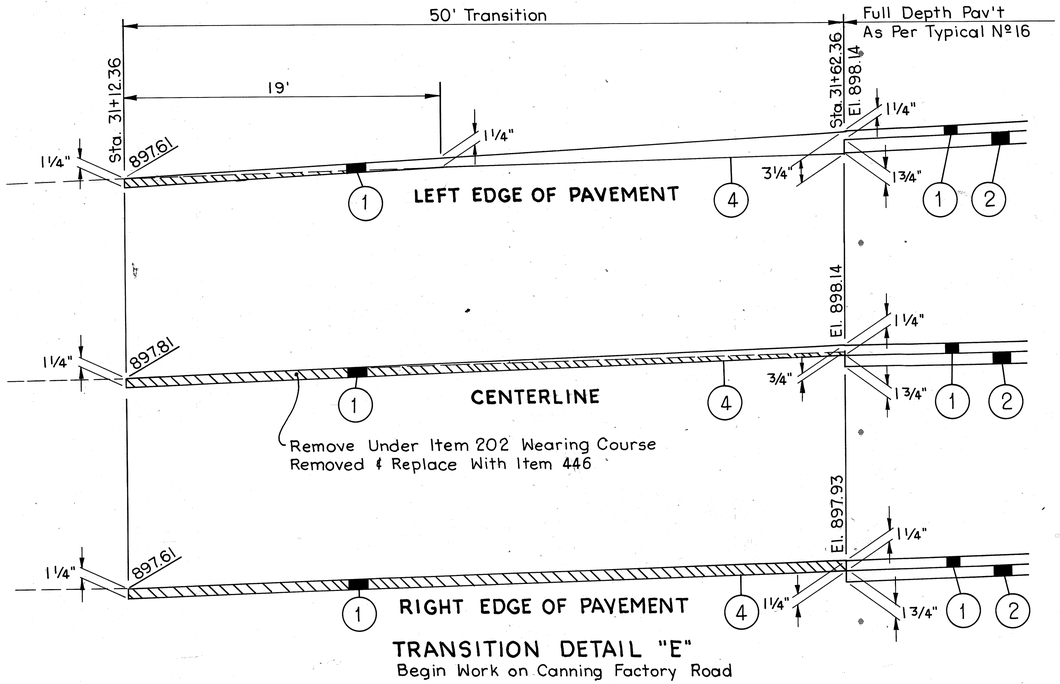


TRANSITION DETAIL "D"
End Work On U.S.R. 33 (E.B.)

TRANSITION DETAILS



TRANSITION DETAIL "F"
End Work On Hardin Pike



TRANSITION DETAIL "E"
Begin Work on Canning Factory Road

Removed Under Item 202
Wearing Course Removed

Details Not Drawn to Scale

~CODE~

(1) ~ Item 446, 1¼" Asphalt Concrete, Surface Course, Type 1, AC-20

(2) ~ Item 446, 1¾" Asphalt Concrete, Intermediate Course, Type 2, AC-20

(4) ~ Item 407, Tack Coat

SYMBOL LEGEND

(Transition) ~ 1 1/4" Min. 446 Asphalt Concrete, Surface Course, Type 1, AC-20 on 0" Min. 446 Asphalt Concrete, Intermediate Course, Type 2, AC-20 On 407 Tack Coat on Existing Pavement.

(Residence Drive) ~ 2" 404 Asphalt Concrete, AC-20 (Driveways) on 408 Bit. Prime Coat @ 0.4 Gal./Sq. Yd. on 6" 304 Aggregate Base

(Field Drive) ~ 6" 304 Aggregate Base

(Pavement Removal) ~ 3" ± Asphalt on 9" Reinf. Conc. Pav't.

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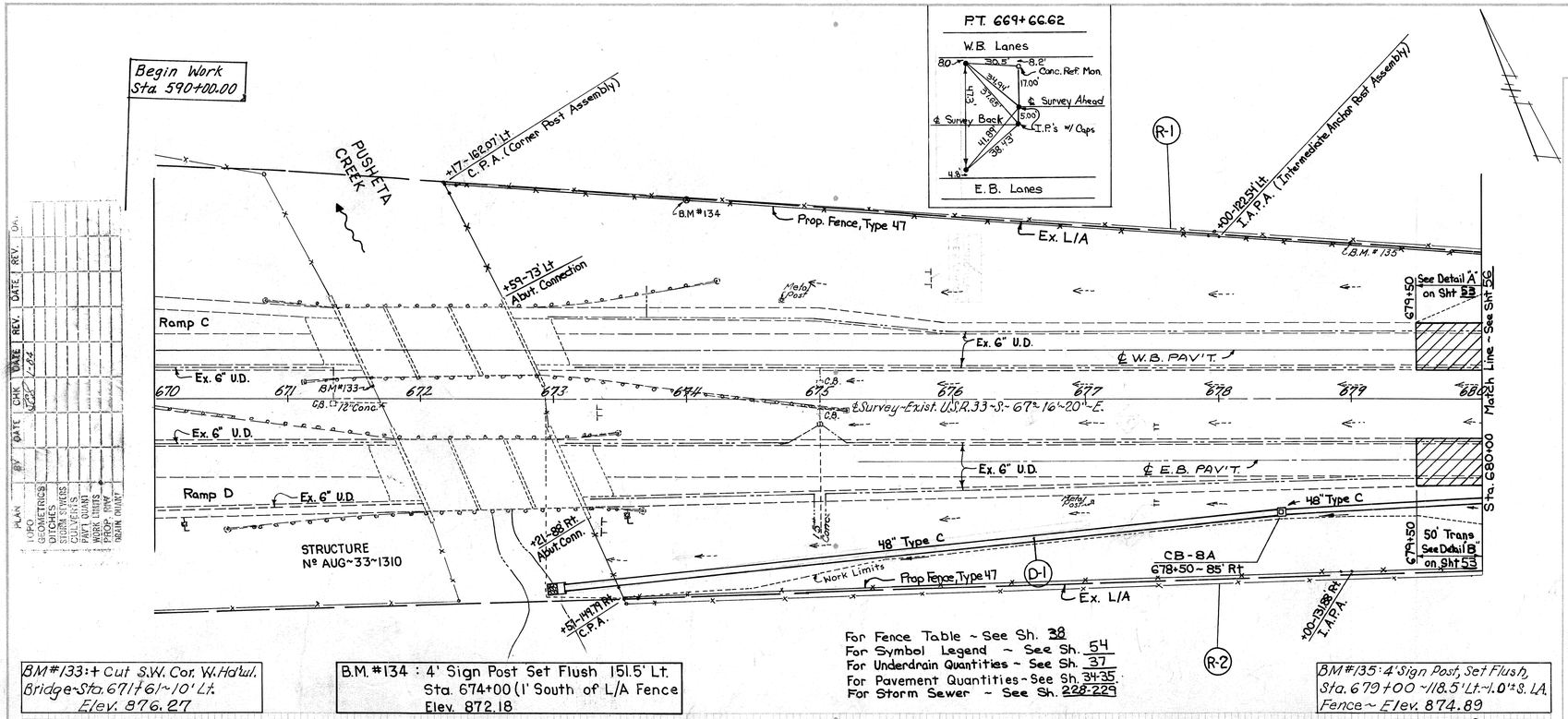


For Fence Table ~ See Sh. 38
For Symbol Legend ~ See Sh. 54
For Underdrain Quantities ~ See Sh. 37
For Pavement Quantities ~ See Sh. 34-35
For Storm Sewer ~ See Sh. 228-229

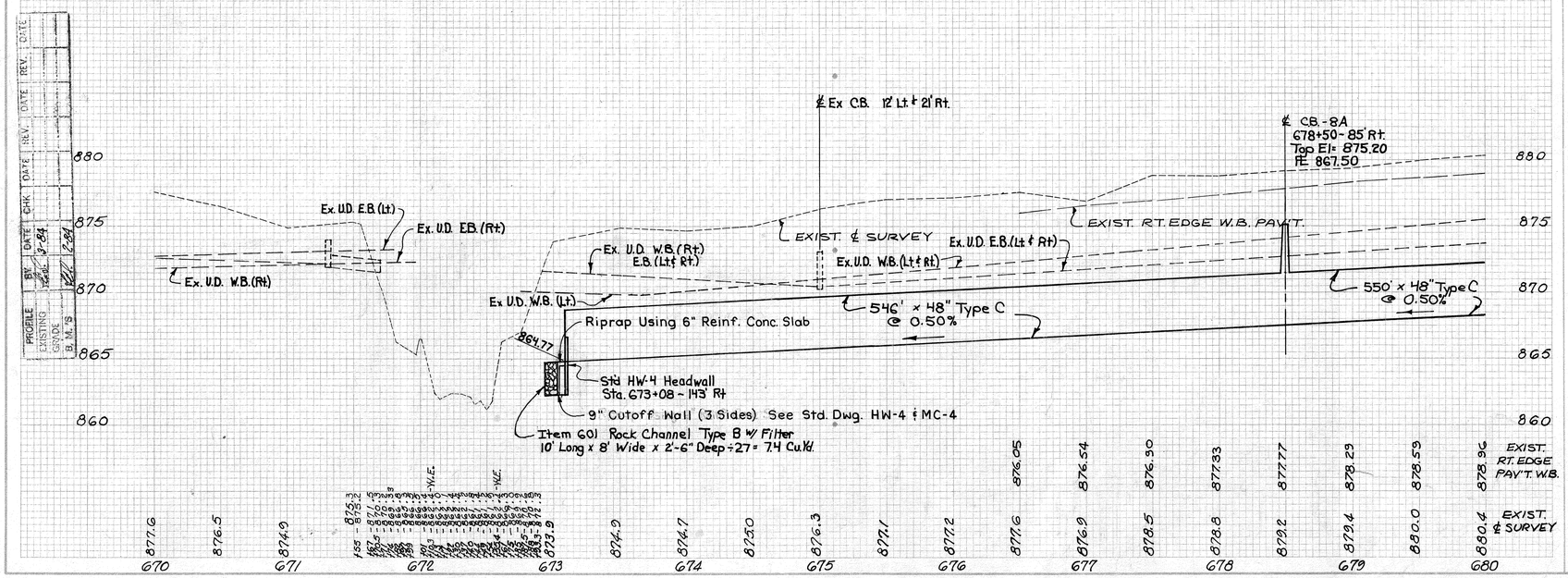
BM#133: + Cut S.W. Cor. W. Hd'wl. Bridge Sta. 671+61~10' Lt. Elev. 876.27

B.M. #134 : 4' Sign Post Set Flush 151.5' Lt. Sta. 674+00 (1' South of L/A Fence Elev. 872.18

BM#135: 4' Sign Post, Set Flush, Sta. 679+00 ~118.5' Lt. ~1.0' S. L.A. Fence ~ Elev. 874.89

PLAN: TOPO, GEOMETRICS, DITCHES, STORM SEWERS, CULVERTS, PAVT. DATA, WORK LIMITS, PROP. R/W, MAINT.

PROFILE: EXISTING GRADE, B.M.'S



PROFILE: EXISTING GRADE, B.M.'S

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	203 Excavation Embankment Cu. Yd.	659 Comm Seeding & Mulching Fertilizer Sq. Yd.	659 Comm Fertilizer Ton	SEE SHEET NO.
D-1	672+93 to 680+00	Rt.	8	1059	0.10	68
	673+08 to 680+00	L&R	268			
R-1	672+59 to 680+00	Lt				
R-2	673+21 to 680+00	Rt				
TOTALS	TO SHT. 33		8	1059	0.10	

REF. NO.	STATION TO STATION	SIDE	601 R.C.P. Type B w/Filter Conc. Slab Cu. Yd.	601 Riprap "6" Using Reinf. Conc. Slab Sq. Yd.	202 Fence Removed Lin. Ft.	602 Concrete Masonry Cu. Yd.	603 Conduit 48" Type C Lin. Ft.	604 Catch Basin Nº 8-A Each
D-1	672+93 to 680+00	Rt.	7.4	4.5		1.10	696	1
	673+08 to 680+00	L&R			684			
R-1	672+59 to 680+00	Lt			619			
R-2	673+21 to 680+00	Rt						
TOTALS	TO SHT. 33		8	5	1303	1.10	696	1

PLAN AND PROFILE ~ STA. 670+00 TO STA. 680+00 ~ U.S.R. 33

AUGLAIZE COUNTY
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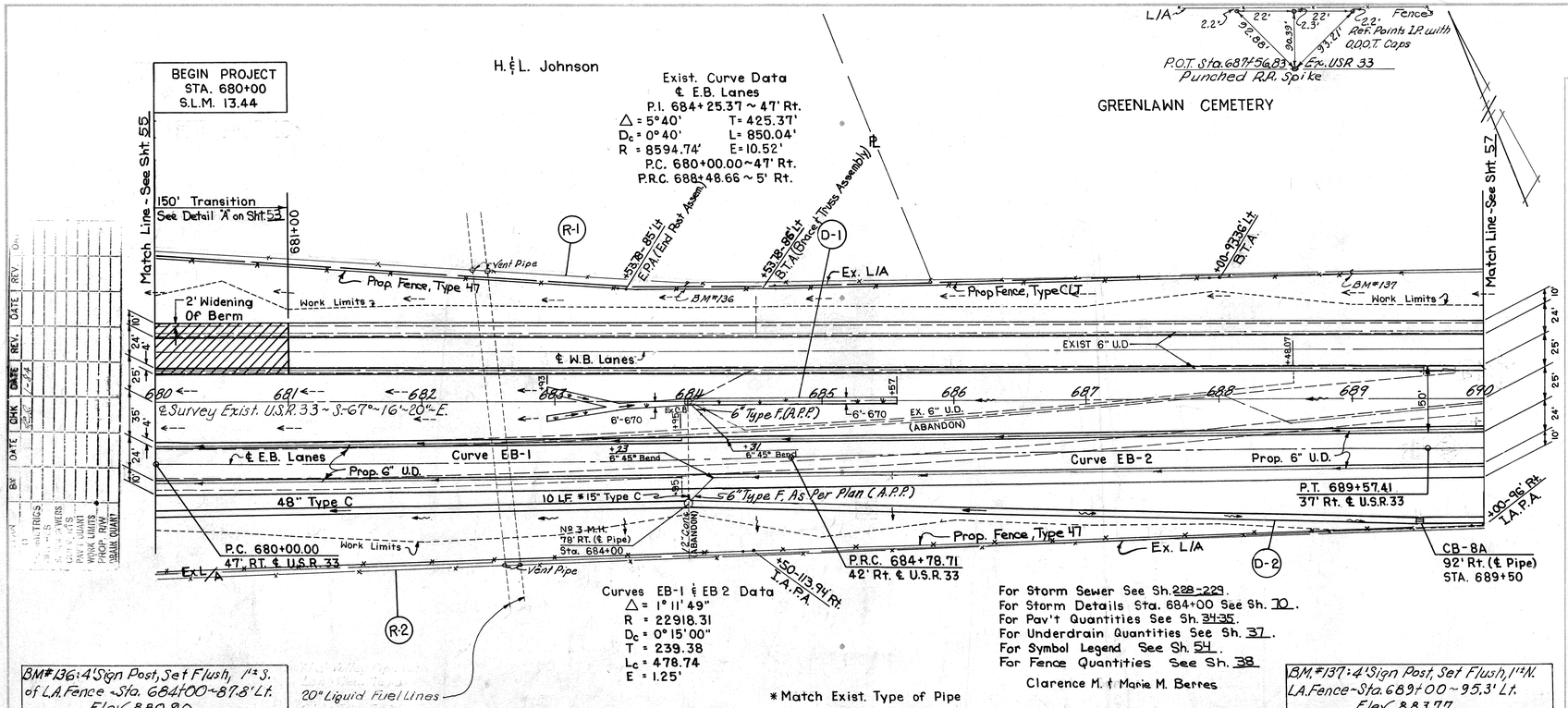

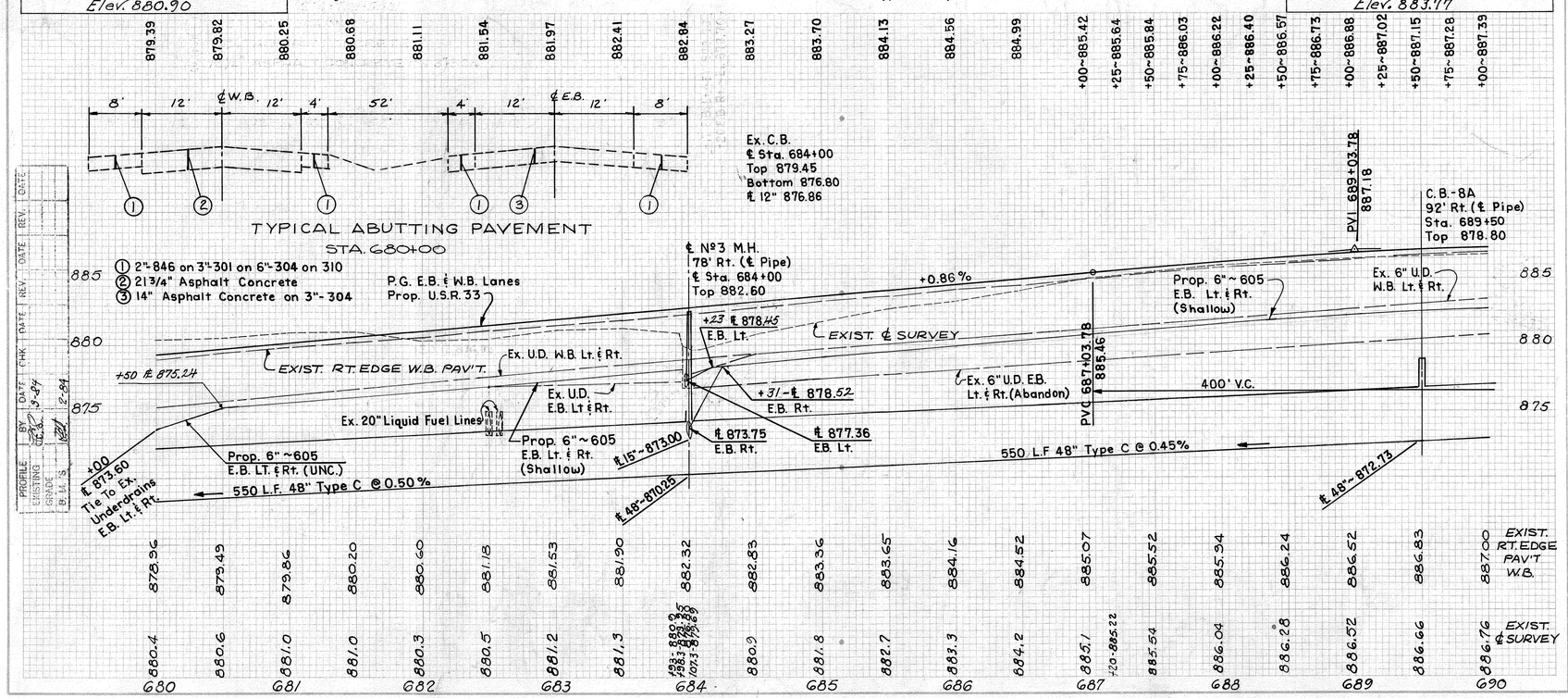

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Fence Removed Lin. Ft.	603 48" Conduit Type C Lin. Ft.	603 15" Conduit Type C Lin. Ft.	604 Catch Basin № 8A Each	604 Manhole № 3 Each	670 Ditch Erosion Protection Sq. YD.	659 Seeding & Mulching Cu. Yd.	659 Comm. Fertilizer Ton	203 Excavation Embankment Cu. Yd.	203 Excavation Embankment Cu. Yd.	SEE SHEET NO.
R-1	680+00 TO 690+00	Lt.	1000										
R-2	680+00 To 690+00	Rt.	1000										
D-1	682+93 To 685+57	Lt & Rt						235					
D-2	680+00 To 690+00	Rt.		1000	10	1	1						
	680+00 TO 690+00	Lt & Rt							0.96		1433	1433	71
TOTALS to Sht. 30-32			2000	1000	10	1	1	235	0.96		1433	1433	

PLAN AND PROFILE ~ STA. 680+00 TO STA. 690+00 ~ U.S.R. 33

AUGLAIZE COUNTY
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GREENLAWN CEMETERY

For Presar Rd. CUL-DE-SAC See Sh. 51.

Ex. Curve Data
℄ E.B. Lanes
PI. 692+71.95 ~ 37' Lt.
Δ = 5° 40' T = 425.37'
D_c = 0° 40' L = 850.04'
R = 8594.74' E = 10.52'
PRC 688+48.66 ~ 5' Rt.
PT 696+97.32 ~ 37' Lt.

Match Line See Sh. 56

Match Line See Sh. 58

EX. C.B. (DO NOT DISTURB) 87' LT. ℄ Sta. 691+39.5 Top 882.15 ℄ 12" 877.45

№8 C.B. 86' LT. ℄ Sta. 691+50

+53.78~103' Lt. B.T.A.

Sta. 699+70.42 ~ ℄ Survey U.S.R.33 = Sta. 10+00 ~ ℄ Survey Presar Rd.

Presar Road

16' Gravel Dr

R/W

14' West Ohio Gas Line

6" Inlet

Pines

+93'±~15' Gravel Dr.

B.T. Drive

BM#138

BM#139 +13.78~86 Lt. B.T.A.

Ex. L/A

Prop. Fence, Type CLT

Work Limits

R/W Mon

Ex. 6" U.D. To Remain

6" Type E (A.P.P.)

18" Type B

℄ W.B. LANES

Prop. 6" U.D.

+75 ~ 6"~45° Bend

Meet Ex. U.D 696+97

EX. 6" U.D.

EX. 6" U.D. (Abandon)

6" Type F (A.P.P.)

№4 C.B.

6'~670

℄ Survey Exist. U.S.R.33 ~ S.67°~16'~20"~E.

68°~13'~11"

℄ E.B. LANES

Prop 6" U.D.

12"~60° Bend ~ ℄ 876.04

10 L.F. 12" Type C

48"×12" Tee

48" Type C

Plug 12" N ℄ 8" S.E.

Ex. 15"

Ex. 6"

EX. C.B. (Abandon) 93' RT. ℄ Sta. 690+23.5 ℄ 12"~875.71 N ℄ 8"~875.90 ℄ 6"~875.82 ℄ 15"~875.90 S

8"~45° Bend ~ ℄ 875.95

10 L.F. 8" Type C

48"×8" Tee

Work Limits

C.B.-8A 86' RT. (℄ Pipe) Sta 691+50

+28.78~101 Rt. Fence Location

Prop. Fence, Type 47

C.B.-8A 84' RT (℄ Pipe) Sta. 696+00

+40~16.85' Rt. I.A.P.A.

+53.78~94' Rt. Fence Location

C.B.-8A 89' RT. (℄ Pipe) Sta. 700+00

Clarence M. & Marie M. Berres

For Presar Road See Sh. 223.
For Storm Sewer See Sh. 228-229.
For Storm Details Sta. 691+50 See Sh. 73.
For Fence Quantities See Sh. 38.
For Pavement Replacement (Sta 691+50) See Sht. 36
For Pav't Quantities See Sh. 34-35
For Underdrain Quantities See Sh. 37.

BM#138: 4' Sign Post, Set Flush, 1'N. L.A. Fence, Sta. 694+00~99.3' Lt. Elev. 884.47

BM#139~4' Sign Post Set Flush, 86.4' Lt. Sta. 699+00 Elev. 887.43 (1±North of L/A Fence

PROFILE: EXISTING GRADE; B.M.'S; BY; DATE; CHK; DATE; REV.; DATE; REV.; DATE; REV.; DATE

PLAN: I.D.; GEOMETRICS; CULVERTS; SEWERS; CULVERTS; PAVT. QUANT.; WORK LIMITS; PROP. R/W; NEW QUANT.

+00~887.39 | +25~887.50 | +50~887.60 | +75~887.69 | +00~887.77 | 887.92 | 888.07 | 888.22 | 888.37 | 888.52 | 888.67 | 888.82 | 888.97 | 889.12 | 889.27 | 889.42 | 889.57 | 889.72 | 889.87 | 890.02 | 890.17 | 890.32 | 890.47

CB-8A 86' RT. (℄ Pipe) Sta. 691+50 Top 882.00

C.B.-8A 84' RT. (℄ Pipe) Sta. 696+00 Top 884.55

C.B.-8A 89' RT. (℄ Pipe) Sta. 700+00 Top 884.15

PROP. 6"~605 W.B. RT. (UNC) @ 0.3%

133.5~88.32' Lt. Ex. CB 700~876.43~℄ 875.77

+45 ℄ 883.87 W.B. RT.

+00 ℄ 883.43 Meet Ex. ℄ W.B. RT.

EX. U.D. W.B. LT.

P.V.T. 691+03.78 887.78

400' V.C.

+75 ℄ 883.41 E.B. LT.

+87 ℄ 883.45 E.B. RT.

882.08

+75 ℄ 882.58 W.B. RT.

Prop. 6"~605 E.B. LT. ℄ RT. (Shallow)

Ex. 24"

880.23 ℄ 878.28 E.B. LT. ℄ W.B. RT.

EX. U.D. RT. (Abandon)

Prop. 6"~605 W.B. RT. (Shallow) @ 0.30% (5.42' Below Prop. Surface)

+0.30%

EXIST. ℄ SURVEY

P.G. Prop. U.S.R. 33

EXIST. RT. EDGE W.B. PAV'T.

+97 ℄ 884.06 Meet Exist. W.B. RT.

Prop. 6"~605 E.B. LT. ℄ RT. (Shallow)

EX. U.D. W.B. LT. ℄ RT.

Ex. 12"

Ex. 8"

Ex. 15"

℄ 877.03 E.B. RT.

Ex. 8"

℄ 18"~876.03

200 L.F. 48" Type C @ 0.40%

450 L.F. 48" Type C @ 0.36%

400 L.F. 48" Type C @ 0.35%

℄ 48"~873.53

℄ 48"~875.15

℄ 48"~876.56

EXIST. RT. EDGE PAV'T. W.B.

EXIST. ℄ SURVEY

886.76 | 886.91 | 887.07 | 887.07 | 887.1 | 887.3 | 887.4 | 887.3 | 887.3 | 887.4 | 887.1 | 886.8 | 886.7 | 886.1 | 885.6 | 885.7 | 886.2 | 889.82 | 889.98

690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Fence Removed Lin. Ft.	670 Ditch Erosion Protection Sq. Yd.	603 48" Conduit Type C Lin. Ft.	603 18" Conduit Type B Lin. Ft.	603 12" Conduit Type C Lin. Ft.	604 Catch Basin № 8 Each	604 Catch Basin № 8A Each	604 Catch Basin № 4 Each	603 ℄ Conduit Type C Lin. Ft.	605 12" 60° Bend Each	605 8" 45° Bend Each	605 48"×12" Tee Each	605 48"×8" Tee Each	202 Catch Basin Abandon Each	203 Excavation Cu. Yd.	203 Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Ton	SEE SHEET NO.
R-1	690+00 To 700+00	Rt.	1000																		
R-2	690+00 To 700+00	Lt.	1000																		
R-3	690+27 To 691+82	Lt.		34																	
D-1	690+00 To 700+00	Rt.			1000	172	10	1		3	1										
D-2	691+50 To 691+18	Lt. & Rt.																			
D-3	691+82 To 691+50	Lt.																			
D-4	698+43 To 699+93	Rt.		100																	
D-5	691+57 To 693+07	℄		100																	
D-6	691+57 To 693+07	Rt.		100																	
D-7	696+07 To 697+00	Lt.		62																	
	690+00 TO 700+00	Lt. & Rt.																			
TOTALS	To Sht. 30-32		2000	396	1000	172	10	1	3	1		1	10	1	1	1	1665	7471	11,932	1.08	74

PLAN AND PROFILE ~ STA. 690+00 TO STA. 700+00 ~ U.S.R. 33

AUGLAIZE COUNTY
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For Service Rd Nº 1 See Sh. 207-209.
For Storm Sewer See Sh. 228-229.
For Storm Details Sta. 702+00 See Sh. 76.
For Storm Details Sta. 706+30 See Sh. 230.
For Pav't Quantities See Sh. 34-35.
For Underdrain Quantities See Sh. 37.
For Crossover Detail See Sh. 52.
For Pavt Replacement (Sta 702+00, 702+30 706+15) See Sh. 36
For Fence Quantities See Sh. 38

L/A 2.3' 25' 25' 2.3' 1.8' Fence
86.66 83.56 88.01
Ref. Points I.P. w/ ODOT Caps
P.O.T. Sta. 708+94.16 Ex. USR 33

Greenlawn Cemetery

Match Line - See Sht. 57

Prop. 20LF 6" Type F (A.P.P.) Connect to Exist. at Each End
Construct Bulkheads See Detail on Sht. 214
Work Limits
2 Exist 21" (Abandon)
6"~670
6" Type F (A.P.P.)
Nº 8 C.B. 80.5' LT. ℄ Sta. 702+00
✱ +46~86' Lt 8" ℄ El. 883.60
C.B. (Abandon)
6" 45° Bend 702+30 Connect to Exist.
R/W Mon.
+65.86' Lt. ℄
Prop. Fence, Type CLT
10 L.F. 6" Type F (A.P.P.) Connect to Ex. at Each End
Standard U-Turn Median Opening Sta. 706+00
Nº 8 C.B. 78' LT. ℄ Sta 706+00
Prop. 6" U.D. Connect to Exist. At Each End
+387.86' Lt. ℄ L.A.
Auglaize County Commissioners
Work Limits
Ex. 6" U.D.
15" Type B
190'×8" Type B @ 0.00%
℄ W. B. LANES
6"~670
6" 45° Bend 702+23 Connect to Exist.
Nº 4 C.B. ℄ Sta. 702+00
C.B. (Abandon)
℄ Survey Exist U.S.R. 33 ~ S.67°~16'~20"~E.
6"~45° Bend 702+25
℄ E. B. LANES
Prop. 6" U.D.
6"~45° Bend 702+38
6" Type F (A.P.P.)
48" Type C
Prop. Fence, Type 47
Nº 4 C.B. ℄ Sta 706+30
18" Conc. (Abandon)
Type 3 Crossing
20' 9"Rt L.A.P.A.
B.M. #140
B.M. #141
Sign
Service Rd. Nº 1
Match Line See Sht. 59
Lorena Kreitzer
John Kreitzer
Penn Central R.R. Abandoned
Clarence M. & Marie M. Berres
Work Limits
R/W Mon.
Eb Drive
✱ +84~94' Rt 8" ℄ El. 883.60
80'~94' Rt L.A.P.A.
C.B.-8A 89' RT. (℄ Pipe) Sta. 700+00
C.B.-8A 87' RT. (℄ Pipe) Sta. 702+00
C.B.-8A 88' RT. (℄ Pipe) Sta. 704+50
C.B.-8A 86' RT. (℄ Pipe) Sta. 706+30
D.M.
Sta. 707+60 156' Rt

BM #140: 4' Sign Post Set Flush 1st S. L/A Fence Sta. 704+00 ~ 94.4' Rt. Elev. 888.09

✱ Connect Ex. 6" F.T. to Prop. 8" Type B with Masonry Collar Per Std. Dwg. MC-4

BM #141: 4' Sign Post Set Flush 1st South L.A. Fence Sta. 709+00 ~ 94.8' Rt. Elev. 892.11

C.B.-8A
89' RT. (℄ Pipe)
Sta. 700+00
Top 884.15

C.B.-8A
87' RT. (℄ Pipe)
Sta. 702+00
Top 885.80

EX. C.B. ~ 702+06
Top 886.11
℄ 883.67

EX. C.B. ~ 702+43.5
Top 886.50
℄ 883.55

C.B.-8A
88' RT. (℄ Pipe)
Sta. 704+50
Top 885.80

CB-8A
86' RT. (℄ Pipe)
Sta. 706+30
Top 887.10

P.G. Prop. U.S.R. 33

+0.30%

Ex. 21" ~ 701+02 ℄ Lt. ~ 886.33 ℄ Rt. ~ 886.07
Ex. 21" ~ 701+06 ℄ Lt. ~ 886.08 ℄ Rt. ~ 885.86
Prop. 6" ~ 605 E.B. Lt. ℄ Rt. (Shallow)
+25 ~ E.B. Lt. ℄ 886.56
+N W.B. Lt ℄ Rt. ℄ 886.55
+23 ~ W.B. Rt. ℄ 886.69
EXIST. RT. EDGE W.B. PAV'T.
+38 ~ E.B. Rt. ℄ 886.60
+30 W.B. Lt. ℄ 886.54
Ex. U.D. W.B. Lt ℄ Rt.
+94 W.B. Lt. ℄ Rt. ℄ 885.94
E.B. Lt. ℄ W.B. Rt. ℄ 884.17
+84 ~ 94' Rt ℄ 883.60
+46 ~ 86' Lt ℄ 883.60
Prop. 8" Type B
E.B. Rt. ℄ 884.97
W.B. Lt. ℄ 880.66
Prop. 6" ~ Type F W.B. Lt. ℄ Rt. (UNC.)
EXIST. ℄ SURVEY
+15 W.B. Lt. ℄ 887.85
+05 W.B. Lt. ℄ 887.62
+16 W.B. Rt. ℄ 887.85
+26 W.B. Rt. ℄ 887.88
Ex. 18" Conc.
Ex. 6" U.D. (Abandon)
+87 W.B. Rt. ℄ 888.67
+00 W.B. Lt. ℄ Rt. ℄ 885.50
Ex. 6" U.D. W.B. Lt. ℄ Rt.
Prop. 6" ~ 605 E.B. Lt. ℄ Rt (Shallow)
℄ 888.70
℄ 888.63
+17 W.B. Lt. ℄ 888.76
Prop. 6" ~ 605 W.B. Lt. ℄ Rt. (UNC.)
℄ 15" ~ 879.91
℄ 48" ~ 876.55
℄ 48" ~ 877.16
200 L.F. 48" Type C @ 0.30%
250 L.F. 48" Type C @ 0.30%
℄ 48" ~ 877.91
180 L.F. 48" Type C @ 0.30%
℄ 15" ~ 881.20
℄ 48" ~ 878.45
420 L.F. 48" Type C @ 0.30%

890.47 890.62 890.77 890.92 891.07 891.22 891.37 891.52 891.67 891.82 891.97 892.12 892.27 892.42 892.57 892.72 892.87 893.02 893.17 893.32 893.47

889.38 890.12 890.21 890.48 890.57 890.66 890.80 891.01 891.13 891.43 891.51 891.65 891.83 892.06 892.14 892.31 892.50 892.93 893.39 893.28 893.15 EXIST. RT. EDGE PAV'T W.B.

886.8 886.3 886.4 886.4 886.6 886.7 887.0 887.3 887.4 887.5 887.7 887.8 886.0 888.3 888.6 888.7 888.4 889.4 889.3 EXIST. ℄ SURVEY

700 701 702 703 704 705 706 707 708 709 710

PROFILE: EXISTING GRADE B.M. #'S; DATE 3-84; BY RJC

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Fence Removed Lin. Ft.	603 48" Conduit Type C Lin. Ft.	603 15" Conduit Type B Lin. Ft.	604 Catch Basin Nº 8A Each	604 Catch Basin Nº 8 Each	604 Catch Basin Nº 4 Each	670 Ditch Erosion Protection Sq. Yd.
R-1	700+00 to 710+00	Rt.	1000						
R-2	700+00 to 709+38	Lt.	938						
R-3	704+45	℄							
R-4	704+08	℄							
D-1	700+00 to 710+00	Rt.		1000		3			
D-2	705+00 to 706+30	Lt. & Rt.			170		1	1	
D-3	702+00	Lt. & Rt.			168		1	1	
D-4	706+07 to 707+57	Lt.							100
D-5	702+07 to 703+57	℄							100
D-6	700+07 to 701+57	Rt.							100
D-7	701+00 to 703+57	Lt.							162
D-8	706+37 to 707+87	℄							100
D-9	701+84 to 702+46	Lt & Rt.							
D-10	703+00 to 706+07	Rt.							196
	700+00 to 710+00	Lt & Rt.							
TOTALS	TO SHT. 30-32		1938	1000	338	3	2	2	758

PLAN AND PROFILE ~ STA. 700+00 TO STA. 710+00 ~ U.S.R. 33

SEE SHEET NO.	659 Seeding & Mulching	659 Comm Fertilizer	203 Excavation	203 Embankment	603 8" Conduit Type B	202 Catch Basin Abandon
	Sq. Yd.	Ton	Cu. Yd.	Cu. Yd.	Lin. Ft.	Each
1						
1						
	1475	7.07	7094	11,229	190	
	1475	7.07	7094	11,229	190	
2	1475	7.07	7094	11,229	190	

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Lorena Kreitzer
John Kreitzer

Match Line - See Sh. 58

+1866~91' Lt. Fence Location

W.B. LT. & RT. Connect To Exist at Each End. Construct Bulkheads. See Detail on Sheet 21-A.

R/W Mon.

D-3 D-4

Nº 8 C.B. 83.5' LT. ℄ Sta. 713+50

6" Type F (A.P.P.)

+00~91' Lt. B.T.A.

4" West Ohio Gas Line 4'-6" Outside L/A (From Presar Rd to Dearbaugh Rd)

R-2

Match Line - See Sh. 69

Work Limits

L/A

6'~670

+93

+45

+07

Prop. Fence, Type CLT

122' (Abandon)

+69

EX. 6" U.D.

℄ W. B. LANES

15" Type B

6"~45° Bend 713+73 Tie to Ex.

D-5

110 111 112 113 114 115 116 117 118 119 120

Nº 4 C.B. ℄ Sta 713+50

6" Type F (A.P.P.)

℄ Survey Exist. U.S.R. 33 ~ 3~ 67°~16'~20" E.

6" 45° Bend 713+75

℄ E.B. LANES

Prop. 6" U.D.

+55 +75

6" 45° Bend 713+87

+90~91' Lt. B.T.A.

42" Type C

BM#142

BM#143

Prop. Fence, Type 47

20 21 22 23 24 25 26 27 28 29 30

℄ Service Rd. Nº 1

Nº 3 M.H. 86' RT. (℄ Pipe) Sta. 710+50

CB-8A 86' RT. (℄ Pipe) Sta. 713+50

Nº 8 C.B. 151' RT. ℄ Sta. 713+50

Nº 3 M.H. 86' RT. (℄ Pipe) Sta. 717+00

D-1 D-2 R-1

BM#142~4'Sign Post Set Flush 1'South L/A Fence Sta. 714+00~95.2' Rt. Elev. 891.87

BM#143~4'Sign Post Set Flush 1'South L/A Fence Sta. 719+00~95.1' Rt. Elev. 895.80

For Storm Sewers See Sh. 228-229
For Storm Details Sta. 713+50 See Sh. 79
For Pav't Quantities See Sh. 34-35
For Underdrain Quantities See Sh. 37
For Pavement Replacement (Sta. 713+50) See Sh. 36
For Fence Quantities See Sh. 38

893.47 893.62 893.77 893.92 894.07 894.22 894.37 894.52 894.67 894.82 894.97 895.12 895.27 895.42 895.57 895.72 895.87 896.02 896.17 896.32 896.47

Nº 3 M.H. 86' RT. (℄ Pipe) Sta. 710+50 Top 893.60

CB-8A 86' RT. (℄ Pipe) Sta. 713+50 Top 889.00

Nº 3 M.H. 86' RT. (℄ Pipe) Sta. 717+00 Top 895.00

+09 W.B. LT. & RT. ℄ 889.56 Meet Ex.

+00 W.B. LT. & RT. ℄ 889.50

P.G. Prop. U.S.R. 33

+0.30%

EXIST. RT. EDGE W.B. PAV'T.

EX. 6" U.D. W.B. LT. & RT.

+73~W.B. RT. ℄ 890.33

+83~W.B. LT. ℄ 890.35

EX. 6" U.D. W.B. LT. & RT.

Ex. ℄ Survey

Prop. 6" 60S E.B. LT. & RT. (Shallow)

W.B. LT. ℄ 887.35

+87~E.B. RT. ℄ 890.05

+75~E.B. LT. ℄ 890.01

Prop. 6"~60S E.B. LT. & RT (Shallow)

E.B. LT. & W.B. RT. ℄ 885.67

℄ 15"~883.36

℄ 42"~881.11

℄ 42"~892.16

℄ 48"~879.71

℄ 48"~880.61

300 L.F. 48" Type C @ 0.30%

350 L.F. 42" Type C @ 0.30%

500 L.F. 42" Type C @ 0.30%

895 890 885

893.15 893.14 893.38 893.63 893.56 893.72 894.01 894.15 894.18 894.35 894.45 894.71 894.63 894.90 895.14 895.33 895.55 895.46 895.77 895.84 895.92 EXIST. RT. EDGE PAV'T. W.B.

889.3 890.1 890.3 890.5 890.5 890.7 890.8 890.8 891.1 891.7 892.6 893.6 893.8 894.3 894.4 894.8 895.6 896.1 895.8 895.3 894.4 EXIST. ℄ SURVEY

710 711 712 713 714 715 716 717 718 719 720

PROFILE EXISTING GRADE B.M.'S

BY DATE CHK DATE REV. DATE REV. DATE REV. DATE

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Fence Removed Lin. Ft.	603 48" Conduit Type C Lin. Ft.	603 42" Conduit Type C Lin. Ft.	603 15" Conduit Type B Lin. Ft.	604 Manhole Nº 3 Each	604 Catch Basin Nº 8 Each	604 Catch Basin Nº 4 Each	604 Catch Basin Nº 8A Each	670 Ditch Erosion Protection Sq. Yd.	SEE SHEET NO.
R-1	710+00 to 720+00	Rt.	1000									
R-2	710+18 to 720+00	Lt.	982									
D-1	710+00 to 720+00	Rt.								1		
D-2	711+93 to 715+07	Rt.		350	650		2				200	
D-3	711+93 to 715+07	Lt.									200	
D-4	713+50	Lt.-Rt.				236		2	1			
D-5	713+57 to 715+07	℄									100	
	710+00 to 720+00	Lt. Rt.								1		
TOTALS TO SHT. 30-32			1982	350	650	236	2	2	1	1	500	80
											12,096	1.09
											3509	1460

659 Seeding & Mulching Comm. Fertilizer Ton
659 Seeding & Mulching Sq. Yd.
203 Excavation Embankment Cu. Yd.
203 Excavation Cu. Yd.

PLAN AND PROFILE ~ STA. 710+00 TO STA. 720+00 ~ EXIST. U.S.R. 33

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT		SHEET NO.
5	OHIO			60 345

++ Remove Ends of Ex. 15" & 21" Pipes Up to Accel. Lane Edge of Pav't. Construct a Bulkhead Inside this Edge of Pav't for Both Pipes. The Cost of These Bulkheads shall be Included in the Cost of Item 202, Pipe Removed.

Lorena Kreitzer
John Kreitzer

Sta. 728+01.18-℄ Survey U.S.R. 33 =
Sta. 20+00-℄ Survey Dearbough Rd.

Ex. 8" U.D. Outlet 721+54 To Remain

№ 8 C.B. 90° LT. ℄ Sta. 722+00

+00-60' Lt. B.T.A.

Sta. 722+19.51

Sta. 722+99.51

Prop. Fence, Type CLT Work Limits

Prop. L/A

Ex. L/A

R/W Mon.

+73.46-109 Lt. B.T.A. 40:1 Taper 6" Type F (APP)

8" Type F (APP)

6'~670

C.B. (ABANDON)

Abandon 30" CMP 32'

Abandon 8"

6" 45° Bend 722+41

EX. 6" U.D.

42" Type B

15" Type B

W.B. LANES

6'~45° Bend 722+23 Connect to Ex.

№ 4 C.B. ℄ Sta. 722+00

6" Type F (APP)

6" 45° Bend 722+25

Survey Exist. U.S.R. 33 ~ S. 67°-16'-20" E.

E.B. LANES

Prop. 6" U.D.

+00-94' Rt. T.A.P.A.

42" Type C

6" 45° Bend 722+41

6" Type F (APP)

6'~670

42" Type C

BM #144

Prop. Fence, Type 47

Service Rd. № 1

R/W

Work Limits

15" Type B

C.B.-8A 90° RT. (℄ Pipe) Sta. 722+00

№ 8 C.B. ℄ U.S.R. Sta 722+00 148' RT.

Match Line - See Sht. 59

Gas Valve

4" West Ohio Gas Lines

Dearborn Rd.

Ex. L/A

C.B.-8 10° LT. ℄ Sta. 728+00

№ 3 M.H. 78.5' LT. ℄ Sta. 730+00

+21.25-120 Lt. B.T.A.

Ex. L/A

6'~670

Grant St. R/W Mon.

6" Type F (APP) Precast Conc. Outlet

№ 3 M.H. 71' LT. ℄ Sta. 727+00

Prop. Fence, Type CLT

D-1

R-6

C.B. (ABANDON)

21" Type C

36" Type C

Bulkheads

Prop. 8" Type C

Prop. 6" U.D.

6"x6" Tee 729+09 Tie to Exist.

Ex. 6" U.D.

42" Type B

6" 45° Bend 727+10

6" 45° Bend 727+25

Prop. 6" U.D.

Construct Bulkheads See Detail on Sht 21-A

+09 Tie Ex. to Prop.

C.B. (ABANDON)

Abandon

6" 45° Bend 727+25

Prop. 6" U.D.

6" 45° Bend 727+38

6" Type F (APP)

Prop. Fence, Type CLT

Prop. 20" Water Casing by City

R/W Mon.

Prop. L/A

6'~670

BM #145

Ex. L/A

Sta. 729+72.58

Match Line - See Sht. 61

C.B.-8A 87° RT. (℄ Pipe) Sta. 727+00

Prop. 16" Sanitary Casing by City

R=100'

R=50'

R=250'

R=60'

R=50'

For Pav't Replacement (Sta. 722+00 - 727+00) See Sh. 36
For Storm Sewer See Sh. 228-229.
For Storm Details Sta. 722+00 See Sh. 82
For Storm Details Sta 727+00 to 728+00 Lt. See Sh. 83-84.
For Pav't Quantities See Sh. 34-35.
For Underdrain Quantities See Sh. 37.
For Service Road № 1 See Sh. 207-209.
For Dearbaugh Road ~ See Sh. 218
For Service Rd № 1 Cul-De-Sac - See Sh. 50
For Fence Quantities See Sh. 38

BM #144-4' Sign Post Set Flush 1' South
L/A Fence-Sta. 724+00-95.2' Rt.
Elev. 893.26

BM #145-4' Sign Post Set Flush 1' South
L/A Fence-Sta. 729+48-114.5' Rt.
Elev. 894.98

Lorena Kreitzer
John Kreitzer

C.B.-8A 90° Rt. (℄ Pipe) Sta. 722+00 Top 889.80

+19.5-77 Lt. to ℄ C.B. Top-891.02-Invert ℄

+36.5-2.5 Rt.-℄ C.B. Top-890.67-Invert ℄

+25 E.B. Lt. ℄ 892.56

+41 E.B. Rt. & W.B. Lt. ℄ 892.61

P.G. Prop. U.S.R. 33

+0.30%

Prop. 6"~605 E.B. Lt. & Rt. (Shallow)

Prop. 6"~605 W.B. Lt. (Shallow)

EXIST. RT. EDGE W.B. PAV'T.

EXIST. ℄ SURVEY

+54 EX. W.B. Lt. ℄ 891.00

+54 EX. W.B. Lt. ℄ 891.50

EX. 6" U.D. W.B. Lt. & Rt.

EX. 6" U.D. W.B. Lt. & Rt.

W.B. Lt. ℄ 887.84

+23 W.B. Rt. ℄ 891.71

E.B. Rt. ℄ 886.66

E.B. Lt. & W.B. Rt. ℄ 887.21

℄ 15" 885.91

℄ 888.83

℄ 888.30

Ex. 20"

Ex. 8"

500 L.F. 42" Type C @ 0.30%

500 L.F. 42" Type C @ 0.25%

℄ 42"~ 883.66

℄ N° 3 M.H. 71' Lt. ℄ Sta. 727+00 Top 897.40

C.B.-8A 87' Rt. (℄ Pipe) Sta. 727+00 Top 892.10

+10 W.B. Lt. ℄ 894.02

+00 W.B. Lt. ℄ 888.30

E.B. Rt. ℄ 887.92

E.B. Lt. & W.B. Rt. ℄ 888.14

℄ 21"~ 886.29

℄ 42"~ 885.30 71' Lt.

℄ 42"~ 884.92 87' Rt.

+25-W.B. Rt. ℄ 892.64

+25 E.B. Lt. ℄ 894.06

+38 E.B. Rt. ℄ 894.10

Ex. 15"

Ex. 21"

Ex. 12"

Prop. 6"~605 @ 0.3% W.B. Rt. (Shallow) (6.00 Below Prop. Surface)

E.B. Lt. & W.B. Rt.

300 L.F. 36" Type C @ 0.25%

16" San.

20" Water

℄ 36"~ 885.80

℄ 36"~ 885.55

18+60~20' Rt. ℄ = 883.06

18+75~20' Lt. ℄ = 882.75

21+00~20' Rt. ℄ = 883.73

21+25~20' Lt. ℄ 882.75

№ 3 M.H. 78.5' Lt. ℄ Sta. 730+00 Top 898.51

Prop. 6"~605 W.B. Lt. (Shallow)

Prop. 6"~605 E.B. Lt. & Rt. (Shallow)

+09~Tie to Exist. W.B. Rt. ℄ 893.20

Ex. W.B. Lt. +09~6"x6" Tee ℄ 893.20

EX. 6" U.D.-W.B. Lt. & Rt. Prop. 6" U.D. (UNC.)

+09-Prop. Outlet for Ex. W.B. Lt.-℄ 892.50

EXIST. RT. EDGE PAV'T. W.B.

EXIST. ℄ SURVEY

Dearborn Rd.

ESTIMATED QUANTITIES

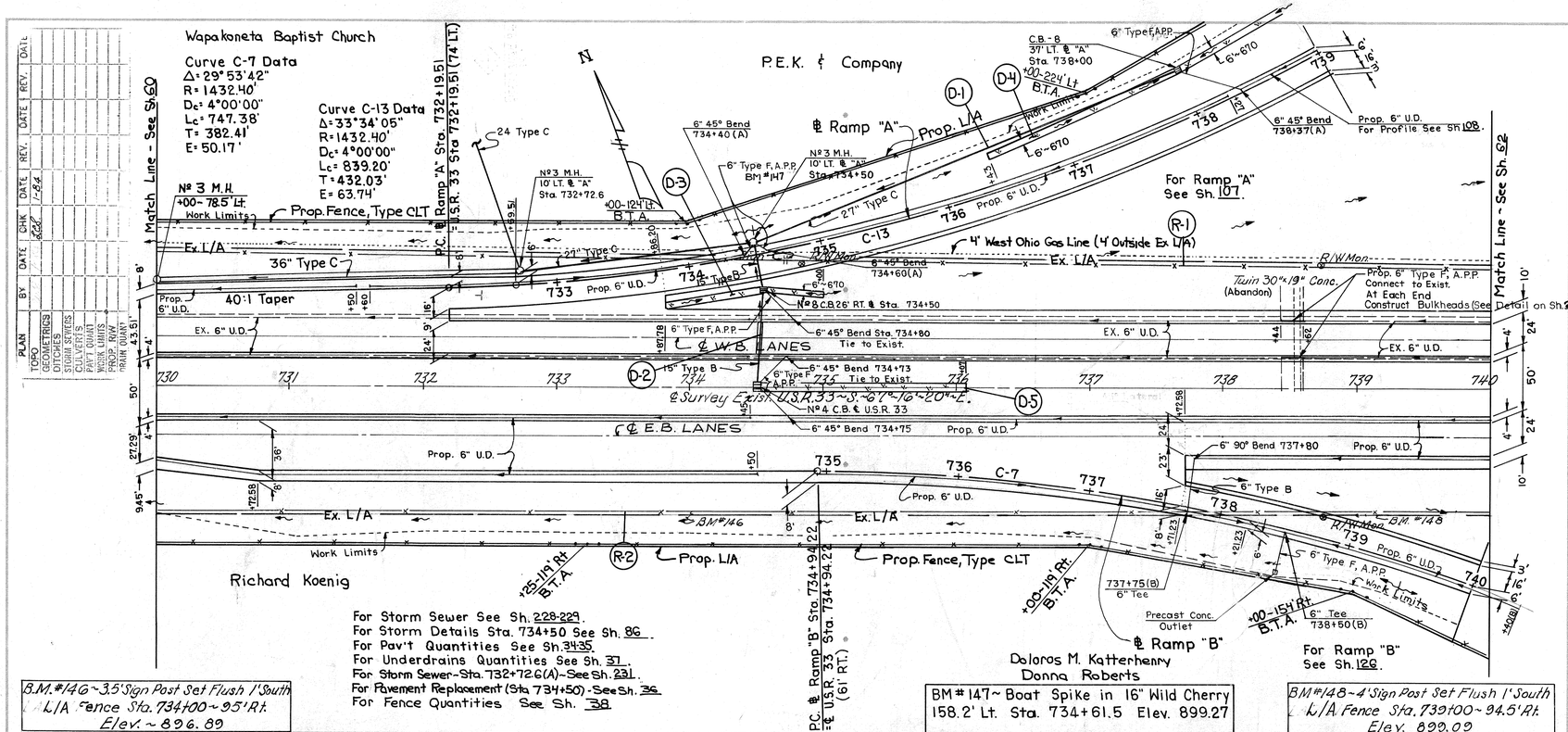
REF. NO.	STATION TO STATION	SIDE	202 Fence Removed Lin. Ft. Each	202 Catch Basin Abandon Each	603 42" Conduit Type C Lin. Ft.	603 21" Conduit Type C Lin. Ft.	603 15" Conduit Type B Lin. Ft.	603 36" Conduit Type C Lin. Ft.	604 Manhole № 3 Each	604 Catch Basin № 4 Each	604 Catch Basin № 8 Each	604 Catch Basin № 8A Each	604 Catch Basin № 8B Each	670 Ditch Erosion Protection Sq. Yd.	604 Catch Basin № 4A Each	202 Pipe Removal 12"-24" Under Lin. Ft.	203 Excavation Embankment Cu. Yd.	203 Excavation Cu. Yd.	659 Comm. Fertilizer Ton	659 Seeding & Mulching Sq. Yd.
R-1	720+00 to 23+60.35	RT.	1020																	
R-2	720+00 to 17+60.35	LT.	729																	
R-3	17+60.35 to 730+00	Lt.			345									224						
R-4	23+60.35 to 730+00	Rt.			340									100						
R-5	720+95 to 721+35	L&R		2										196						
R-6	728+65 to 728+65	L&R		2																
D-1	720+00 to 730+00	Lt.&Rt.						300		2					1					
D-2	722+00 to 728+00	Lt.&Rt.					238													
D-3	727+00 to 728+00	Lt.				108														
D-4	726+50 to 730+00	Lt.																		
D-5	722+07 to 723+57	℄																		
D-6	725+50 to 728+57	Rt.																		
D-7	720+43 to 723+57	Rt.																		
D-8	720+43 to 723+57	Lt.																		
D-9	727+07 to 728+57	℄																		
	720+00 to 730+00	L&R																		
A-7	727+30	Lt.																		
A-8	728+45	Lt.																		
TOTALS TO SHT 30-32			2434	4	700	158	108	238	3	2	1	2	1	1020	1	50	1968	11,509	1.14	12,667

PLAN AND PROFILE ~ STA. 720+00 TO STA. 730+00 ~ U.S.R. 33

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

61 / 345



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Fence Removed Lin. Ft.	603 36" Conduit Type C Lin. Ft.	603 27" Conduit Type C Lin. Ft.	603 15" Conduit Type B Lin. Ft.	604 Manhole Nº 3 Each	604 Catch Basin Nº 4 Each	604 Catch Basin Nº 8 Each
R-1	730+00 to 740+00	Lt.	1000						
R-2	730+00 to 740+00	Rt.	1000						
D-1	730+00 to 738+00 (A)	Lt.						1	1
D-2	734+50	Lt. ↑ Rt.							
D-3	733+88 to 735+00	Lt.		274	520	106	2	1	1
D-4	736+43(A) to 739+00(A)	Lt.							
D-5	734+57 to 736+07	℄							
	730+00 to 740+00	Lt & R							
TOTALS	TO SHT. 30-32		2000	274	520	106	2	1	2

REF. NO.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Sq. Yd.	203 Excavation Cu. Yd.	203 Embankment Cu. Yd.	670 Ditch Erosion Protection Sq. Yd.	SEE SHEET NO.
R-1						86
R-2						
D-1						
D-2						
D-3	13,535	1.22	1055	13,328	66	
D-4					162	
D-5					100	
	13,535	1.22	1055	13,328	328	

PLAN AND PROFILE ~ STA. 730+00 TO STA. 740+00 ~ U.S.R. 33

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

62
345

T.S. Sta. 743+28.35 - ℄ Survey U.S.R. 33

All Point I.Rs. With ODOT Caps

22.81' 90.68' 95.28' 33' 89.71' 51.6' 13' 14' L/A Fence

Match Line - See Sh. 61

4" West Ohio Gas Line (4' Outside Ex. L/A)

Ex. L/A

R/W Mon.

Prop. T.S. Sta. 743+28.33 ℄ U.S.R. 33

Prop. S.C. Sta. 745+78.33 ℄ U.S.R. 33

PRECAST CONC. OUTLET

6" Type F, A.P.P.

Twin 22" x 34" Type A, Class HE-II

6" 90° Bend 743+10

№ 4-A C.B. 743+02.8

6" Type F, A.P.P.

6" 45° Bend 743+28

℄ Survey Exist. U.S.R. 33 - S. 67°-16'-20" E

℄ W.B. LANES Prop. 6" U.D.

℄ E.B. LANES Prop. 6" U.D.

EX. 6" U.D.

740 741 742 743 744 745 746 747 748 749 750

10' 24' 4' 50' 4' 24' 10'

+90 +100 +90

10'-670 8'-670 6'-670

℄ BM #149

For Culvert Detail Sta. 743+00 See Sh. 232.
For Pav't Quantities See Sh. 34-35.
For Underdrain Quantities See Sh. 37.

For Ramp "C" See Sh. 107.

℄ Ramp "C"

S.C. Sta. 749+25.79

Prop. 6" U.D.

EX. 6" U.D.

Match Line See Sht. 63

℄ Ramp "D"

For Ramp "D" See Sh. 126.

E.S. Sta. 748+00.00

F=16' R=16'

Hickory

E.T. Sta. 750+00.00

Spiral S-4 Data
L_s = 200.00' X_c = 197.33'
L_c = 198.81' L.T. = 134.29'
D_c = 21°00'00" S.T. = 67.53'
K = 99.55' θ_s = 21°00'00"
Y_c = 24.20' P = 6.08

BM #149 - 4' Sign Post Set Flush 1' South L/A Fence - Sta. 744+00 - 92.5' Rt. Elev. 902.49

BM #150 - Boat Spike in 24" Hickory Sta. 748+87.5 - 90.5' Rt. Elev. 901.04

902.47 902.62 902.77 +25-902.86 +50-902.97 +75-903.12 903.28 +25-903.48 +50-903.70 +75-903.95 904.23 +25-904.53 +50-904.86 +75-905.22 905.60 +25-906.01 +50-906.45 +75-906.91 907.40 908.41 909.42 910.43 911.44 912.45 913.45 914.46 915.47 916.48 917.49

915 910 905 900 895

400' V.C.

P.V.C. Sta. 741+00 902.77

P.V.I. 743+00 903.37

P.V.T. 745+00 907.40

+0.30%

+2.017%

Profile Grade U.S.R. 33

+10 W.B. LT. ℄ 899.77

+10 W.B. LT. 85' LT. ℄ ℄ 898.5

+28 E.B. LT. ℄ 899.99

+028 E.B. LT. ℄ 898.93

+028 ℄ Std. 4A-C.B. Grate = 902.00 ℄ 22" x 34" = 897.6

Prop. 6"~605 W.B. LT. ℄ RT. (UNC)

Prop. 6"~605 E.B. LT. ℄ RT. (Shallow)

Prop. 6"~605 E.B. LT. ℄ RT. ℄ W.B. LT. ℄ RT. (Shallow)

EX. 6" U.D. W.B. LT. ℄ RT.

+80 W.B. RT. ℄ 897.30

+80 W.B. LT. ℄ 897.14

+00 E.B. LT. ℄ RT. ℄ W.B. LT. ℄ RT. ℄ 898.19

Prop. 6"~605 E.B. LT. (Shallow)

Prop. 6"~605 W.B. LT. (Shallow)

Prop. 6"~605 Ramp "D" (Shallow)

Prop. 6"~605 Ramp "C" (Shallow)

749+00 (C) See Sh. 109 For Continuation

748+00 (D) See Sh. 128 For Continuation

EXIST. RT. EDGE W.B. PAV'T.

EXIST. ℄ SURVEY

EX. 6" U.D. (Abandon)

901.75 901.99 902.25 902.38 902.57 902.60 902.74 902.99 903.31 903.55 903.53 903.79 903.98 904.22 904.60 904.68 904.85 904.95 905.01 905.24 905.33 EXIST. RT. EDGE PAV'T. W.B.

897.5 897.7 897.6 898.0 898.1 898.1 898.9 898.8 898.3 898.6 898.8 899.0 900.3 900.3 900.4 900.3 900.4 900.7 900.7 900.7 900.9 EXIST. ℄ SURVEY

740 741 742 743 744 745 746 747 748 749 750

PLAN: TOPO, GEOMETRICS, DITCHES, STORM SEWERS, CULVERTS, PAV'T. QUANT., HYDR. LIMITS, CROSS SECTS., DRAIN. QUANT.

PROBLE, EXISTING, NEW, U.M.S.

DATE | BY | DATE | CHK | DATE | REV. | DATE | REV. | DATE | REV.

ESTIMATED QUANTITIES

SEE SHEET NO.	ITEM	DESCRIPTION	UNIT	TOTALS	TO SHT. 30-32	2000	823
	659	Seeding & Mulching	Sq. Yd.	18396			18396
	659	Comm. Fertilizer	Ton	1.66			1.66
	203	Excavation Embankment	Cu. Yd.	2159	36673		2159 36673
	202	Fence Removed	Lin. Ft.				

REF. NO.	STATION TO STATION	SIDE		
R-1	740+00 to 750+00	LT.	1000	
R-2	740+00 to 750+00	RT.	1000	
D-1	743+09.8 to 750+00	℄		656
D-2	745+50 to 748+00	LT.		167
	740+00 to 750+00	L+R		

670	Ditch Erosion Protection	Sq. Yd.				

PLAN AND PROFILE - STA. 740+00 TO STA. 750+00 - U.S.R. 33

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

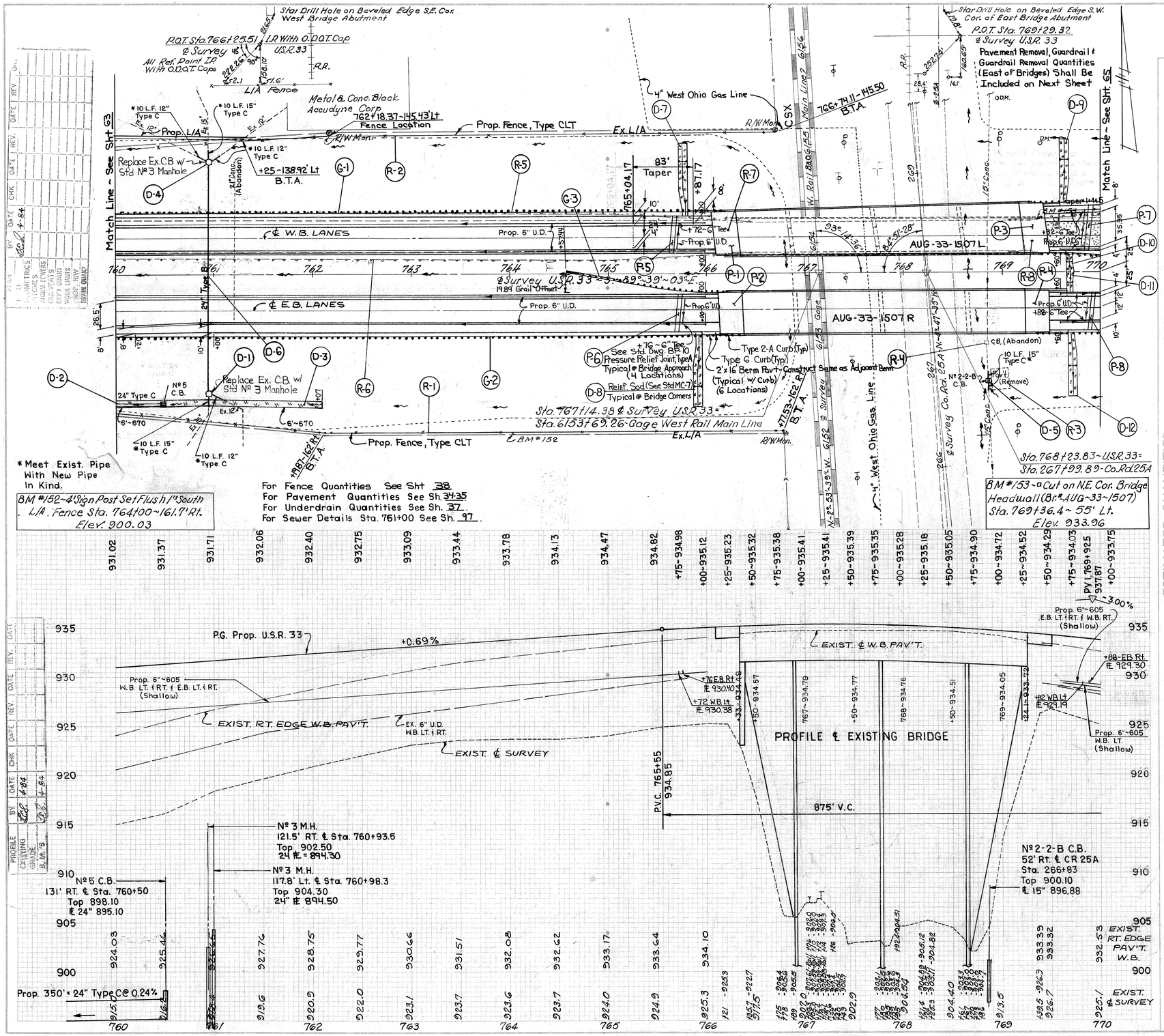
63 / 345

P.I. Sta. 750+27.52
All Point IPs With ODOT Caps
Back Tang.
Fwd. Tang.
Curve C-11
Δ = 15°46'07"
Dc = 4°00'00"
L.C. = 392.97
R = 1432.40
T = 198.36
Lc = 394.22
EX = 13.67'
P.I. Sta. 750+27.52
Δ = 22°22'43" Lt.
Ex. L/A
4" West Ohio Gas Line (4' Outside Ex. L/A)
Ramp "C"
Ramp "D"
Match Line - See Sht. 62
Match Line - See Sht. 64
Prop. 6" U.D.
Ex. 6" U.D.
Prop. 6" U.D. Tee
Type 6 Curb Type 2-A Curb
Reinf. Soil
Prop. 20" Casing w/Bore
Prop. 42" Type B
Prop. 42" Type C
Prop. 42" Type A
Prop. 48" Type C
Prop. 30" Type B
Prop. 24" Type C
Prop. 16" Sanitary Sewer
Prop. 8" Water Line
Prop. 6" Type F, A.P.P.
Precast Conc. Outlet
6" 90° Bend Sta. 755+00
6" 45° Bend 755+00
6" 45° Bend 757+80
6" 90° Bend 757+80
Prop. 6" U.D. Wye
Prop. 6" U.D. 45° Bend
Prop. 6" U.D. Cleanout
Prop. 6" U.D. Reducer
Prop. 6" U.D. Plug
Prop. 6" U.D. Coupling
Prop. 6" U.D. Adapter
Prop. 6" U.D. Flexible Coupling
Prop. 6" U.D. Flexible Adapter
Prop. 6" U.D. Flexible Reducer
Prop. 6" U.D. Flexible Plug
Prop. 6" U.D. Flexible Cleanout
Prop. 6" U.D. Flexible 45° Bend
Prop. 6" U.D. Flexible Wye
Prop. 6" U.D. Flexible Tee

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

64
345


Star Drill Hole on Beveled Edge S.E. Cor. West Bridge Abutment
P.O.T. Sta. 766+25.51 ℄ Survey
I.R. With O.D.O.T. Cap
U.S.R. 33
All Ref. Point I.R. With O.D.O.T. Caps
R.R.
L/A Fence
Metal & Conc. Block Accudyne Corp.
762+18.37-145.43' Lt Fence Location
Prop. Fence, Type CLT
Ex. L/A
4" West Ohio Gas Line
766+74.11-145.50 B.T.A.
Star Drill Hole on Beveled Edge S.W. Cor. of East Bridge Abutment
P.O.T. Sta. 769+29.32 ℄ Survey U.S.R. 33
Pavement Removal, Guardrail & Guardrail Removal Quantities (East of Bridges) Shall Be Included on Next Sheet
Match Line - See Sht. 63
Match Line - See Sht. 65
Replace Ex. C.B. w/ Std. No. 3 Manhole
Prop. L/A
*10 L.F. 12" Type C
*10 L.F. 15" Type C
*10 L.F. 12" Type C
+25-138.92' Lt B.T.A.
21" Conc. (Abandon)
℄ W.B. LANES
℄ E.B. LANES
Prop. 6" U.D.
83' Taper
+87.17
765+04.17
10'
8'
+72-6" Tee
Prop. 6" U.D.
℄ Survey U.S.R. 33 = 1989 Grail Offset
S 89°-39'-03" E
AUG-33-1507 L
AUG-33-1507 R
Type B
24" Type B
Prop. 6" U.D.
+88-6" Tee
Prop. 6" U.D.
+76-6" Tee
See Std. Dwg. BP 10 Pressure Relief Joint Typical @ Bridge Approach (4 Locations)
Type 2-A Curb (Typ.)
Type G Curb (Typ.)
2'x 16' Berm Pavt. Construct Same as Adjacent Berm
(Typical w/ Curb) (6 Locations)
Reinf. Sod (See Std MC-7) Typical @ Bridge Corners
CB (Abandon)
10 L.F. 15" Type C
Pvt. (Remove)
Nº 2-2-B C.B.
Replace Ex. C.B. w/ Std. Nº 3 Manhole
Nº 5 C.B.
24" Type C
Ex. 12"
6'~670
10 L.F. 15" *Type C
10 L.F. 12" *Type C
Sta. 767+14.38 ℄ Survey U.S.R. 33 = Sta. 615+769.26-Gage West Rail Main Line
+187-162 Rt. B.T.A.
+153-162 B.T.A.
Sta. 768+23.83~U.S.R. 33= Sta. 267+99.89-Co. Rd. 25A
BM #153-a Cut on N.E. Cor. Bridge Headwall (Br.# AUG-33-1507) Sta. 769+36.4~55' Lt. Elev. 933.96
BM #152-4" Sign Post Set Flush 1" South of L/A Fence Sta. 764+00~161.7' Rt. Elev. 900.03
* Meet Exist. Pipe With New Pipe In Kind.
For Fence Quantities See Sht 38
For Pavement Quantities See Sh. 34-35
For Underdrain Quantities See Sh. 37
For Sewer Details Sta. 761+00 See Sh. 97
Taper 144.5
Prop. 6" U.D.
+32-6" Tee
+88-6" Tee
Prop. 6" U.D.
Prop. 6" U.D.
+88-6" Tee
Prop. 6" U.D.
+88-6" Tee
Prop. 6" U.D.
+88-6" Tee

AUGLAIZE COUNTY
AUG~33~13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

G5
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For Ramp "C" See Sh. 146.

For Ramp "B" See Sh. 145.

Match Line ~ See Sht 64

Match Line ~ See Sht 66

T.S. Ramp "C" Sta. 775+41.67 = U.S.R. 33 Sta. 775+41.67 (174' Lt. ℄)

S.C. 777+41.67

831' offset

Ex. Ramp "C"

℄ Ramp "C"

1:41.5 Taper

125' Transition See Detail 'C' on Sht 53

Sta. 778+56.99

Sta. 779+81.99

+57 Tie To Ex. U.D.

Prop. 6" U.D.

℄ W.B. LANES

1989' G'rail Offset

℄ Survey U.S.R. 33 ~ S. 89°-39'-03"-E.

Ex. 6" U.D.

℄ E.B. LANES

Prop. 6" Udrain

℄ Ramp "B"

(R-1) Includes All Pavt Removal of Ex. USR 33 From Structure AUG-33-1507 to Sta. 781+72.97 +15.07

T.S. Ramp "B" Sta. 776+89.11 = U.S.R. 33 Sta. 776+89.11 (61' Rt. ℄)

S.C. 778+89.11

Ex. Ramp "B"

For Pavement Quantities See Sh. 34-35
For Underdrain Quantities See Sh. 37.
For Symbol Legend See Sh. 54.

PLAN / TOPO / GEOMETRICS / DITCHES / STORM SEWERS / CULVERTS / PAVT QUANT / WORK LIMITS / PROP. R/W / DRAIN QUANT

BY: JSK | DATE: 12-84

BM# 154 ~ 4' Sign Post Set Flush 1' South L/A Fence ~ Sta. 775+00 ~ 479' Rt. Elev. 905.89

BM# 155 ~ 4' Sign Post Set Flush 1' South L/A Fence ~ Sta. 780+00 ~ 442.2' Rt. Elev. 906.12

+00~933.75 | +25~933.44 | +50~933.10 | +75~932.74 | +00~932.35 | +25~931.93 | +50~931.49 | +75~931.02 | +00~930.53 | +25~930.01 | +50~929.46 | +75~928.89 | +00~928.29 | +25~927.66 | +50~927.01 | +75~926.33 | +00~925.63 | +25~924.89 | 924.15 | 922.65 | 921.15 | 919.65 | 918.15 | 916.65 | 915.15 | +75~914.40 | +00~913.67 | +25~912.99 | +50~912.35 | +75~911.75 | +00~911.18 | +25~910.66 | +50~910.18 | +75~909.74 | +00~909.34

EXIST. RT. EDGE W.B. PAV'T.

EXIST. ℄ SURVEY

300'

P.G. Prop. U.S.R. 33

Prop. 6"~605 W.B. Lt. (Shallow)

Prop. 6"~605 E.B. Rt. (Shallow)

EX. 6" U.D. W.B. Rt.

875' V.C.

P.V.C. 774+30 924.75

Prop. 6"~605 E.B. LT. ℄ W.B. R.T. (Shallow)

+41.67 W.B. LT.

See Ramp "C" Profile For Continuation Sh 147.

EXIST. ℄ SURVEY

Ex. 6" U.D. W.B. LT.

+89.11 E.B. RT.

See Ramp "B" Profile For Continuation Sh. 147.

Prop. 6"~605 W.B. LT. ℄ RT. ℄ E.B. LT. (Shallow)

500' V.C.

914.54

P.V.C. 777+70.19

Prop. 6"~605 W.B. LT. ℄ RT. (UNC)

+57 W.B. LT. ℄ RT. ℄ 907.89

+25 W.B. LT. ℄ RT. ℄ 908.41

EX. U.D. W.B. LT. ℄ RT.

Prop. 6"~605 E.B. LT. ℄ RT. (Shallow)

P.V.I. 780+20.19 907.04

EXIST. RT. EDGE PAV'T. W.B.

925.1 | 924.2 | 923.6 | 922.9 | 922.4 | 922.8 | 923.4 | 924.1 | 923.77 | 924.73 | 922.74 | 921.68 | 920.43 | 919.17 | 917.71 | 916.03 | 914.4 | 912.9 | 911.1 | 910.0 | 908.9 | 908.1

EXIST. ℄ SURVEY

925.1 | 924.2 | 923.6 | 922.9 | 922.4 | 922.8 | 923.4 | 924.1 | 923.09 | 923.77 | 922.74 | 921.68 | 920.43 | 919.17 | 917.71 | 916.03 | 914.4 | 912.9 | 911.1 | 910.0 | 908.9 | 908.1

770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780

925 | 920 | 915 | 910 | 905 | 900

PROFILE: EXISTING GRADE / B.M.'S

DATE | REV. | DATE | REV. | DATE | CHK | DATE | BY

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Pavement Removed Sq. Yd.	202 Guardrail Removed Lin. Ft.	606 Guardrail Type 5 Lin. Ft.	606 Guardrail Barr. Design Type 5 Lin. Ft.	606 Bridge Terminal Assembly Type A Each	606 Anchor Assembly Barr. Design Type A Each	606 Anchor Assembly A T Each Each	802 Barrier Reflector A B Each Each
			4850	800						
				988						
R-1	769+51 to 781+72.97	L & R								
R-2	769+38 to 777+38	L+			800.0		1	1		
R-3	769+38 to 771+03.04 (8)	L & R			675.0		1		1	
					112.5	25.0		1		
G-1	769+37.69 to 777+62.39	L+								
G-2	769+46.07 to 776+45.07	R+								
G-3	769+40.54 to 771+03.04	L+								
	770+00 to 780+00	L & R								
	750+89.32 to 776+45.07	R+							23	4
	751+63.33 to 777+62.39	L+							22	5
	764+57.44 to 769+45.07	R+							5	4
	766+15.34 to 771+03.04	L+							5	4
TOTALS	TO SHT. 30-32		4850	1788	1587.5	25.0	3	1	1	1	55	17

SEE SHEET NO.

659 Seeding & Mulching	Comm. Fertilizer	Sq. Yd.	Ton	104
659 Seeding & Mulching		Sq. Yd.		17,932 1.62
203 Excavation Embankment		Cu. Yd.	Cu. Yd.	2517 53,290
				17,932 1.62
				2517 53,290

WHITE

YELLOW

PLAN AND PROFILE ~ STA. 770+00 TO STA. 780+00 ~ U.S.R. 33

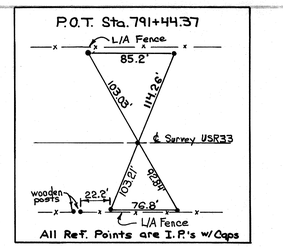
AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

66
345

SEE SHEET NO. 106

P.O.T. Sta. 791+44.37



All Ref. Points are I.P.'s w/Caps

End Work Sta. 799+37.19

For Pavement Quantities ~ See Sht. 34-35
For Underdrain Quantities ~ See Sht. 31
For Symbol Legend ~ See Sht. 54

B.M. #156 ~ R.R. Spike in ℄ Sta. 784+21 ~ 226.4' Rt. Elev. 905.93

B.M. #157 ~ + In Brass Plate N.G.S. Calibration Base Line Mon. Sta. 789+01.5 ~ 139.01' Rt. ~ Elev. 906.88

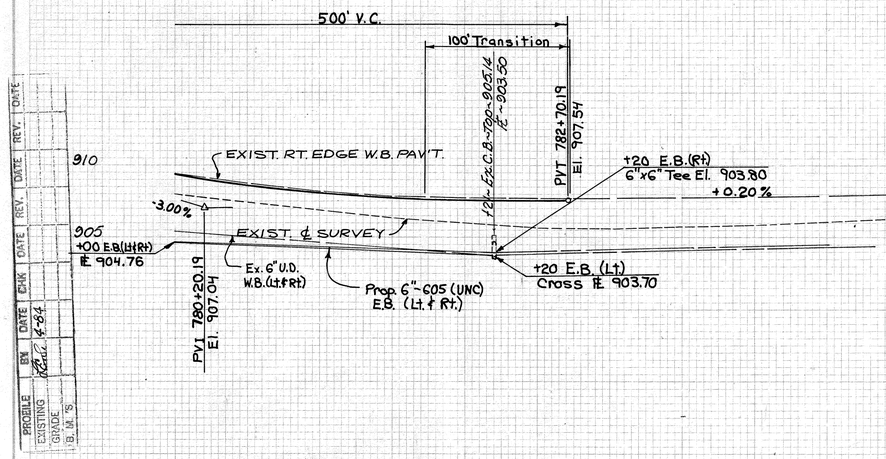
PLAN	BY	DATE
TOPO		
GEOMETRICS		
DITCHES		
STORM SEWERS		
SANITARY SEWERS		
PAVT. QUANT.		
WORK LIMITS		
PROP. R/W		
GRAIN QUANT.		

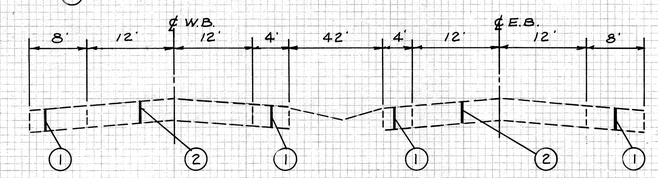
REV.	DATE

PROFILE	BY	DATE
EXISTING		4-84
GRADE		
B.M.'S		

REV.	DATE

+00-909.34
+25-908.74
+50-908.65
+75-908.37
+00-908.13
+25-907.92
+50-907.76
+72.97-907.65





TYPICAL ABUTTING PAVEMENT
STA. 782+00

	780	781	782	783	784	785	786	787	788	789	790
EXIST. RT. EDGE PAV'T. W.B.	909.37	908.73	908.20	907.84	907.71	907.64	907.69	907.76	907.84	907.93	908.08
EXIST. ℄ SURVEY	908.1	907.5	906.8	906.4	906.0	905.7	905.7	905.8	905.9	906.1	906.3

	906.5	906.5	906.8	906.9	906.9	906.9	907.1	907.0	907.3	907.2	

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE				
			659 Seeding & Mulching	659 Comm. Fertilizer		
			Sq. Yd.	Ton		
	780+00 to 781+72.97	Lt+Rt	1827	0.17		
			1827	0.17		
			203 Excavation	203 Embankment		
			Cu. Yd.	Cu. Yd.		
			273	104		
			273	104		

TOTALS TO SHT. 33

PLAN AND PROFILE ~ STA. 780+00 TO STA. 790+00 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

68
345

AUGLAIZE COUNTY
AUG~33~13.44

SEEDING
END WIDTH | SQ. YDS.

EXISTING TEMPLATE
DITCHES
AREAS
VOLUMES
SEEDING

END AREA		VOLUME	
CUT	FILL	CUT	FILL

677+50
878.5
Prop. 48" Storm

677+00
876.9

676+50
877.6

676+00
877.2

675+50 Back Only
877.1

675+00
876.3
Ex. C.B.
Ex. 15"
Ex. C.B.
Ex. 15"
PROP. 48" STORM

674+50

Fertilizer Calculations
(1059 lb)(20)÷(1000/2000)=.10 Ton

Excavation	8 Cu. Yd.
Embankment	268 Cu. Yd.
Seeding	1059 Sq. Yd.
Comm. Fertilizer	0.10 Ton

Quantities Carried to Sheet 55

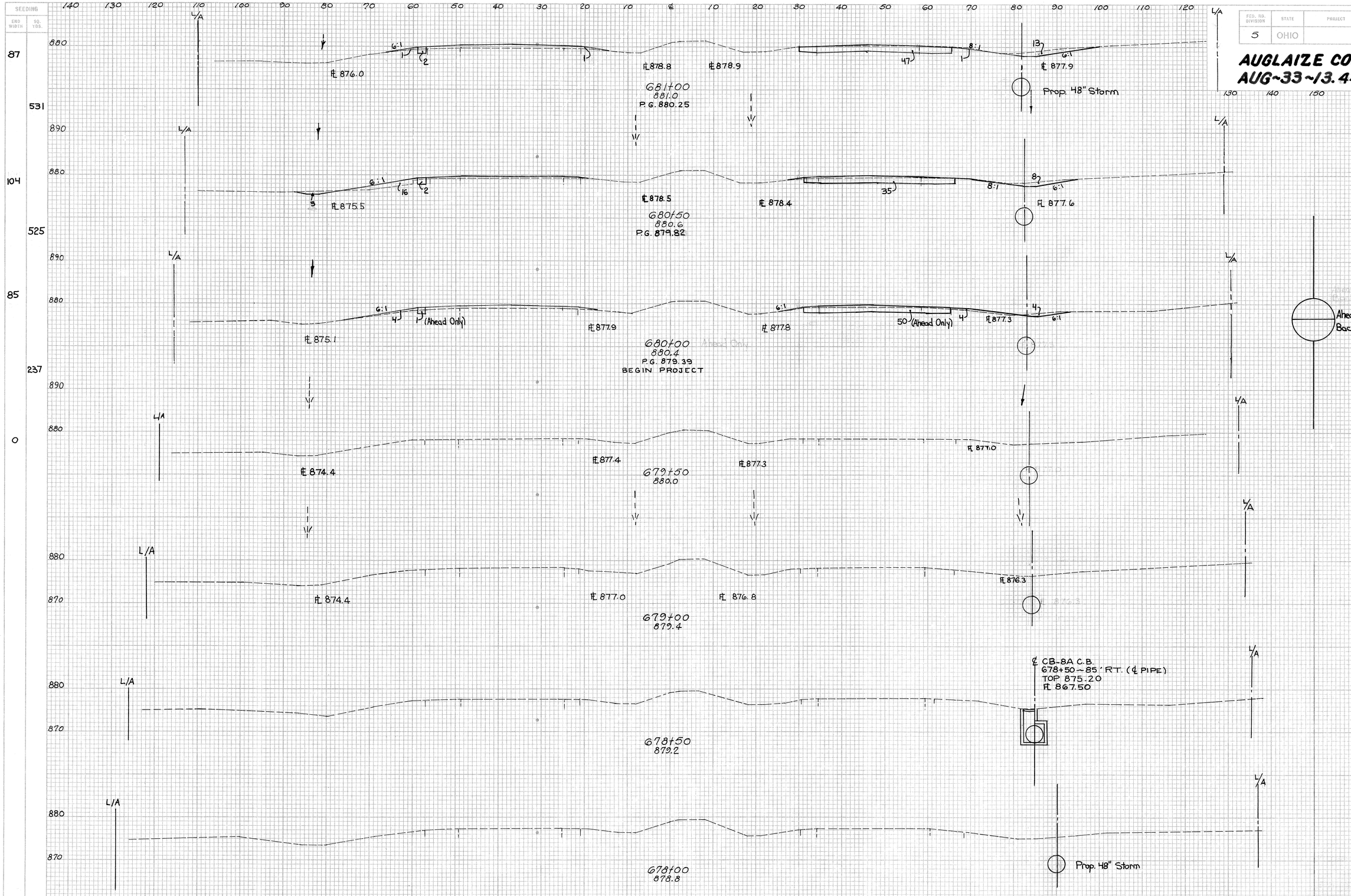
0		0	0
	84		0 28
30		0	15
	203		0 68
43		0	58

X-SECTIONS ~ STA. 675+00 TO STA. 677+50 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

69
345

AUGLAIZE COUNTY
AUG~33~13.44



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
62	3		
		102	18
48	16		
		96	23
55	8		
4	8		
		4	8
0	0		

EXISTING TEMPLATE DITCHES AREAS VOLUMES SEEDING

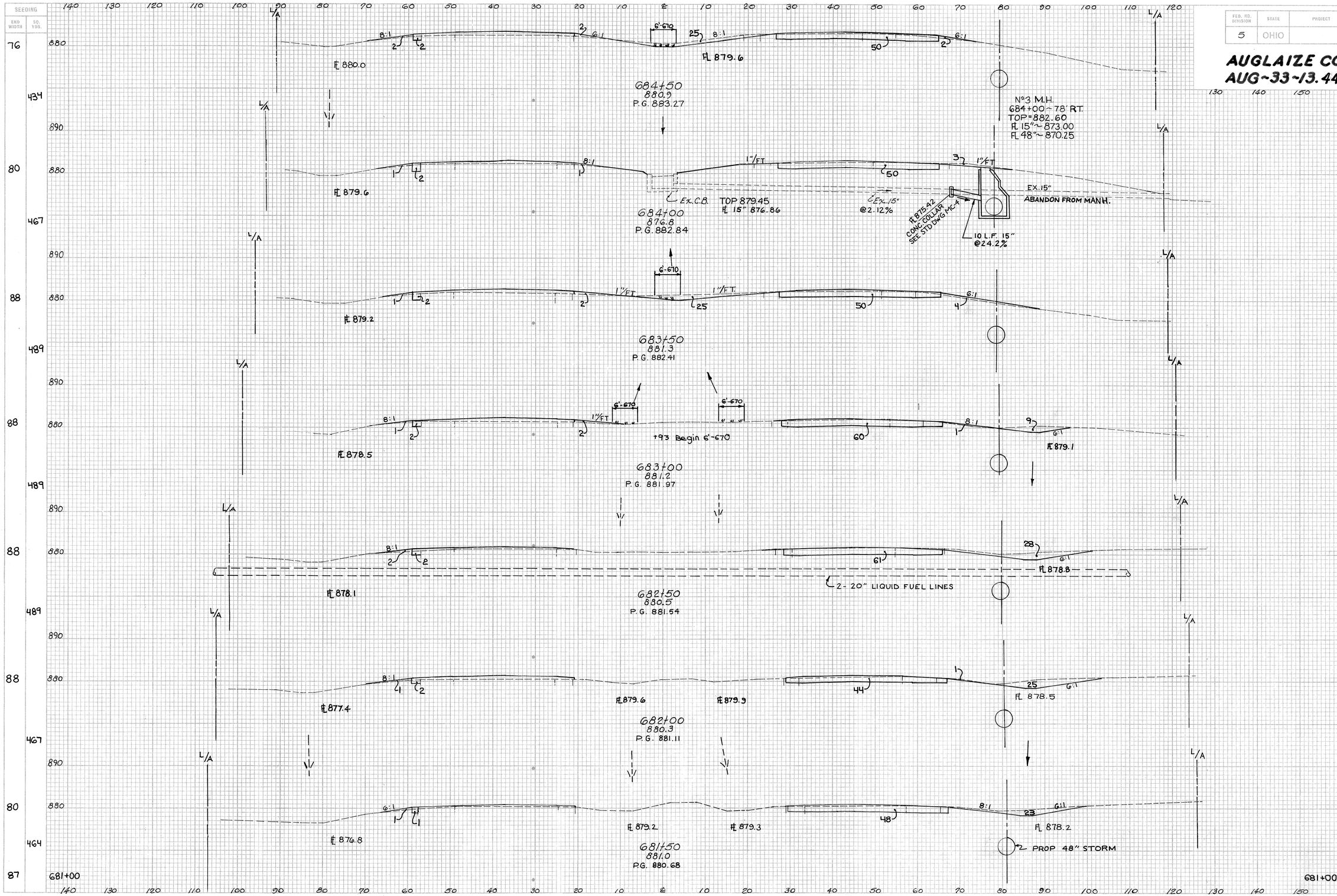
3-84

X-SECTIONS ~ STA. 678+00 TO STA. 681+00 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

70
345

AUGLAIZE COUNTY
AUG~33~13.44



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
77	6		
		123	8
55	2		
		123	9
77	7		
		137	11
71	4		
		150	6
91	2		
		151	3
72	1		
		134	2
72	1		
		124	4
62	3		

EXISTING
TEMPLATE
DITCHES
AREAS
VOLUMES
SEEDING

BY | DATE | CH | REV | DATE | REV | DATE

X-SECTIONS ~ STA. 681+50 TO STA. 684+50 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

67
345

AUGLAIZE COUNTY
AUG-33-13.44

SEEDING	
END WIDTH	SQ. YDS.
43	217
35	192
34	126
20	

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

870
860

674+50
875.0

674+00
874.7

673+50
874.9

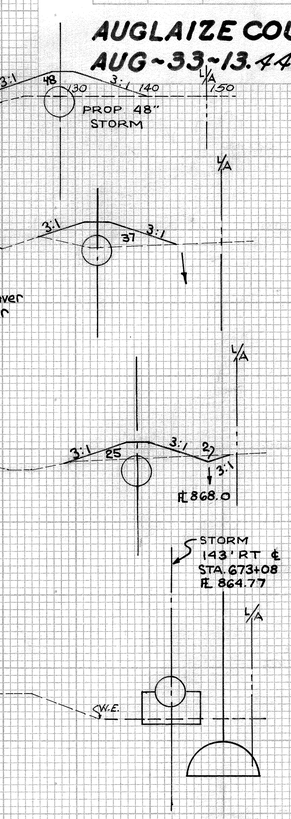
673+08 Ahead Only
873.9

672+93.3 ~ Section Across Abutment Lt.
872.3

672+88 ~ Section Across Abutment Rt.
870.8

672+87.5 ~ Bridge Seat Rt.
870.6

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



Note: Maintain 2' of Cover Over Storm Sewer

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	48		
		0	79
0	37		
		2	58
2	25		
		2	27
0	0		

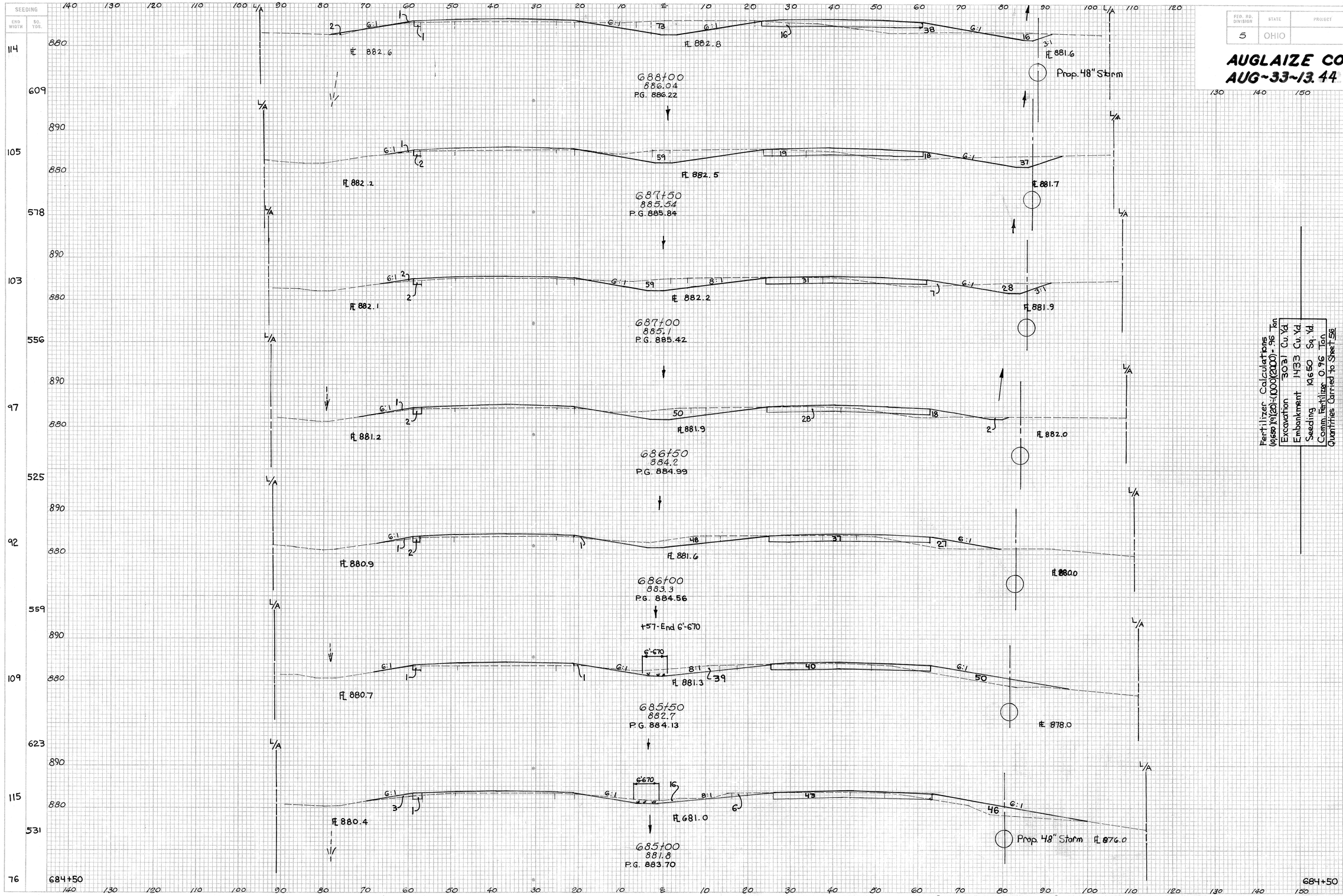
DRAWING TEMPLATE DUPLICATES AREAS VOLUMES SEEDING

X-SECTIONS ~ STA. 672+87.5 TO STA. 674+50 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

71
345

AUGLAIZE COUNTY
AUG~33~13.44



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
106	41		
		207	56
117	19		
		229	26
130	9		
		197	26
82	19		
		157	45
87	29		
		155	74
80	51		
		136	93
66	49		
		133	51
77	6		

X-SECTIONS ~ STA. 685+00 TO STA. 688+00 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

72
345

AUGLAIZE COUNTY
AUG-33-13.44

SEEDING

END WIDTH	SQ. YDS.
105	575
102	564
101	558
100	567
104	581
105	608
114	

EXISTING
TEMPLATE
DITCHES
AREAS
VOLUMES
SEEDING

C Ex. 24"

691+08 ~ ℄ Pipe on Skew 30°
887.08
P.G. 887.79

℄ 883.8 — ℄ 884.4 — ℄ 882.8 — Prop 48" Storm

691+00
887.07
P.G. 887.77

℄ 884.6 — ℄ 884.3

690+50
886.91
P.G. 887.59

℄ 884.1 — ℄ 884.0

690+00
886.76
P.G. 887.39

℄ 883.3 — ℄ 883.7

CB-8A
689+50 ~ 92' RT (℄ PIPE)
TOP 878.80
℄ 48" ~ 872.73

689+50
886.66
P.G. 887.15

℄ 883.0 — ℄ 883.3 — ℄ 879.5

689+00
886.52
P.G. 886.88

℄ 882.7 — ℄ 883.0 — ℄ 880.5

688+50
886.28
P.G. 886.57

PROP 48" STORM

688+00

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
55	272		
		90	559
42	331		
		102	517
68	227		
		144	349
87	150		
		167	262
93	133		
		177	226
98	111		
		189	141
106	41		

X-SECTIONS ~ STA. 688+50 TO STA. 691+08 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

73
345

AUGLAIZE COUNTY
AUG-33-13.44

	DATE	REV.	DATE	REV.
BY	DATE	C-H		
	3-84			

EXISTING
TEMPLATE
DITCHES
AREAS
VOLUMES
SEEDING

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

101 890 / 880 — 608

℄ 883.9 — 6:1, 1, 1 — 4 — 6:1 — 20 — 6:1 — 213 — 8:1 — 3:1, 3:1 — 5 — ℄ 883.50

694+50
887.3
P.G. 888.82

PROP. 48" STORM

118 890 / 880 — 633

℄ 883.6 — 4 — 1 — 5 — 31 — 209 — 6 — ℄ 883.0

694+00
887.3
P.G. 888.67

110 890 / 880 — 619

℄ 882.9 — 3 — 1 — 5 — 34 — ℄ 885.2 — 237 — 18 — ℄ 882.5

693+50
887.4
P.G. 888.52

+07 End 6'-670

113 890 / 880 — 608

℄ 882.8 — 3 — 1 — 5 — 40 — 6'-670 — ℄ 885.0 — 229 — 6'-670 — 16 — ℄ 882.3

+07- End 6'-670

693+00
887.3
P.G. 888.37

106 890 / 880 — 575

℄ 882.5 — 3 — 1 — 4 — 42 — 6'-670 — ℄ 884.9 — 220 — 6'-670 — 28 — ℄ 882.2

692+50
887.3
P.G. 888.22

101 890 / 880 — 619

℄ 882.4 — 6:1, 1 — 4 — 42 — 6'-670 — ℄ 884.7 — 228 — 6'-670 — 31 — ℄ 882.1

692+00
887.1
P.G. 888.06

N°4 CATCH BASIN
691+50 ~ ℄
TOP 884.35
℄ 18" 877.28

122 890 / 880 — 631

℄ 882.8 — 6:1, 1 — 4 — 6:1 — 5 — 34 — 6:1 — ℄ 884.6 — 242 — 8:1 — 3:1 — 17 — 3:1 — ℄ 882.0

86 L.F. 18" TYPE B @ 1.30%

86 L.F. 18" TYPE B @ 1.45%

691+50
887.0
P.G. 887.92

CB-8A
691+50 ~ 86' RT. (℄ PIPE)
TOP 882.00
℄ 18" ~ 876.03
℄ 48" ~ 873.53

FOR QUANTITIES SEE SH. 57.

105 691+00 / 880

N°8 CATCH BASIN
691+50 ~ 86' LT
TOP 882.00
℄ 18" ~ 878.40

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	30	214		
			68	396
	43	213		
			94	420
	58	240		
			112	440
	62	235		
			127	424
	75	223		
			142	419
	78	229		
			129	436
	61	242		
			108	476
691+00	55	272		

X-SECTIONS ~ STA. 691+50 TO STA. 694+50 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

74
345

AUGLAIZE COUNTY
AUG-33-13.44

	DATE	REV.	DATE	REV.	DATE	CHK	DATE	BY
EXISTING							3-84	
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

| | | | | | | | |

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

75
345

AUGLAIZE COUNTY
AUG-33-13.44

	DATE
EXISTING	
TEMPLATE	
DITCHES	
AREAS	
VOLUMES	
SEEDING	

	DATE	REV.	DATE	C+H	DATE
8"	3-84				

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

107 890 880 594

℄ 887.4
+00 - Begin 6'-670
6'-670
3:1 4 6:1 8 12 6:1 5 6:1 6:1 235 8:1 3:1 6'-670 3:1 7
℄ 887.4
℄ 886.0
Prop. 48" Storm

701+00
886.3
P.G. 890.77

107 890 880 594

3:1 10 18 9 5 242 6'-670 7
℄ 886.8
℄ 887.3
℄ 884.6

700+50
886.3
P.G. 890.62

107 890 880 594

7 15 10 5 217 6'-670 9
℄ 886.4
℄ 887.1

CB-8A
700+00 - 89' RT (℄ PIPE)
TOP 884.15
℄ 48" ~ 876.56

700+00
886.8
P.G. 890.47

107 890 880 594

28 14 4 11 204 6'-670 11
℄ 886.2
℄ 886.9
℄ 884.8

699+50
887.2
P.G. 890.32

107 890 880 600

8 10 9 4 138 6'-670 15
℄ 886.0
℄ 886.8
℄ 885.0

699+00
886.2
P.G. 890.17

109 890 880 614

3:1 6 6:1 10 12 5 6:1 6:1 63 8:1 3:1 25 3:1
℄ 885.6
℄ 886.7
℄ 885.2
+43 - Begin 6'-670
Prop 48" Storm

698+50
885.7
P.G. 890.02

112 698+00

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
699+00	15	252		
			43	474
699+50	31	260		
			58	456
700+00	31	232		
			92	405
700+50	68	205		
			97	328
701+00	36	149		
			78	206
701+50	48	73		
			74	168
698+00	32	108		

X-SECTIONS - STA. 698+50 TO STA. 701+00 - U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

76
345

AUGLAIZE COUNTY
AUG~33~13.44

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
24	252			
			41	455
20	239			
			38	459
21	256			
			42	468
24	249			
			50	457
30	244			
			42	460
701+00	15	252		

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

End +57 6'-670

+57 6'-670

6'-670 6:1 3:1 16 1 12 4 6:1 6:1 236 8:1 3:1 5:1 7

℄ 887.6 ℄ 888.2 ℄ 886.4

107 890 880 594

703+50
887.0
P.G. 891.52

6'-670 10 4 2 215 22 6

℄ 887.4 ℄ 888.0 ℄ 886.6

+00-Begin 6'-670

107 890 880 594

703+00
886.7
P.G. 891.37

6'-670 143.5~73.2' Lt.~℄ Ex.C.B.~Top-886.5 ℄-883.55 26 9 4 230 8

℄ 887.3 ℄ 887.9 ℄ 886.4

Ex.6" Ex.6"

107 890 880 594

702+50
886.6
P.G. 891.22

№4 CATCH BASIN
702+00 ~ ℄
TOP 887.46
℄ 15"~ 883.42

6'-670 2 15 9 4 225 9

80 L.F. 15" TYPE B @ 1.0% ℄ 887.7 87 L.F. 15" TYPE B @ 4.03%

Ex.6" Ex.6" 106~1'Lt.~℄ Ex.C.B.~Top-886.11 ℄-883.67

CB-8A
702+00~87'RT (℄ PIPE)
TOP 885.80
℄ 15" 879.91
℄ 48" 877.16

FOR DRAINAGE QUANTITIES SEE SH. 58.

CB-8 CATCH BASIN
702+00 ~ 80.5' LT.
TOP ELEV. 886.95
℄ 15"~ 884.22

107 890 880 594

702+00
886.4
P. G. 891.07

6'-670 3:1 5 6:1 12 12 4 6:1 6:1 232

℄ 887.2 ℄ 887.6 9 ℄ 885.5

+57 End 6'-670

6'-670

PROP. 48" STORM

107 890 880 594

701+50
886.4
P. G. 890.92

℄-886.08 Ex. 21" ABANDON ℄-885.86

107 890 880

701+06~℄ Pipe Skew
886.6
P. G. 890.79

℄-886.33 Ex. 21" ABANDON ℄-886.07

107 890 880

701+02~℄ Pipe Skew.
886.5
P.G. ℄ 890.78

140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

X-SECTIONS ~ STA. 701+02 TO STA. 703+50 ~ U.S.R. 33

BY	DATE	REV.	DATE	REV.	DATE
CHP	3-94				

EXISTING
TEMPLATE
DITCHES
AREAS
VOLUMES
SEEDING

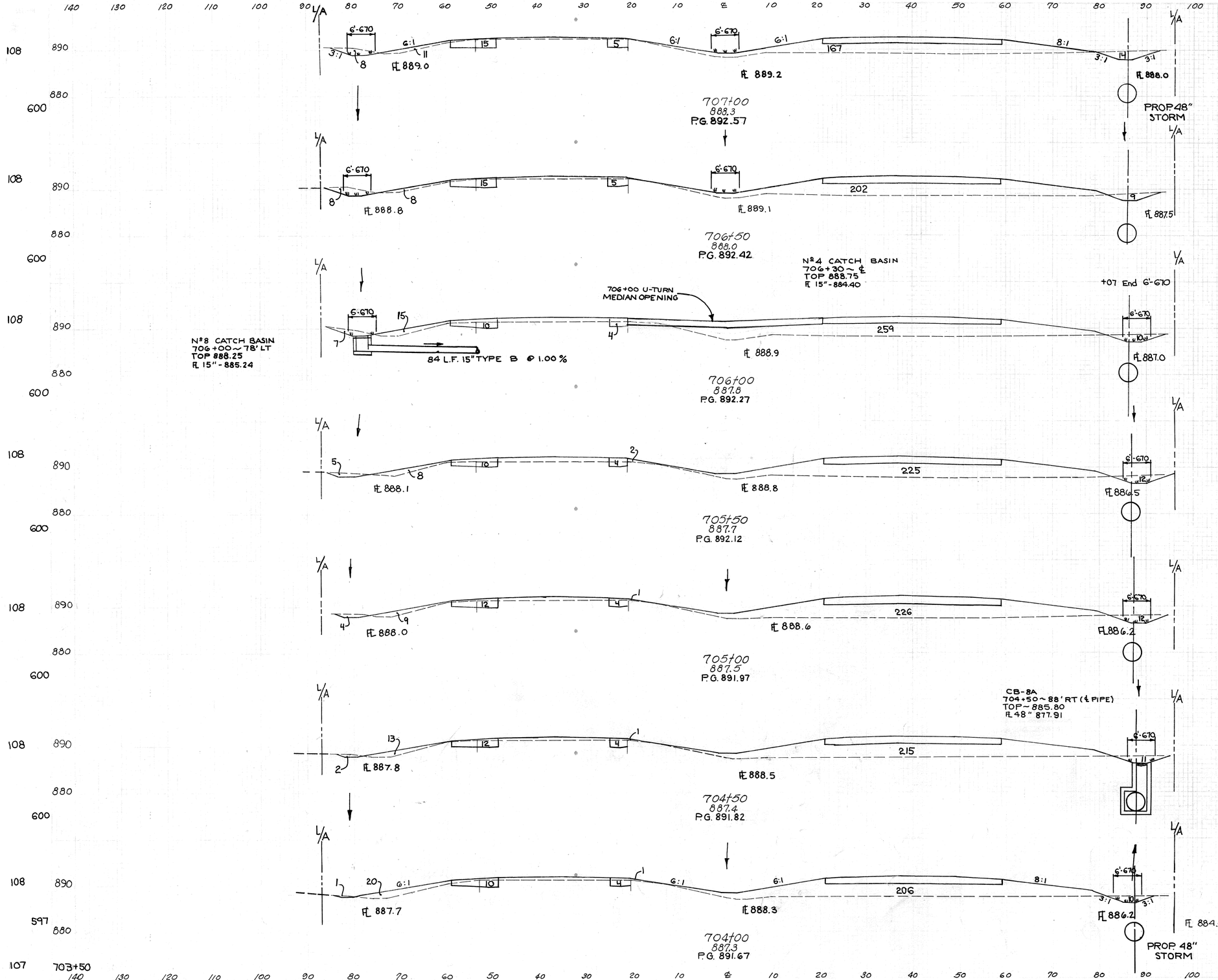
FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

77
345

AUGLAIZE COUNTY
AUG-33-13.44

BY	DATE	CHK.	DATE	REV.	DATE	REV.	DATE
KTP	3-84						

EXISTING
TEMPLATE
DITCHES
AREAS
VOLUMES
SEEDING



X-SECTIONS ~ STA. 704+00 TO STA. 707+00 ~ U.S.R. 33

S OHIO

AUGLAIZE COUNTY
AUG~33~13.44

N°3 M.H.
710+50 ~ 86' RT (℄ PIPE)
TOP 893.60
R 48"~879.71

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

710+50
890.1
P.G. 893.62

95 900 890 — 10 6:1 12 5 6:1 6:1 8:1 99 5:1 — ℄ 891.0 ℄ 890.3 ℄ 892.0

550 900 890 — 1 15 5 88 — 8 ℄ 890.7 11 ℄ 890.1 ℄ 891.2

PROP. 48" STORM

710+00
889.3
P.G. 893.47

103 900 890 — 1 15 4 2 — 3:1 20 ℄ 890.5 25 ℄ 890.0 21 33 ℄ 891.0

586 900 890

709+50
889.4
P.G. 893.32

108 890 — 22 15 4 28 3 10 7 22 — ℄ 890.0 ℄ 889.8 ℄ 890.0

597 890 880

709+00
891.5
P.G. 893.17

107 890 — 8 9 15 5 3 4 6 28 19 — ℄ 889.4 ℄ 889.7 ℄ 889.3

594 880

708+50
888.4
P.G. 893.02

107 890 — 3 8 15 4 16 67 34 — ℄ 889.2 ℄ 889.5 ℄ 889.0

597 880

708+00
888.7
P.G. 892.87

+57 ~ End G'-670
+87 ~ End G'-670

108 890 — G'-670 6:1 3:1 6 5 1 15 3 G'-670 6:1 6:1 149 8:1 9 3:1 — ℄ 889.1 ℄ 889.4 ℄ 888.5

600 880

Prop. 48" Storm

707+50
888.6
P.G. 892.72

108 707+00

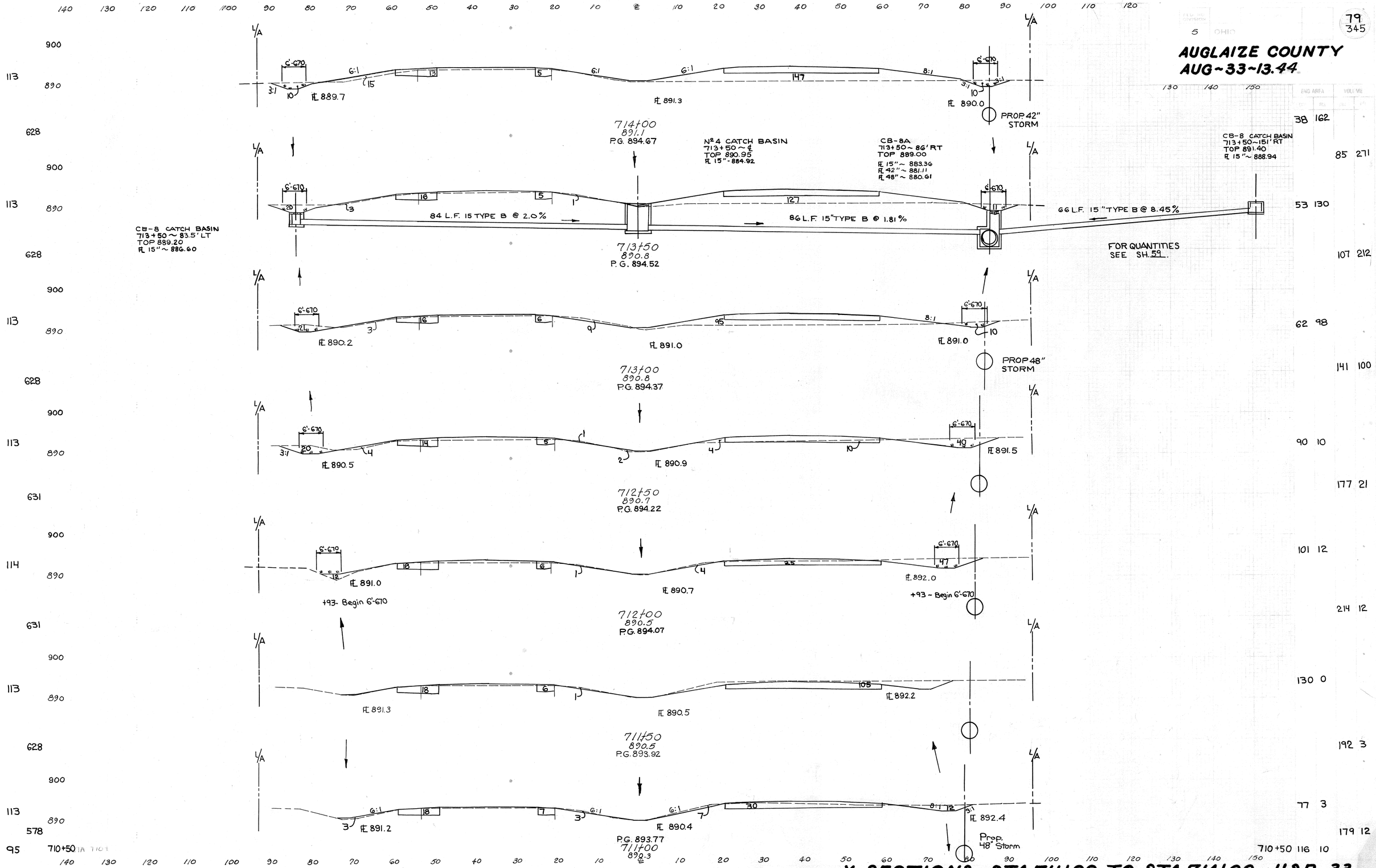
140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
710+50	116	10	208	28
	108	20	188	43
	95	26	182	34
	101	10	140	53
	50	47	99	128
	56	91	83	227
	33	154	70	308
707+00	42	178		

BY	DATE	REV.	DATE
	4-3-84		
EXISTING			
TEMPLATE			
DITCHES			
AREAS			
VOLUMES			
SEEDING			

X-SECTIONS ~ STA. 707+50 TO STA. 710+50 ~ U.S.R. 33

AUGLAIZE COUNTY
AUG~33~13.44

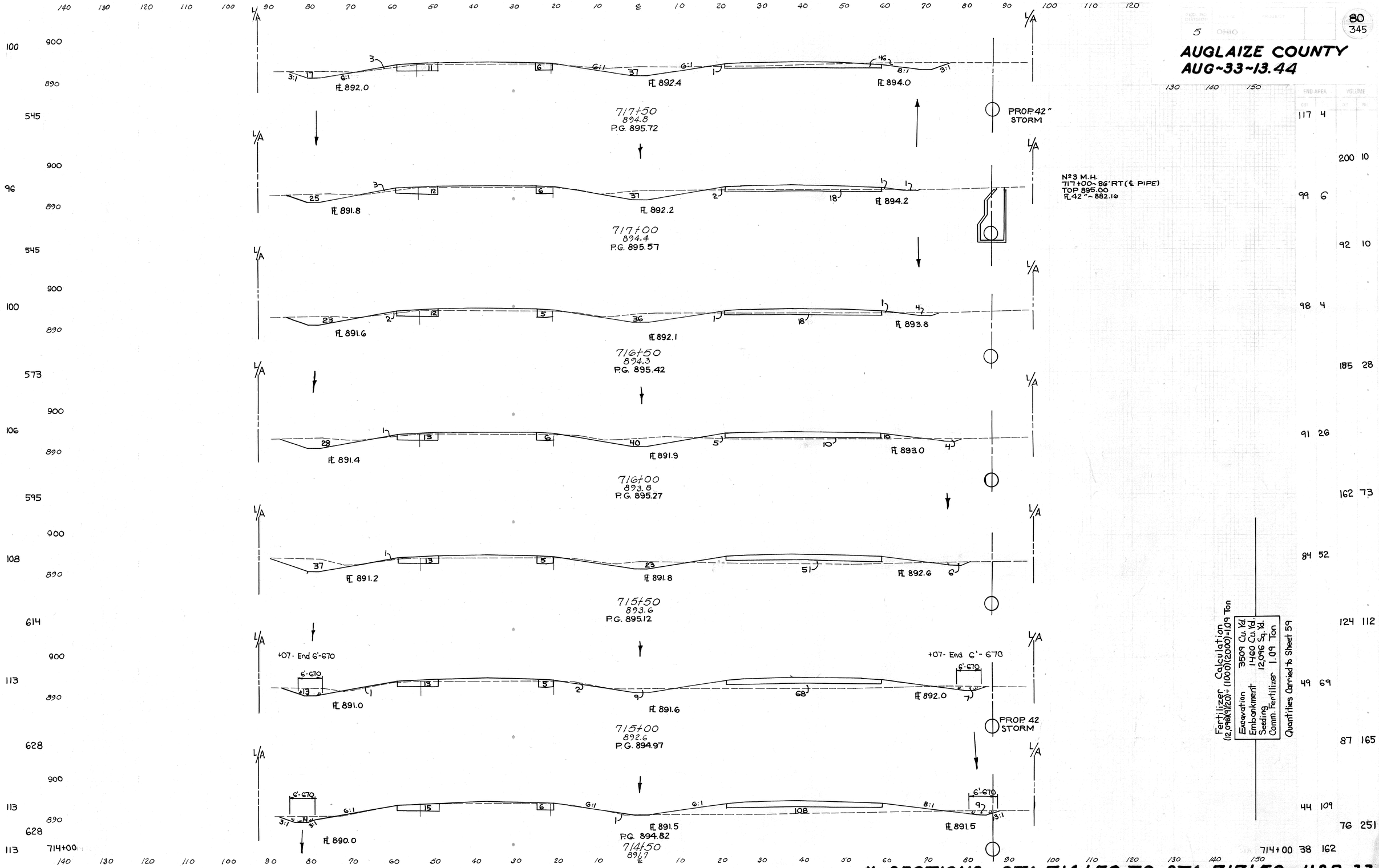


	BY	DATE	CHK.	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

X-SECTIONS ~ STA. 711+00 TO STA. 714+00 ~ U.S.R. 33

5 OHIO

AUGLAIZE COUNTY
AUG~33~13.44



	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

X~SECTIONS ~STA. 714+50 TO STA. 717+50 ~ U.S.R. 33

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

101 900 890

6'-670 6:1 2.5 5' 3:1 12 6 2 6:1 6:1 264 8:1 3:1 6'-670 3:1 7 3:1

Ft. 890.5 Ft. 893.4 Ft. 890.8

Prop 42" Storm

721+00
891.5
P.G. 896.77

559 900 890

100

6'-670 35 5' 9 5 18G 6'-670

Ft. 891.0 Ft. 893.3 Ft. 891.1

+43-Begin 6'-670

720+50
892.7
P.G. 896.62

+43- Begin 6'-670

592 900 890

113

18 5' 14 4 2 5' 12 82 3:1 16 3:1

Ft. 892.0 Ft. 893.1 Ft. 891.4

720+00
894.4
P.G. 896.47

628 900 890

113

10 6 13 6 32 3 7 8:1 22 3:1

Ft. 892.8 Ft. 893.0 Ft. 893.0

719+50
895.3
P.G. 896.32

628 900 890

113

28 2 16 6 50 1 30 27

Ft. 892.6 Ft. 892.8 Ft. 893.3

719+00
895.8
P.G. 896.17

620 900 890

110

28 3 13 6 135 27

Ft. 892.4 Ft. 892.7 Ft. 893.5

PROP. 42" STORM

718+50
896.1
P.G. 896.02

609 900 890

109

3:1 23 6:1 16 6 6:1 59 6:1 36 8:1 26 3:1

581

Ft. 892.2 Ft. 892.5 Ft. 893.7

P.G. 895.87

718+00
895.6

100 717+50

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 717+50

	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

81
345

5 OHIO

AUGLAIZE COUNTY
AUG~33~13.44

130 140 150

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
			30	289
			52	473
			26	221
			62	303
			41	106
			112	117
			79	20
			219	22
			157	3
			339	6
			209	3
			348	3
			166	0
			262	4
717+50			117	4

X~SECTIONS~STA. 718+00 TO STA. 721+00~U.S.R. 33

82
345

5 OHIO

AUGLAIZE COUNTY
AUG-33-13.44

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150				
116 900 890				
600 900 100 890			33 330	60 585
559 900 101 890			31 301	62 593
562 900 101 890			35 339	70 652
564 900 102 890			40 365	86 657
567 900 890			52 344	75 649
564 900 102 890			29 356	55 597
101 721+00			721+00 30 289	

DATE | REV. | DATE | REV. | C+F | C+F | 4.64

EXISTING TEMPLATE | DITCHES | AREAS | VOLUMES | SEEDING

L/A

8' 16.51 897.27 897.60 897.86 897.67 6 8 3:1 6:1 57 8 ℄ 891.2 6:1 6:1 2.73 ℄ 894.3 8:1 3:1 3:1 ℄ 891.7

724+00
892.6
P.G. 897.67

+57 - End 6'-670

8' 15.26 897.14 897.47 897.71 897.52 4 2 6 6'-670 10 46 ℄ 890.9 2.53 ℄ 894.2 ℄ 891.5

723+50
892.3
P.G. 897.52

8' 14.01' 897.01 897.34 897.56 897.37 4 2 5 6'-670 19 47 ℄ 890.6 290 ℄ 894.0 8:1 7 ℄ 891.2

723+00
891.9
P.G. 897.37

PROP. 42" STORM

9.24' 12.76' 896.85 897.24 897.41 897.22 5 2 7 6'-670 21 35 ℄ 890.3 328 ℄ 893.9 6:1 7 ℄ 890.3

722+50
891.5
P.G. 897.22

C.B. N°4
722+00 ~ ℄
TOP 893.45
℄ 15" ~ 886.46

CB. N°8
722+00 ~ 90' LT
TOP 889.75
℄ 15" ~ 887.09

6'-670 23 14 4 12 4 1 329 9 90 L.F. 15" TYPE B @ 0.7% 90 L.F. 15" TYPE B @ 0.61% 58 L.F. 15" TYPE B @ 3.62 %

CB-8 CATCH BASIN
722+00 ~ 148' RT
TOP 890.60
℄ 15" ~ 888.01

722+00
891.6
P.G. 897.07

CB-8A
722+00 ~ 90' RT
TOP 889.80
℄ 15" ~ 885.91
℄ 42" ~ 883.66

890.88 38"x24" 890.95

ABANDON EX. 38"x24"

721+52.8 ~ ℄ 38"x24" Pipe Rt. Fwd. Skew
893.23
P.G. 896.93

6'-670 29 6:1 3:1 12 4 1 6:1 6:1 ℄ 893.6 326 8:1 3:1 6 ℄ 890.3

Prop. 42" Storm

P.G. 896.92

721+50
891.5

X-SECTIONS - STA. 721+50 TO STA. 724+00 - U.S.R. 33

AUGLAIZE COUNTY
AUG~33~13.44

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

END AREA VOLUME

170 258

209 522

55 305

89 550

41 289

68 514

32 266

61 513

33 288

67 597

39 356

62 662

27 358

56 637

724+00 33 330

139 748 128 673 114 623 110 606 108 628 118 645 114 639 116

900 890

8' 25.26' 898.19 898.52 898.91 898.72 6'-670 122 3:1 6:1 4 20 6 3 253 19 PROP. 36" STORM

Fℓ 891.0 Fℓ 895.4 Fℓ 892.8

727+50
894.7
P.G. 898.72

CB-4A
727+00~ ℄
TOP 895.00
Fℓ 42" 885.14

CB-8A
727+00~ 87 RT
TOP 892.10
Fℓ 42"~ 884.92

Nº3 M.H.
727+00 ~ 71'LT
TOP 897.40
Fℓ 21"~ 886.29
Fℓ 36"~ 885.80
Fℓ 42"~ 885.30

8' 24.01' 898.05 898.38 898.76 898.57 6'-670 12 70 12 6 234 25

Fℓ 891.5

TO C.B. LT.
STA. 728+00

108 L.F. 21" @ 0.89%

71 L.F. 42" TYPE B @ 0.23%

87 L.F. 42" TYPE B @ 0.25%

727+00
894.0
P.G. 898.57

8' 22.76' 897.92 898.25 898.01 898.42 6'-670 70 5 6 3 5 217 8:1 25

Fℓ 892.3 Fℓ 895.1 Fℓ 893.0

+50 - Begin 6'-670

PROP. 42" STORM

726+50
893.5
P.G. 898.42

8' 21.51' 897.79 898.12 898.46 898.27 6'-670 49 10 5 1 216 9

Fℓ 892.2 Fℓ 894.9 Fℓ 893.2

726+00
893.5
P.G. 898.27

8' 20.26' 897.66 897.99 898.31 898.12 6'-670 49 12 4 2 237 3

Fℓ 892.0 Fℓ 894.8 Fℓ 893.3

+50 - Begin 6'-670

725+50
893.2
P.G. 898.12

8' 19.01' 897.53 897.86 898.16 897.97 55 10 6 301 4

Fℓ 891.7 Fℓ 894.6 Fℓ 892.8

725+00
892.9
P.G. 897.97

8' 17.76' 897.40 897.73 898.01 897.82 53 8 6 305 6

Fℓ 891.4 Fℓ 894.4 Fℓ 891.8

P.G. 897.82

724+50
892.7

Prop. 42" Storm

FOR SEWER QUANTITIES
STA. 727+00 SEE SH. 80.

Fertilizer Calculation
(12ton/ac)(9ac)/(20)=(2000)(1000) = 1.14 Ton

Excavation	1968 Cu. Yd.
Embankment	11,509 Cu. Yd.
Seeding	12,667 Sq. Yd.
Comm. Fertilizer	1.14 Ton

Quantities Carried to Sheet 80

DATE	BY	CHK.	DATE	REV.	DATE	REV.	DATE
8"	dcm	4-PK					

EXISTING
TEMPLATE
DITCHES
AREAS
VOLUMES
SEEDING

X-SECTIONS ~ STA. 724+50 TO STA. 727+50 ~ U.S.R. 33

84
345

5

AUGLAIZE COUNTY
AUG-33-13.44

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

125 900 890 689

8' 16' 4.76' 12' 21.29' 8.45'

898.97 899.30 899.55 899.62 899.81 899.62 899.62 899.81 899.48 899.09

6:1 3:1 20 110 225 12 6 1 15

℄ 893.0 PROP. 36" STORM ℄ 896.3 ℄ 893.7

730+50
894.3
P.G. 899.62

122 900 890

8' 16' 12' 3.51' 15.29' 9.45'

898.84 899.17 899.42 899.47 899.66 899.47 899.47 899.66 899.48 899.03

+00 - End G'-670 G'-670 20 96 8 5 1 261 6:1 3:1 8

℄ 892.8 No3 M.H. 730+00-78.5' LT TOP 898.51 ℄ 36"-886.55 ℄ 896.1 ℄ 893.6

730+00
894.2
P.G. 899.47

695 900 890

8' 16' 12' 2.26'

898.68 899.01 899.26 899.32 899.51 899.32

G'-670 20 118 4 2 281 6:1 7

℄ 892.5 ℄ 896.0 ℄ 893.4

729+50
894.1
P.G. 899.32

698 900 890

8' 29.01'

898.58 898.91 899.36 899.17

G'-670 16 116 10 4 343 5

℄ 892.0 ℄ 895.8 ℄ 893.3

INCLUDED W/ DEARBAUGH ST. X-SECTIONS

729+00
894.5
P.G. 899.17

703 900 890

8' 27.76

898.45 898.78 899.21 899.02

G'-670 10 119 10 5 3 235

+57- End G'-670 +57- End G'-670 118

℄ 891.5 ℄ 895.7 ℄ 893.1

728+50
895.0
P.G. 899.02

736 900 890

728+01.5 - ℄ Dearbough Rd. Rt. Fwd. Skew
898.40
P.G. 898.87

8' 26.51'

898.32 898.65 899.06 898.87

No8 C.B. 728+00-110' LT TOP 889.75 ℄ 21½-887.25

6'-670 20 31 19 6 68 10 60 5 1

TO M.H. STA. 727+00 LT. 108 L.F. 21" TYPE C @ 0.89% PROP. 36" STORM

AHEAD ONLY BACK INCLUDED W/ SERVICE RD No1 X-SECTIONS

INCLUDED W/ DEARBAUGH ST. X-SECTIONS

℄ 895.5 ℄ 893.0

P.G. 898.87
728+00
898.41

135 Ahead 890
115 Back
706
139 727+50

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 727+50

	DATE
REV.	
REV.	
REV.	
BY	DATE
EXISTING	4-84
TEMPLATE	
DITCHES	
AREAS	
VOLUMES	
SEEDING	

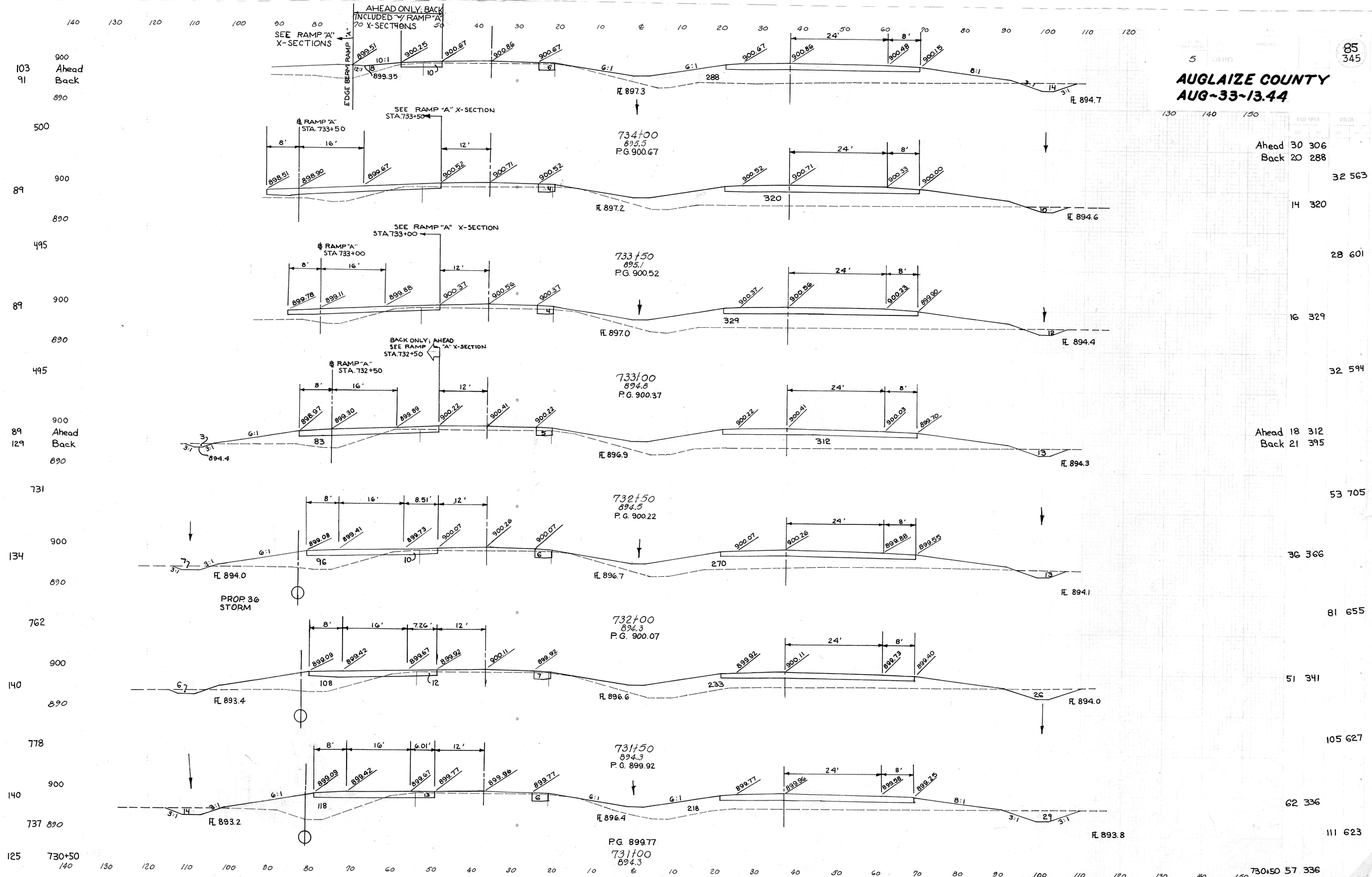
130 140 150 END AR. VOL INC

57 336
91 643
41 358
71 703
35 401
65 797
35 459
168 753
146 354
254 428
Ahead 128 108
Back 128 92
276 324
727+50 170 258

℄ A

X-SECTIONS - STA. 728+00 TO STA. 730+50 - U.S.R.3

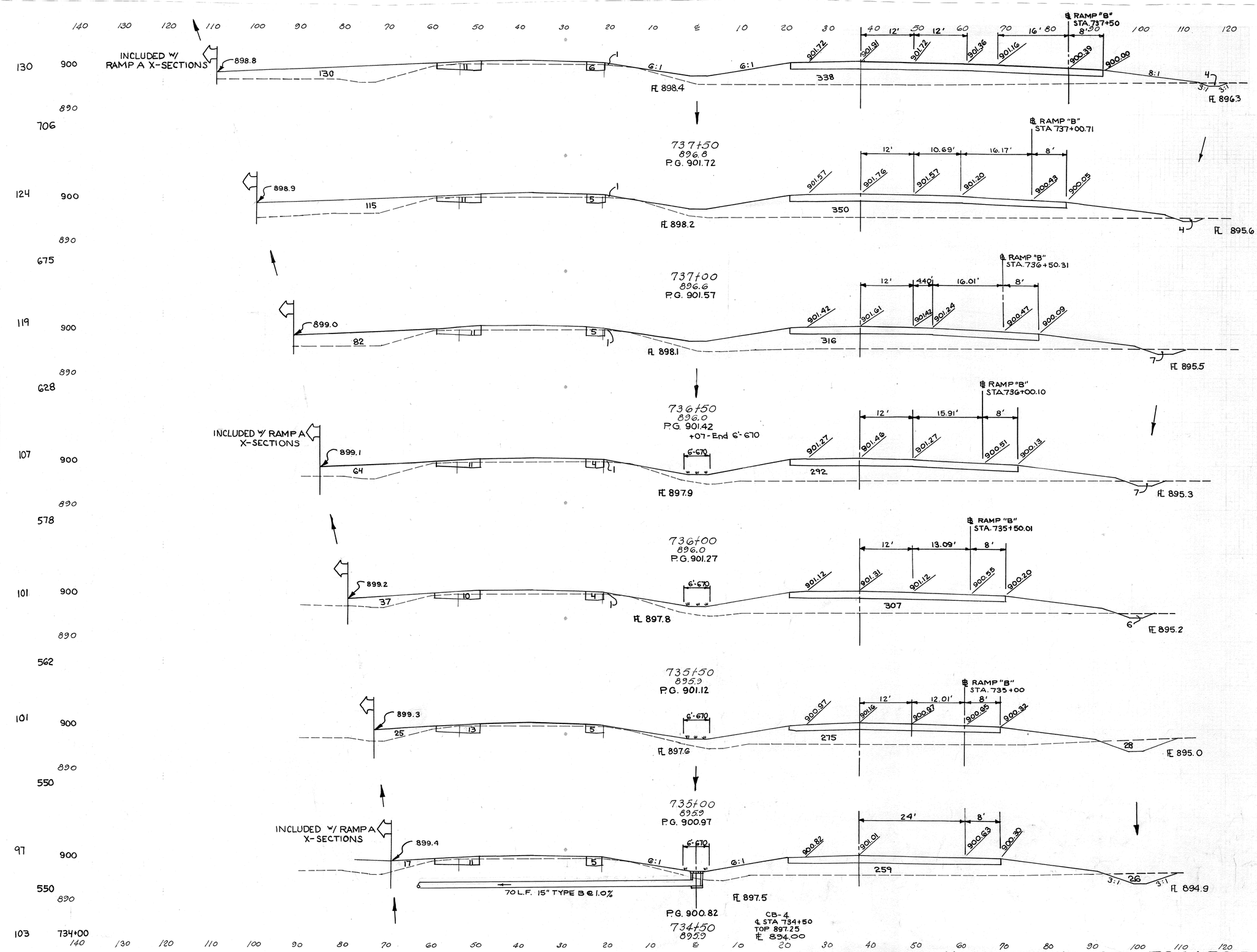
AUGLAIZE COUNTY
AUG-33-13.44



X-SECTIONS ~ STA. 731+00 TO STA. 734+00 ~ USR 33

AUGLAIZE COUNTY
AUG~33~13.44

EXISTING	BY	CHK	DATE	REV.	DATE	REV.	DATE
TEMPLATE	KSS		4-84				
DITCHES							
AREAS							
VOLUMES							
SEEDING							



Fertilizer Calculations
(13,535 Yd)(20)÷(1000/2000)=1.22 Ton

Excavation	1055 Cu. Yd.
Embankment	13,328 Cu. Yd.
Seeding	13,535 Sq. Yd.
Comm. Fertilizer	1.22 Ton

Quantities Carried to Sheet 61

X-SECTIONS ~STA. 734+50 TO STA. 737+50~U.S.R.33

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

INCLUDED W/ RAMP A X-SECTIONS

INCLUDED W/ RAMP B X-SECTIONS

740+50
897.7
P.G. 902.62

740+00
897.5
P.G. 902.47

739+50
897.3
P.G. 902.32

739+00
897.3
P.G. 902.17

738+50
897.5
P.G. 902.02

738+00
897.2
P.G. 901.87

INCLUDED W/ RAMP A X-SECTIONS

INCLUDED W/ RAMP B X-SECTIONS

BACK ONLY; AHEAD INCLUDED W/ RAMP B X-SECTIONS

℄ RAMP B

		740+50	740+00	739+50	739+00	738+50	738+00
		190	967	168	150	781	131
		890	890	890	890	890	890
		1003		883		670	
		900	900	900	900	900	900
		8:1	8:1	8:1	8:1	8:1	8:1
		110	155	124	120	102	
		12	10	10	10	12	
		5	5	5	5	5	
		G:1	G:1			G:1	G:1
		268	213	260	223	252	
		½"/1'	½"/1'	½"/1'	½"/1'	½"/1'	
		898.3	898.5	898.55	898.65	898.7	
		℄ 899.3	℄ 899.0	℄ 898.8	℄ 898.7	℄ 898.5	
		899.3	900.1	900.2	900.4	900.5	
		180				98	
		890				8:1	
		900				6%	
		898.4				5:1	
		℄ 899.1				896.7	
		899.9					
		217					
		½"/1'					
		899.9					
						110 Ahead	730+00
						157 Back	
						890	890
						798	900
						130	

		737+50
		21 469
		41 853
		Ahead 17 354
		Back 23 452
		15 343
		30 646
		28 674
		15 384
		28 697
		15 368
		26 759
		13 391
		28 712
		17 378

130 140 150

EXISTING	BY	
TEMPLATE	DATE	4-78
DITCHES		
AREAS		
VOLUMES		
SEEDING		

	DATE	REV.	DATE	REV.	DATE	DWN	DATE

5 OH

87
345

AUGLAIZE COUNTY
AUG-33-13.44

X-SECTIONS - STA. 738+00 TO STA. 740+50 - U.S.R. 33

AUGLAIZE COUNTY
AUG-33-13.44

88
345

5

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

232 — INCLUDED W/ RAMP C X-SECTIONS — 61 — 8:1 — 898.3 — 8:1 — 10'-670 — 8:1 — 902.7 — 434 — 8:1 — 3:1 — 53

890

P.G. 905.60
744+00
899.3

INCLUDED W/ RAMP B X-SECTIONS — 150 — 130 150 170 180 — 897.1

1220

207 — 900 — 81 — 8:1 — 54 — 9:1 — 10'-670 — 9:1 — 902.3 — 301 — 8:1 — 3:1 — 151 — 3:1 — 897.2

264 434
460 731
232 355

890

1131 — STA 743+40 ~ END 10-670

P.G. 904.86
743+50
899.8

INCLUDED W/ RAMP B X-SECTIONS

455 676

200 — AHEAD INCLUDED W/ RAMP C X-SECTIONS; BACK INCL. W/ RAMP A X-SECTION — 10'-670 — 78 — 897.80 — 2:1 — 9:1 — 68 — 10:1 — 10:1 — 307 — 8:1 — 2:1 — 897.40 — 181 — 12:1 — 898.0

259 375

FOR CULVERT DETAILS SEE SHEET 232

+02.8 ℄ USR33
STD 4-A CATCH BASIN
GRATE EI=902.00
FL 22" x 34" EI=897.60

174' OF TWIN 22" x 34" CONDUIT
TYPE A
706.04 @ 0.23%
Class HE-II

18" RCP TYPE "C" W/ FILTER
8' LONG X 10' WIDE

890

1067

P.G. 904.23
743+00
898.5

262 689

184 — INCLUDED W/ RAMP A X-SECTION — 10'-670 — 3 — 8:1 — 74 — 897.9 — 21 — +53.33 AHEADONLY — 8:1 — 8:1 — 295 — 900.8 — 8:1 — 899.0

Ahead 24 369
Back 3 369

+50 ~ BEGIN 10'-670

890

P.G. 903.70
742+50
898.1

1056

21 635

196 — 900 — 4 — 8:1 — 54 — 10 — 5 — G:1 — G:1 — 262 — 8:1 — 898.0 — 899.7 — 899.2 — INCLUDED W/ RAMP B X-SECTIONS

19 316

890

P.G. 903.28
742+00
898.1

1095

34 561

198 — 900 — 2 — 8:1 — 68 — 10 — 5 — G:1 — G:1 — 221 — 8:1 — 898.1 — 899.5 — 899.4

17 289

890

P.G. 902.97
741+50
898.0

1095

66 552

INCLUDED W/ RAMP A X-SECTIONS — 196 — 900 — 39 — 8:1 — 42 — 10 — 5 — G:1 — G:1 — 265 — 8:1 — 898.2 — 899.4 — 899.6 — INCLUDED W/ RAMP B X-SECTIONS

54 307

1073

890

66 635

P.G. 902.77
741+00
897.6

190 — 740+50

740+50 17 378

Fertilizer Calculations
(18396)(4)(20) ÷ (1000)(2000) = 1.66 Ton

Excavation	2,159 Cu. Yd.
Embankment	36,673 Cu. Yd.
Seeding	18,396 Sq. Yd.
Comm. Fertilizer	1.66 Ton

Quantities Carried to Sheet 62

BY	DATE	DATE	REV.	DATE
EXISTING				
TEMPLATE				
DITCHES				
AREAS				
VOLUMES				
SEEDING				

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

X-SECTIONS ~ STA. 741+00 TO STA. 744+00 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

89 / 345

AUGLAIZE COUNTY
AUG-33-13.44

| | | |

AUGLAIZE COUNTY
AUG-33-13.44

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

INCLUDED W/ RAMP C X-SECTIONS

8'-670

6:1 6:1

913.5

2180

INCLUDED W/ RAMP D X-SECTIONS

34 900 890 189

P.G. 917.49
750+00
900.9

0 2180

0 4036

34 900 259 890

8'-670

912.8

2178

P.G. 916.48
749+50
900.7

0 2178

INCLUDED W/ RAMP C X-SECTIONS

AHEAD ONLY; BACK INCLUDED W/ RAMP C X-SECTIONS

AHEAD ONLY; BACK INCLUDED W/ RAMP D X-SECTIONS

INCLUDED W/ RAMP D X-SECTIONS

59 Ahead
47 Back 900 890 292

265 912.0

8'-670

911.9

1570

915.3

320

P.G. 915.47
749+00
900.7

Ahead 0 2155
Back 0 1570

0 2939

INCLUDED W/ RAMP C X-SECTIONS

8'-670

910.8 910.8

1604

913.4

58 900 356 890

P.G. 914.46
748+50
900.7

0 1604

0 3060

+00~END 6'-670

6'-670

INCLUDED W/ RAMP C X-SECTIONS

909.0

8'-670

910.0

1701

911.2

INCLUDED W/ RAMP D X-SECTIONS

70 442 900 89

P.G. 913.45
748+00
900.4

0 1701

0 3120

747+50 0 1669

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

X-SECTIONS - STA. 748+00 TO STA. 750+00 - U.S.R. 33

ESTIMATED QUANTITIES

601	RIPRAP USING 6" REINF CONC SLAB	8 SQ YD
601	ROCK CHANNEL PROTECTION TYPE C W/ FILTER	4 CU YD
602	CONCRETE MASONRY	3.00 CU YD
603	42" CONDUIT TYPE A 706.02 2250 D-LOAD 54" 707.07 OR 707.22 (0.075")	258 LIN FT

QUANTITIES CARRIED TO SHEET 33

DESIGN DATA

DRAINAGE AREA = 15.9 ACRES
Q (50 YR) = 38.1 CFS
Q (100 YR) = 42.6 CFS

AUGLAIZE COUNTY
AUG-33-13.44

INCLUDED W/ RAMP C X-SECTIONS

106 905 — 100 YR HW= 899.40; 50 YR HW= 899.19; 899.32; 559; 9"; CUTOFF WALL-3 SIDES SEE STD DWG HW-4 & MC-4; INLET 898.30; STD HW-4 HEADWALL; 6" HEADWALL EXTENSION; RIPRAP USING 6" REINF CONC SLAB; 1"/1'; 6:1; 6:1; 2:1; 2:1; 918.9; 3330; P.G. 922.53; 752+50; 902.2; 258' OF 42" TYPE A @ 0.20 %; STD HW-4 HEADWALL; 12"; 18" ROCK CHANNEL PROTECTION TYPE C W/ FILTER 7'-0" WIDE x 10'-0" LONG x 1'-6" DEEP = 3.9 CU. YD.; 0 3330; INCLUDED W/ HARDIN PIKE X-SECTIONS; ℄ OUTLET 895.80; 0 6209

STA 752+00 ~ END 6'-670

95 479 Ahead Back — 900 — 2556 890 — 6'-670; 6:1; 6:1; 12:1; 918.0; 3375; P.G. 921.52; 752+00; 901.8; AHEAD & BACK; BACK ONLY; AHEAD INCLUDED W/ HARDIN PIKE X-SECTIONS; Ahead 0 3375; Back 1122 3429; 25:1; 54; INCLUDED W/ RAMP D X-SECTIONS; 1122; 895.0; 1818 6453

INCLUDED W/ RAMP C X-SECTIONS

441 — 900 — 2209 890 — 6'-670; 6:1; 6:1; 8:1; 3:1; 917.0; 3540; P.G. 920.51; 751+50; 901.4; 160; 240; 510; 520; 841 3540; 18'-670; 841; 3:1; 895.2; INCLUDED W/ RAMP D X-SECTIONS; 1316 6404

AHEAD ONLY; BACK INCLUDED W/ RAMP D X-SECTIONS

354 36 Ahead Back — 900 — 890 — 6'-670; 6:1; 6:1; 8:1; 3:1; 916.0; 2296; 1070; P.G. 919.50; 751+00; 901.4; Ahead 580 3376; Back 0 2296; 18'-670; 580; 3:1 (ON SKEW); 3:1; 895.3; INCLUDED W/ RAMP D X-SECTIONS; 370; 380; 0 4162

+50 END 8'-670
BEGIN 6'-670

INCLUDED W/ RAMP C X-SECTIONS

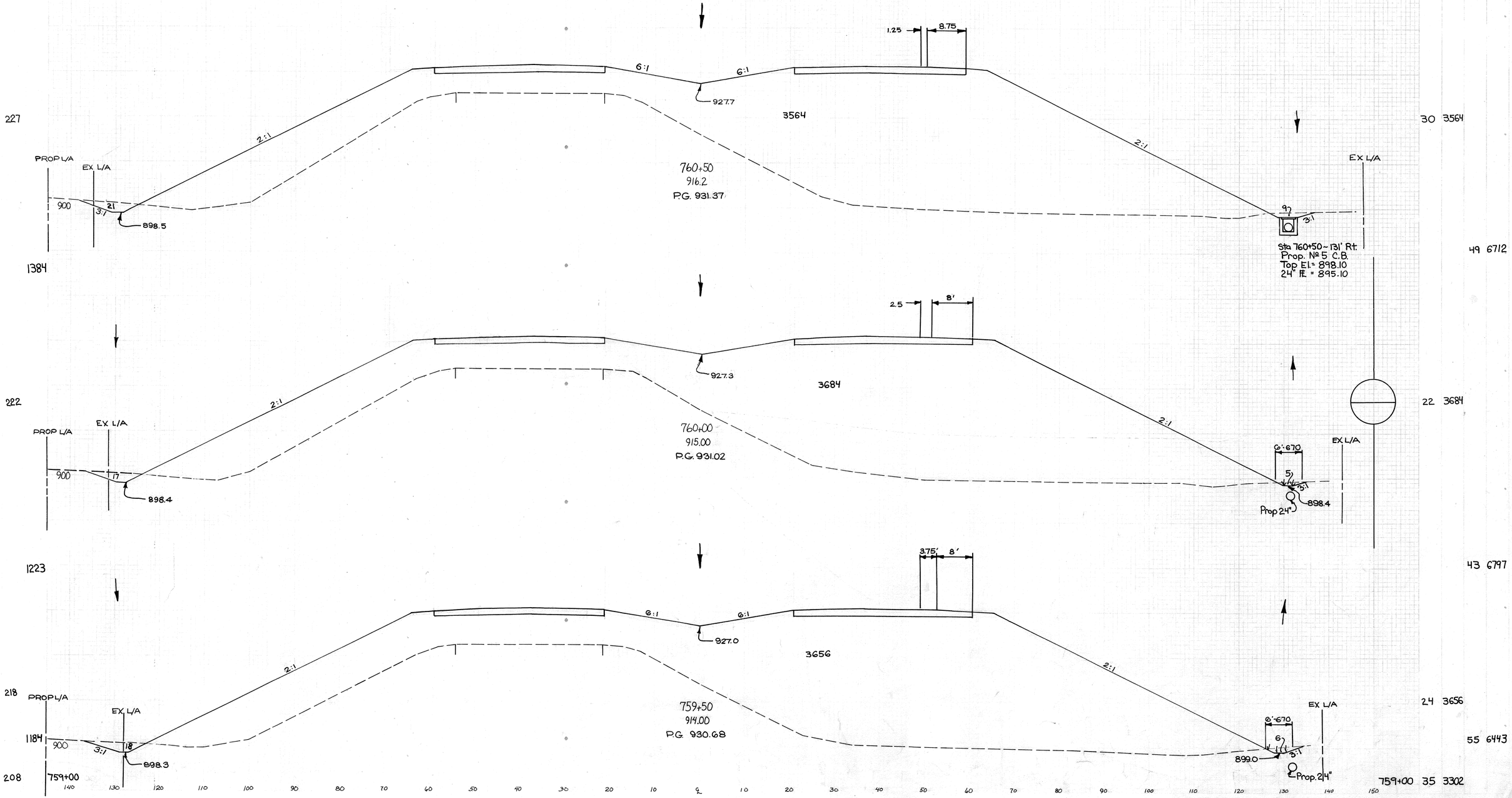
34 189 — 900 — 34 750+00 — 8'-670; 6:1; 6:1; 915.0; 2198; INCLUDED W/ RAMP D X-SECTIONS; 0 2198; 0 4054; P.G. 918.50; 750+50; 901.3; 750+00; 0 2180

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

X-SECTIONS - STA. 750+50 TO STA. 752+50 U.S.R 33

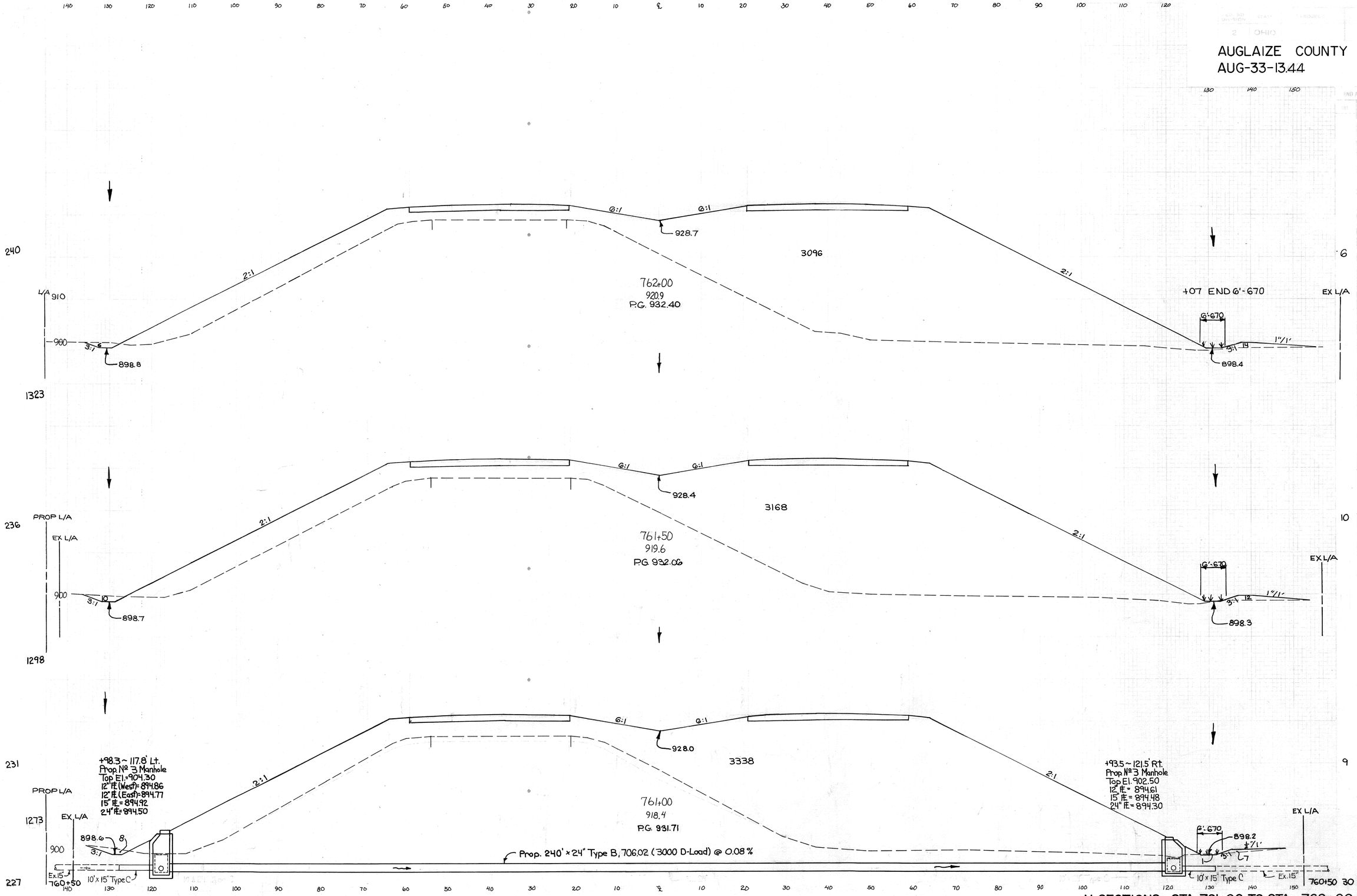
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

AUGLAIZE COUNTY
AUG-33-13.44



X-SECTIONS-STA. 759+50 TO STA. 760+50 U.S.R. 33

AUGLAIZE COUNTY
AUG-33-13.44



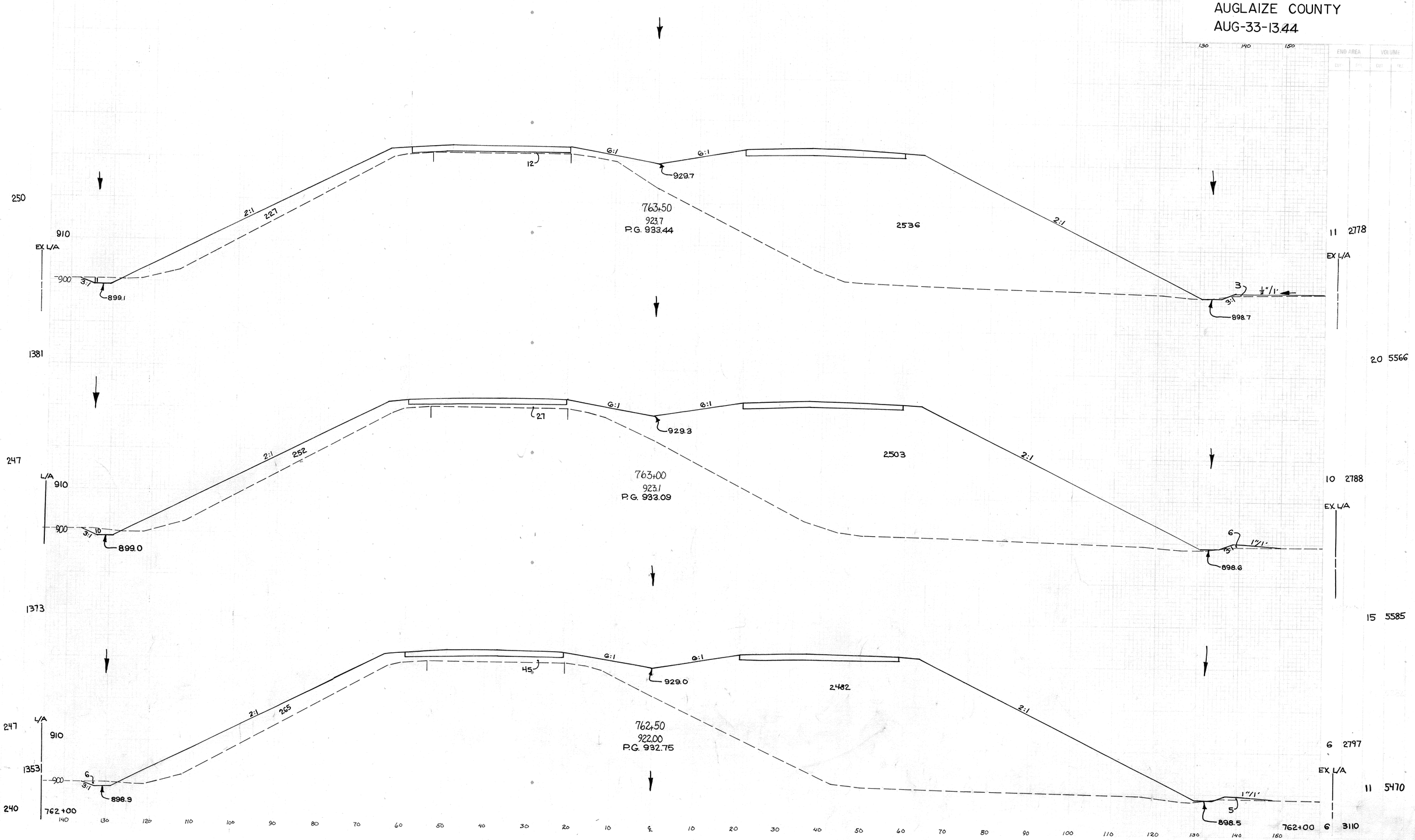
X-SECTIONS – STA. 761+00 TO STA. 762+00 – U.S.R. 3

98
345

AUGLAIZE COUNTY
AUG-33-13.44

END AREA		VOLUME	
CUT	FILL	CUT	FILL

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



X-SECTIONS - STA. 762+50 TO STA. 763+50 USR 33

20 5566

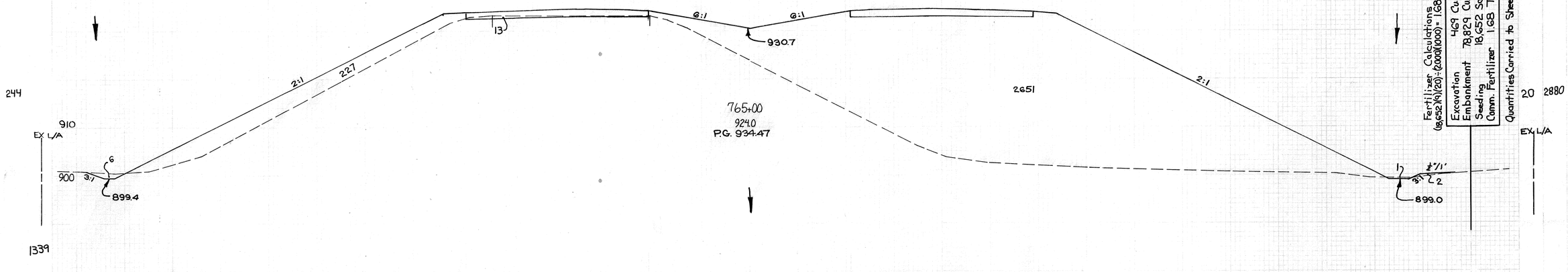
FED. RD. DIVISION 2 | STATE OHIO | PROJECT

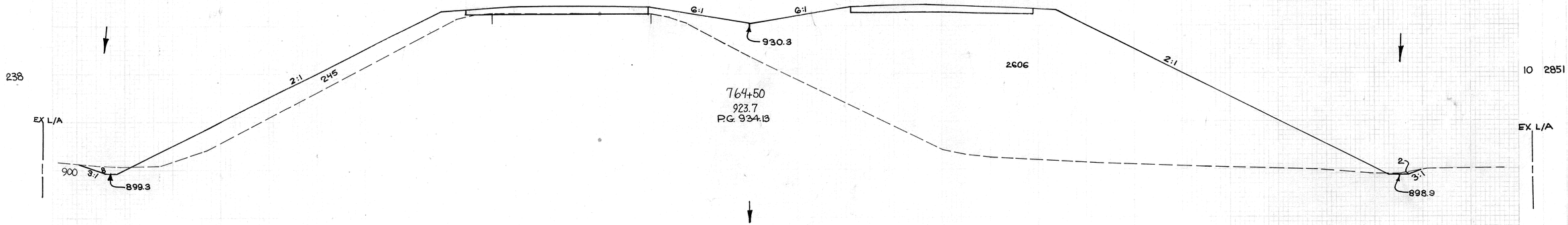
99
345

AUGLAIZE COUNTY
AUG-33-13.44

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

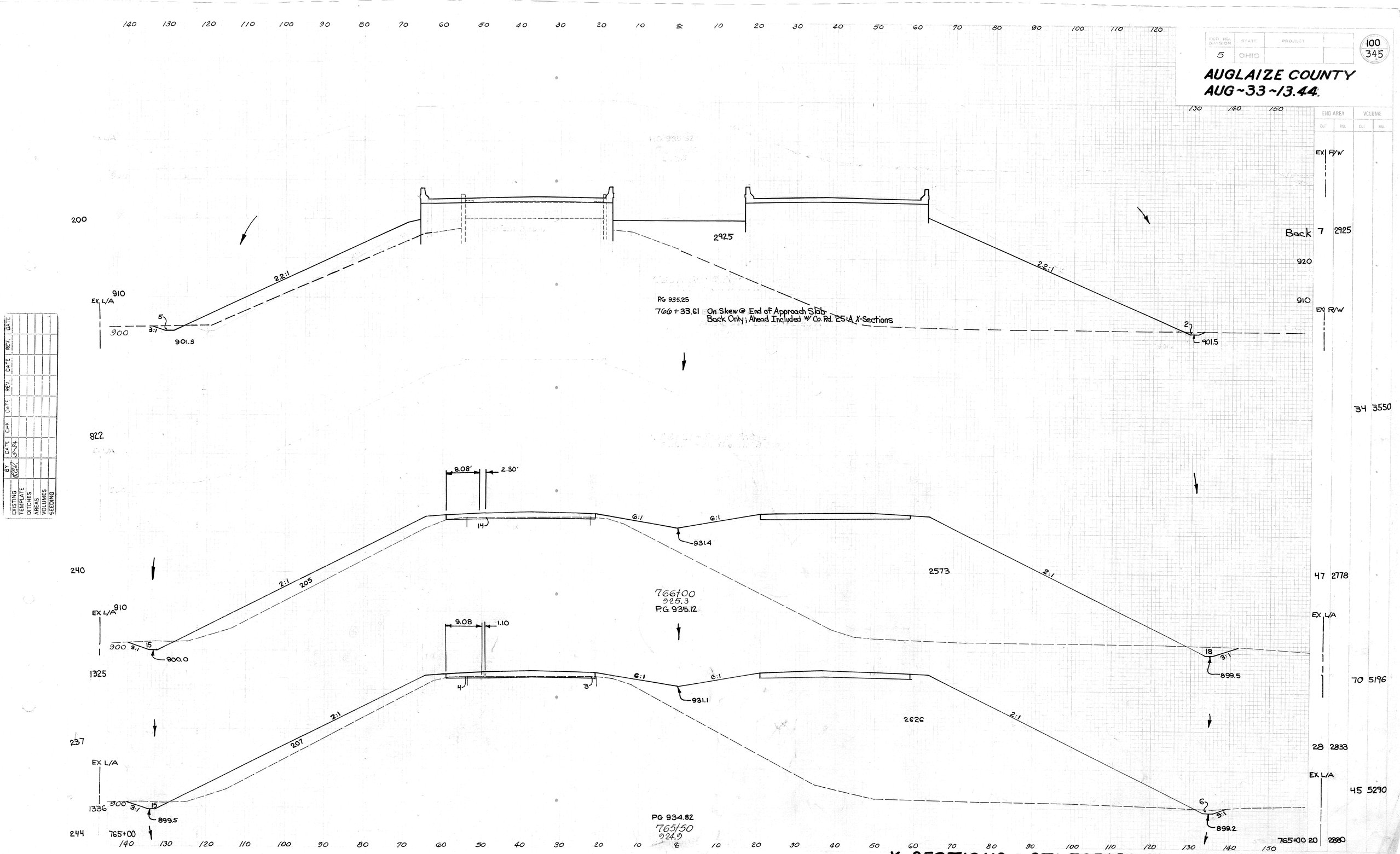
END AREA CUT | FILL — VOLUME CUT | FILL





28 5307

X-SECTIONS – STA. 764+00 TO STA. 765+00 U.S.R. 33



EXISTING	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
TEMPLATE	KGS	5-84						
DITCHES								
AREAS								
VOLUMES								
SEEDING								

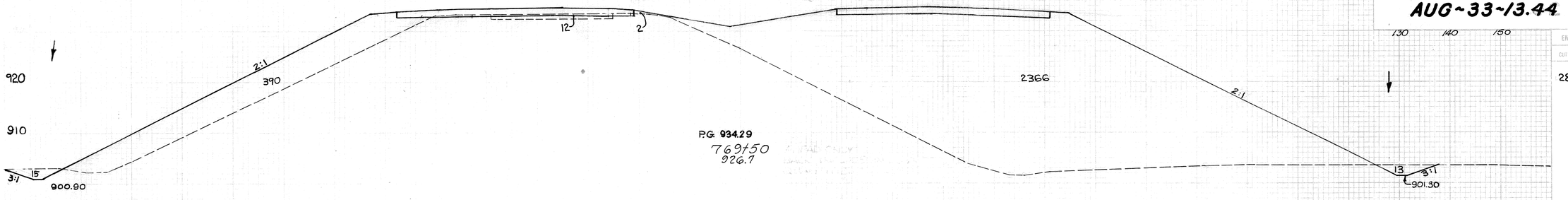
X~SECTIONS ~ STA. 765+50 TO STA. 766+34 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

101
345

AUGLAIZE COUNTY
AUG-33-13.44

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



216 920 910

P.G. 934.29
769+50
926.7

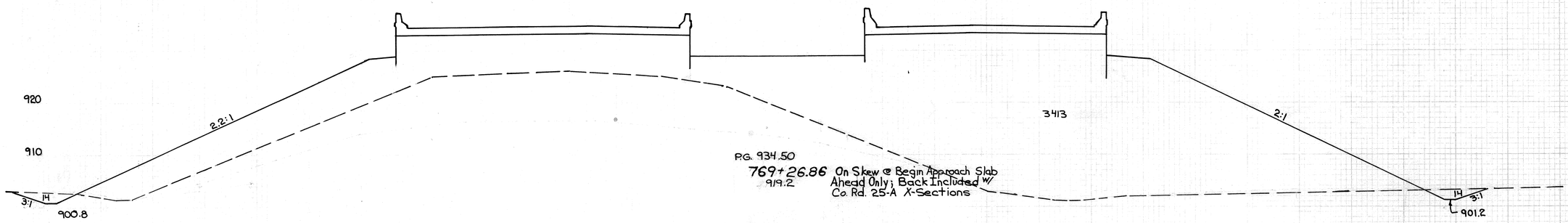
END AREA		VOLUME	
CUT	FILL	CUT	FILL
28	2768		

538

30 2644

	BY	DATE	CHK.	DATE
EXISTING				
TEMPLATE		5-64		
DITCHES				
AREAS				
VOLUMES				
SEEDING				

REV.	DATE	REV.	DATE



202 920 910

P.G. 934.50
769+26.86 On Skew @ Begin Approach Slab
919.2 Ahead Only; Back Included w/
Co. Rd. 25-A X-Sections

Ahead 28 3413

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

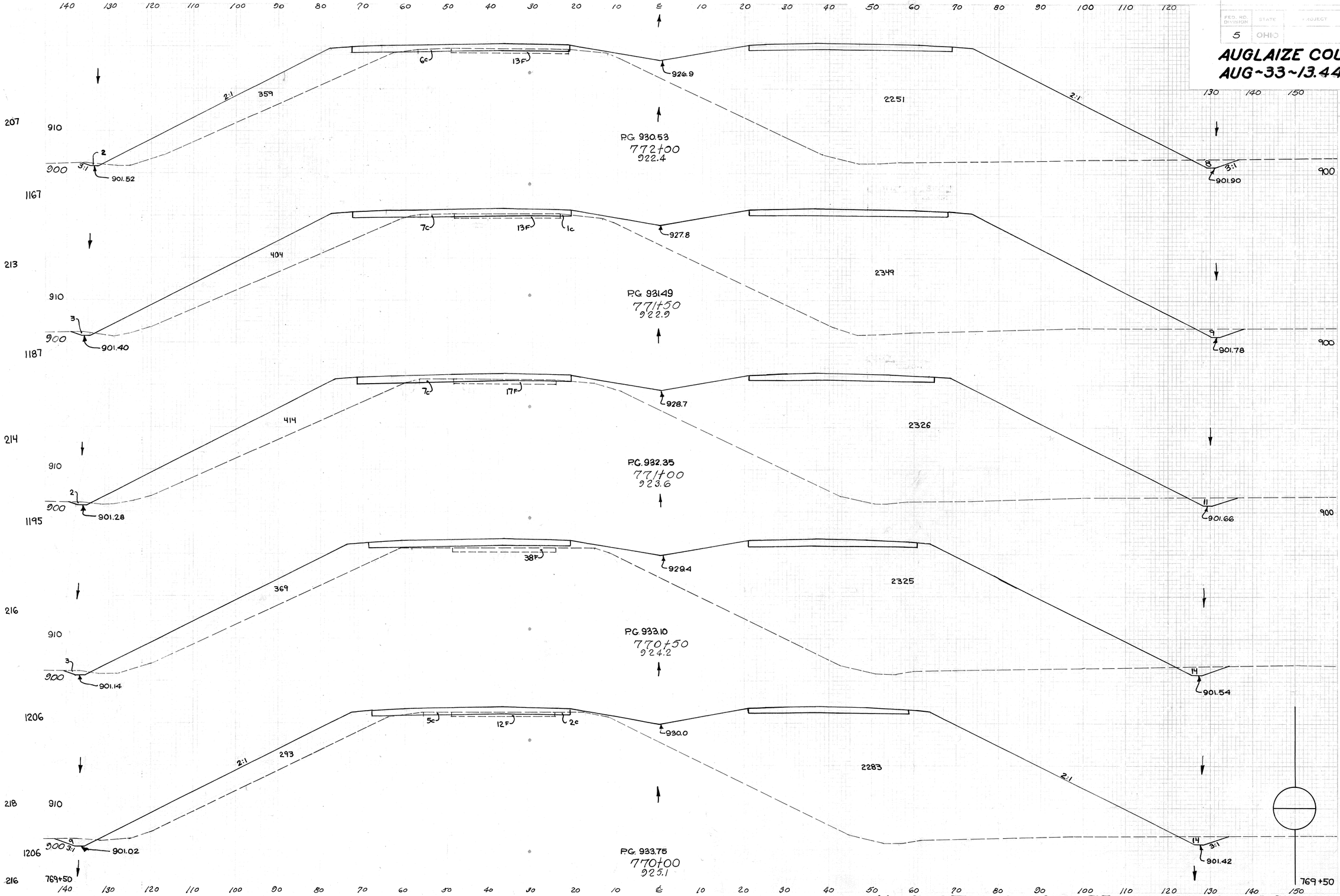
X-SECTIONS - STA. 769+27 TO STA. 769+50 U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

102
345

AUGLAIZE COUNTY
AUG-33-13.44

BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING TEMPLATE							
DITCHES							
AREAS							
VOLUMES							
SEEDING							

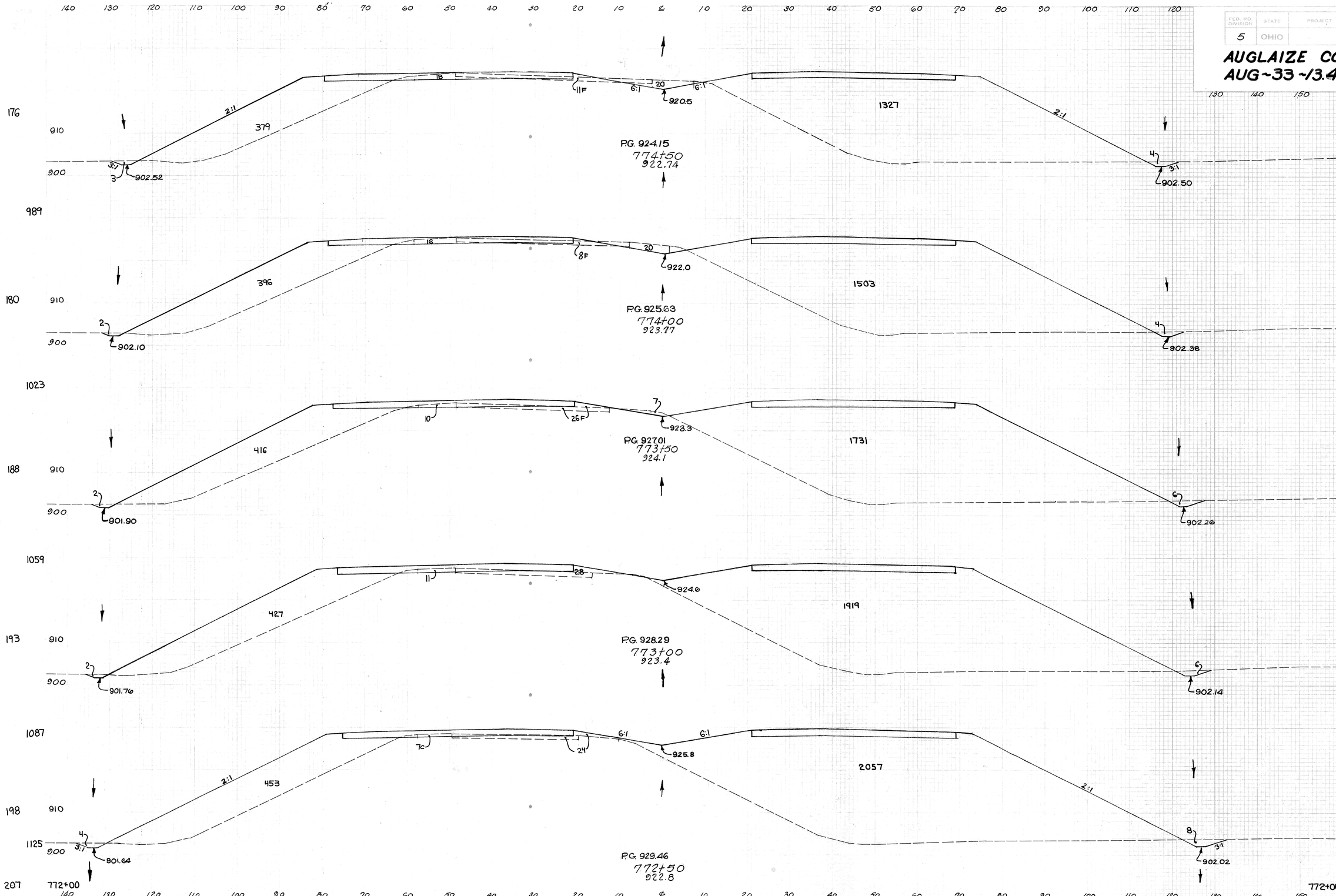


X-SECTIONS - STA. 770+00 TO STA. 772+00 - U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

103
345

AUGLAIZE COUNTY
AUG~33~13.44



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
45	1717		
		81	3356
42	1907		
		62	3778
25	2173		
		41	4211
19	2374		
		36	4545
19	2534		
		33	4775
16	2623		

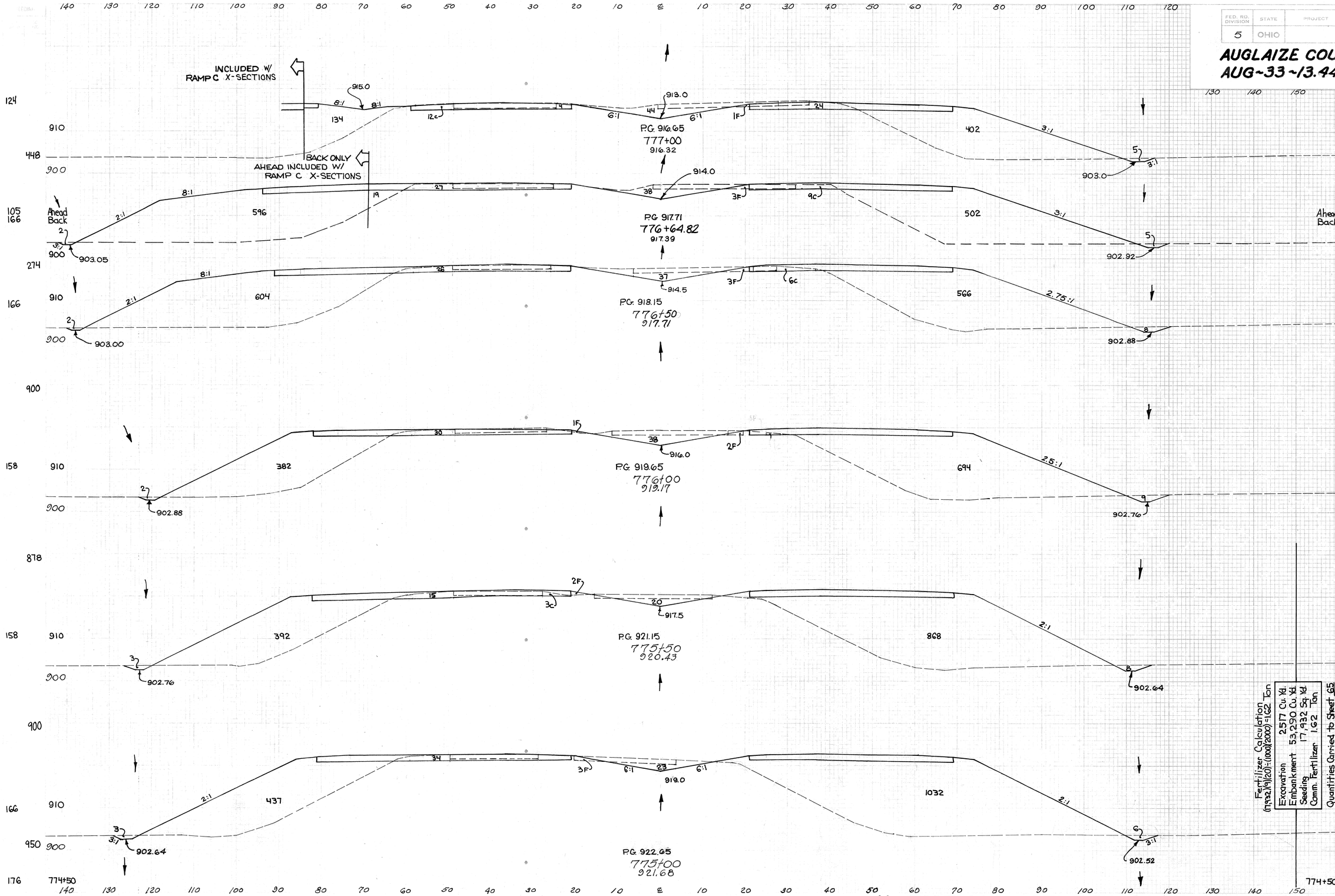
	BY	DATE	CHK.	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

X~SECTIONS ~ STA. 772+50 TO STA. 774+50 ~ U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

104
345

AUGLAIZE COUNTY
AUG~33~13.44



	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	89	537		
			110	692
Ahead	79	524		
Back	81	1120		
			44	630
	79	1173		
			148	2087
	80	1080		
			120	2169
	49	1262		
			107	2532
	66	1472		
			103	2953
774+50	45	1717		

Fertilizer Calculation
(17,932)(9)(20)÷(1000)(2000)=1.62 Ton

Excavation	2517 Cu. Yd.
Embankment	53,290 Cu. Yd.
Seeding	17,932 Sq. Yd.
Comm. Fertilizer	1.62 Ton

Quantities Carried to Sheet 65

	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE		5-84						
DITCHES								
AREAS								
VOLUMES								
SEEDING								

X-SECTIONS ~ STA. 775+00 TO STA. 777+00 ~ U.S.R. 33

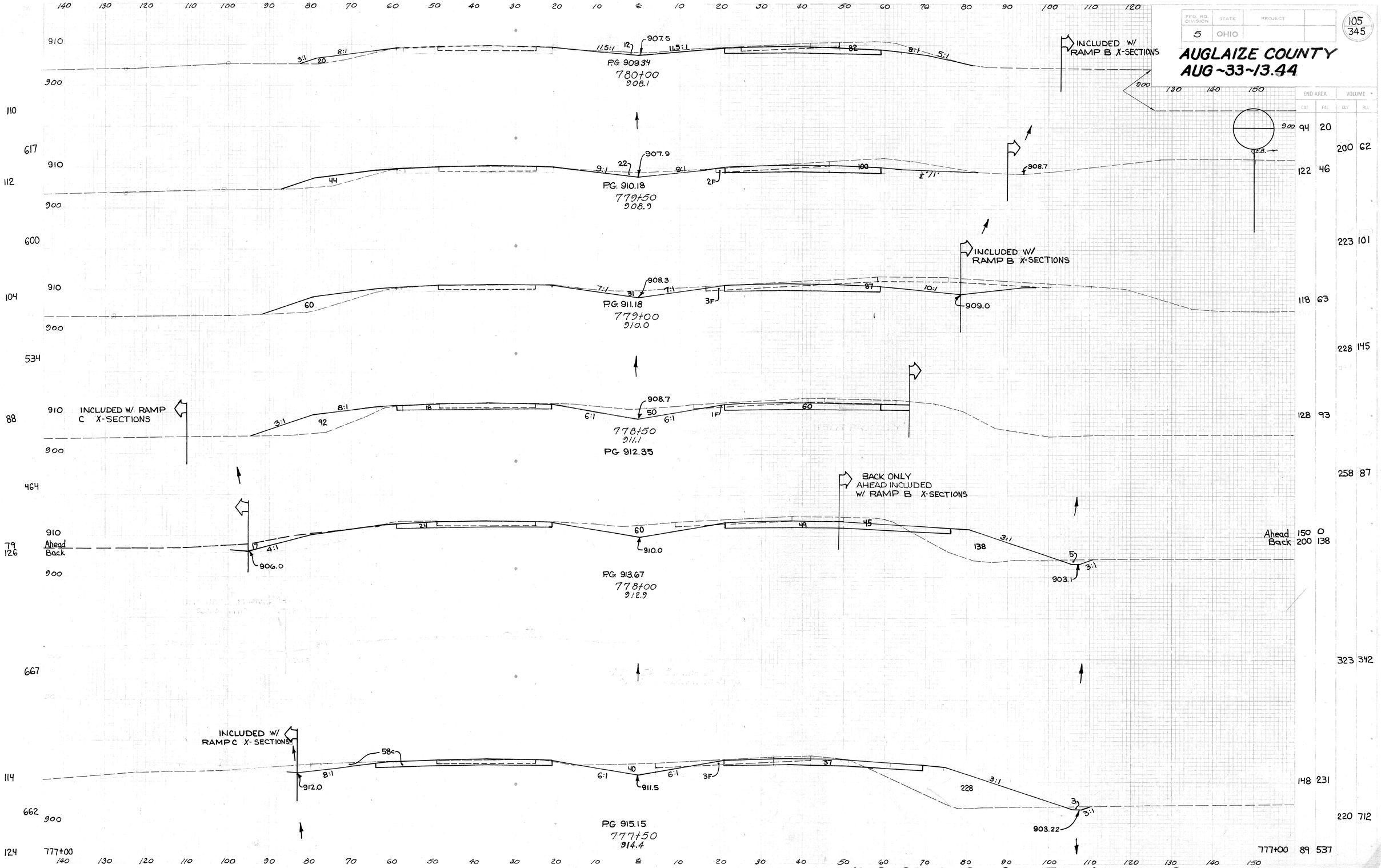
FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

105
345

AUGLAIZE COUNTY
AUG-33-13.44

	BY	DATE	CHK
EXISTING			
TEMPLATE			
DITCHES			
AREAS			
VOLUMES			
SEEDING			

DATE	REV.	DATE	REV.	DATE	CHK



X-SECTIONS - STA. 777+50 TO STA. 780+00 - U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

106
345

AUGLAIZE COUNTY
AUG-33-13.44

	DATE	REV.	DATE	REV.	DATE	CHK.	DATE	BY
EXISTING							5-84	KCA
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

910 / 900

783+50
905.8

910 / 900

783+00
905.7

20 — 910 / 900

782+72.97 Meet Exist. Pav't
905.7

289 — 910 / 900

BACK ONLY

P.G. 907.65
781+72.97 End Full Depth Pav't
906.1 Begin Feather

125 — 910 / 900

906.4

P.G. 907.76
781+50
906.4

406 — 910 / 900

906.8

P.G. 908.13
781+00
906.8

462 — 910 / 900

907.2

P.G. 908.65
780+50
907.5

545 — 780+00

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
900				
0 0				
0 0				
Ahead 0 0 / Back 31 0				
29 0				
36 0				
56 37				
24 13				
62 30				
42 19				
126 37				
780+00 94 20				

Fertilizer Calculation
(1827 Yd)(2)÷(1000/2000)=0.17 Ton

Excavation	273 Cu.Yd.
Embankment	104 Cu.Yd.
Seeding	1827 Sq.Yd.
Comm. Fertilizer	0.17 Ton

Quantities Carried to Sht. 66

X-SECTIONS - STA. 780+50 TO STA. 783+50 - U.S.R. 33

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

107
345

SPIRAL S-2 DATA
L_s = 250.00' X_c = 249.95'
LC = 249.98' L.T. = 166.69'
D_c = 1° 58' 28.1" S.T. = 83.35'
K = 124.99' θ_s = 2° 28' 05.1"
Y_c = 3.59'

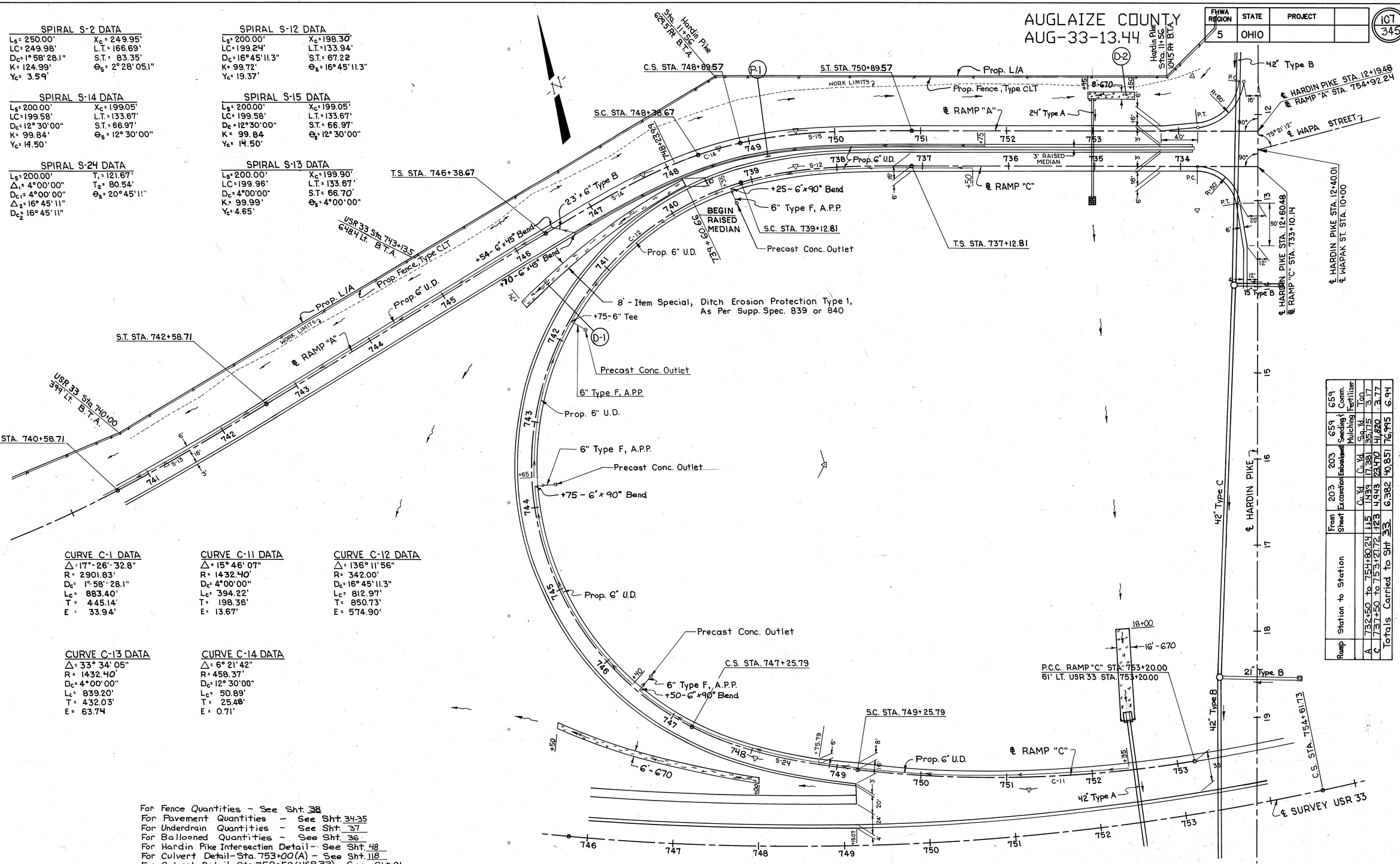
SPIRAL S-12 DATA
L_s = 200.00' X_c = 198.30'
LC = 199.24' L.T. = 133.94'
D_c = 16° 45' 11.3" S.T. = 67.22
K = 99.72' θ_s = 16° 45' 11.3"
Y_c = 19.37'

SPIRAL S-14 DATA
L_s = 200.00' X_c = 199.05'
LC = 199.58' L.T. = 133.67'
D_c = 12° 30' 00" S.T. = 66.97'
K = 99.84' θ_s = 12° 30' 00"
Y_c = 14.50'

SPIRAL S-15 DATA
L_s = 200.00' X_c = 199.05'
LC = 199.58' L.T. = 133.67'
D_c = 12° 30' 00" S.T. = 66.97'
K = 99.84 θ_s = 12° 30' 00"
Y_c = 14.50'

SPIRAL S-24 DATA
L_s = 200.00' T_1 = 121.67'
Δ_1 = 4° 00' 00" T_2 = 80.54'
D_{c1} = 4° 00' 00" θ_s = 20° 45' 11"
Δ_2 = 16° 45' 11"
D_{c2} = 16° 45' 11"

SPIRAL S-13 DATA
L_s = 200.00' X_c = 199.90'
LC = 199.96' L.T. = 133.67'
D_c = 4° 00' 00" S.T. = 66.70'
K = 99.99' θ_s = 4° 00' 00"
Y_c = 4.65'



CURVE C-1 DATA
Δ = 17° - 26' - 32.8"
R = 2901.83'
D_c = 1° - 58' - 28.1"
L_c = 883.40'
T = 445.14'
E = 33.94'

CURVE C-11 DATA
Δ = 15° 46' 07"
R = 1432.40'
D_c = 4° 00' 00"
L_c = 394.22'
T = 198.36'
E = 13.67'

CURVE C-12 DATA
Δ = 136° 11' 56"
R = 342.00'
D_c = 16° 45' 11.3"
L_c = 812.97'
T = 850.73'
E = 574.90'

CURVE C-13 DATA
Δ = 33° 34' 05"
R = 1432.40'
D_c = 4° 00' 00"
L_c = 839.20'
T = 432.03'
E = 63.74

CURVE C-14 DATA
Δ = 6° 21' 42"
R = 458.37'
D_c = 12° 30' 00"
L_c = 50.89'
T = 25.48'
E = 0.71'

Ramp	Station to Station	From Sheet	203 Excavation	203 Embankment	659 Seeding & Mulching	659 Comm. Fertilizer
			Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton
A	732+50 to 754+80.24	1.15	1,439	17,381	35,175	3.17
C	737+50 to 753+27.72	1.23	4,943	23,470	41,820	3.77
Totals Carried to Sht 33			6,382	40,851	76,995	6.94

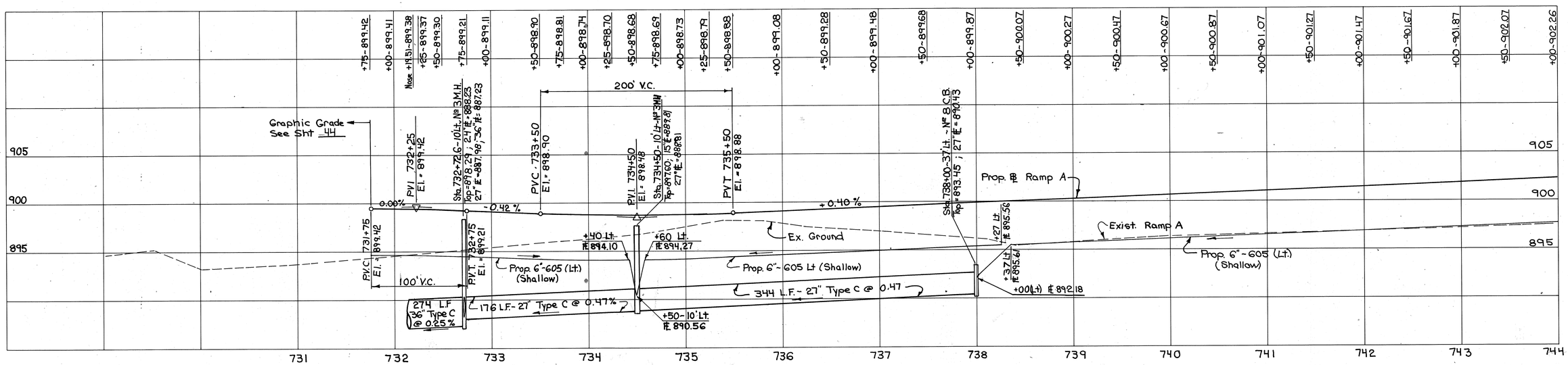
For Fence Quantities - See Sht. 38
For Pavement Quantities - See Sht. 34-35
For Underdrain Quantities - See Sht. 37
For Ballooned Quantities - See Sht. 36
For Hardin Pike Intersection Detail - See Sht. 48
For Culvert Detail - Sta. 753+00 (A) - See Sht. 118
For Culvert Detail - Sta. 752+50 (USR 33) - See Sht. 91
For Storm Sewer Detail - Hardin Pike West - See Sht. 154-155

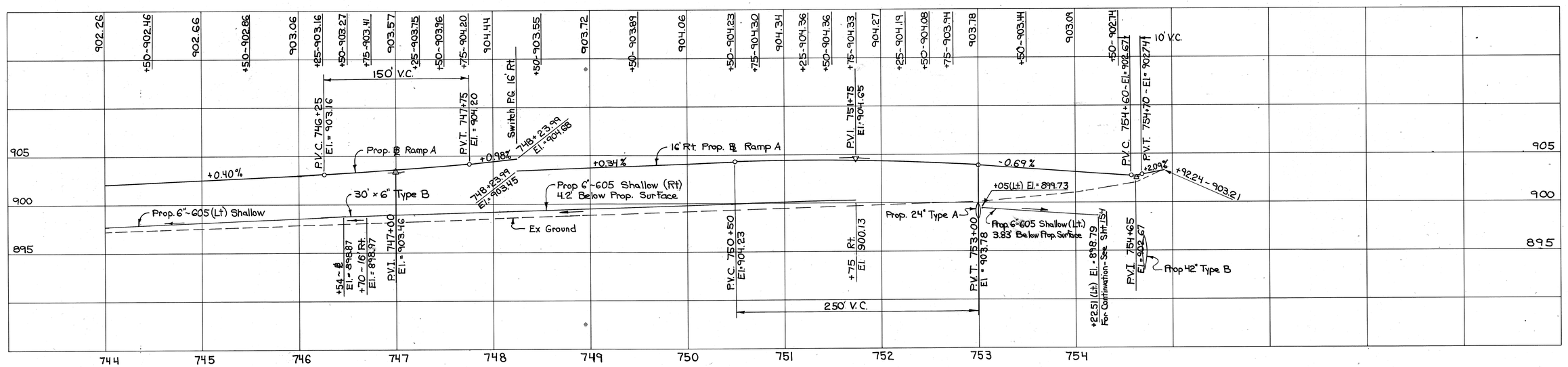
PLAN RAMP "A" & RAMP "C" (HARDIN PIKE)

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

108
345



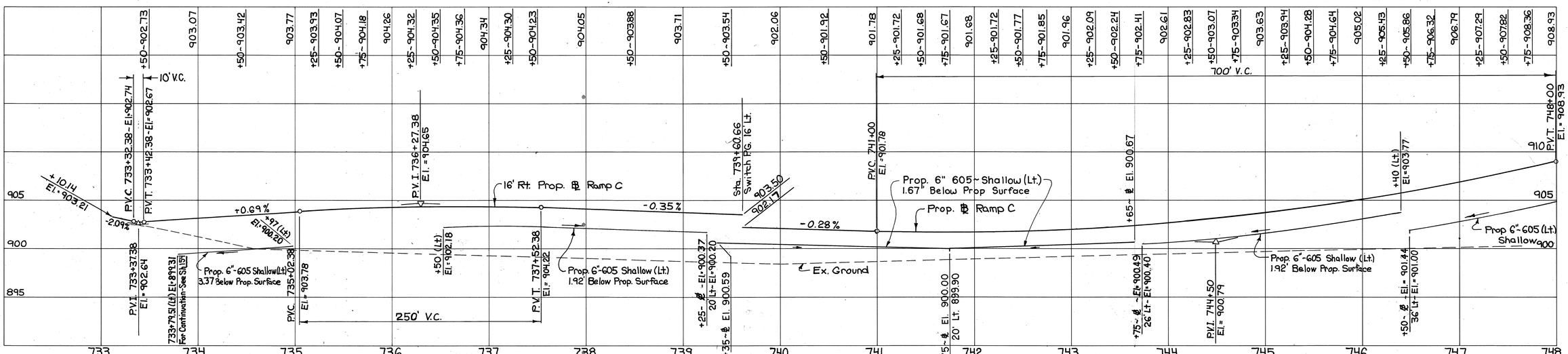


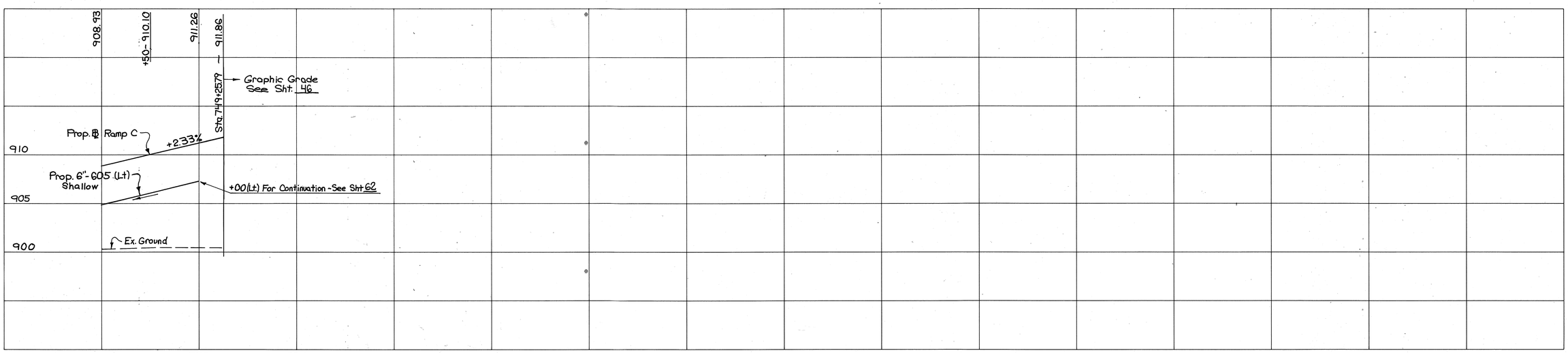
PROFILE GRADE RAMP A (HARDIN PIKE)

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

109
345





PROFILE GRADE RAMP C (HARDIN PIKE)

110
345

AUGLAIZE COUNTY
AUG- 33 -13.44

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

90500 / 90000 / 89500 / 89000

Back Only; Ahead Included w/ USR 33 X-Sections

See USR 33 X-Sections

35 Ahead
43 Back

898.74 | 898.51 | 900.67
6:1 | 6:1 | 5:1
3:1 | 5 | 49 | ℄ 899.0 | 10 | 13
℄ 896.2

734+00
897.0
P.G. 898.74

PROP. 27" STORM

EDGE PAV'T USR 33

SEE USR 33 X-SECTIONS STA. 733+50

217

898.90 | 899.67 | 900.52
12
6 | 45
℄ 895.5

733+50
896.5
P.G. 898.90

SEE USR 33 X-SECTIONS STA. 733+00

208

899.11 | 899.88 | 900.37
12
10 | 60
℄ 895.0

PROP. 27" STORM

733+00
895.7
P.G. 899.11

SEE USR 33 X-SECTIONS STA. 732+50

228

Nº3 M.H.
732+72.6 - 10' LT
TOP 898.29
℄ 24" 888.23
℄ 27" 887.98
℄ 36" 887.23

899.30 | 899.89 | 900.22
6:1
3:1 | 10 | 73 | 10
℄ 894.7

42

PROP. 36" STORM

732+50
894.9
P.G. 899.37

AHEAD ONLY; BACK INCLUDED W/ USR 33 X-SECTIONS

32-1972
894.7

Ahead 5 49
Back 18 59

33 96

18 45

37 97

22 60

39 123

20 73

X SECTIONS ON RAMP A AT HARDIN PIKE STA. 732+50 TO STA. 734+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

215
345

AUGLAIZE COUNTY
AUG-33-13.44

SEEDING
END WIDTH | SIDE SLOPE

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

END AREA CUT | END AREA FILL | VOLUME CUT | VOLUME FILL

36 — 203 — 37 — 208 — 38 — 194 — 32 — 189 — 36 — 203 — 37 — 211 — 39

895 / 890

8 14 — 12 26 — 5 14 — 11 18 — 7 5 — 20 12 — 15 8 — 21 30 — 8 24 — 16 51 — 9 31 — 14 73 — 30+00 6 48

1/A — 3 1/8"/1' — 5 — 3 — 11 — 4:1 — 3 — 3:1 — R/W — ℄ 891.5 — ℄ 891.2

P.G. 893.29
33+50
892.3

1/4"/1' — 6 — 4 — 4 — 5 — ℄ 891.3 — ℄ 890.9

P.G. 892.75
33+00
891.9

Included in U.S.R.
33 X-Sections

1/A — 1 — 1/4"/1' — 4 — 1 — 4:1 — 6 — ℄ 890.5 — ℄ 890.8

P.G. 892.50
32+50
891.6

1/2"/1' — 7 — 1 — 3:1 — 15

15" Type B → — 58' x 15" Type B @ 3.62% — P.G. 892.79 — 32+00 — 892.1

Sta. 31+90 - 36' Lt.
N° 8-A Catch Basin
Top. El. = 889.80
42" ℄ = 883.66
15" ℄ = 885.91

Sta. 31+90 - 22' Rt.
N° 8 Catch Basin
Top. El. 890.60
15" ℄ 888.01

1"/1' — 24 — 1 — 4:1 — 7 — ℄ 890.2 — ℄ 891.3

P.G. 893.36
31+50
892.2

1/A — 1 — 1"/1' — 31 — 4:1 — 8 — 3:1 — R/W — ℄ 890.9 — ℄ 891.9

P.G. 893.93
31+00
892.7

X SECTIONS STA. 31+00 TO STA. 33+50 SERVICE RD. NO. 1

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

107
345

SPIRAL S-2 DATA

L_s = 250.00'	X_c = 249.95'
LC = 249.98'	L.T. = 166.69'
D_c = 1° 58' 28.1"	S.T. = 83.35'
K = 124.99'	θ_s = 2° 28' 05.1"
Y_c = 3.59'	

SPIRAL S-12 DATA

L_s = 200.00'	X_c = 198.30'
LC = 199.24'	L.T. = 133.94'
D_c = 16° 45' 11.3"	S.T. = 67.22
K = 99.72'	θ_s = 16° 45' 11.3"
Y_c = 19.37'	

SPIRAL S-14 DATA

L_s = 200.00'	X_c = 199.05'
LC = 199.58'	L.T. = 133.67'
D_c = 12° 30' 00"	S.T. = 66.97'
K = 99.84'	θ_s = 12° 30' 00"
Y_c = 14.50'	

SPIRAL S-15 DATA

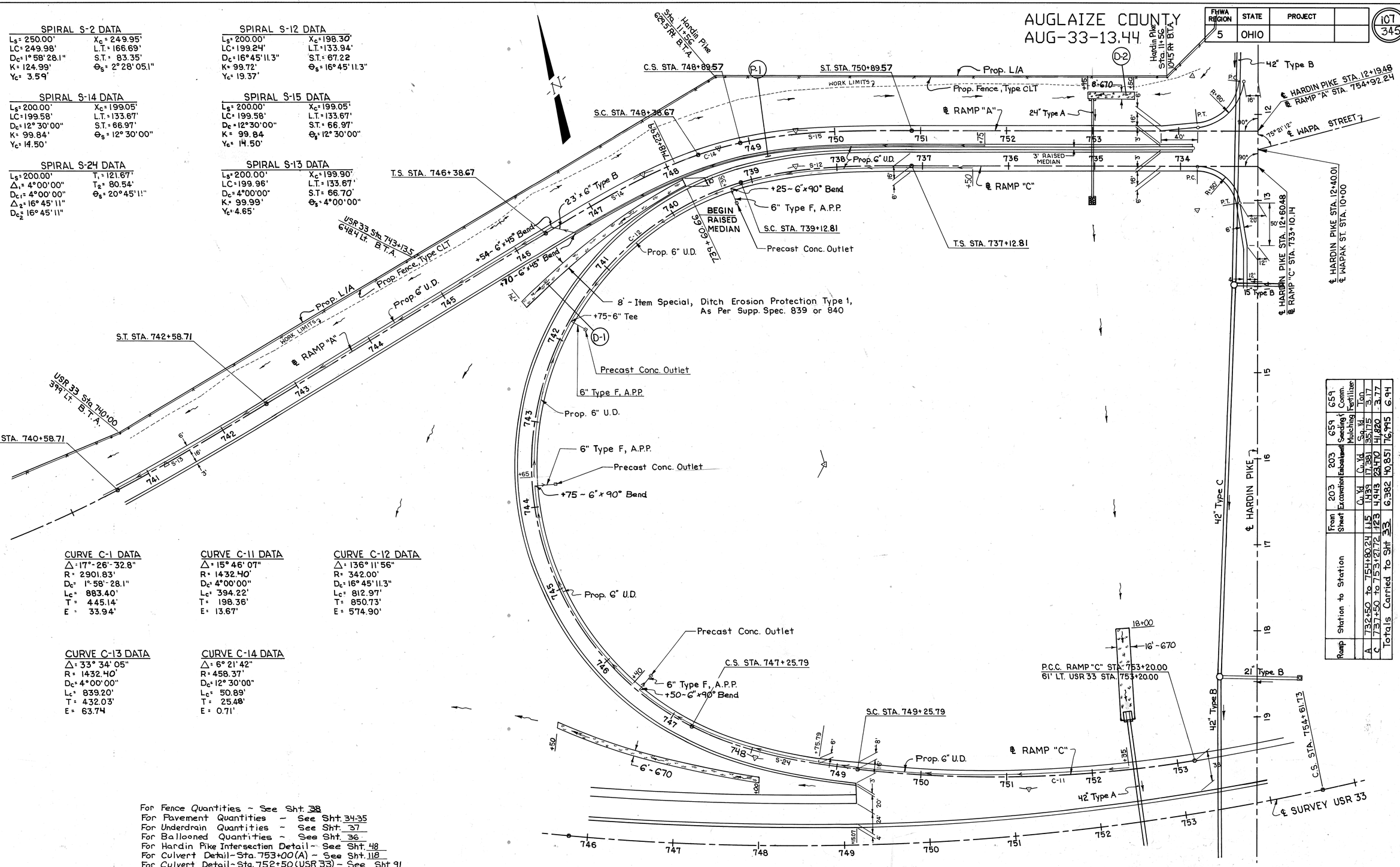
L_s = 200.00'	X_c = 199.05'
LC = 199.58'	L.T. = 133.67'
D_c = 12° 30' 00"	S.T. = 66.97'
K = 99.84	θ_s = 12° 30' 00"
Y_c = 14.50'	

SPIRAL S-24 DATA

L_s = 200.00'	T_1 = 121.67'
Δ_1 = 4° 00' 00"	T_2 = 80.54'
D_{c1} = 4° 00' 00"	θ_s = 20° 45' 11"
Δ_2 = 16° 45' 11"	
D_{c2} = 16° 45' 11"	

SPIRAL S-13 DATA

L_s = 200.00'	X_c = 199.90'
LC = 199.96'	L.T. = 133.67'
D_c = 4° 00' 00"	S.T. = 66.70'
K = 99.99'	θ_s = 4° 00' 00"
Y_c = 4.65'	



CURVE C-1 DATA

Δ = 17° - 26' - 32.8"	
R = 2901.83'	
D_c = 1° - 58' - 28.1"	
L_c = 883.40'	
T = 445.14'	
E = 33.94'	

CURVE C-11 DATA

Δ = 15° 46' 07"	
R = 1432.40'	
D_c = 4° 00' 00"	
L_c = 394.22'	
T = 198.36'	
E = 13.67'	

CURVE C-12 DATA

Δ = 136° 11' 56"	
R = 342.00'	
D_c = 16° 45' 11.3"	
L_c = 812.97'	
T = 850.73'	
E = 574.90'	

CURVE C-13 DATA

Δ = 33° 34' 05"	
R = 1432.40'	
D_c = 4° 00' 00"	
L_c = 839.20'	
T = 432.03'	
E = 63.74	

CURVE C-14 DATA

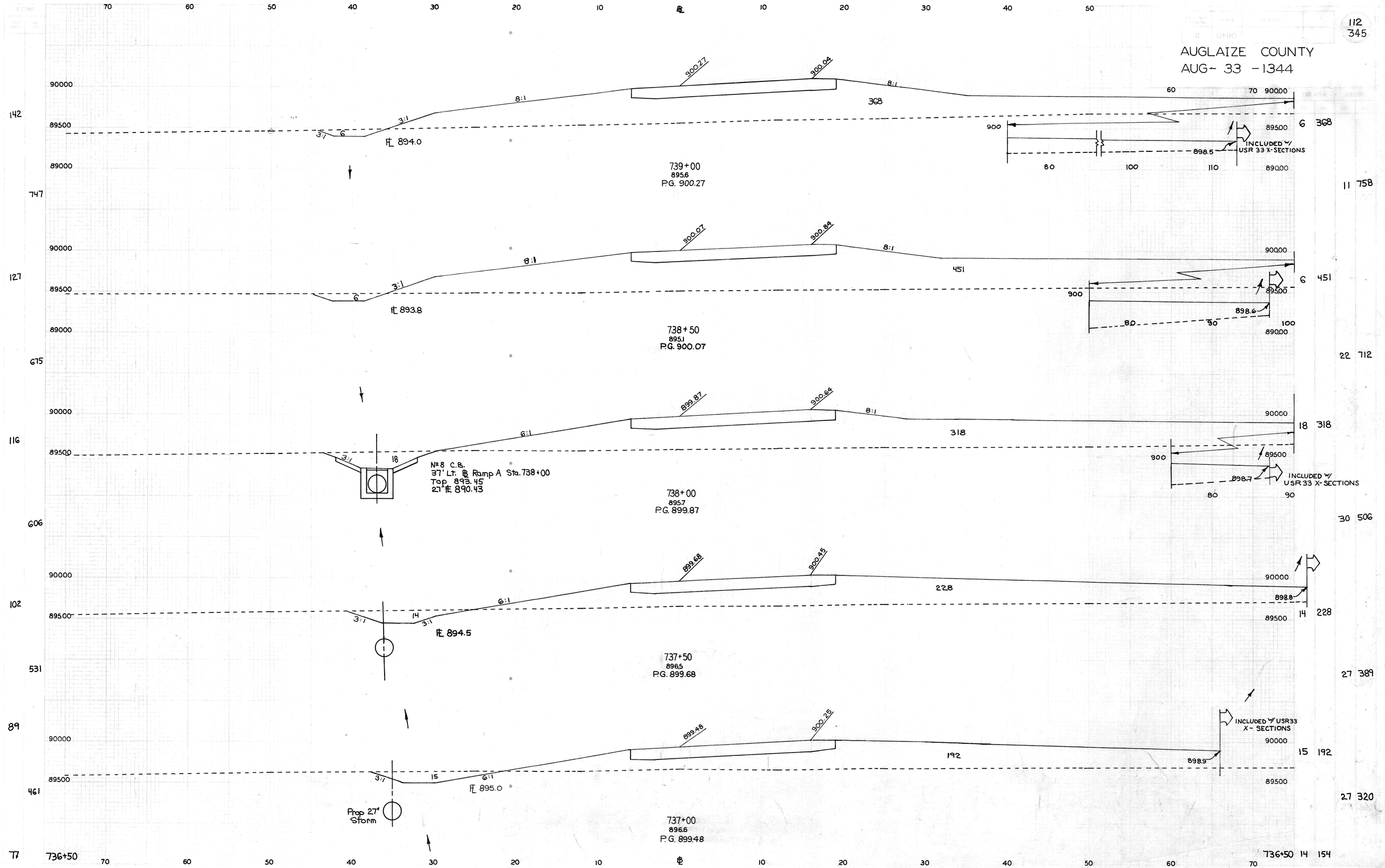
Δ = 6° 21' 42"	
R = 458.37'	
D_c = 12° 30' 00"	
L_c = 50.89'	
T = 25.48'	
E = 0.71'	

Ramp	Station to Station	From Sheet	203 Excavation	203 Embankment	659 Seeding & Mulching	659 Comm. Fertilizer
			Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton
A	732+50 to 754+80.24	1.15	1,439	17,381	35,175	3.17
C	737+50 to 753+27.72	1.23	4,943	23,470	41,820	3.77
	Totals Carried to Sht 33		6,382	40,851	76,995	6.94

For Fence Quantities - See Sht. 38
For Pavement Quantities - See Sht. 34-35
For Underdrain Quantities - See Sht. 37
For Ballooned Quantities - See Sht. 36
For Hardin Pike Intersection Detail - See Sht. 48
For Culvert Detail - Sta. 753+00 (A) - See Sht. 118
For Culvert Detail - Sta. 752+50 (USR 33) - See Sht. 91
For Storm Sewer Detail - Hardin Pike West - See Sht. 154-155

PLAN RAMP "A" & RAMP "C" (HARDIN PIKE)

AUGLAIZE COUNTY
AUG- 33 -1344



X SECTIONS ON RAMP A AT HARDIN PIKE STA. 737+00 TO STA. 739+00

113
345

AUGLAIZE COUNTY
AUG- 33 -1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

375 | 90000 | 895.00 | 901.27 | 901.80 | 8:1 | 3:1 | 3:1 | 7 | FL 895.4 | 472 | 8:1 | 90000 | 7 472 | 900 | 89500 | 897.9 | AHEAD INCLUDED W/ RAMPC X-SECTIONS BACK INCLUDED W/ USR33 X-SECTIONS | 80 | 360 | 12 732

741+50
897.2
P.G. 901.27

1872 | 900.00 | 895.00 | 901.07 | 901.73 | 8:1 | 6 | FE 895.2 | 319 | 8:1 | 90000 | 6 319 | 89500 | INCLUDED W/ USR 33 X-SECTIONS | 898.0 | 80 | 260 | 270 | 21 466

741+00
897.1
P.G. 901.07

1500 | 90000 | 895.00 | 900.87 | 901.64 | 8:1 | 3:1 | 3:1 | 17 | FL 895.1 | 184 | 8:1 | 90000 | 17 184 | 89500 | 898.15 | 80 | 200 | 210

740+50
897.6
P.G. 900.87

1208 | 90000 | 895.00 | 900.67 | 901.41 | 8:1 | 12 | FL 894.9 | 285 | 8:1 | 90000 | 12 28 | 89500 | 898.3 | 80 | 160 | 27 434

740+00
897.2
P.G. 900.67

1003 | 900.00 | 895.00 | 900.47 | 901.24 | 8:1 | 3:1 | 3:1 | 6 | FL 894.5 | 334 | 8:1 | 90000 | 6 334 | INCLUDED W/ USR 33 X-SECTIONS | 898.4 | 80 | 130 | 140 | 89000 | 17 573

831 | 890.00

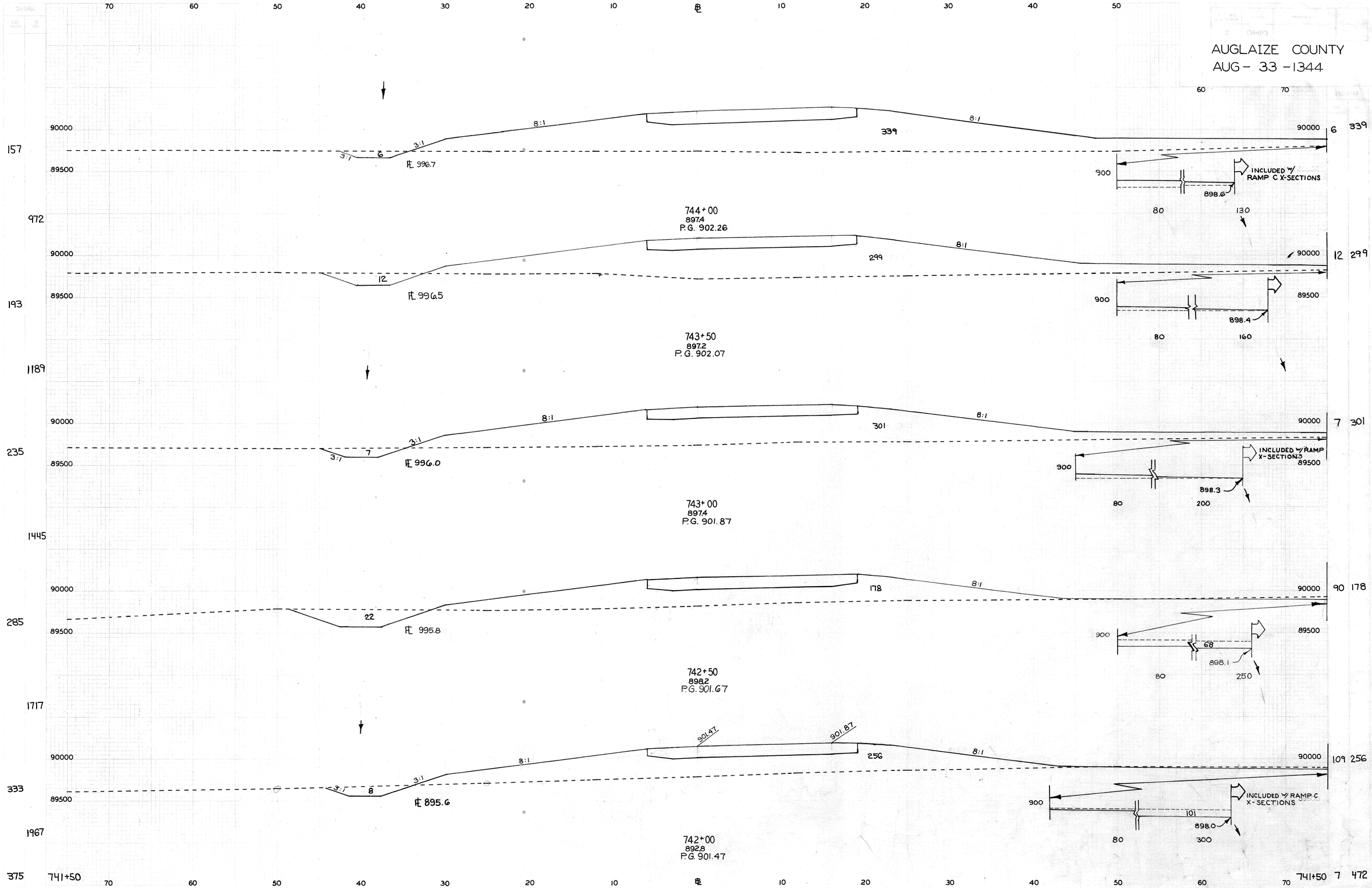
739+50
896.4
P.G. 900.47

132 | 739+00 | 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 739+00 | 6 368 | 11 650

X SECTIONS ON RAMP A AT HARDIN PIKE STA. 739+50 TO STA. 741+50

114
345

AUGLAIZE COUNTY
AUG - 33 - 1344



X SECTIONS ON RAMP A AT HARDIN PIKE STA. 742 + 00 TO STA. 744 + 00

115
345

AUGLAIZE COUNTY
AUG- 33 -1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

INCLUDED W/ RAMP C X-SECTIONS

70 — 900.00 — 895.00 — 392
5 ℄ 8:1 — 8:1 — 153 — 8:1
899.3 — 900.9
5 153

746+50
899.7
P.G. 903.27

5 323

Fertilizer Calculation
(35,175.91)/(20)=(1000/2000)=3.17 Ton

Excavation	1439 Cu. Yd.
Embankment	17,381 Cu. Yd.
Seeding	3.17 Sq. Yd.
Comm. Fertilizer	35,175 Ton

Quantities Carried to Sheet 101

71 — 900.00 — 895.00 — 433
8:1 — 8:1 — 196
899.4 — 899.7
0 196

746+00
898.9
P.G. 903.06

2 365

85 — 900.00 — 895.00 — 525
2 ℄ 3:1 — 3:1 — 8:1 — 198 — 8:1
898.5 — 898.9
2 198

745+50
898.7
P.G. 902.86

6 388

INCLUDED W/ RAMP C X-SECTIONS

104 — 900.00 — 895.00 — 647
4 ℄ 3:1 — 3:1 — 8:1 — 221 — 8:1
898.2 — 898.8
4 221

745+00
898.7
P.G. 902.66

900 — 898.7 — INCLUDED W/ RAMP C X-SECTIONS
80 — 100
7 468

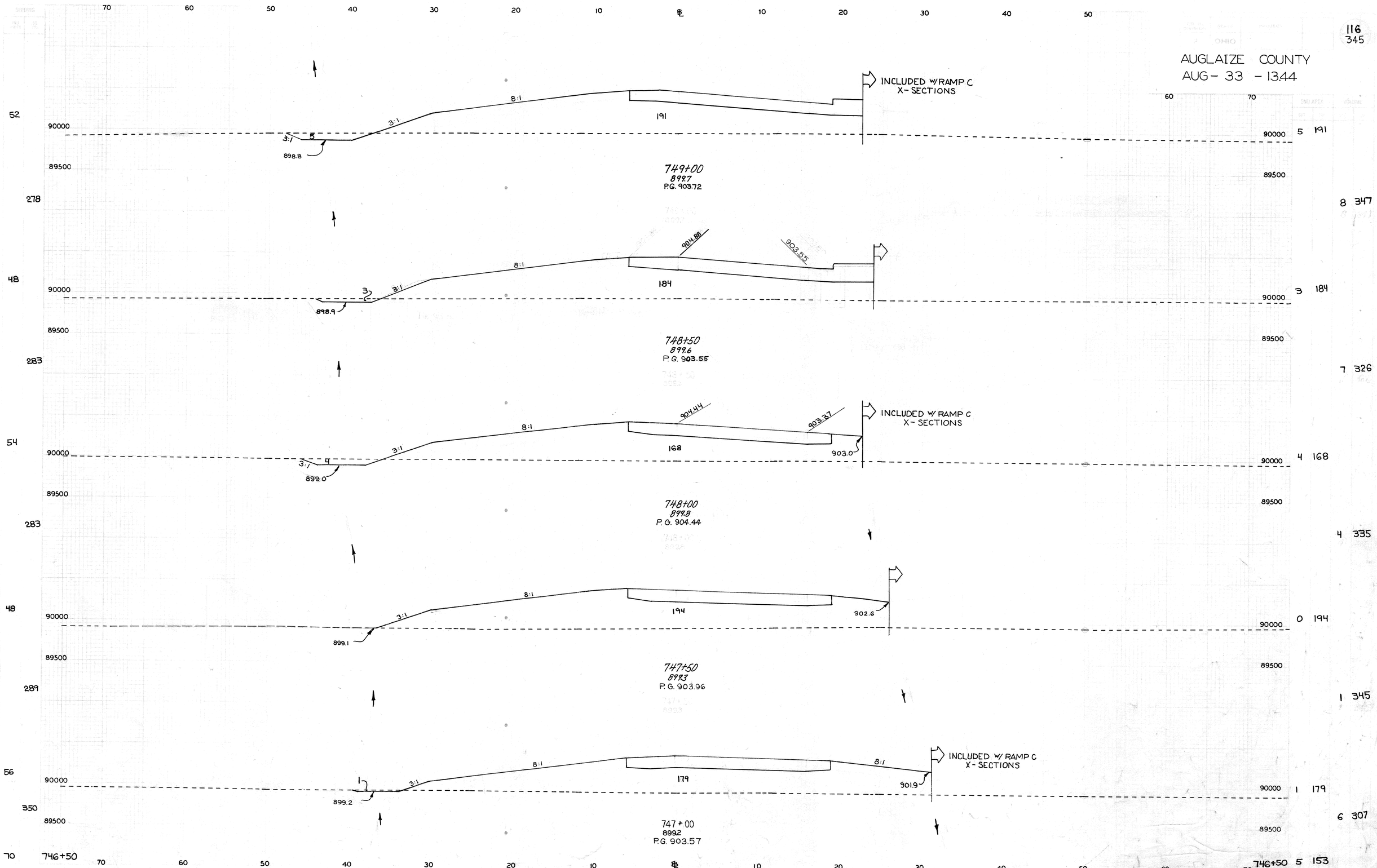
129 — 900.00 — 895.00 — 794
4 ℄ 3:1 — 3:1 — 8:1 — 284 — 8:1
897.3 — ℄ 897.3
4 284
9 577

744+50
897.9
P.G. 902.46

157 744+00 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 744+00 6 339

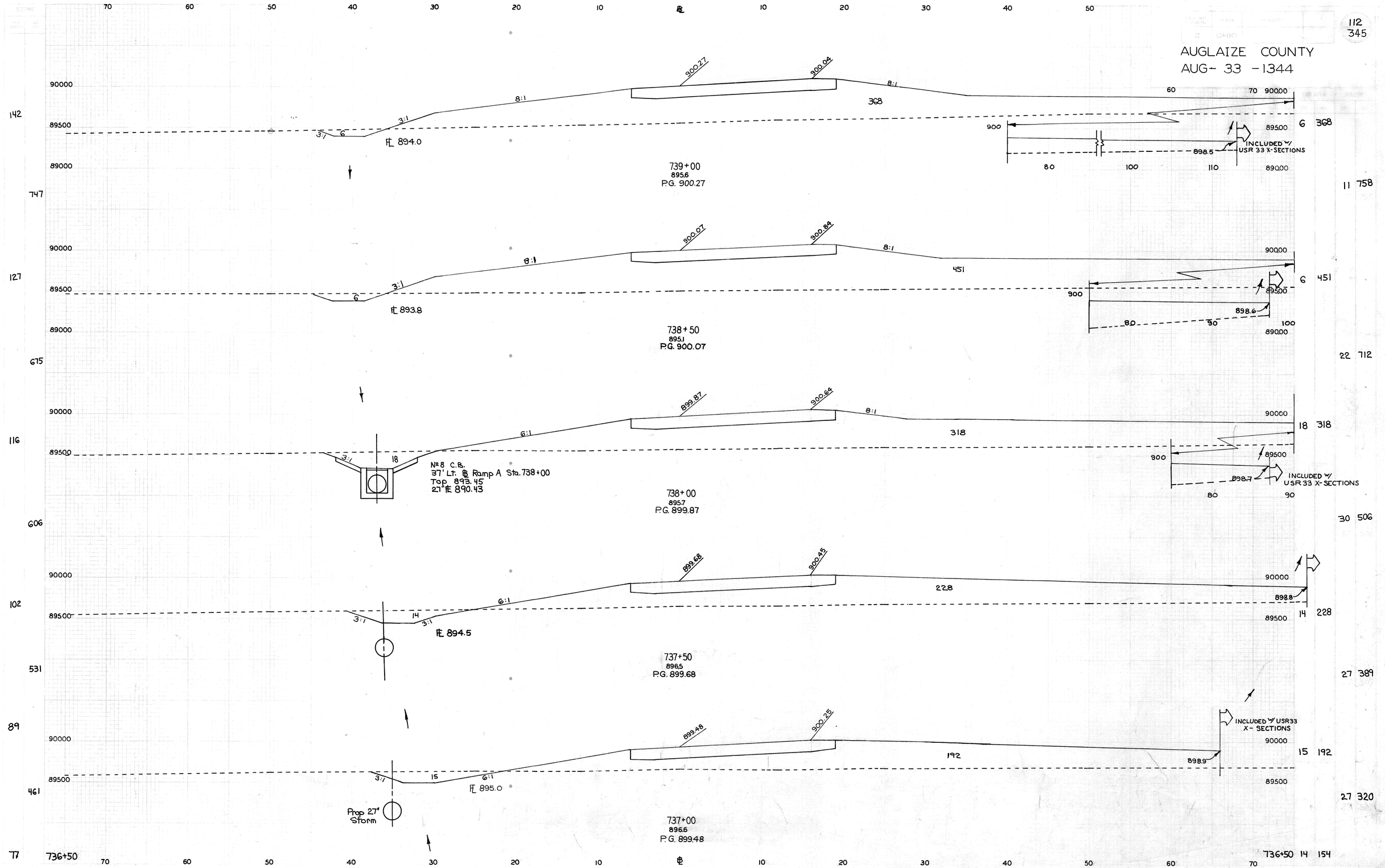
X SECTIONS ON RAMP A AT HARDIN PIKE STA. 744+50 TO STA. 746+50

AUGLAIZE COUNTY
AUG- 33 - 13.44



X SECTIONS ON RAMP A AT HARDIN PIKE STA. 747+00 TO STA. 749+00

AUGLAIZE COUNTY
AUG- 33 -1344



X SECTIONS ON RAMP A AT HARDIN PIKE STA. 737+00 TO STA. 739+00

AUGLAIZE COUNTY
AUG-33 -1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

399 90500 90000 89500 2214

3:1 34 3:1 8:1 898.3

751+50
900.7
P.G. 904.36

252 8:1 90500 90000 89500 900

INCLUDED W/ RAMP C X-SECTIONS

46c 898.6

80 390

70 252

118 573

398 90500 90000 89500 2206

3:1 18 3:1 8:1 898.4

751+00
900.2
P.G. 904.34

367 8:1 90500 90000 89500 900

INCLUDED W/ RAMP C X-SECTIONS

39c 898.7

80 390

57 367

59 705

AHEAD ONLY; BACK INCLUDED W/ RAMP C X-SECTIONS

396 Ahead 52 Back 90500 90000 89500

3:1 7 3:1 8:1 898.5

750+50
899.9
P.G. 904.23

156 238 8:1 90500 90000 89500 900

INCLUDED W/ RAMP C X-SECTIONS

898.8

80 390

11 317

289 90000 89500 52

3:1 5 3:1 8:1 898.6

750+00
899.8
P.G. 904.06

186 INCLUDED W/ RAMP C X-SECTIONS 90000 89500

5 186

11 333

289 90000 89500 52

3:1 7 3:1 8:1 898.7

749+50
899.9
P.G. 903.89

174 INCLUDED W/ RAMP C X-SECTIONS 90000 89500

7 174

11 338

749+00 5 191

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

X SECTIONS ON RAMP A AT HARDIN PIKE STA. 749+50 TO STA. 751+50

113
345

AUGLAIZE COUNTY
AUG- 33 -1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

375 | 90000 | 895.00 | 901.27 | 901.80 | 8:1 | 3:1 | 3:1 | 7 | FL 895.4 | 472 | 8:1 | 90000 | 7 472 | 900 | 89500 | 897.9 | AHEAD INCLUDED W/ RAMPC X-SECTIONS BACK INCLUDED W/ USR33 X-SECTIONS | 80 | 360 | 12 732

741+50
897.2
P.G. 901.27

1872 | 900.00 | 895.00 | 901.07 | 901.73 | 8:1 | 6 | FE 895.2 | 319 | 8:1 | 90000 | 6 319 | 89500 | INCLUDED W/ USR 33 X-SECTIONS | 898.0 | 80 | 260 | 270 | 21 466

741+00
897.1
P.G. 901.07

1500 | 90000 | 895.00 | 900.87 | 901.64 | 8:1 | 3:1 | 3:1 | 17 | FL 895.1 | 184 | 8:1 | 90000 | 17 184 | 89500 | 898.15 | 80 | 200 | 210

740+50
897.6
P.G. 900.87

1208 | 90000 | 895.00 | 900.67 | 901.41 | 8:1 | 12 | FL 894.9 | 285 | 8:1 | 90000 | 12 28 | 89500 | 898.3 | 80 | 160 | 27 434

740+00
897.2
P.G. 900.67

1003 | 900.00 | 895.00 | 900.47 | 901.24 | 8:1 | 3:1 | 3:1 | 6 | FL 894.5 | 334 | 8:1 | 90000 | 6 334 | INCLUDED W/ USR 33 X-SECTIONS | 898.4 | 80 | 130 | 140 | 89000 | 17 573

831 | 890.00

739+50
896.4
P.G. 900.47

132 | 739+00 | 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 739+00 | 6 368 | 11 650

X SECTIONS ON RAMP A AT HARDIN PIKE STA. 739+50 TO STA. 741+50

118
345

AUGLAIZE COUNTY
AUG - 33 - 1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50

89 231 77 431 78 1295 388 2158 389 2189 399

905.00 / 900.00 / 895.00

10:1 | 6:1 | 21 | 899.2 | 93 | 8:1

753+75
900.7
P.G. 903.27

19 116

+50 - End 8'-670

8' 670 | 8:1 | 6:1 | 5 | 899.0 | 157 | 8:1 | 5c

753+50
900.0
P.G. 903.44

14 157

38 381

903.53 | 903.28 | 1"/FT | 1½"/FT | 3/16"/FT | 903.78 | 903.83 | 3/16"/FT | 903.83 | 903.78 | 3/16"/FT | 903.53 | 1½"/FT | 903.28 | 1"/FT | 10:1

100 Yr H.W.=899.40
25 Yr. HW=899.26
8'-670 | 12:1 | 2:1 | 3:1 | 19 | Inlet ℄ El. 898.0 | Std HW-4 Headwall | 255 | 8c | 114' of 24" Conduit Type A @ 0.26% | Std HW-4 Headwall

753+00
899.6
P.G. 903.78

DESIGN DATA

Drainage Area	=	2.2 Ac.
Q for 25 Year	=	5.8 cfs
Q for 100 Year	=	7.3 cfs

ESTIMATED QUANTITIES

601 ~ Rock Channel Protection, Type C w/Filter 2 Cu.Yd.
602 ~ Concrete Masonry 1.20 Cu.Yd.
603 ~ 24" Conduit Type A 706.02 or 706.08 114 Lin.Ft.
30" ~ 707.05 or 707.21
Quantities Carried to Sht. 33

Rock Channel Protection Type C w/ Filter 4' Wide x 8' Long x 1'-6" Deep: 2.1= 1.8 Cu.Yd.

27 255 | 69 529

INCLUDED W/ HARDIN PIKE X-SECTIONS

28 93

316 | 8:1 | 3:1 | 33 | 898.1

752+50
900.0
P.G. 904.08

48 316

BACK ONLY; AHEAD INCLUDED W/ HARDIN PIKE X-SECTIONS | INCLUDED W/ RAMP C X-SECTIONS | 900 | 15c | 898.4 | 80 | 180 | 380

70 569

298 | 8:1 | 3:1 | 28 | 898.2

752+00
900.2
P.G. 904.27

28 298

INCLUDED W/ RAMP C X-SECTIONS | 900 | 23c | 898.6 | 80 | 380

91 509

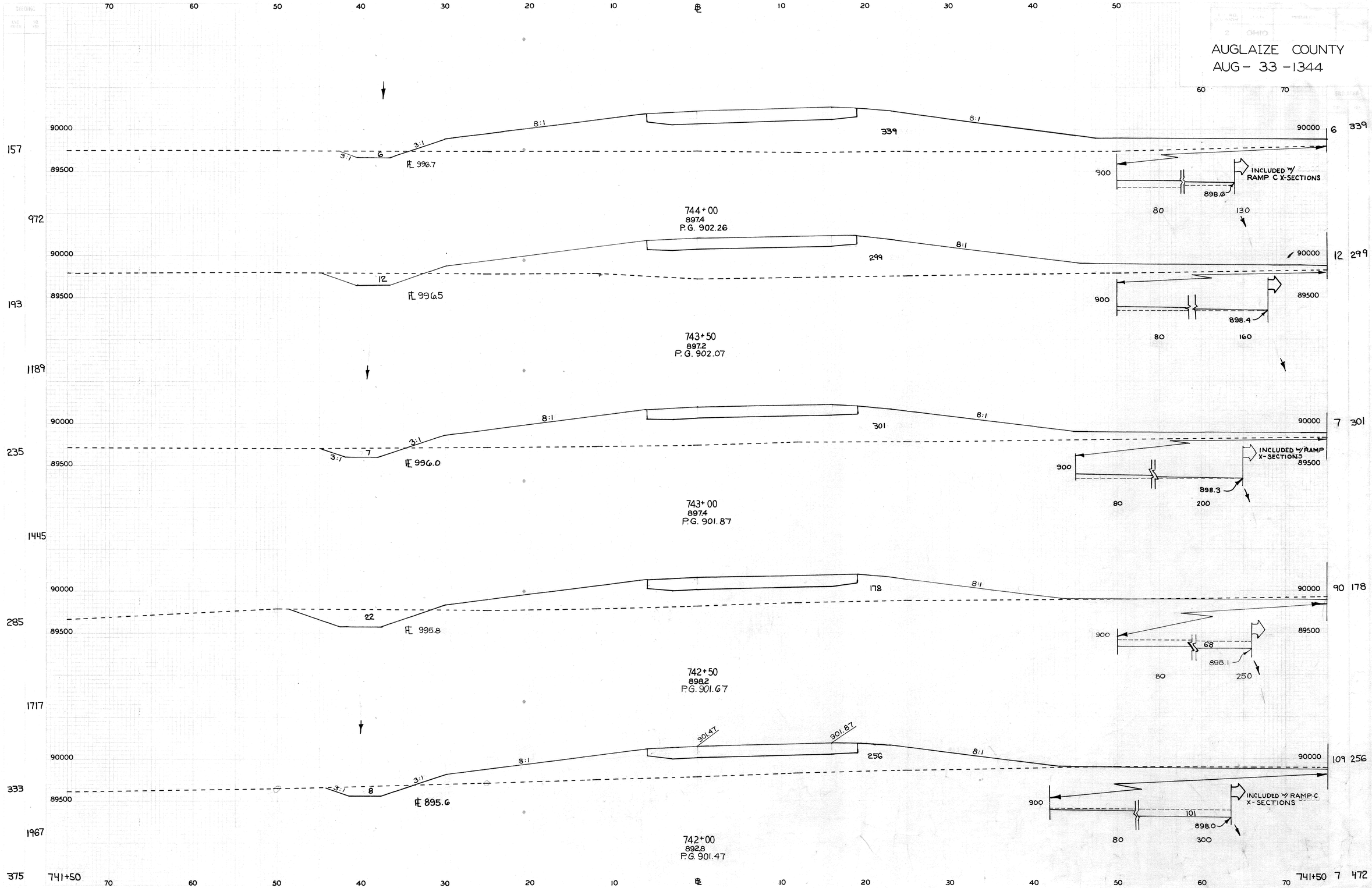
751+50 70 252

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 751+50

X SECTIONS ON RAMP A AT HARDIN PIKE STA. 752+00 TO STA. 753+75

114
345

AUGLAIZE COUNTY
AUG - 33 - 1344



X SECTIONS ON RAMP A AT HARDIN PIKE STA. 742 + 00 TO STA. 744 + 00

AUGLAIZE COUNTY
AUG- 33 - 1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50

0

90500
90000
INCLUDED W/ HARDIN PIKE X-SECTIONS
44c
BACK ONLY; AHEAD INCLUDED W/ HARDIN PIKE X-SECTIONS
754 + 80.24
902.4
P.G. 902.96
60 70
44 0
90500
90000
34 15

121

72

90500
90000
INCLUDED W/ HARDIN PIKE X-SECTIONS
7c
15
5c
2F
4c
9F
754 + 50
901.4
P.G. 902.74
90500
90000
16 26
INCLUDED W/ HARDIN PIKE X-SECTIONS

228

92

90500
90000
INCLUDED W/ HARDIN PIKE X-SECTIONS
6:1
30
899.6
20:1
11
1c
754 + 25
901.0
P.G. 902.92
33
10:1
90000
5c
90500
36 44
36 50

261

96

90500
90000
6:1
29
899.4
14:1
754 + 00
900.9
P.G. 903.09
65
8:1
90000
12
90500
41 65
INCLUDED W/ HARDIN PIKE X-SECTIONS
32 73

257

89 753+75 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 753+75 28 93

X SECTIONS ON RAMP A AT HARDIN PIKE STA. 754 + 00 TO STA. 754 + 75

115
345

AUGLAIZE COUNTY
AUG- 33 -1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

INCLUDED W/ RAMP C X-SECTIONS

70 — 900.00 — 895.00 — 392
5 ℄ 8:1 — 8:1 — 153 — 8:1
899.3 — 900.9
5 153

746+50
899.7
P.G. 903.27

5 323

Fertilizer Calculation
(35,175.91)/(20)=(1000/2000)=3.17 Ton

Excavation	1439 Cu. Yd.
Embankment	17,381 Cu. Yd.
Seeding	3.17 Sq. Yd.
Comm. Fertilizer	35,175 Ton

Quantities Carried to Sheet 101

71 — 900.00 — 895.00 — 433
8:1 — 8:1 — 196
899.4 — 899.7
0 196

746+00
898.9
P.G. 903.06

2 365

85 — 900.00 — 895.00 — 525
2 ℄ 3:1 — 3:1 — 8:1 — 198 — 8:1
898.5 — 898.9
2 198

745+50
898.7
P.G. 902.86

6 388

INCLUDED W/ RAMP C X-SECTIONS

104 — 900.00 — 895.00 — 647
4 ℄ 3:1 — 3:1 — 8:1 — 221 — 8:1
898.2 — 898.8
4 221

745+00
898.7
P.G. 902.66

900 — 898.7 — INCLUDED W/ RAMP C X-SECTIONS
80 — 100
7 468

129 — 900.00 — 895.00 — 794
4 ℄ 3:1 — 3:1 — 8:1 — 284 — 8:1
897.3 — ℄ 897.3
4 284
9 577

744+50
897.9
P.G. 902.46

157 744+00 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 744+00 6 339

X SECTIONS ON RAMP A AT HARDIN PIKE STA. 744+50 TO STA. 746+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

120
345

AUGLAIZE COUNTY
AUG- 33 -13.44

SEEDING
DAD WIDTH | SQ. YDS

340 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

END AREA: CUT | FILL — VOLUME: CUT | FILL

INCLUDED W/ OTHER RAMP C X-SECTIONS
90000
14
R.P. ELEV. 899.0
89500
8:1
124
INCLUDED W/ RAMP A X-SECTIONS
P.G. 903.54
739+50
899.4
14 124
90000
89500
19 174

90000
14
899.0
89500
8:1
143
P.G. 903.71
739+00
899.7
14 143
90000
89500
21 239

Note: Seeding Inside Ramp C Included on Sht: 123

INCLUDED W/ OTHER RAMP C X-SECTIONS
90000
15
898.9
89500
8:1
187
INCLUDED W/ RAMP A X-SECTIONS
P.G. 903.88
738+50
899.5
15 187
90000
89500
28 274

90000
22
898.9
89500
8:1
182
P.G. 904.05
738+00
899.5
22 182
90000
89500

INCLUDED W/ OTHER RAMP C X-SECTIONS
90000
33
898.8
89500
8:1
205
INCLUDED W/ RAMP A X-SECTIONS
P.G. 904.23
737+50
899.7
AHEAD ONLY; BACK INCLUDED W/ RAMP A X-SECTIONS
46 323
90000
89500
33 205

340 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

X SECTIONS ON RAMP C AT HARDIN PIKE STA. 737+50 TO STA. 739+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

121
345

AUGLAIZE COUNTY
AUG - 33 - 1344

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		340 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70				
		INCLUDED W/ OTHER RAMP C X-SECTIONS				
44		90000				
		R.P. ELEV. 899.0				
		89500				
		8:1				
		P.G. 901.68				
		742+00				
		899.5				
		314				
		8:1				
		898.9				
		INCLUDED W/ RAMP A X-SECTIONS				
		90000	0	314		
		89500				
200					0	484
		INCLUDED W/ OTHER RAMP C X-SECTIONS				
28		90000				
		R.P. ELEV. 899.0				
		89500				
		8:1				
		P.G. 901.68				
		741+50				
		899.3				
		308				
		8:1				
		899.8				
		90000	0	308		
		89500				
128					0	485
		INCLUDED W/ OTHER RAMP C X-SECTIONS				
18		90000				
		R.P. ELEV. 899.0				
		89500				
		8:1				
		P.G. 901.78				
		741+00				
		898.9				
		315				
		8:1				
		901.3				
		INCLUDED W/ RAMP A X-SECTIONS				
		90000	0	315		
		89500				
79					22	396
		28				
10		90000				
		R.P. ELEV. 899.0				
		89500				
		8:1				
		P.G. 901.92				
		740+50				
		898.9				
		194				
		8:1				
		902.2				
		90000	28	194		
		89500				
50					47	178
		INCLUDED W/ RAMP A X-SECTIONS				
		8:1				
		902.9				
		INCLUDED W/ OTHER RAMP C X-SECTIONS				
8		42				
		90000				
		R.P. ELEV. 899.0				
		89500				
		8:1				
		P.G. 902.06				
		740+00				
		899.8				
		80				
		2				
		90000	44	80		
		89500				
23					38	133
0	739+50	340 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70	739+50	14	124	

X SECTIONS ON RAMP C AT HARDIN PIKE STA. 740+00 TO STA. 742+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

122
345

AUGLAIZE COUNTY
AUG-33-1344

SEEDING
ENG. WIDTH | SQ. YDS.

				END AREA		VOLUME	
				CUT	FILL	CUT	FILL
340	60	50	40	30	20	10	℄
249	INCLUDED W/ OTHER RAMP C X-SECTIONS	97	90000	3:1	8:1	255	8:1
		R.P. ELEV. 899.0	89500	P.G. 903.63 744+00 899.7			90000
1228							900
							80
							260
							183
							897.9
							270
							INCLUDED W/ RAMP A X-SECTIONS 89500
193			90000	8:1		382	8:1
		R.P. ELEV 899.0	89500	P.G. 903.07 744+50 899.3			90000
959							900
							80
							200
							82
							898.1
							210
							89500
152	INCLUDED W/ OTHER RAMP C X-SECTIONS	48	90000	8:1		296	8:1
		R.P. ELEV. 899.0	89500	P.G. 902.61 744+00 898.9			90000
748							900
							80
							160
							11½
							898.3
							170
							89500
117		1½	90000	8:1		500	8:1
		R.P. ELEV. 899.0	89500	P.G. 902.24 743+50 898.7			90000
570							900
							80
							130
							898.5
							140
							INCLUDED W/ RAMP A X-SECTIONS 89500
88			90000	8:1		558	8:1
		R.P. ELEV 899.0	89500	P.G. 901.96 743+00 898.2			90000
425							900
							80
							100
							898.6
							110
							89500
65	INCLUDED W/ OTHER RAMP C X-SECTIONS		90000	8:1		493	8:1
		R.P. ELEV. 899.0	89500	P.G. 901.77 742+50 898.4			90000
303							900
							80
							898.8
							INCLUDED W/ RAMP A X-SECTION 89500
44	742+00	340	60	50	40	30	20

| | | | | | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

123
345

AUGLAIZE COUNTY
AUG - 33 - 13.44

SEEDING

END WIDTH	SQ. YDS.
15	112
25	173
37	253
54	351
83	642
148	1103
249	

34,367 = Seeding Needed for Inside Ramp C
Planimetered Area = 309,303 sq.ft. ÷ 9 = 34,367 Sq.Yd.

INCLUDED W/ OTHER RAMP C X-SECTIONS

INCLUDED W/ USR 33 X-SECTIONS

STA 748+15 ~ END 6-670

STA 746+15 ~ BEGIN 6'-670

R.P. ELEV 899.0

P.G. 908.93 748+00 900.6

P.G. 907.82 747+50 899.9

P.G. 906.79 747+00 899.6

P.G. 905.86 746+50 899.8

P.G. 905.02 746+00 899.4

P.G. 904.28 745+50 899.6

Fertilizer Calculation
(41,820)(9)(20) ÷ (1000)(2000) = 3.77 Ton

3.77 Ton	
41,820 Sq.Yd.	
4943 Cu.Yd.	
23,470 Cu.Yd.	
Quantities Carried to Sh. 107	

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
39	518		
		60	884
38	618		
		30	1016
0	688		
		0	1011
0	581		
		30	848
35	436		
		161	716
142	353		
		415	597
280	255		

X SECTIONS ON RAMP C AT HARDIN PIKE STA. 745 + 50 TO STA. 748 + 00

SEEDING

THD WIDTH	SQ YDS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

124
345

AUGLAIZE COUNTY
AUG- 33 -1344

INCLUDED W/ USR 33 X-SECTIONS

P.G. 917.12
751+00
900.5

641

INCLUDED W/ RAMP A X-SECTIONS
301
900
898.6
370
80

P.G. 915.83
750+50
900.4

565

286
900
898.6
360
80

P.G. 913.88
750+00
900.4

485

INCLUDED W/ RAMP A X-SECTIONS
282
900
898.7
360
80

INCLUDED W/ USR33 X-SECTIONS

408

INCLUDED W/ RAMP A X-SECTIONS
193
900
898.8
360
80

BACK ONLY; AHEAD INCLUDED W/ USR33 X-SECTIONS

INCLUDED W/ USR33 X-SECTIONS

911.7

262

339

P.G. 911.26
749+00
900.5

INCLUDED W/ OTHER RAMP C X-SECTIONS
163
900
898.9
350
80

INCLUDED W/ USR33 X-SECTIONS

910.2

608

INCLUDED W/ OTHER RAMP C X-SECTIONS
156
898.9
350
80

P.G. 910.10
748+50
900.7

748+00

X SECTIONS ON RAMP C AT HARDIN PIKE STA. 748+50 TO STA. 751+00

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
	301	641		
			511	1050
	286	565		
			484	895
	282	485		
			405	761
	193	408		
			304	637
Ahead	163	339		
Back	163	601		
			237	894
	156	608		
			145	833
	39	518		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

125
345

AUGLAIZE COUNTY
AUG- 33 - 13.44

INCLUDED W/ USR 33 X-SECTIONS

P.G. 922.17
753+27.72
90+41

SKEW @ END OF APPROACH SLAB BACK ONLY; AHEAD INCLUDED W/ HARDIN PIKE X-SECTIONS

INCLUDED W/ HARDIN PIKE X-SECTIONS

672

2:1

905.00
900.00

649

P.G. 921.61
753+00
98.39

INCLUDED W/ USR 33 X-SECTIONS

P.G. 920.58
752+50
90.34

600

47

42" INLET
℄ 89.63

PROP 258'x42" TYPE A @ 0.2%

FOR CULVERT DETAILS ~ SEE SHEET 91

P.G. 919.47
752+00
90.45

719

8:1

BACK ONLY
AHEAD INCLUDED W/ HARDIN PIKE X-SECTION

453

11

INCLUDED W/ RAMP A X-SECTION

BACK ONLY; AHEAD INCLUDE W/ HARDIN PIKE X-SECTIONS

898.4

370

80

777

INCLUDED W/ USR 33 X-SECTIONS

P.G. 918.32
751+50
90.13

INCLUDED W/ RAMP A X-SECTIONS

359

898.5

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
0	672			
2	649		1224	
46	600		1157	
47	600			
54	719		1222	
Ahead	11	719		
Back	464	719		
732	359	777	1330	
359	777			
575	359	641	1235	
751+00	301	641		

X SECTIONS ON RAMP C AT HARDIN PIKE STA. 751 + 50 TO STA. 753 + 27.72

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

126
345

For Fence Quantities ~ See Sht 38
For Pavement Quantities ~ See Sht 34-35
For Underdrain Quantities ~ See Sht. 37
For Ballooned Quantities ~ See Sht. 36
For Hardin Pike Intersection Detail ~ See Sht. 48
For Storm Sewer (Hardin Pike West) ~ See Sht 155
For Culvert Detail ~ Sta. 745+00 (B) ~ See Sht. 132
For Culvert Detail ~ Sta. 736+75 (D) ~ See Sht. 233
For Culvert Detail ~ Sta. 746+00 (D) ~ See Sht. 234
For Culvert Detail ~ Sta. 752+50 (USR 33) ~ See Sht. 91

℄ USR 33
℄ HARDIN PIKE STA. 20+00.00
℄ USR 33 STA. 753+83.52
USR 33 Sta. 739+00 154' Rt. B.A.
+50 ~ 6" x 90° Bend
6" Type F, A.P.P.
Precast Conc. Outlet
Work Limits
USR 33 Sta. 741+00 249' Rt. B.T.A.
C.S. STA. 742+41.59
℄ RAMP "B"
Prop 6" U.D.
S.T. STA. 744+41.59
21" Type A
USR 33 Sta. 743+25 142' Rt. B.T.A.
Prop. Fence, Type CLT
Prop. L/A
T.S. STA. 747+14.03
Prop 6" U.D.
S.C. STA. 749+14.03
Twin 22" x 34" Type A
10'~670
6'~670
16'~670
+10 ~ 6" x 90° Bend
6" Type F, A.P.P.
Precast Conc. Outlet
18'~670
℄ RAMP "D"
Prop. 6" U.D.
6" Type F, A.P.P.
Precast Conc. Outlet
+75 ~ 6" x 90° Bend
+25 ~ 6" Tee
8'~Item Special, Ditch Erosion Protection, Type I, As Per Supp. Spec. 839 or 840
Precast Conc. Outlet
6" Type F, A.P.P.
S.C. STA. 741+29.03
Precast Conc. Outlet
℄ RAMP "D"
6" Type F, A.P.P.
+50 ~ 6" x 90° Bend
T.S. STA. 739+29.03
Prop. 6" U.D.
6" Type B
Precast Conc. Outlet
S.T. STA. 753+22.03
℄ RAMP "B"
Prop 6" U.D.
+66 6" x 90° Bend
6" Type F, A.P.P.
Precast Conc. Outlet
BEGIN RAISED MEDIAN
Prop. Fence, Type CLT
Prop. L/A
C.S. Sta. 751+22.03
Work Limits
Ex. Hardin Pike Sta. 21+19 679.95 Rt. B.T.A.
Ex. Hardin Pike Sta. 21+19 179 Rt. B.T.A.
20'~670
℄ Ex. Canning Factory Rd.
Prop. 6" U.D.
S.T. STA. 744+41.59
S.C. STA. 744+41.59
S.T. STA. 750+00.00
S.T. STA. 751+00.00
USR 33 STA. 751+00.00
RAMP "D" STA. 751+00.00
C.S. STA. 748+00.00
42" Type A
42" Type B
30" Type B
T.S. STA. 21+79.15
№3 MH
℄ PROP. HARDIN PIKE
18'~670
48" Type C
Conc. Slab With 3 Walls
Old Conc. Slab & Foundations
Conc. Slab
Concrete Block Building
S.C. STA. 23+79.15
№3 MH
15" Type B
℄ EX. HARDIN PIKE
18'~670
Mobile Home
54" Type A
48" Type B
PROP. HARDIN PIKE STA. 24+94.71
℄ RAMP "D" STA. 735+97.99
C.S. STA. 24+94.71
EX. HARDIN PIKE STA. 26+14.99
℄ RAMP "D" STA. 735+46.18
EX. HARDIN PIKE STA. 26+55.99
℄ RAMP "B" STA. 757+05.49
PROP. HARDIN PIKE STA. 26+39.65
℄ RAMP "B" STA. 756+53.51
PSS. STA. 26+94.71

SPIRAL S-3 DATA

L_s = 200.00'	X_c = 197.33'
LC = 198.81'	L.T. = 134.29'
D_c = 21°00'00"	S.T. = 67.53'
K = 99.55'	Θ_s = 21°00'00"
Y_c = 24.20'	

SPIRAL S-4 DATA

L_s = 200.00'	X_c = 197.33'
LC = 198.81'	L.T. = 134.29'
D_c = 21°00'00"	S.T. = 67.53'
K = 99.55'	Θ_s = 21°00'00"
Y_c = 24.20'	

SPIRAL S-5 DATA

L_s = 200.00'	X_c = 199.90'
LC = 199.96'	L.T. = 133.37'
D_c = 4°00'00"	S.T. = 66.70'
K = 99.98'	Θ_s = 4°00'00"
Y_c = 4.65'	

SPIRAL S-6 DATA

L_s = 200.00'	X_c = 199.05'
LC = 199.58'	L.T. = 133.67'
D_c = 12°30'00"	S.T. = 66.97'
K = 99.84'	Θ_s = 12°30'00"
Y_c = 14.50'	

SPIRAL S-7 DATA

L_s = 200.00'	X_c = 199.05'
LC = 199.58'	L.T. = 133.67'
D_c = 12°30'00"	S.T. = 66.97'
K = 99.84'	Θ_s = 12°30'00"
Y_c = 14.50'	

SPIRAL S-19 DATA

L_s = 200.00'	X_c = 199.95'
L.C. = 199.98'	L.T. = 133.35'
D_c = 3°00'00"	S.T. = 66.68'
K = 99.99'	Θ_s = 3°00'00"
Y_c = 3.49'	

SPIRAL S-20 DATA

L_s = 200.00'	X_c = 199.95'
L.C. = 199.98'	L.T. = 133.35'
D_c = 3°00'00"	S.T. = 66.68'
K = 99.99'	Θ_s = 3°00'00"
Y_c = 3.49'	

CURVE C-1 DATA

Δ = 17° 26' 32.8"	
R = 2901.83'	
D_c = 1° 58' 28.1"	
L_c = 883.40'	
T = 445.14'	
E = 33.94'	

CURVE C-3 DATA

Δ = 3° 28'00"	
R = 1909.86'	
D_c = 3°00'00"	
L_c = 115.54'	
T = 57.80'	
E = 0.87'	

CURVE C-6 DATA

Δ = 140° 54' 17.5"	
R = 272.84'	
D_c = 21°00'00"	
L_c = 670.98'	
T = 768.44'	
E = 542.60'	

CURVE C-7 DATA

Δ = 29° 53' 42"	
R = 1432.40'	
D_c = 4°00'00"	
L_c = 747.38'	
T = 382.41'	
E = 50.17'	

CURVE C-8 DATA

Δ = 26°00'00"	
R = 458.37'	
D_c = 12° 30'00"	
L_c = 208.00'	
T = 105.82'	
E = 12.06'	

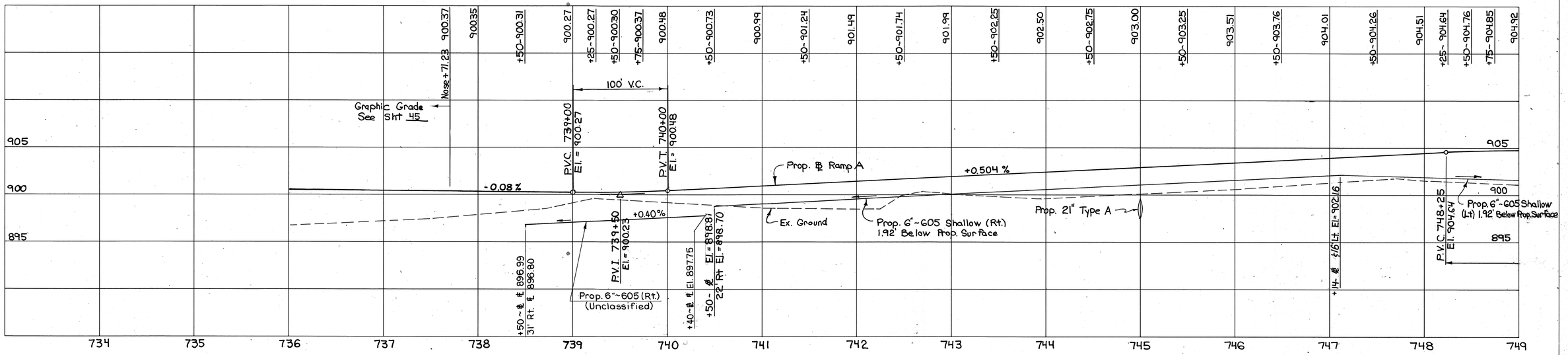
Ramp	Station to Station	From Sheet	203 Excavation	203 Embankment	659 Seeding & Mulching	659 Comm. Fertilizer
			Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton
B	738+00 to 756+41.51	133	2,352	6,584	20,036	1.80
D	736+01.99 to 751+00	138	16,469	17,947	30,103	2.71
	Totals Carried to Sht 33		18,861	24,536	50,139	4.51

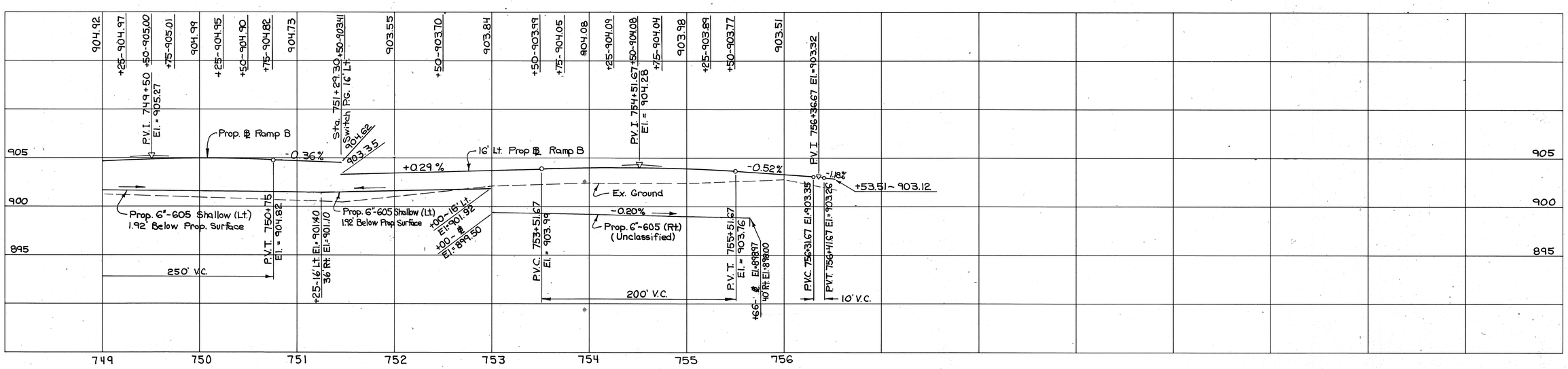
PLAN RAMP B & RAMP D (HARDIN PIKE)

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

127
345



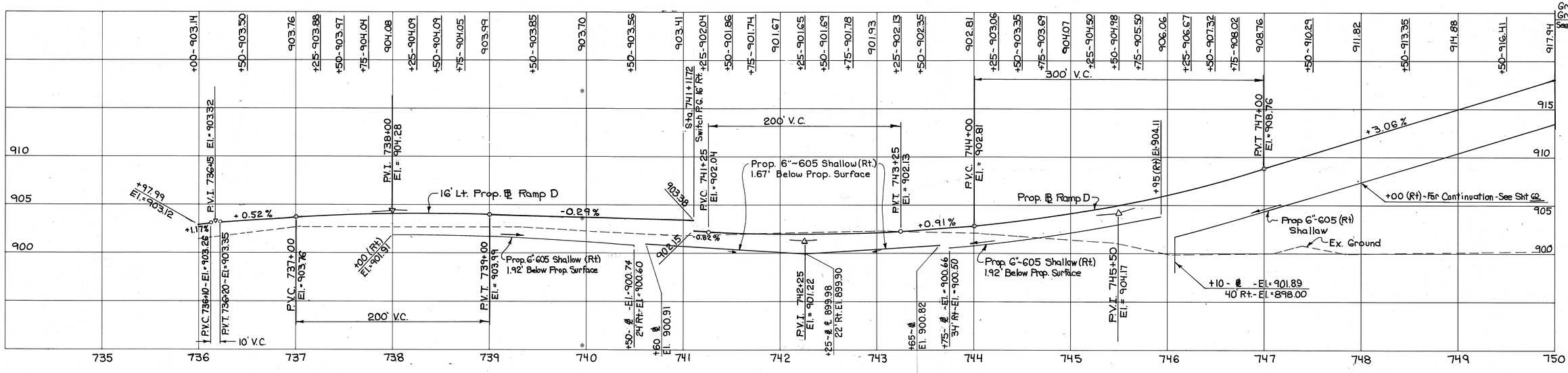


PROFILE GRADE RAMP B (HARDIN PIKE)

AUGLAIZE COUNTY
AUG-33-13.44

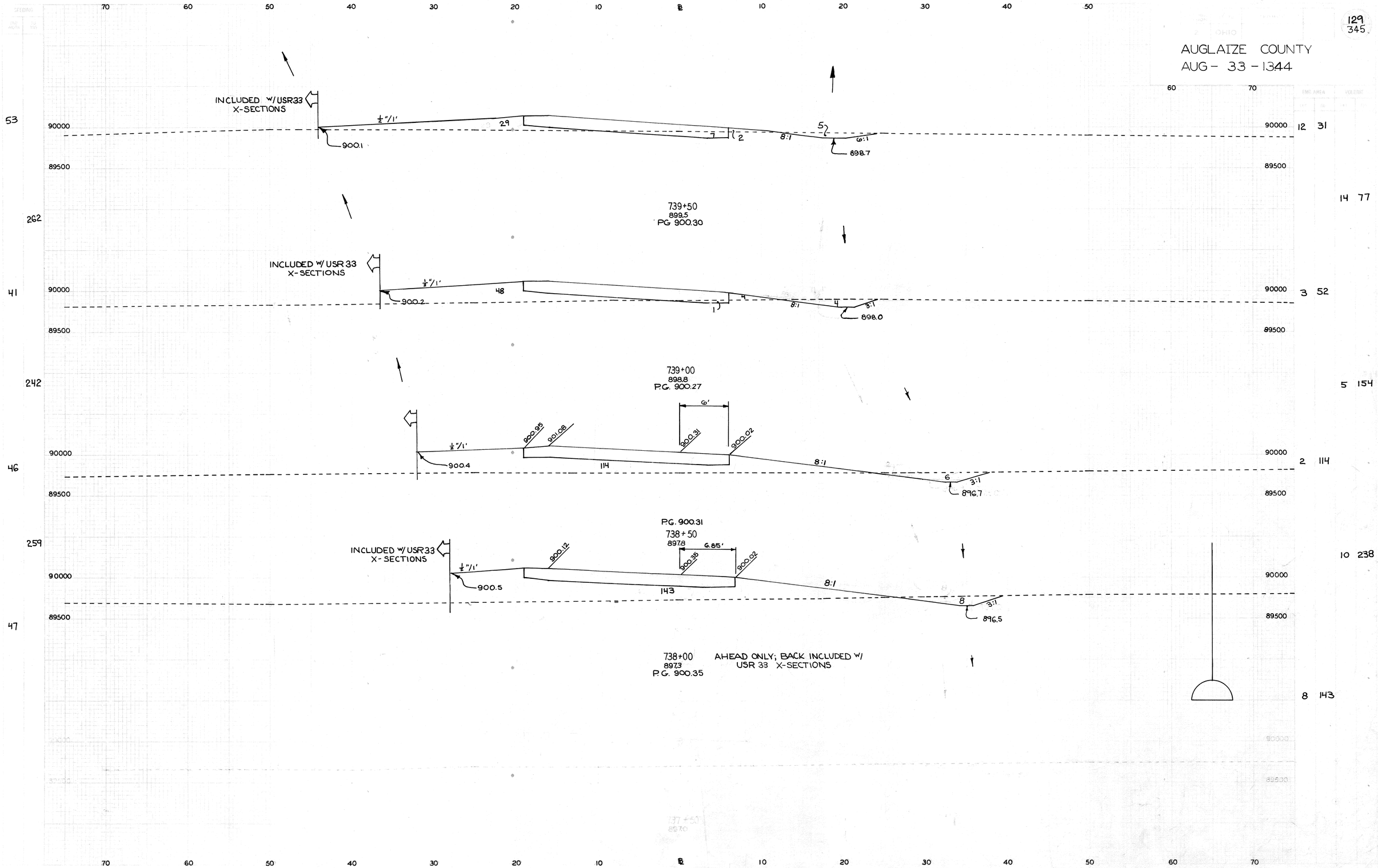
FHWA REGION	STATE	PROJECT	
5	OHIO		

128
345



PROFILE GRADE RAMP D (HARDIN PIKE)

AUGLAIZE COUNTY
AUG - 33 - 13.44



X SECTIONS ON PROPOSED RAMP B STA. 738+00 TO STA 739+50

FED. RD. DIVISION 2 | STATE OHIO | PROJECT

130
345

AUGLAIZE COUNTY
AUG-33 -1344

SEEDING

	70	60	50	40	30	20	10	℄	10	20	30	40	50	60	70	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
132															900.00	6	173		
															895.00				
678																		7	345
112															900.00	1	198		
															895.00				
578																		8	324
96															900.00	7	151		
															895.00				
484																		11	229
78															900.00	4	96		
															895.00				
398																		17	117
65															900.00	14	30		
															895.00				
328																		25	57
53	739+50														739+50	12	31		

INCLUDED W/ USR33 X-SECTIONS
110 899.1 100 90 80 900
8:1 173 8:1 6 6:1 898.2

742+00
899.1
P.G. 901.49

INCLUDED W/ USR33 X-SECTIONS
90 899.3 80 900
8:1 197 8:1 1 6:1 1 6:1 898.3

741+50
898.4
P.G. 901.24

INCLUDED W/ USR 33 X-SECTIONS
899.5
8:1 151 8:1 6:1 898.4

741+00
898.6
P.G. 900.99

INCLUDED W/ USR 33 X-SECTIONS
899.7
8:1 96 8:1 4 6:1 898.5

740+50
899.0
P.G. 900.73

INCLUDED W/ USR33 X-SECTIONS
899.9
8:1 29 5 1 8:1 9 6:1 898.6 R/W

740+00
899.7
P.G. 900.48

X SECTION ON PROPOSED RAMP B STA 740+00 TO STA 742+00

AUGLAIZE COUNTY
AUG-33 -1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

END AREA CUT FILL | VOLUME CUT FILL

INCLUDED W/ USR33 X-SECTIONS
21 3:1 80
896.9
905.00
190 180 170
238
900.00
8:1 139 8:1
3:1 36 3:1 1/2":1' 2
897.6
744+50
900.53
P.G. 902.75
57 141

895.00
1281
32 3:1 80
897.1
905.00
170 160 150
223
900.00
8:1 110 8:1
3:1 46 3:1 1/2":1' 16
897.75
744+00
900.4
P.G. 902.50
78 126
125 248

895.00
INCLUDED W/ USR33 X-SECTIONS
1145
20 3:1 80
897.2
905.00
160 150 140
189
900.00
8:1 177 8:1
3:1 30 3:1
897.9
743+05 ~ END 10'-670
50 177

895.00
INCLUDED W/ USR33 X-SECTIONS
1042
10'-670
10 3:1 80
897.3
905.00
160 150 140
186
900.00
8:1 148 8:1
3:1 29 3:1
898.0
743+50
899.6
P.G. 902.25
39 148
83 301

895.00
INCLUDED W/ USR33 X-SECTIONS
10'-670
12:1 12:1
898.5
120 80
130
959
905.00
159
900.00
8:1 133 8:1
3:1 30 3:1
898.1
743+00
900.0
P.G. 901.99
30 133
64 261

895.00
809
742+20 BEGIN 10'-670
895.00
742+50
899.8
P.G. 901.74
34 284

132 742+00 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 742+00 6 173

X SECTIONS ON PROPOSED RAMP B STA. 742+50 TO STA. 744+50

AUGLAIZE COUNTY
AUG-33-1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

END AREA | VOLUME
CUT FILL | CUT FILL

INCLUDED W/ RAMP D X-SECTIONS
900.0
80
905.00
118
900.00
10
8:1
131
8:1
6
6:1
899.9
16 131

700
100 90 80
899.7
905.00
134
900.00
187
747+00
900.7
P.G. 904.01
8:1
3:1
6
3:1
899.3
6 187
21 295

895.00
INCLUDED W/ RAMP D X-SECTIONS
809
899.5
120 110 100 90 80
905.00
157
900.00
8:1
175
746+00
900.0
P.G. 903.51
8:1
3:1
12
3:1
898.7
12 175
17 336

895.00
INCLUDED W/ RAMP D X-SECTIONS
975
160 150 140 80
899.2
905.00
194
900.00
8:1
187
745+50
900.00
P.G. 903.25
8:1
3:1
16
3:1
898.1
16 187
26 336

16'-670
895.00
896.8
BACK INCLUDED W/USR33 X-SECTIONS;AHEAD INCL. W/ RAMP D X-SECTIONS
200 190 180 80
1212
905.00
242
900.00
479
OUTLET EL 897.30
2:1
144
903.13
903.25
903.00
902.75
10:1
11:1
2:1
1334
895.00
STD HW-4 HEADWALL
18" ROCK CHANNEL PROTECTION TYPE C W/ FILTER
4'-0" WIDE x 8' LONG x 1'-6" DEEP + 27 = 1.8 Cu.Yd.
745+00
899.8
P.G. 903.00
88' OF 21" CONDUIT TYPE A @ 0.23%
STD HW-4 HEADWALL
INLET EL 897.80
17
3:1
25 YR HW = 898.70
100 YR HW = 898.81
496 144
513 264

ESTIMATED QUANTITIES

601 ~ ROCK CHANNEL PROTECTION, TYPE C W/ FILTER	2 CU. YD
602 ~ CONCRETE MASONRY	1.06 CU. YD
603 ~ 21" CONDUIT TYPE A 706.02, 706.08 27"- 707.05 OR 707.21	88 LIN FT

QUANTITIES CARRIED TO SHEET Nº 33

DESIGN DATA
DRAINAGE AREA = 1.6 Ac.
Q FOR 25 YR = 4.63 cFs
Q FOR 100 YR = 5.72 cFs

475 307

238 744+50 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 744+50 57 141

X SECTIONS ON RAMP B STA. 745+00 TO STA. 747+00

FED. ROD. DIVISION 2 | STATE OHIO | PROJECT

133
345

AUGLAIZE COUNTY
AUG- 33 - 13.44

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

END AREA CUT | END AREA FILL | VOLUME CUT | VOLUME FILL

INCLUDED W/ RAMP D X-SECTIONS

90500 / 90000 — 8:1 — 95 — 8:1 — 6:1 — 901.0 — 901.0

749+50
901.9
P.G. 905.00

74 | 420 | 4 95 | 10 209

90500 / 90000 — 8:1 — 130 — 8:1 — 6:1 — 900.8 — 901.1

749+00
901.2
P.G. 904.92

77 | 434 | 6 130 | 10 282

INCLUDED W/ RAMP D X-SECTIONS

905.00 / 900.00 — 8:1 — 174 — 8:1 — 6:1 — 900.6 — 901.2

748+50
901.3
P.G. 904.76

79 | 470 | 4 174 | 13 263

905.00 / 900.00 — 8:1 — 110 — 8:1 — 6:1 — 900.4 — 900.8

748+00
901.1
P.G. 904.51

90 | 537 | 10 110 | 26 207

INCLUDED W/ RAMP D X-SECTIONS

905.00 / 900.00 — 8:1 — 113 — 8:1 — 6:1 — 900.2 — 900.3

747+50
901.0
P.G. 904.26

103 | 614 | 18 113 | 32 226

118 | 747+00 | 747+00 | 16 131

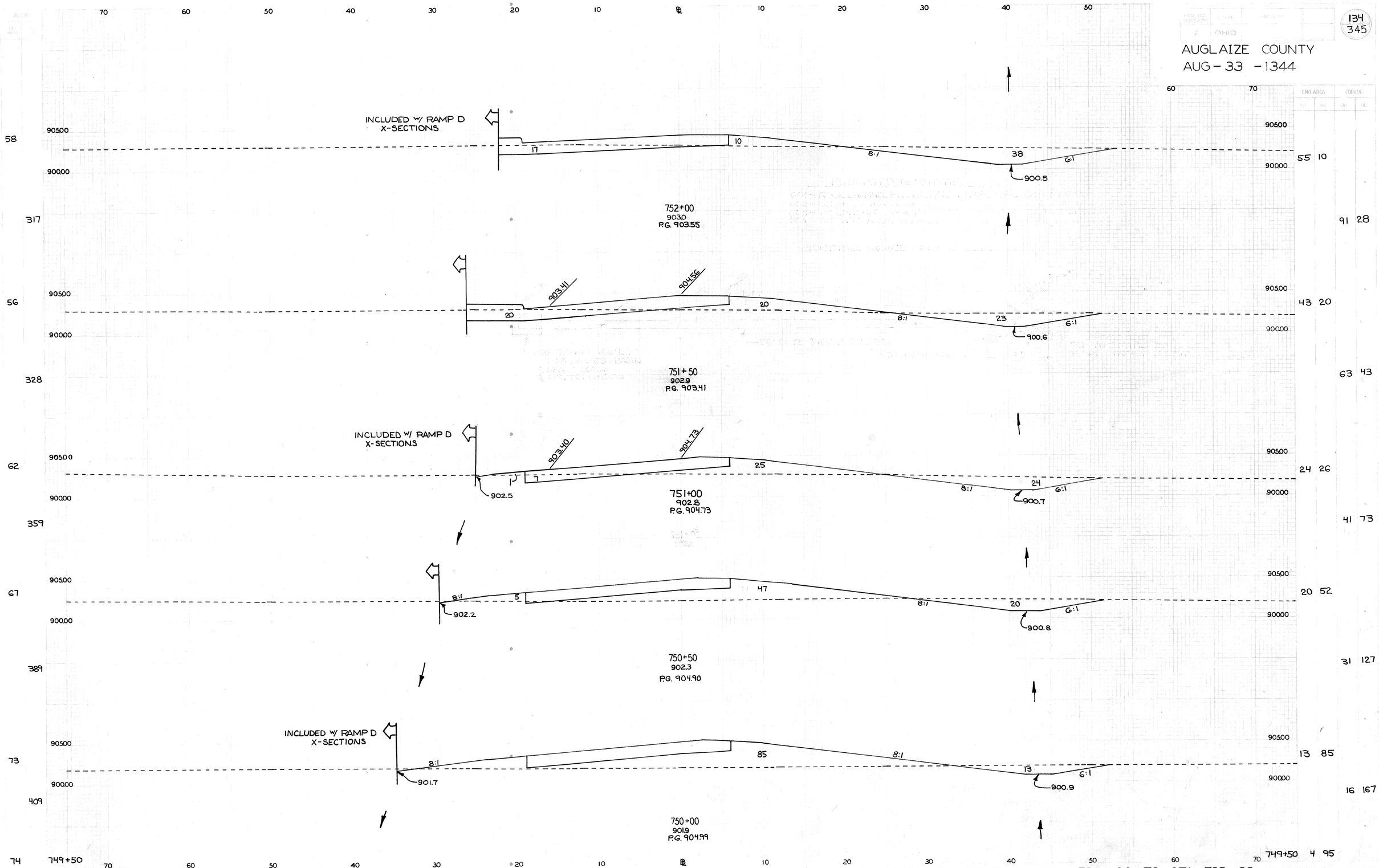
Fertilizer Calculation
(20.0336)(9)(20)÷(1000)(2000)= 1.80 Ton

Comm. Fert: 1.80 Ton
Seeding 20.038sq.Yd
Excavation Embankment 2392 cu.Yd
6589 cu.Yd

Quantities Carried to Sh. 126

X SECTIONS ON PROPOSED RAMP B STA. 747 + 50 TO STA. 749 + 50

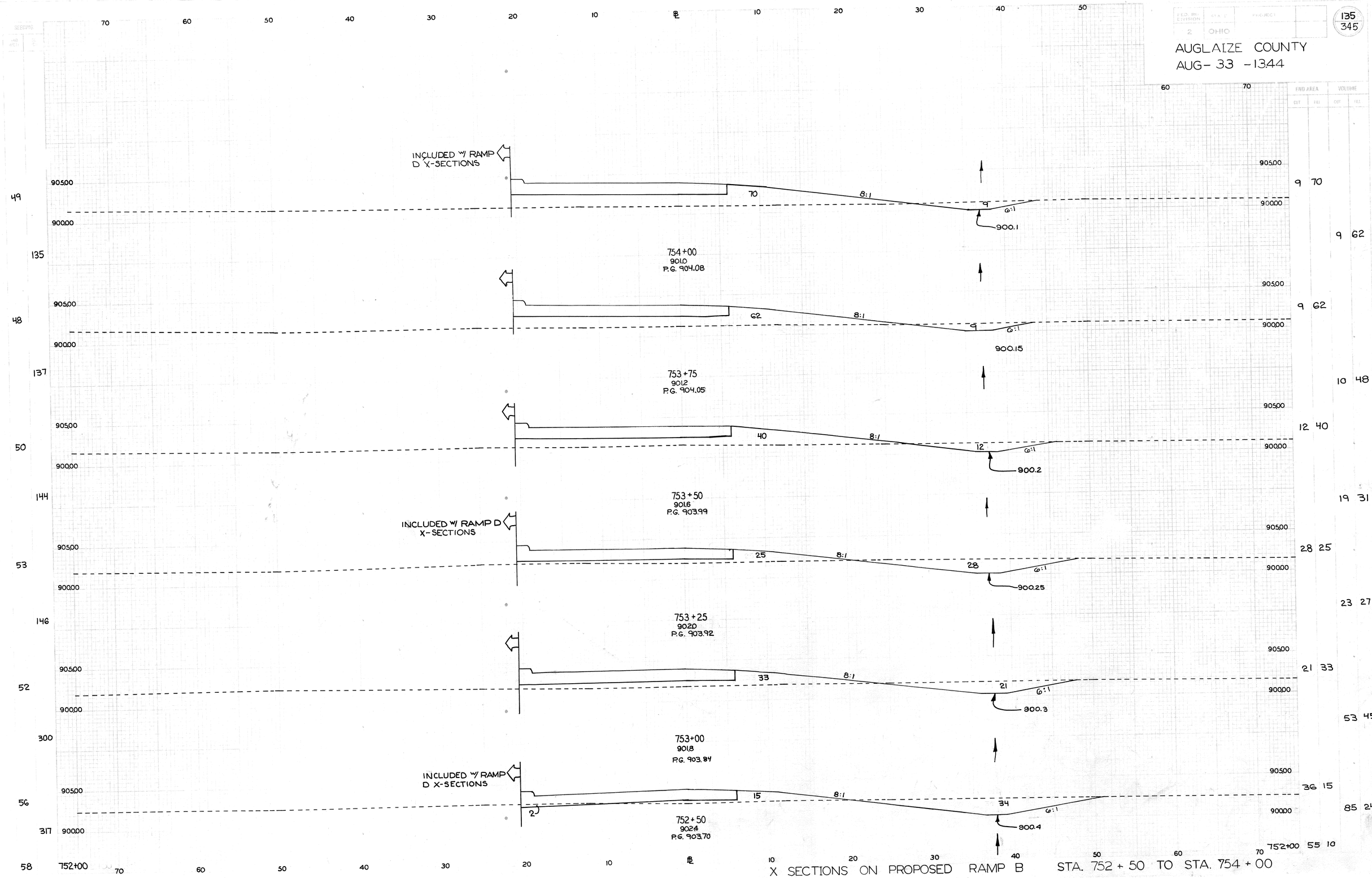
AUGLAIZE COUNTY
AUG-33 -1344



X SECTIONS ON PROPOSED RAMP B STA. 750+00 TO STA. 752+00

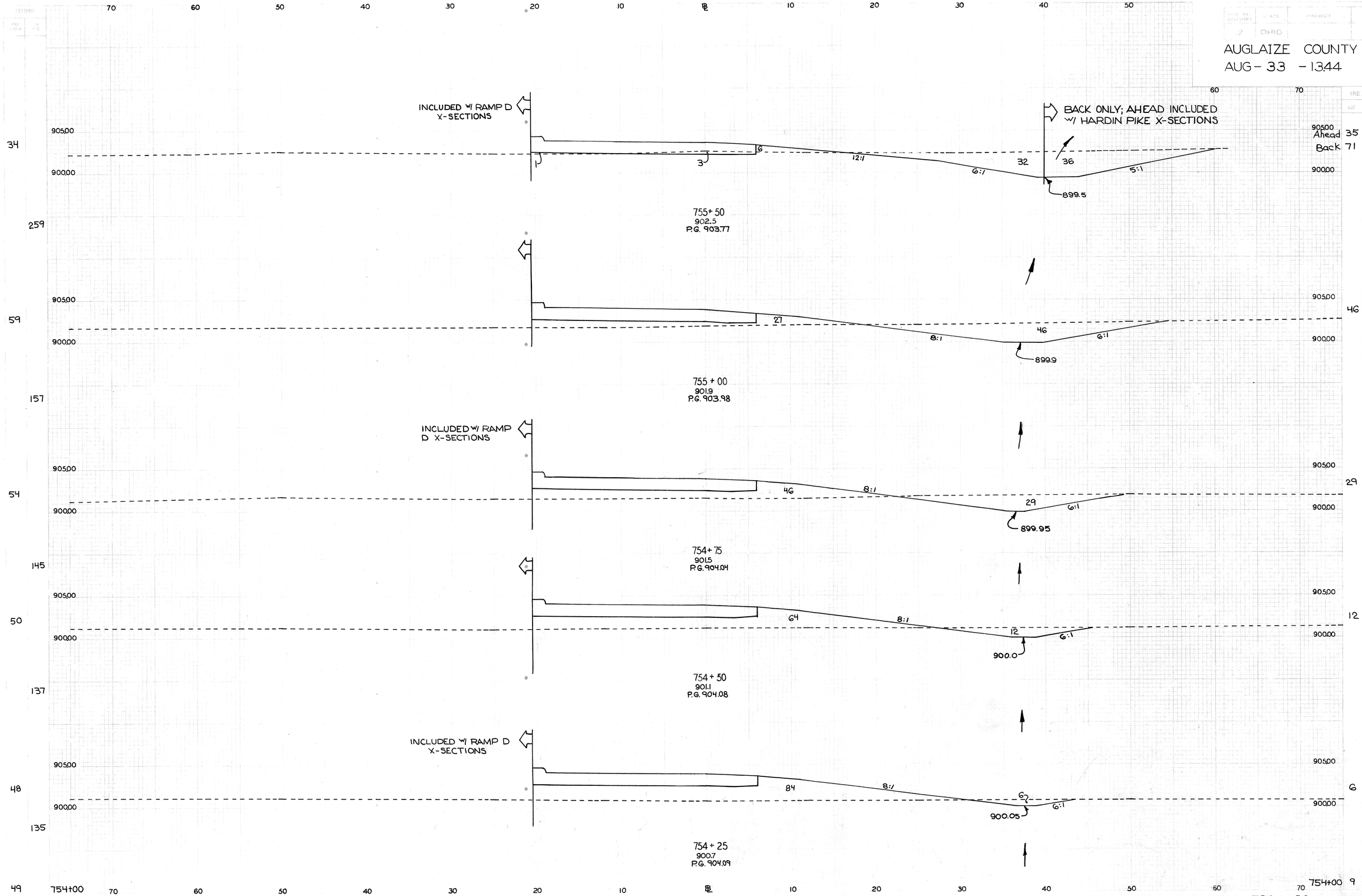
FED. RD. DIVISION 2 | STATE OHIO | PROJECT
135
345

AUGLAIZE COUNTY
AUG- 33 -13.44



X SECTIONS ON PROPOSED RAMP B STA. 752 + 50 TO STA. 754 + 00

AUGLAIZE COUNTY
AUG – 33 – 13.44



X SECTIONS ON PROPOSED RAMP B STA. 754 + 25 TO STA. 755 + 50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

137
345

AUGLAIZE COUNTY
AUG- 33 - 1344

SEEDING	
END WIDTH	SQ. YD.
0	
6	
6	
56	
34	
95	
34	
95	
34	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	16		
		4	6
11	3		
		18	2
27	1		
		41	2
60	2		
49	49		
		44	5
35	7		

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

905.00
900.00

INCLUDED W/ RAMP D X-SECTIONS

INCLUDED W/ HARDIN PIKE X-SECTIONS

16

756+41.51
901.5
P.G. 903.26

BACK ONLY
AHEAD INCLUDED W/ HARDIN PIKE X-SECTIONS

11 3

756+25
901.8
P.G. 903.38

15 1 12

756+00
902.3
P.G. 903.51

INCLUDED W/ RAMP D X-SECTIONS

INCLUDED W/ HARDIN PIKE X-SECTIONS

10:1 11 2 12:1 2:1

2:1

894.80

894.50

124' x 54" TYPE A @ 0.24%

755+75
902.5
P.G. 903.64

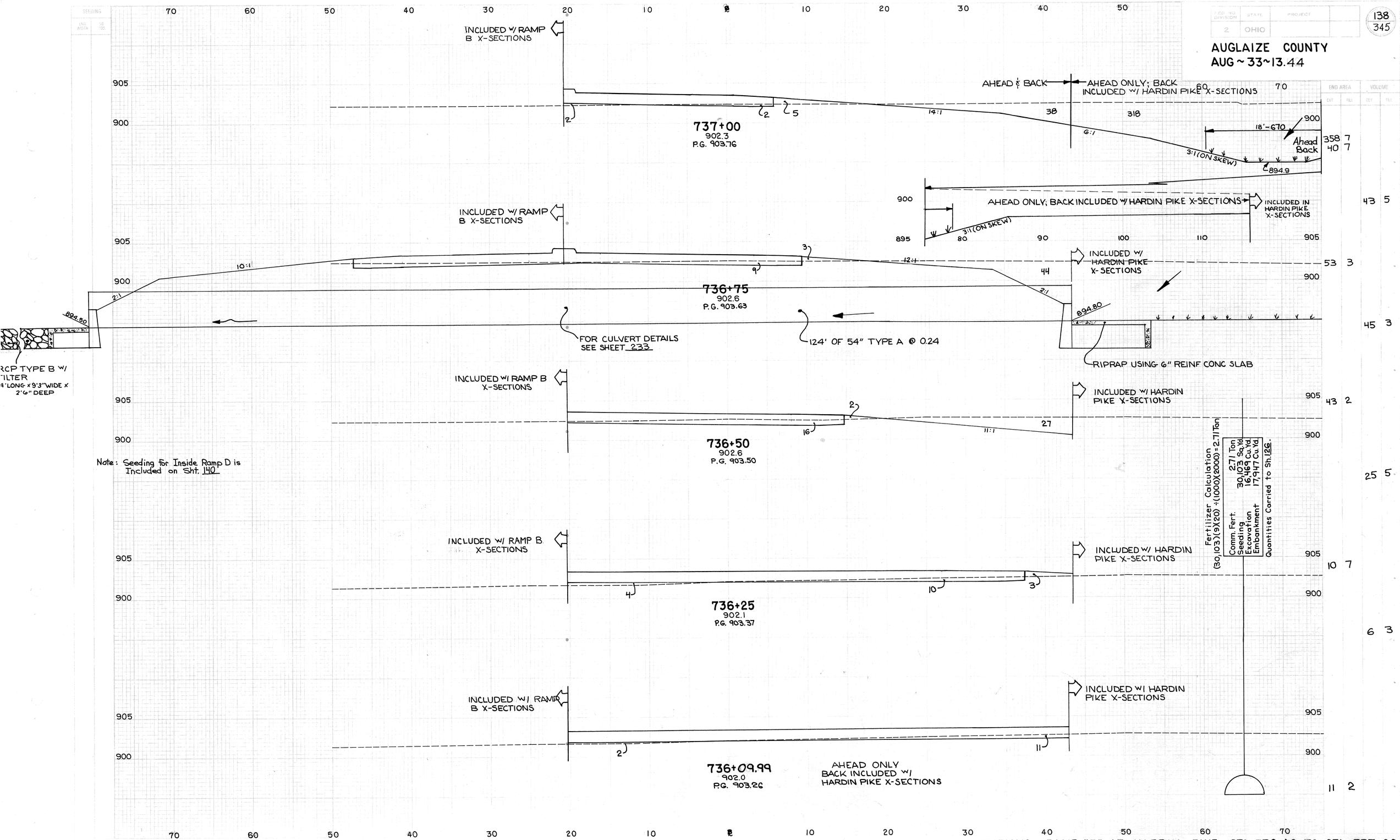
FOR CULVERT DETAILS ~ SEE SHEET 233

755+50

X SECTIONS ON PROPOSED RAMP B STA. 755+75 TO STA. 756+41.51

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

AUGLAIZE COUNTY
AUG ~ 33~13.44



X-SECTIONS RAMP "D" AT HARDIN PIKE STA. 736+10 TO STA. 737+00

SEEDING	
END WIDTH	SQ. YDS.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

139
345

AUGLAIZE COUNTY
AUG~33~13.44

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL

INCLUDED W/ RAMP B X-SECTIONS

739+00
901.6
P.G. 903.99

905
900
30
8:1
247
900
247 30
18'~6.70
SEE OTHER RAMP D X-SECTIONS
3:1 (ON SKEW)
80 190 200 895.5
529 83

738+50
901.2
P.G. 904.09

905
900
59
8:1
324
900
324 59
18'~6.70
SEE OTHER RAMP D X-SECTIONS
3:1 (ON SKEW)
80 160 170 895.3
532 111

INCLUDED W/ RAMP B X-SECTIONS

738+00
901.2
P.G. 904.08

905
900
60
8:1
250
900
250 60
18'~6.70
SEE OTHER RAMP D X-SECTIONS
3:1 (ON SKEW)
80 130 140 895.2
431 81

737+50
901.8
P.G. 903.97

905
900
27
8:1
215
900
215 27
18'~6.70
SEE OTHER RAMP D X-SECTIONS
3:1 (ON SKEW)
80 90 100 895.1
229 26

INCLUDED W/ RAMP B X-SECTIONS

737+25
901.8
P.G. 903.88

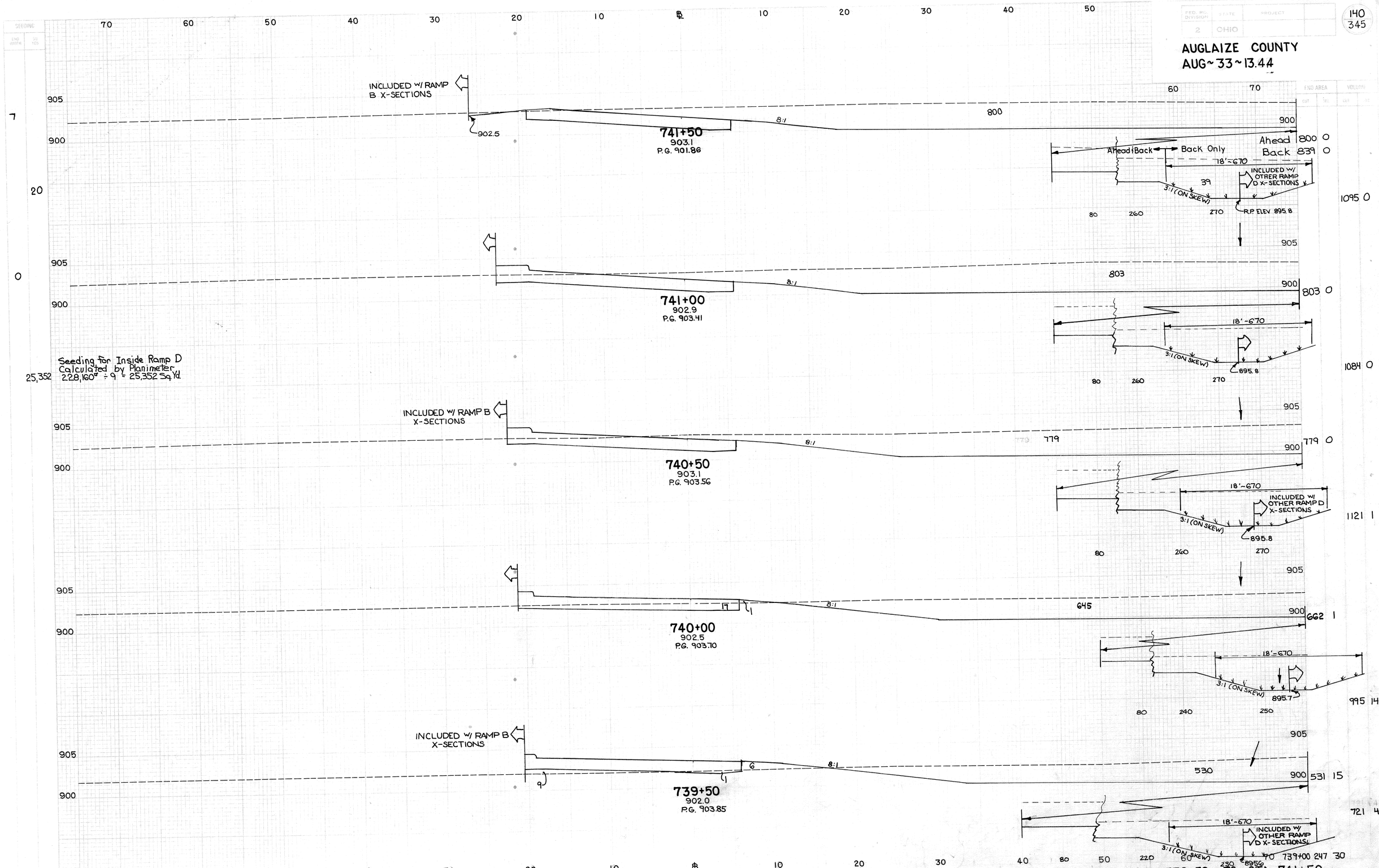
905
900
27
10:1
15:1
279
900
279 29
295 17
18'~6.70
AHEAD INCLUDED W/ RAMP D SECTIONS BACK INCLUDED W/ HARDIN PIKE SECTIONS
3:1 (ON SKEW)
3:1 (ON SKEW)
895.0
70 737+00 358 7

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

X-SECTIONS RAMP "D" AT HARDIN PIKE STA. 737+25 TO STA. 739+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

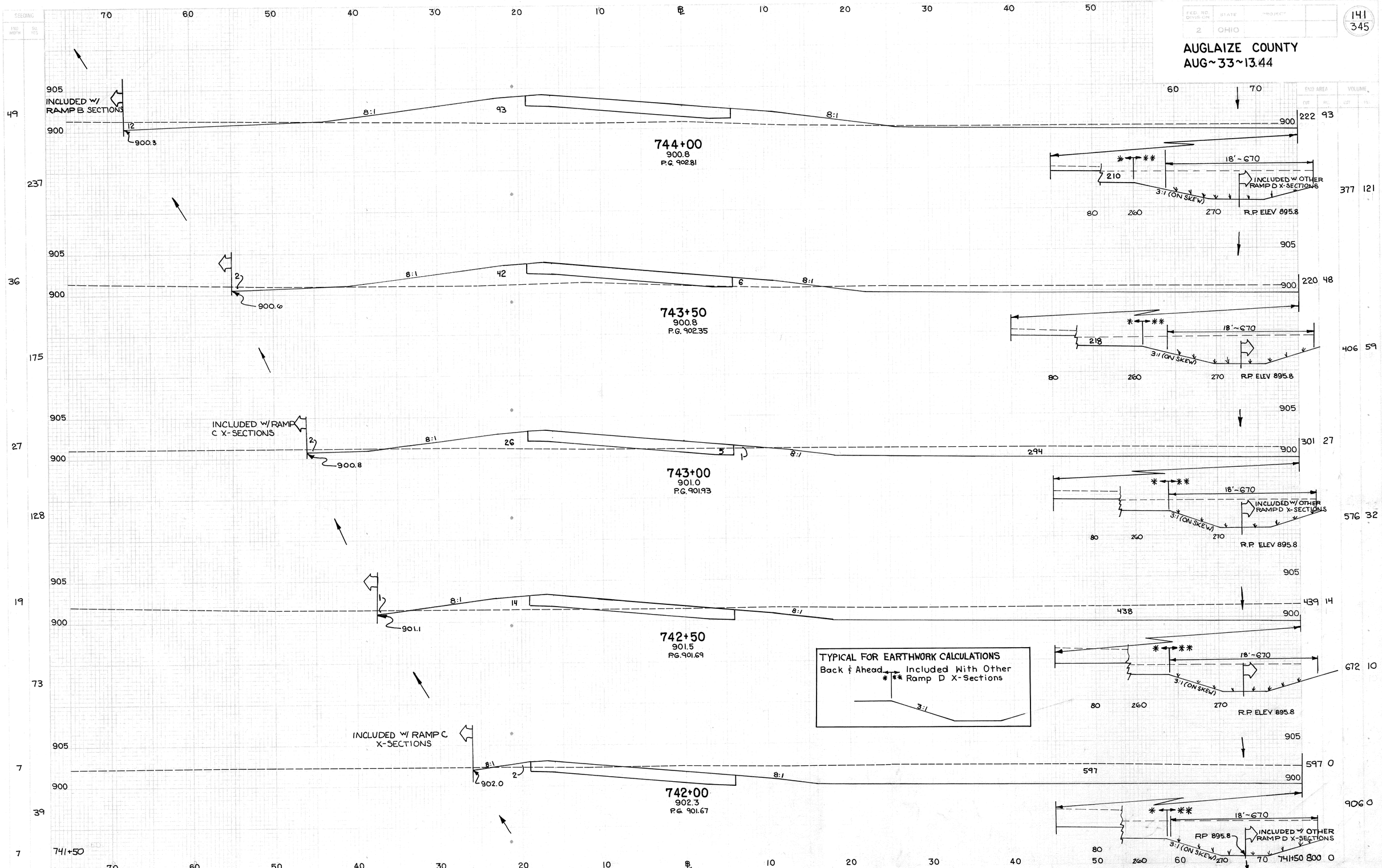
AUGLAIZE COUNTY
AUG~33~13.44



X-SECTIONS RAMP "D" AT HARDIN PIKE STA. 739+50 TO STA. 741+50

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

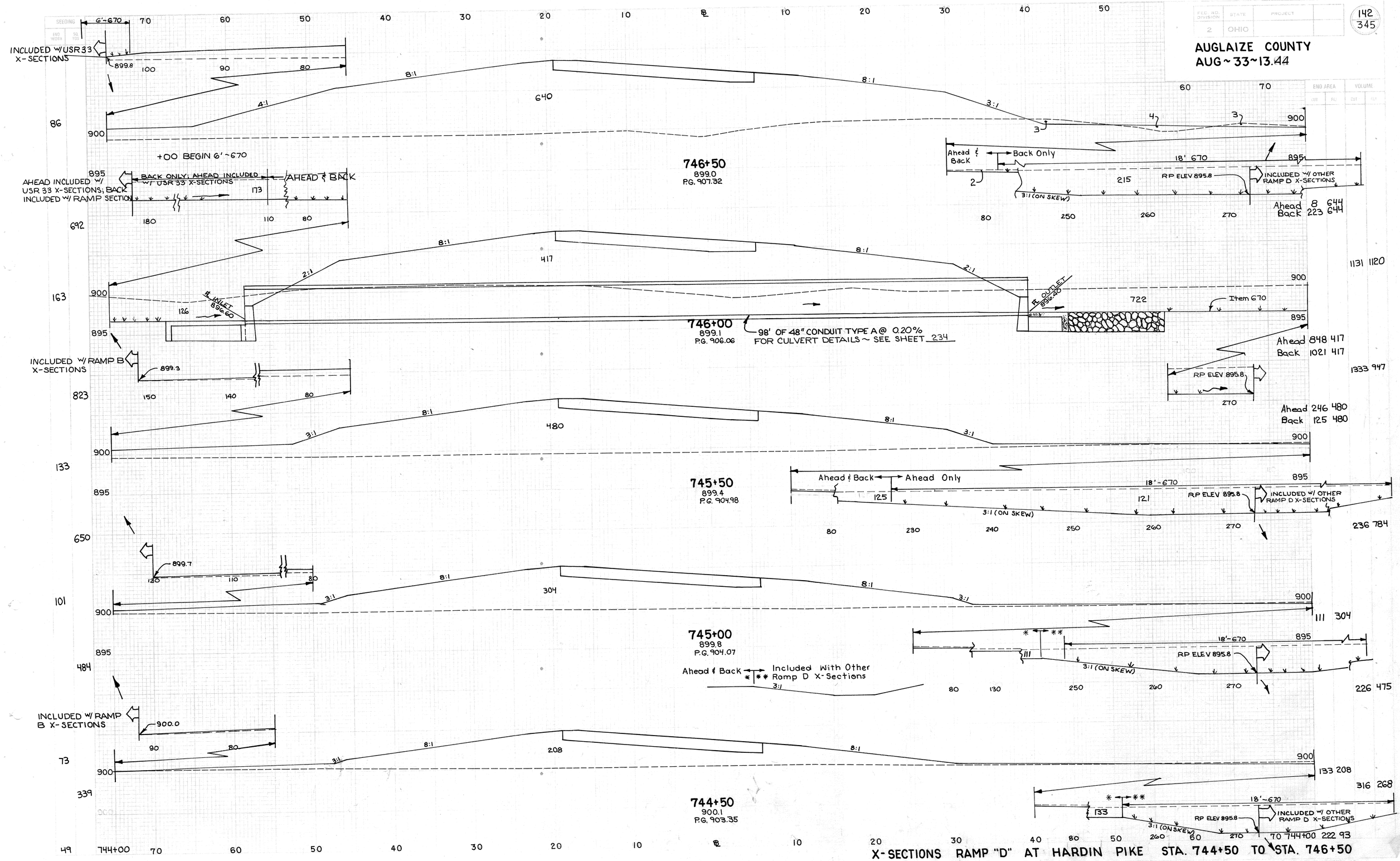
AUGLAIZE COUNTY
AUG~33~13.44



X-SECTIONS RAMP "D" AT HARDIN PIKE STA. 742+00 TO STA. 744+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

AUGLAIZE COUNTY
AUG ~ 33 ~ 13.44



X-SECTIONS RAMP "D" AT HARDIN PIKE STA. 744+50 TO STA. 746+50

SEEDING
LIN. WIDTH | SQ. YDS

FED. RD. DIVISION: 2 | STATE: OHIO | PROJECT:

143
345

AUGLAIZE COUNTY
AUG~33~13.44

70 60 50 40 30 20 10 ℄ 10 20 30 40 50

INCLUDED W/ USR33 X-SECTIONS

BACK ONLY; AHEAD INCL W/ USR33 X-SECTIONS

12:1 915.3 8:1 3:1

5 — 325 — 584

50 — 900

749+00
900.2
P.G. 914.88

895

INCLUDED W/ USR33 X-SECTIONS

12:1 913.4 8:1 3:1

13 — 934

106 — 900

748+50
899.8
P.G. 913.35

895

INCLUDED W/ USR33 X-SECTIONS

8:1 910.4 8:1 3:1

25 — 940

173 — 900

748+00
899.7
P.G. 911.82

895

+00 END 6'-670

6' 670

INCLUDED W/ USR33 X-SECTIONS

8:1 907.0 8:1 3:1

37 — 908

306 — 900

747+50
899.4
P.G. 910.29

895

Ahead / Back * ** Included With Other Ramp D X-Sections

3:1

73 — 876

6'-670

INCLUDED W/ USR33 X-SECTIONS

10:1 903.0 8:1 3:1

442 — 900

747+00
899.5
P.G. 908.76

895

86 — 746+50

60 70 | END AREA CUT FILL | VOLUME CUT FILL

Ahead 174 584
Back 174 909

900 — 18'~670 — 895

174

3:1 (ON SKEW)

INCLUDED W/ OTHER RAMP D X-SECTIONS

895.7

80 280 290

243 1366

900 — 154 934

18'~670 — 895

154

895.8

80 270 280

253 1610

Ahead / Back — Ahead Only

15 97 46

900 — 18'~670 — 895

3:1 (ON SKEW)

INCLUDED W/ OTHER RAMP D X-SECTIONS

RP ELEV 895.8

Ahead 143 955
Back 97 955

80 250 260 270

290 1591

4

900 — 243 912

243

18'~670 — 895

3:1 (ON SKEW)

RP ELEV 895.8

80 250 260 270

452 1590

265 876

900

265

18'~670 — 895

RP ELEV 895.8

3:1 (ON SKEW)

INCLUDED W/ OTHER RAMP D X-SECTIONS

270 1520

80 250 40 260 60 270 70 746+00 8 644

X-SECTIONS RAMP "D" AT HARDIN PIKE STA. 747+00 TO STA. 749+00

AUGLAIZE COUNTY
AUG~33~13.44

INCLUDED W/ USR33 X-SECTIONS

751+00
900.3
P.G. 920.94

1029

BACK ONLY; AHEAD INCLUDED W/ USR 33 X-SECTIONS

381 1029

750+50
900.0
P.G. 919.47

930

337 930

750+00
899.6
P.G. 917.94

INCLUDED W/ USR 33 X-SECTIONS

726

159 726

749+50
899.8
P.G. 916.41

847

133 847

X-SECTIONS RAMP "D" AT HARDIN PIKE STA. 749+50 TO STA. 751+00

FHWA REGION	STATE	PROJECT	
5	OHIO		

145
345

AUGLAIZE COUNTY
AUG~33~13.44

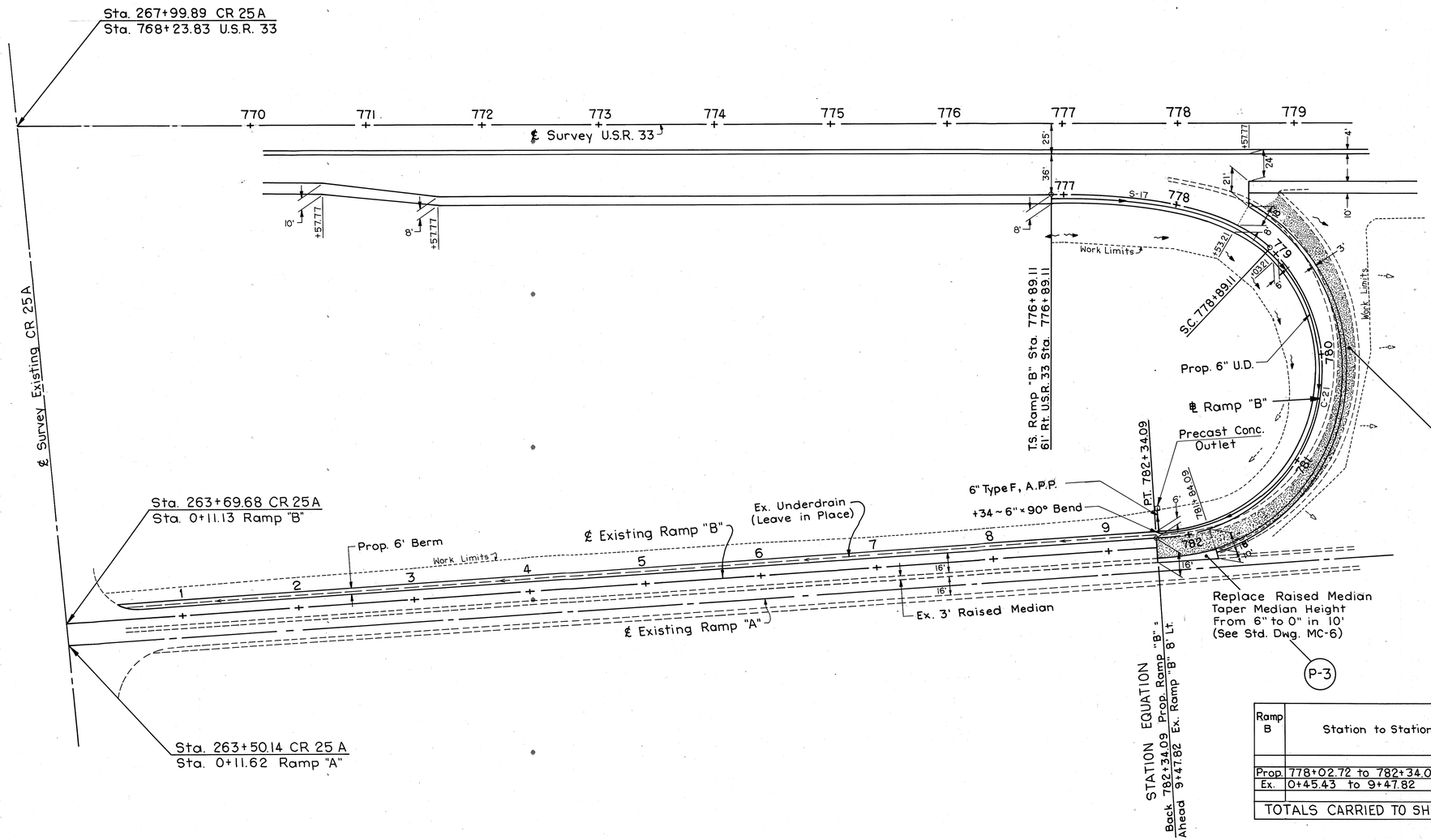
N

Spiral Data S-17

Ls = 200.00'	Xc = 190.64'
Lc = 195.78'	L.T. = 136.84'
Dc = 39° 38' 04.6"	S.T. = 69.86'
K = 98.43'	Θs = 39° 38' 04.6"
Yc = 44.56'	

Curve Data C-21

Δ = 136° 44' 01.4"	Dc = 39° 38' 04.6"
L.C. = 268.76'	R = 144.56'
T = 364.50'	Lc = 344.99'
Ex = 247.56'	



For Pavement Quantities ~ See Sht. 34-35.
For Underdrain Quantities ~ See Sht. 37.
For Ballooned Quantities ~ See Sht. 36.

R-2 Remove Ex. Ramp "B"

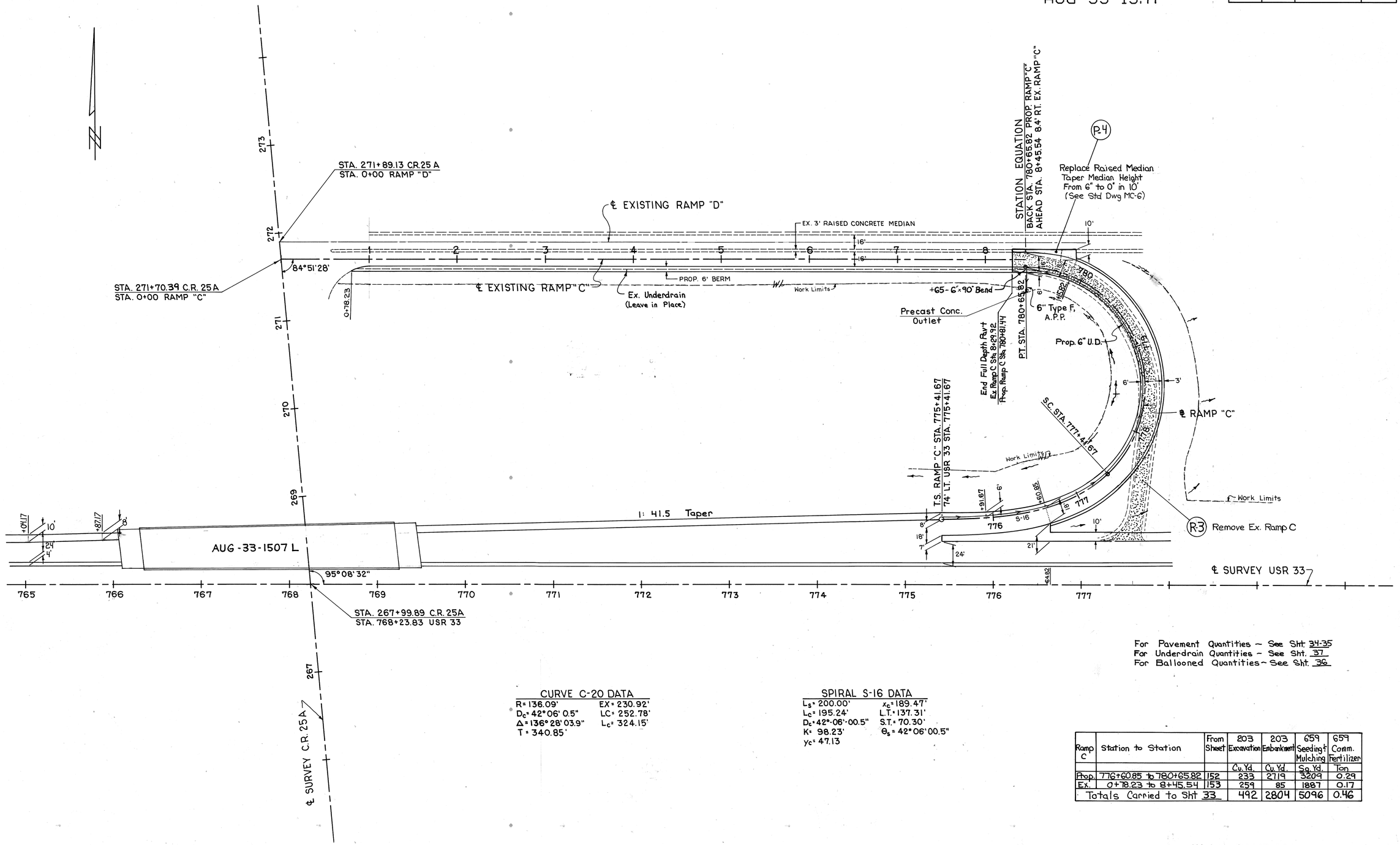
Ramp B	Station to Station	From Sheet	203 Excavation	203 Embankment	659 Seeding & Mulching	659 Commerical Fertilizer
			Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton
Prop.	778+02.72 to 782+34.09	148	729	624	2116	0.19
Ex.	0+45.43 to 9+47.82	150	298	93	2027	0.19
TOTALS CARRIED TO SHT. 33			1027	717	4143	0.38

PLAN RAMP "B" CR 25 A

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

146/345



For Pavement Quantities – See Sht. 34-35
For Underdrain Quantities – See Sht. 37
For Ballooned Quantities – See Sht. 36

CURVE C-20 DATA

R = 136.09'	EX = 230.92'
D_C = 42°06' 0.5"	LC = 252.78'
Δ = 136° 28' 03.9"	L_C = 324.15'
T = 340.85'	

SPIRAL S-16 DATA

L_S = 200.00'	x_C = 189.47'
L_C = 195.24'	L.T. = 137.31'
D_C = 42°-06'-00.5"	S.T. = 70.30'
K = 98.23'	Θ_S = 42° 06' 00.5"
y_C = 47.13	

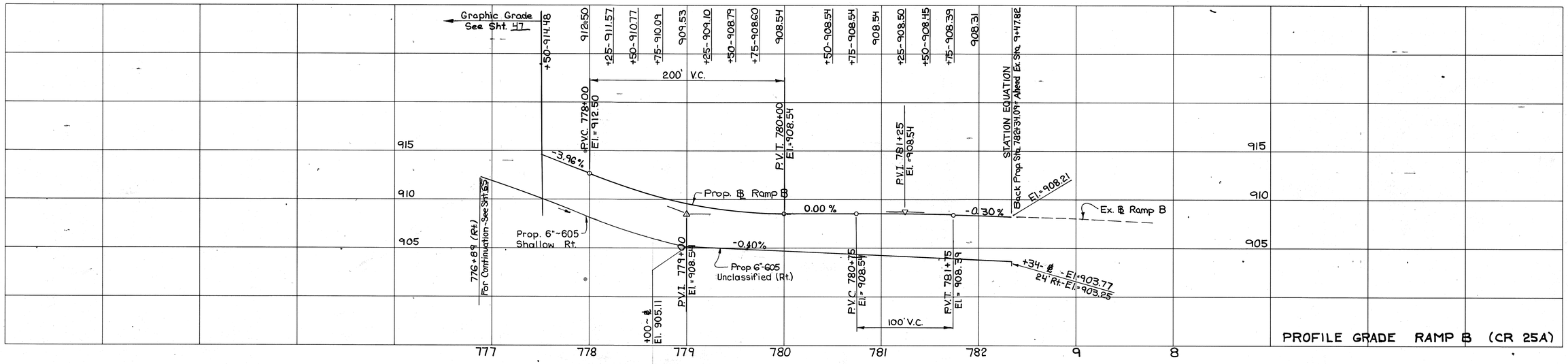
Ramp C	Station to Station	From Sheet	203 Excavation	203 Embankment	659 Seeding & Mulching	659 Comm. Fertilizer
			Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton
Prop.	776+60.85 to 780+65.82	152	233	2719	3209	0.29
Ex.	0+78.23 to 8+45.54	153	259	85	1887	0.17
Totals Carried to Sht 33			492	2804	5096	0.46

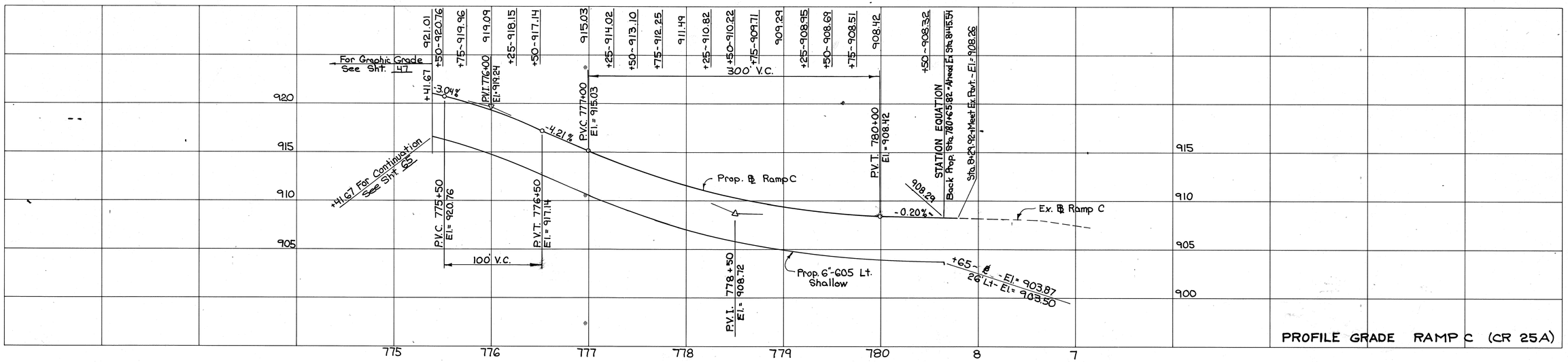
PLAN RAMP "C"
C.R. 25A

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

147
345





PROFILE GRADE RAMP B & RAMP C (CR 25A)

SEEDING

TYP. WIDTH	SQ. YDS.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

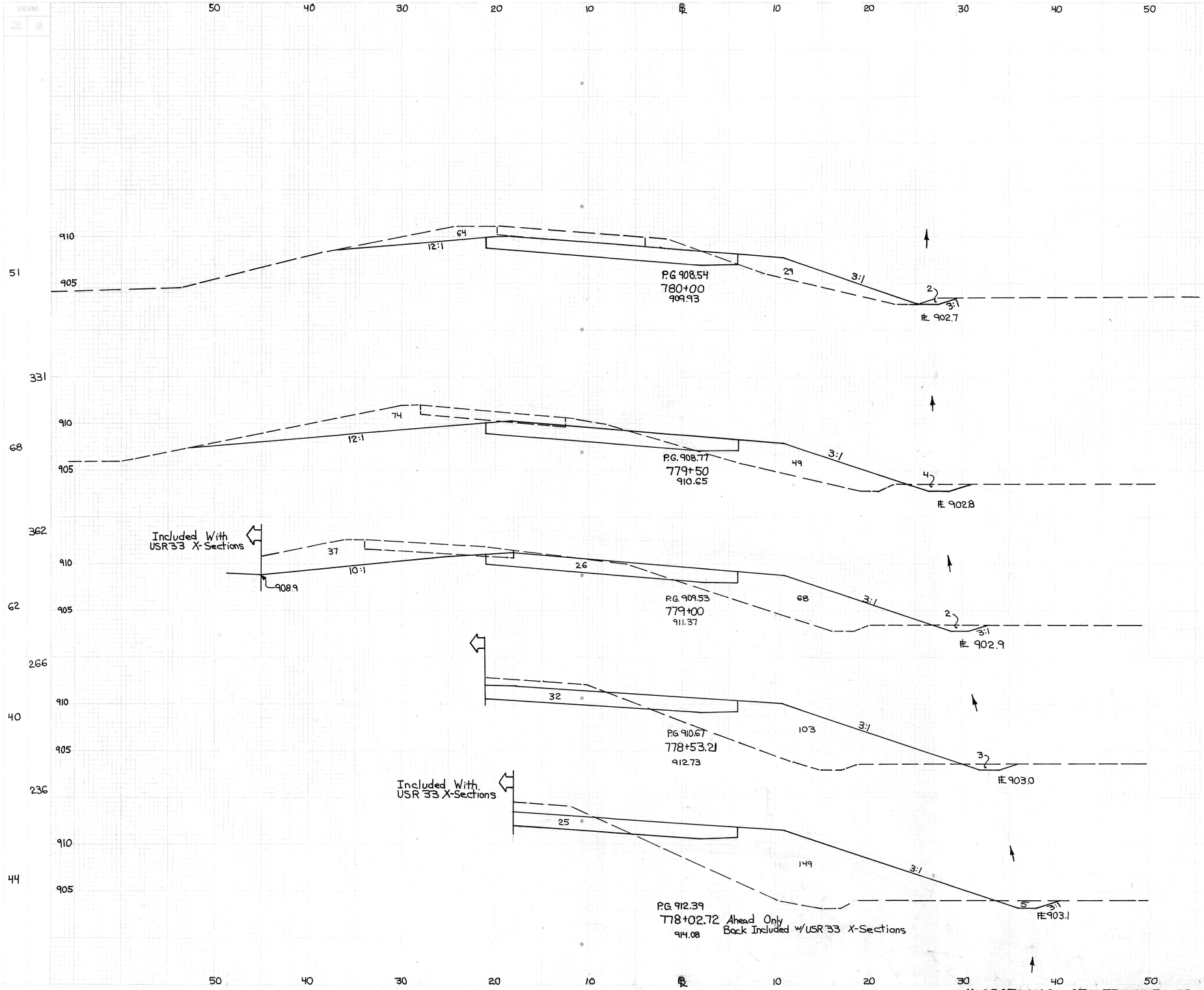
148
345

AUGLAIZE COUNTY
AUG-33-13.44

Fertilizer Calculation
(2.116)(9)(20)÷(1000)(2000)=0.19Ton

Comm. Fert.	0.19 Ton
Seeding	2.116 Sq.Yd.
Excavation	729 Cu.Yd.
Embankment	624 Cu.Yd.

Quantities Carried to Sheet 145



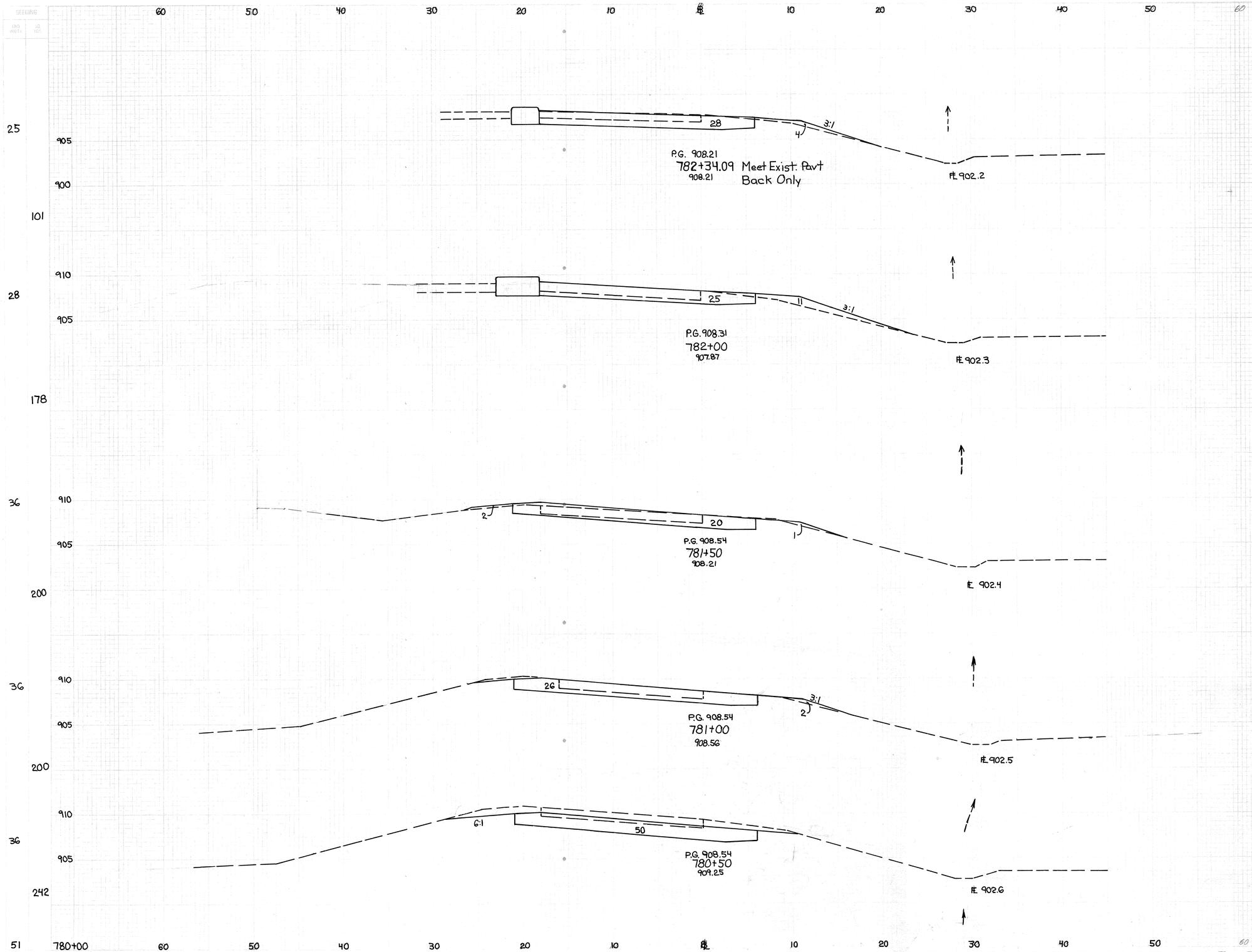
	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
51				
331	66	29		
68			134	73
362	78	49		
62			133	109
266	65	68		
40			102	149
236	35	103		
44			62	236
	30	149		

X-SECTIONS STA. 778+02.72 TO STA. 780+00 RAMP B (CR-25A ℄ U.S.R. 33)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

149
345

AUGLAIZE COUNTY
AUG-33-13.44



X-SECTIONS STA. 780+50 TO STA. 782+34.09 RAMP B (CR 25-A x USR 33)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

150
345

AUGLAIZE COUNTY
AUG-33-13.44

SEEDING

END WIDTH	SIDE SLOPE
22	345
20	228
21	250
24	262
23	262
24	245
20	223
20	212
18	

℄

9+47.82 Ex. Ramp B =
782+34.09 Prop. Ramp B

9+47.82(B) Back Only
908.3

8+00 (B)
907.8

7+00 (B)
906.6

6+00 (B)
905.8

5+00 (B)
905.2

4+00 (B)
904.6

3+00 (B)
903.8

2+00 (B)
903.0

1+00 (B)
902.6

0+45.43(B) Ahead Only; Meet Existing

50 40 30 20 10 ℄

Fertilizer Calculation
(2027)(9)(20)÷(1000)(2000)=.019Ton

Comm. Fert.	.019 Ton
Seeding	2027 Sq.Yd.
Excavation	298 Cu.Yd.
Embankment	93 Cu.Yd.

Quantities Carried to Sh. 145.

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
910				
	9	3		
905			50	14
910				
	9	2		
905			34	8
910				
	9	2		
905			34	10
910				
	9	3		
905			34	13
910				
	9	4		
905			34	13
905				
	9	3		
900			34	10
905				
	9	2		
900			34	10
905				
	9	3		
900			34	12
905				
	9	3		
900			10	3
	0	0		

X-SECTIONS STA. 0+45.43 TO STA. 9+47.82 EXIST. RAMP B (CR-25A & USR 33)

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

151
345

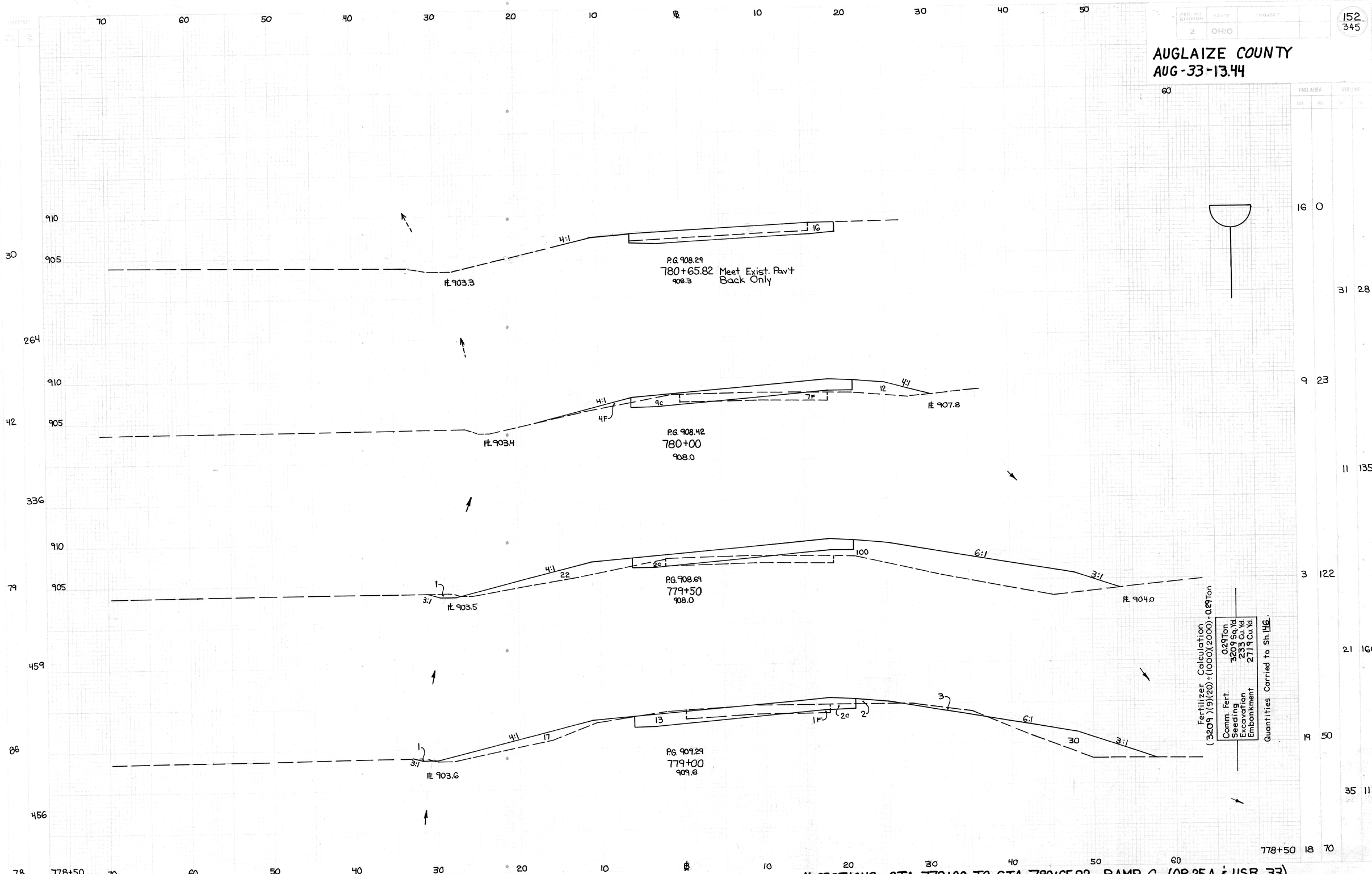
AUGLAIZE COUNTY
AUG-33-13.44

| | | |

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

152
345

AUGLAIZE COUNTY
AUG-33-13.44



	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
60				
	16	0		
			31	28
	9	23		
			11	135
	3	122		
			21	160
	19	50		
			35	111
778+50	18	70		

Fertilizer Calculation
(3209)(9)(20)÷(1000)(2000)=0.29Ton

Comm. Fert.	0.29Ton
Seeding	3209 Sq.Yd.
Excavation	233 Cu.Yd.
Embankment	2719 Cu.Yd.

Quantities Carried to Sh. 146.

X-SECTIONS STA. 779+00 TO STA. 780+65.82 RAMP C-(CR-25A & USR 33)

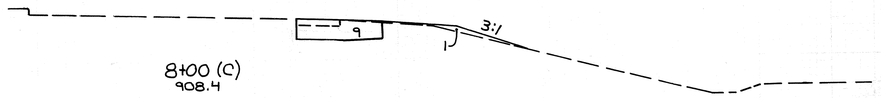
AUGLAIZE COUNTY
AUG-33-13.44

℄ 10 20 30 40

780+65.82 Prop. Ramp C Ahead =
8+45.54 Exist. Ramp C Back



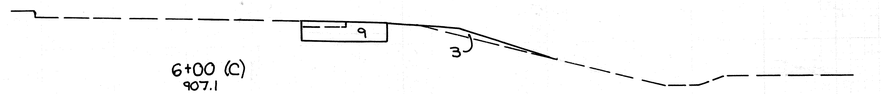
8+45.54 Back Only
908.7



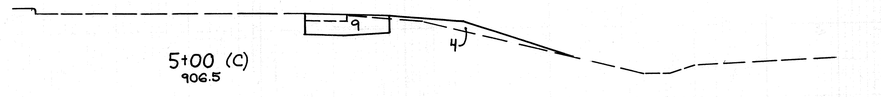
8+00 (C)
908.4



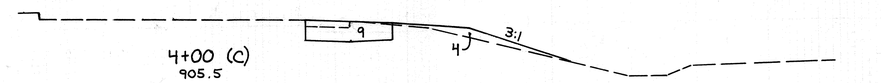
7+00 (C)
907.8



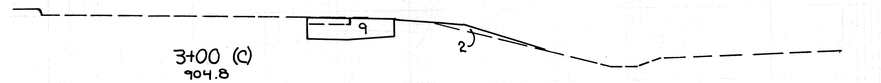
6+00 (C)
907.1



5+00 (C)
906.5



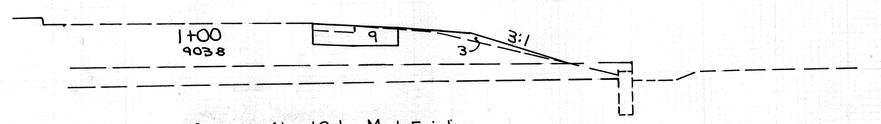
4+00 (C)
905.5



3+00 (C)
904.8



2+00 (C)
904.3



1+00
903.8

0+78.23 Ahead Only; Meet Existing
℄ 10 20 30 40

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
26	10	1		
119			17	2
21	9	1		
234			34	6
21	9	2		
239			34	10
22	9	3		
250			34	13
23	9	4		
262			34	15
24	9	4		
256			34	12
22	9	2		
250			34	12
23	9	4		
250			34	13
22	9	3		
27	4	2		
0	0	0		

Fertilizer Calculation
(1887)(9)(20)÷(1000)(2000) = 0.17 Ton

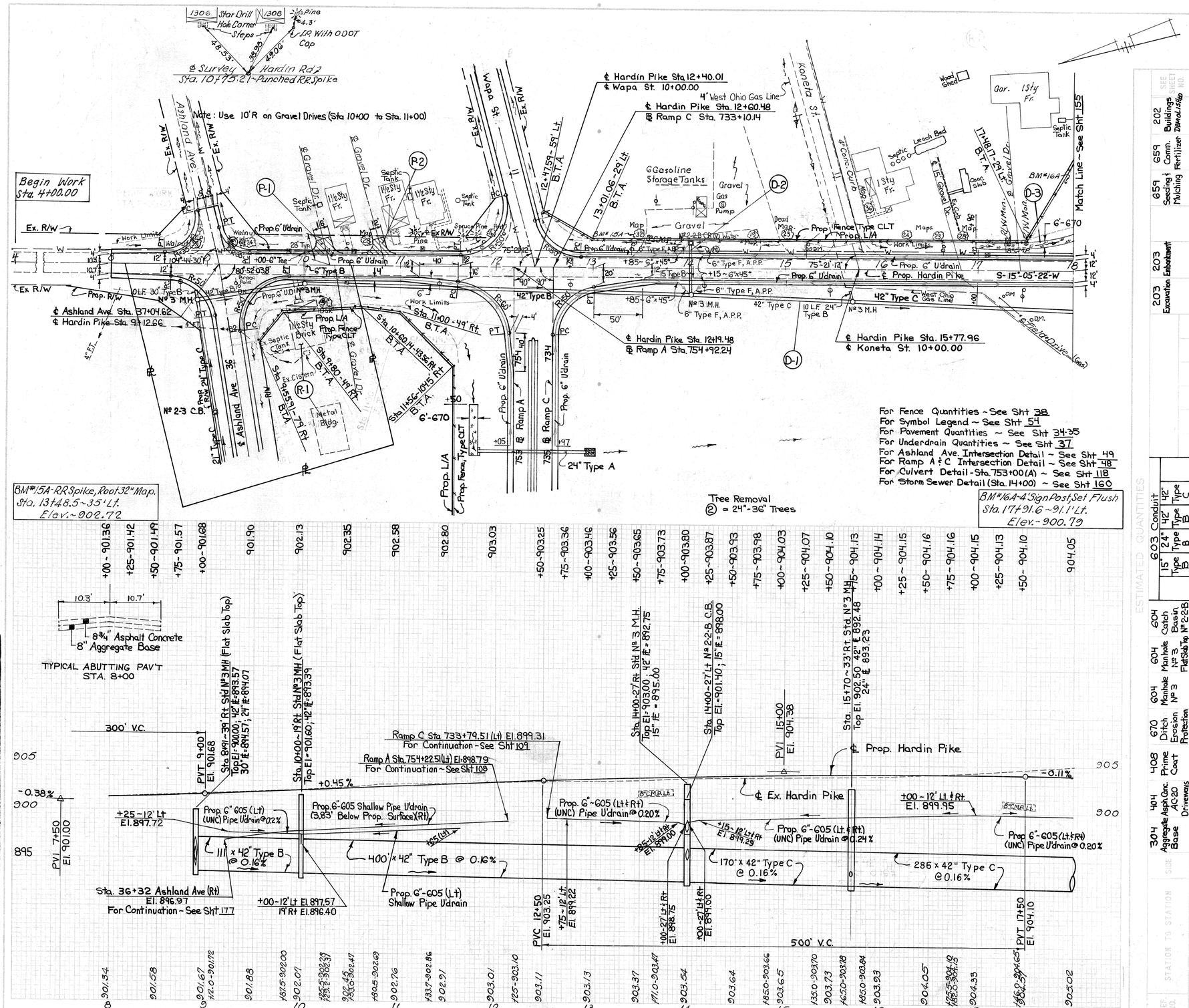
Comm. Fert.	0.17 Ton
Seeding	1887 Sq. Yd.
Excavation	259 Cu. Yd.
Embankment	85 Cu. Yd.

Quantities Carried to Sht 146

X-SECTIONS STA. 0+78.23 TO STA. 8+45.54 EX. RAMP C (CR-25A & USR 33)

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
5	OHIO			154	345

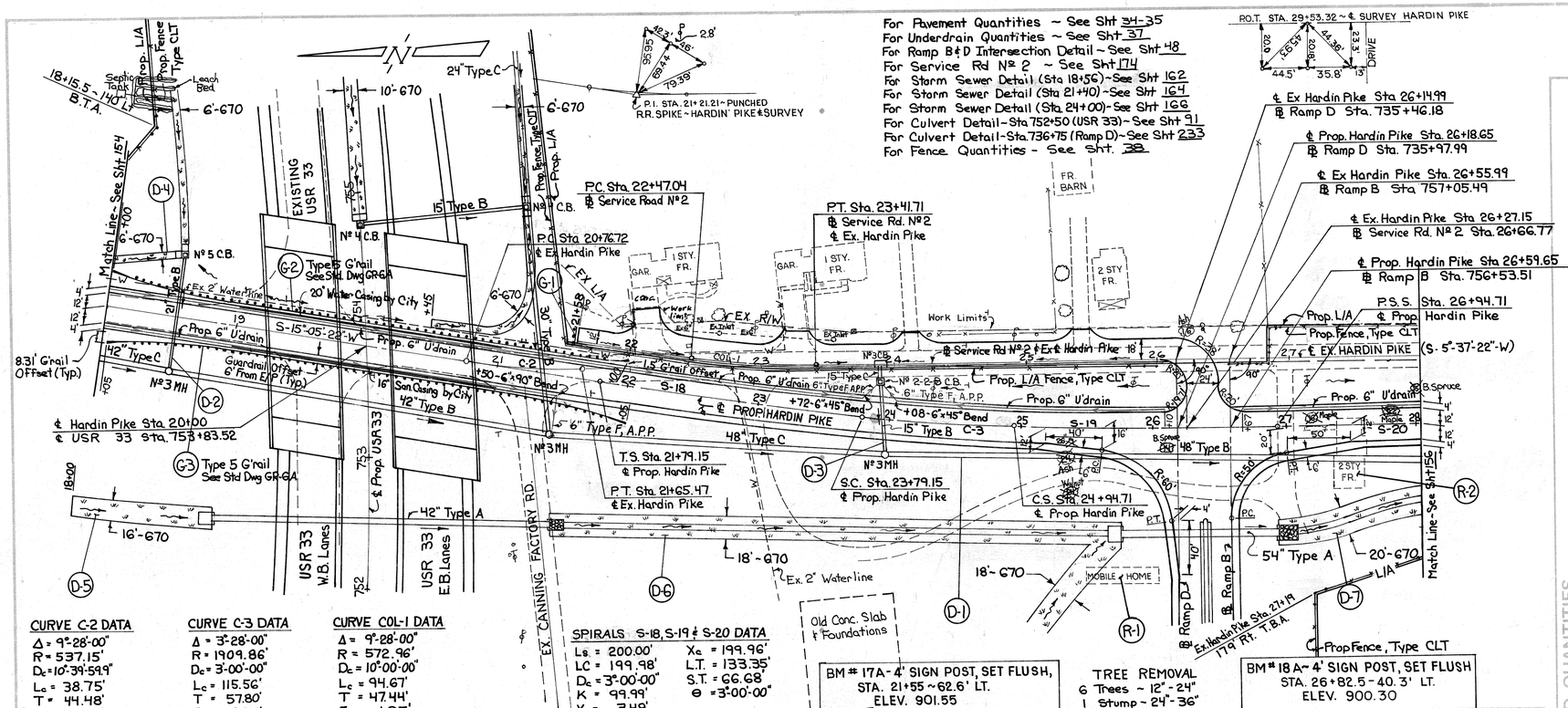

Star Drill
Hole Corner
Steps
Pine
LA With ODOT Cap
℄ Survey Hardin Rd 2
Sta. 10+75.21 ~ Punched RR Spike
Note: Use 10'R on Gravel Drives (Sta 10+00 to Sta. 11+00)
Ashland Ave.
Wapa St.
Koneta St.
Gravel Dr.
Begin Work Sta. 4+00.00
Ex. R/W
Work Limits
Prop. 6" U'drain
Prop. L/A
Prop. Fence Type CLT
Septic Tank
Gas Pump
Gasoline Storage Tanks
Leach Bed
Shed
Gar.
Drive
Walnut
Maple
Spruce Pine
Metal Bldg.
Ex. Cistern
Ex. Catch Basin
Ex. Inlet
Ex. Manhole
Ex. Gas Valve
Ex. Water Valve
Ex. Water Meter
Ex. Sign
Ex. Mail Box
Ex. Light Pole
Ex. Power Pole
Ex. Guy Anchor
Ex. Fire Hydrant
Ex. Water Line
Ex. Gas Line
Ex. Underground Electric
Ex. Underground Telephone
Ex. Overhead Electric
Ex. Overhead Telephone
Ex. Overhead Electric & Telephone
Ex. Fence
Ex. Tree
Ex. Shrub
Ex. Contour
Ex. Ditch
Ex. Creek
Ex. Pond
Ex. Building
Ex. Concrete
Ex. Asphalt
Ex. Gravel
Ex. Brick
Ex. Stone
Ex. Wood
Ex. Steps
Ex. Retaining Wall
Ex. Guard Rail
Ex. Culvert
Ex. Bridge
Ex. Railroad
Ex. Railroad Signal
Ex. Railroad Crossing
Ex. Railroad Switch
Ex. Railroad Signal Box
Ex. Railroad Signal Light
Ex. Railroad Signal Gate
Ex. Railroad Signal Arm
Ex. Railroad Signal Post
Ex. Railroad Signal Wire
Ex. Railroad Signal Cable
Ex. Railroad Signal Conduit
Ex. Railroad Signal Duct
Ex. Railroad Signal Manhole
Ex. Railroad Signal Handhole
Ex. Railroad Signal Pedestal
Ex. Railroad Signal Cabinet
Ex. Railroad Signal Relay
Ex. Railroad Signal Transformer
Ex. Railroad Signal Battery
Ex. Railroad Signal Charger
Ex. Railroad Signal Rectifier
Ex. Railroad Signal Inverter
Ex. Railroad Signal Converter
Ex. Railroad Signal Amplifier
Ex. Railroad Signal Repeater
Ex. Railroad Signal Detector
Ex. Railroad Signal Sensor
Ex. Railroad Signal Transmitter
Ex. Railroad Signal Receiver
Ex. Railroad Signal Antenna
Ex. Railroad Signal Tower
Ex. Railroad Signal Mast
Ex. Railroad Signal Pole
Ex. Railroad Signal Bracket
Ex. Railroad Signal Arm
Ex. Railroad Signal Light
Ex. Railroad Signal Gate
Ex. Railroad Signal Crossing
Ex. Railroad Signal Switch
Ex. Railroad Signal Box

AUGLAIZE COUNTY
AUG~33-13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

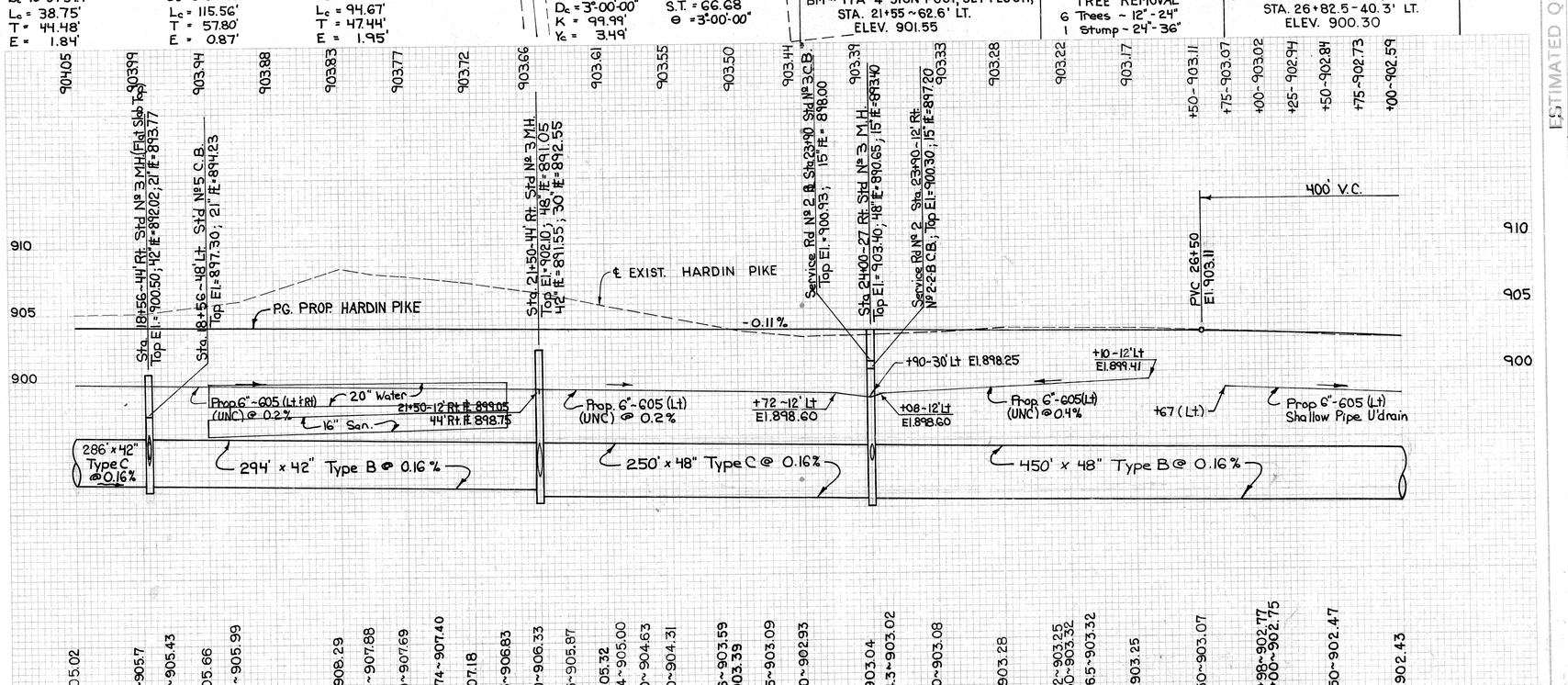
155
345

For Pavement Quantities ~ See Sht 34-35
For Underdrain Quantities ~ See Sht 37
For Ramp B & D Intersection Detail ~ See Sht 48
For Service Rd Nº 2 ~ See Sht 174
For Storm Sewer Detail (Sta 18+56) ~ See Sht 162
For Storm Sewer Detail (Sta 21+40) ~ See Sht 164
For Storm Sewer Detail (Sta 24+00) ~ See Sht 166
For Culvert Detail ~ Sta 752+50 (USR 33) ~ See Sht 91
For Culvert Detail ~ Sta 736+75 (Ramp D) ~ See Sht 233
For Fence Quantities ~ See Sht. 38



CURVE C-2 DATA	CURVE C-3 DATA	CURVE C0L-1 DATA
Δ = 9°-28'-00"	Δ = 3°-28'-00"	Δ = 9°-28'-00"
R = 537.15'	R = 1909.86'	R = 572.96'
D_c = 10°-39'-59.9"	D_c = 3°-00'-00"	D_c = 10°-00'-00"
L_c = 38.75'	L_c = 115.56'	L_c = 94.67'
T = 44.48'	T = 57.80'	T = 47.44'
E = 1.84'	E = 0.87'	E = 1.95'

SPIRALS S-18, S-19 & S-20 DATA		
L_s = 200.00'	X_c = 199.96'	
LC = 199.98'	L.T. = 133.35'	
D_c = 3°-00'-00"	S.T. = 66.68'	
K = 99.99'	θ = 3°-00'-00"	
Y_c = 3.49'		



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Buildings Demolished Each	603 Conduit 15" Type B L.F.	603 Conduit 15" Type C L.F.	604 Catch Basin Nº 3 Each	604 Catch Basin Nº 2-2-8 Each	604 Catch Basin Nº 3 Each	604 Catch Basin Nº 5 Each	604 Manhole Nº 3 Flat Slab Top Each	606 Guardrail Type 5 Lin. Ft.	606 Anchor Assembly Type A Each	802 Barrier Reflector Type A Each (White)	670 Ditch Erosion Protection Sq. Yd.	659 Comm. Fertilizer Ton	SEE SHEET NO.
D-1	18+00 to 28+00	Rt & Lt			250											
D-2	18+56 to 23+90	Lt & Rt			400			1		1						
D-3	23+90 to 24+00	Lt & Rt			56			1		1						
D-4	18+00 to 18+49	Lt		92										33		
D-5	18+00 to 19+00	Rt			294									177		
D-6	21+58 to 25+75	Rt												815		
D-7	24+90 to 28+00	Rt												217		
G-1	21+58	Lt							1		12.5	1	5			
G-2	18+00 to 22+00	Lt & Rt									350.0	2	5			
G-3	18+05 to 22+05	Rt									350.0	2	5			
	18+00 to 28+00	Lt & Rt													1.27	164
R-1	25+70	Rt	Lump													
R-2	27+45	Rt	Lump													
	TOTALS		Lump	92	1294	2	1	4	1	2	712.5	4	10	1242	1.27	
				58	12						4,035			11,632	5133	14,035
											4,035			11,632	5133	
											712.5			1242	1.27	
											250			400	56	
											92			294		
											12			58		

SEE SHT 30-32

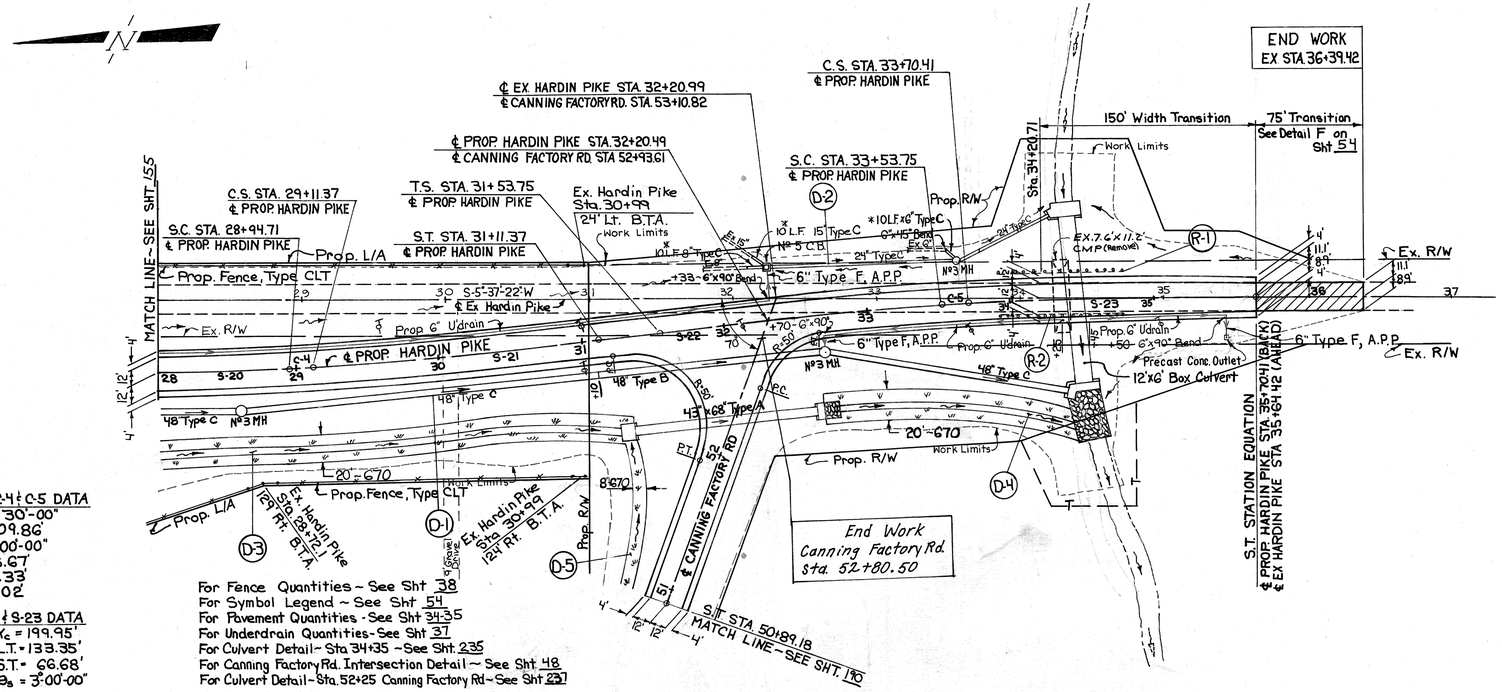
PLAN AND PROFILE STA. 18+00 TO STA. 28+00 ~ HARDIN PIKE

AUGLAIZE COUNTY
AUG~33~13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

156
345

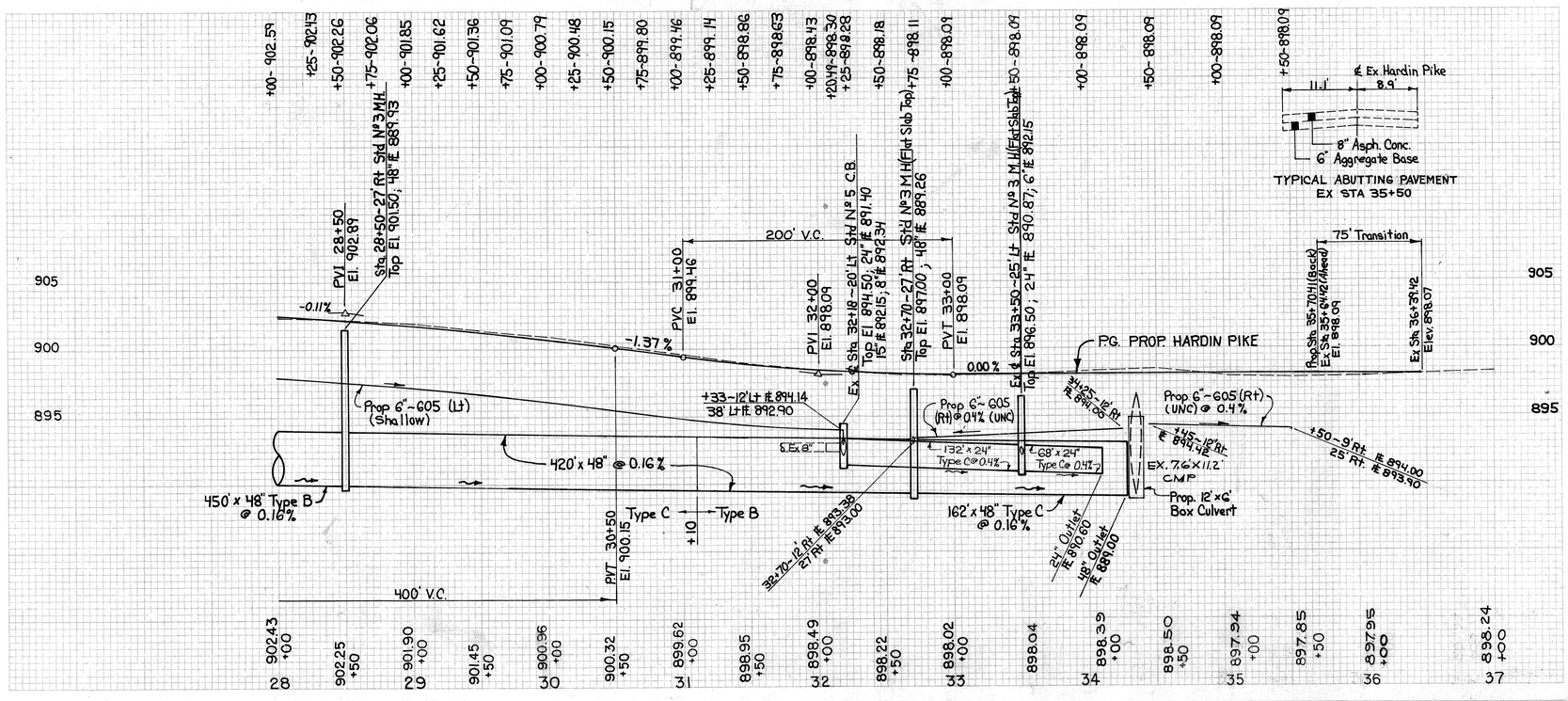
* Meet Exist Pipe With New Pipe in Kind



CURVE C-4 & C-5 DATA
- Δ = 0°-30'-00"
- R = 1909.86'
- D_c = 3°-00'-00"
- L_c = 16.67'
- T = 8.33'
- E = 0.02

SPIRALS S-20, S-21, S-22 & S-23 DATA
- L_s = 200.00'
- D_c = 3°00'-00"
- K = 99.99'
- Y_c = 3.49'
- X_c = 199.95'
- L.T. = 133.35'
- S.T. = 66.68'
- θ_s = 3°-00'-00"

For Fence Quantities ~ See Sht 38
For Symbol Legend ~ See Sht 54
For Pavement Quantities ~ See Sht 34-35
For Underdrain Quantities ~ See Sht 37
For Culvert Detail ~ Sta 34+35 ~ See Sht 235
For Canning Factory Rd. Intersection Detail ~ See Sht 48
For Culvert Detail ~ Sta. 52+25 Canning Factory Rd ~ See Sht 251



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Guardrail Removed Lin. Ft.	604 Manhole No 3 Each	604 Manhole No 3 Flat Slab Top Each	604 Catch Basin No 4 Each	670 Ditch Erosion Protection Sq Yd	603 Conduit 6" Type C L.F.	603 Conduit 8" Type C L.F.	603 Conduit 15" Type C L.F.	603 Conduit 24" Type C L.F.	603 Conduit 48" Type B L.F.	603 Conduit 48" Type C L.F.	203 Excavation Embankment Cu. Yd.	203 Excavation Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Ton	SEE SHEET NO.
R-1	33+85 to 34+73	Lt.	88															
R-2	33+85 to 34+73	Rt.	88															
D-1	28+00 to 34+28	Rt.		1		1						210	422					
D-2	32+08 (Ex) to 34+11 (Ex)	Lt.		1		1				10	200							
D-3	28+00 to 31+30	Rt.					738											
D-4	32+58 to 34+42	Rt.					416											
D-5	50+89 (C.F. Rd) to 51+87 (Can'g)	Lt.					89											
	28+00 to 36+39.82	Lt. & Rt.																
TOTALS TO SHT 30-32			176	1	2	1	1243	10	10	10	200	210	422	3606	1627	7638	0.69	171

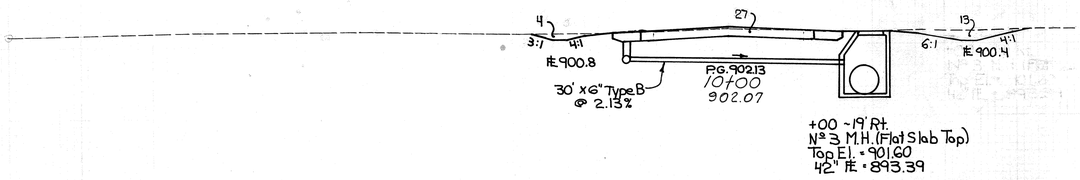
PLAN & PROFILE STA. 28+00 TO STA. 36+00 ~ HARDIN PIKE

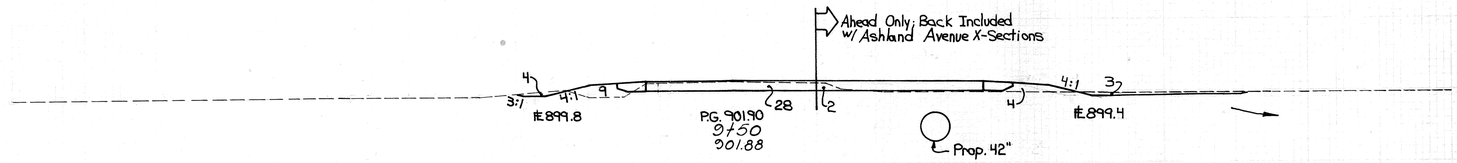
FED. NO. DIVISION	STATE	PROJECT	
5	OHIO		

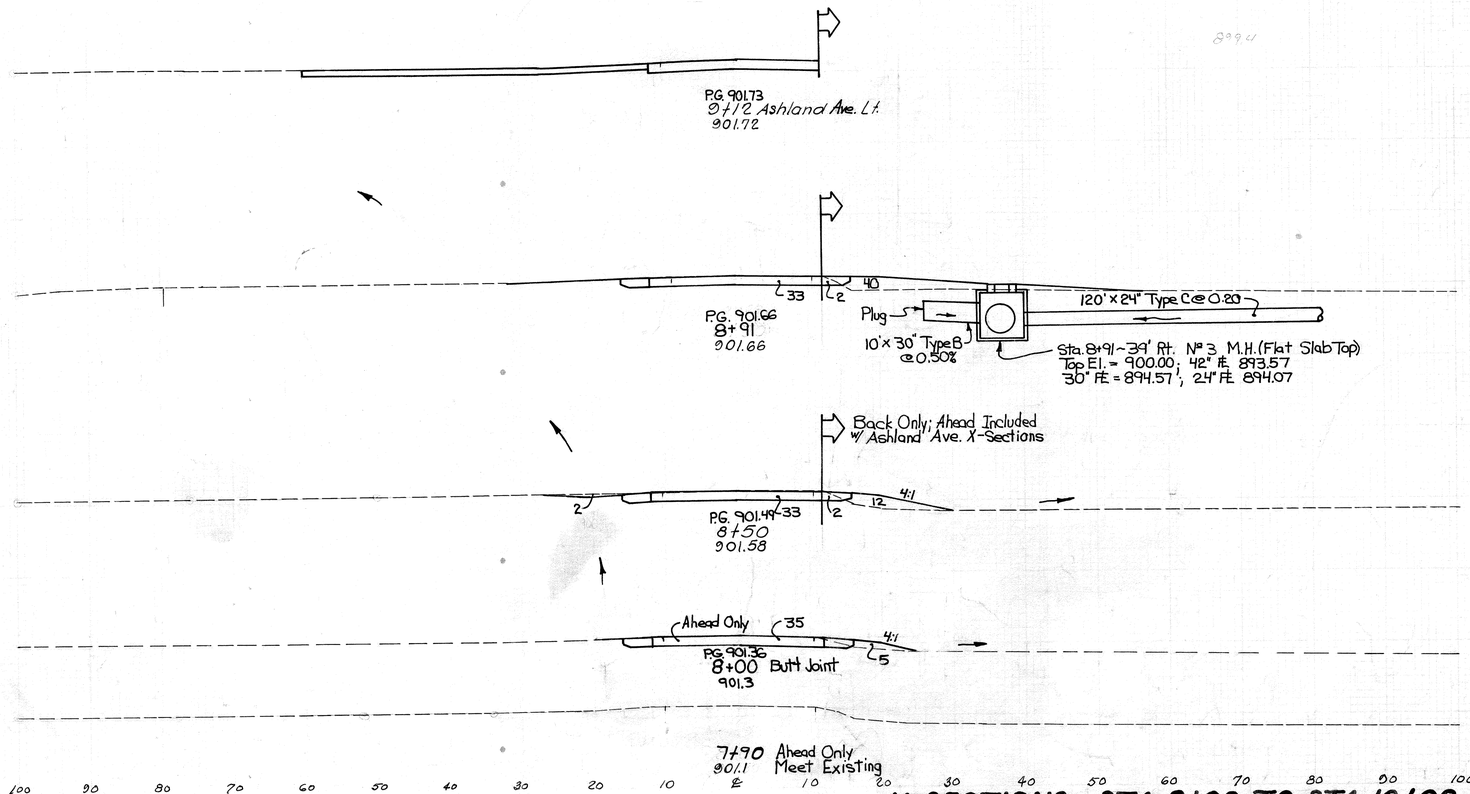
157
345

AUGLAIZE COUNTY
AUG-33-13.44

	EXISTING	TEMPLATE	DITCHES	AREAS	VOLUMES	SEEDING
BY	KMK					
DATE	6-94					
CHK						
DATE						
REV.						
DATE						
REV.						
DATE						







			END AREA		VOLUME	
			CUT	FILL	CUT	FILL
32	900		43	0		
					74	12
214	900					
45	900 Ahead					
28	Back					
			Ahead	37	13	
			Back	32	9	
125	900					
			Add for Cut on Ashland Ave		80	
					71	10
10	900				33	0
66					52	0
19	Ahead					
43	Back		Ahead	35	0	
	900		Back	37	12	
200					67	16
29			Ahead	35	5	
			Back	0	5	
16					0	2
	900				0	0
0						

X-SECTIONS - STA. 8+00 TO STA. 10+00 - HARDIN PIKE

FED. ROAD DIVISION	STATE	PROJECT
5	OHIO	

158
345

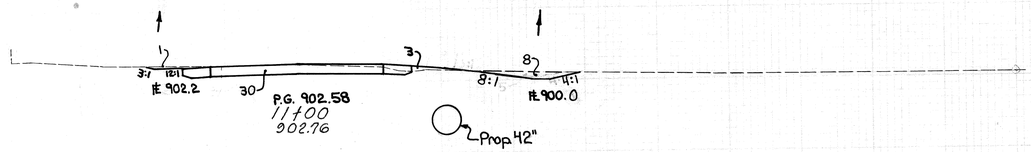
AUGLAIZE COUNTY
AUG~33~13.44

	BY	DATE	CHK.	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

47

900



900

900

236



P.G. 902.49
10+80.5~Gr. Dr. Lt.
902.69

900

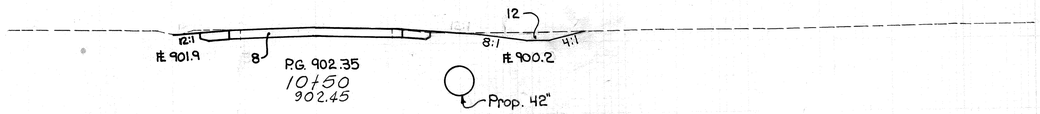
900

38

194

32

10+00



900

900



P.G. 902.23
10+25.5~16' Gr. Dr. Lt.
902.28

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
	39	3		
Add for Cut on Gr. Drive Left			7	
	73	3		
	40	0		
			77	0
10+00	43	0		
Add for Cut on Gravel Drive Left			9	

X-SECTIONS ~ STA. 10+25.5 TO STA. 11+00 ~ HARDIN PIKE

FED. HWY. DIVISION	STATE	PROJECT	
5	OHIO		

159
345

AUGLAIZE COUNTY
AUG-33-13.44

	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING	JW	8-91					
TEMPLATE							
AREAS							
VOLUMES							
SEEDING							

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

246 Ahead
0 Back

900

4:1 2 18 8:1
℄E 901.7 19
P.G. 903.65
13+50
903.37

Prop. 42"

105 130 140 150

Included w/ Ramp A X-Sections

160 180 200 220 240
83
4:1 4:1
℄E 897.6

1325 Ahead
231 Back

900

Ahead Only; Back Included w/ Wapa St. X-Sections

Ahead Only; Back Included w/ Ramp A X-Sections

4:1 10 2 16 2 8:1 9
℄E 901.0
P.G. 903.46
13+00
903.13

64

Included w/ Ramp A X-Sections

42 4:1 4:1 8
Prop. 24" Outlet El. 897.70

160 180 200 220 240

0 Ahead
0 Back

900

18
P.G. 903.25
12+50
903.11

Prop. 42"

Included w/ Ramp A X-Sections

29

12+25~Wapak St. Lt.
903.10

0 Ahead
15 Back

900

Back Only; Ahead Included w/ Wapa St. X-Sections

25 29
P.G. 903.03
12+00
903.01

92 Ahead
18 Back

900

Back Only; Ahead Included w/ Ramp A X-Sections

17
℄E 901.8 34 2 14:1 32 ℄E 899.8
P.G. 902.80
11+50
902.91

Prop. 42"

333

900

47 11+00

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Fertilizer Calculation
(14,564/90)(220)÷(1000)(2000)=1.31 Ton

Quantities	
Excavation	9037 Cu. Yd.
Embankment	253 Cu. Yd.
Seeding	14,564 Sq. Yd.
Comm. Fertilizer	1.31 Ton

Quantities Carried to Sheet 154

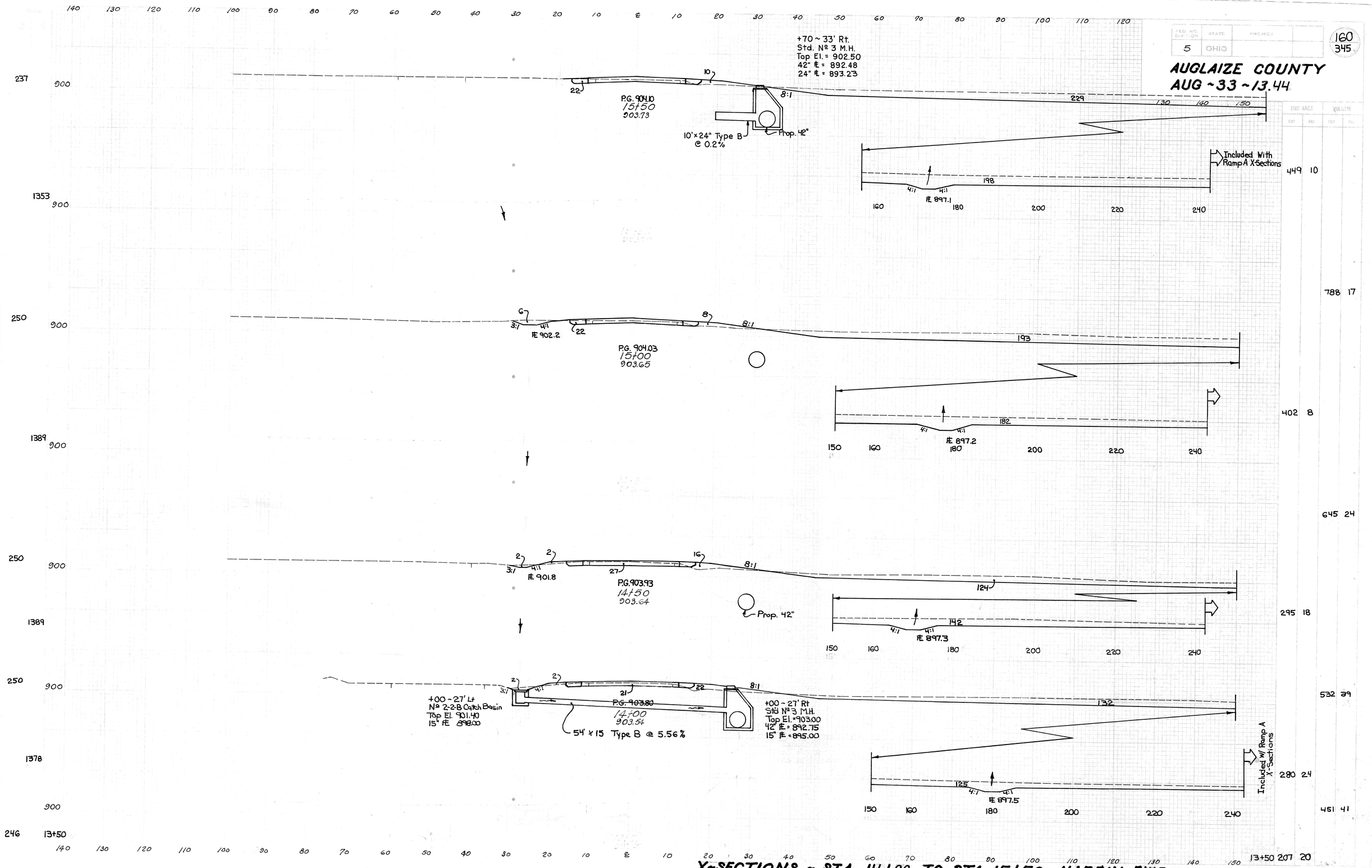
	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	207	20		
			306	45
Ahead	124	29		
Back	16	0		
			31	0
	18	0		
			44	0
Ahead	29	0		
Back	54	0		
			83	0
Ahead	35	0		
Back	70	0		
			101	3
	11+00	39	3	

X-SECTIONS ~ STA. 11+50 TO STA. 13+50 - HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

160
345

AUGLAIZE COUNTY
AUG ~33 ~13.44



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
449	10		
		788	17
402	8		
		645	24
295	18		
		532	39
280	24		
		451	41
13+50	207	20	

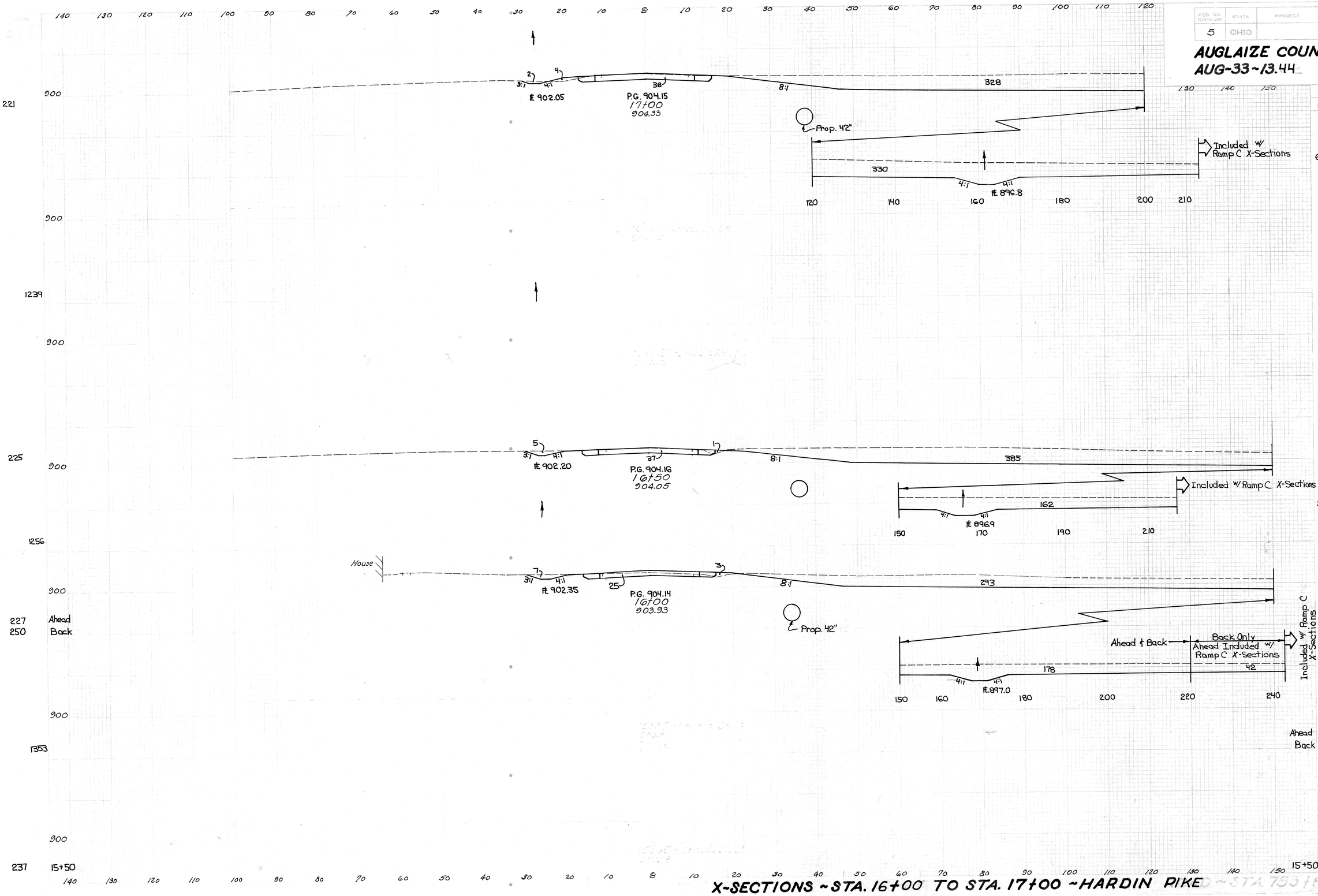
	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

X-SECTIONS ~ STA. 14+00 TO STA. 15+50 ~ HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

161
345

AUGLAIZE COUNTY
AUG-33-13.44



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
698	4		
		1192	5
589	1		
		1011	4
Ahead 503	3		
Back 545	3		
		920	12
15+50 449	10		

	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

X-SECTIONS ~ STA. 16+00 TO STA. 17+00 ~ HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

162
345

AUGLAIZE COUNTY
AUG-33-13.44

		END AREA		VOLUME	
		CUT	FILL	CUT	FILL
	Ahead	753	2		
	Back	814	2		
219	Ahead				
237	Back				
1244				1269	9
211					
1189				557	8
217				1142	12
1217				676	5
221				1272	8
	17+00			17+00	698 4

BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING							
TEMPLATE							
DITCHES							
AREAS							
VOLUMES							
SEEDING							

Included w/ Ramp C X-Sections
162
4:1
160 180 200

Included w/ USR-33 X-Sections
Back Only; Ahead Included w/ USR33 X-sections
61 208 4:1 2 8:1 383
900
P.G. 903.99
18+50
905.27
92' x 21" Type B @ 0.50%
+56-48' Lt.
№ 5 C.B.
Top El.=897.30
21" ℄ = 894.23
+56-44 Rt.
№ 3 M.H.
Top El.=900.50
42" ℄ = 892.02
21" ℄ = 893.77
16'-6 7/0
℄ 896.4

+00 - Begin 16'-6 7/0
R/W
3 15 4:1 3 48 5 423
3:1
℄ 899.2
900
P.G. 904.05
18+00
905.02
16'-6 7/0
4:1
℄ 896.6
Prop. 42"
Included w/ Ramp C X-Sections
71
4:1
160 180 200

R/W
6 5
3:1 4:1 42 8:1 448
℄ 901.9
900
P.G. 904.10
17+50
904.57
4:1
℄ 896.7
Prop. 42"
Included w/ Ramp C X-Sections
180
4:1
160 180 200

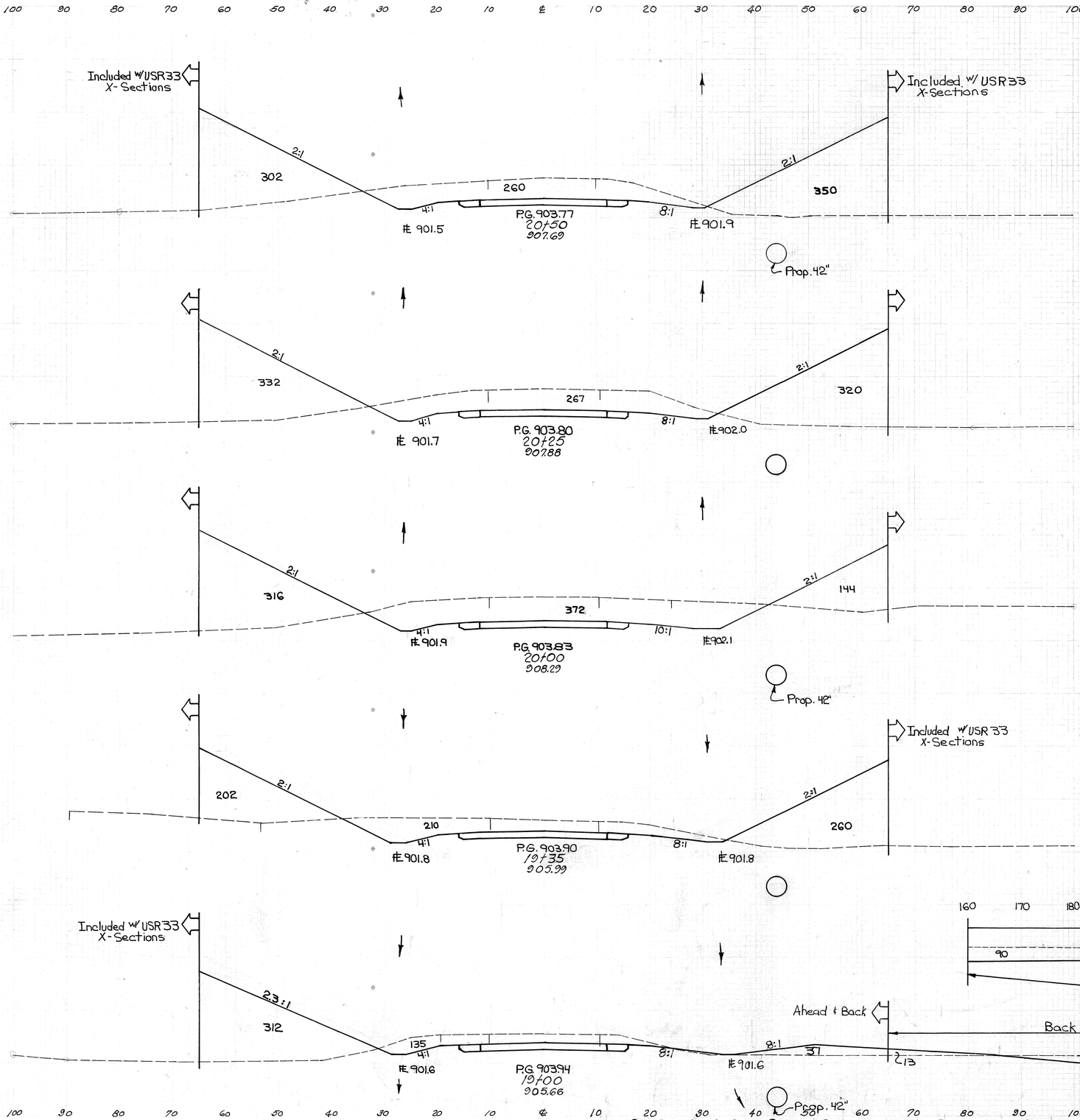
X-SECTIONS - STA. 17+50 TO STA. 18+50 - HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

163
345

AUGLAIZE COUNTY
AUG-33-13.44

	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								



	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
	260	652		
	244	604		
	267	652		
	296	515		
	372	460		
	701	1110		
	210	462		
	224	406		

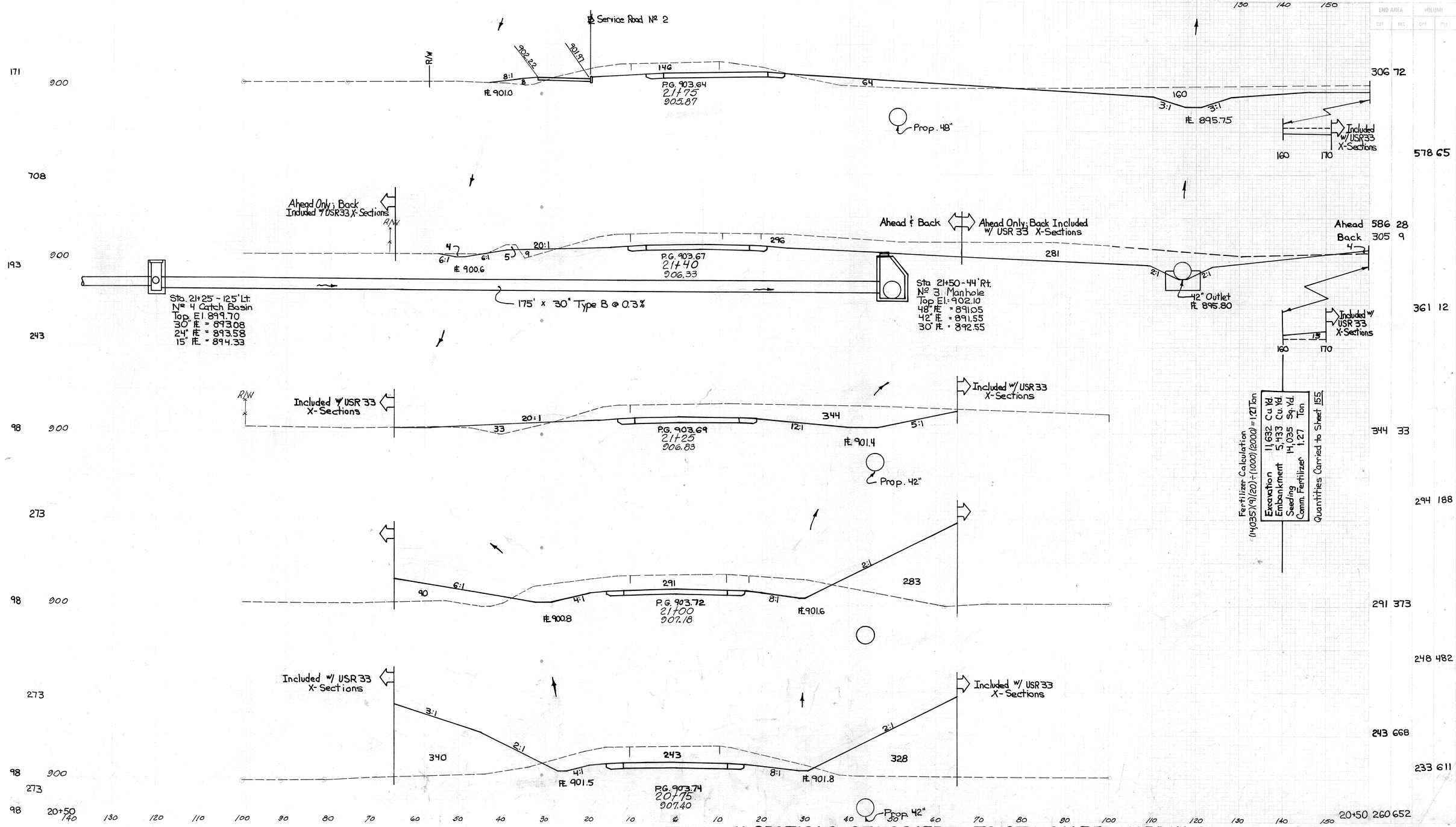
FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

164
345

AUGLAIZE COUNTY
AUG-33-13.44

	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
EXISTING				
TEMPLATE				
DITCHES				
AREAS				
VOLUMES				
SEEDING				

BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
	6-84						

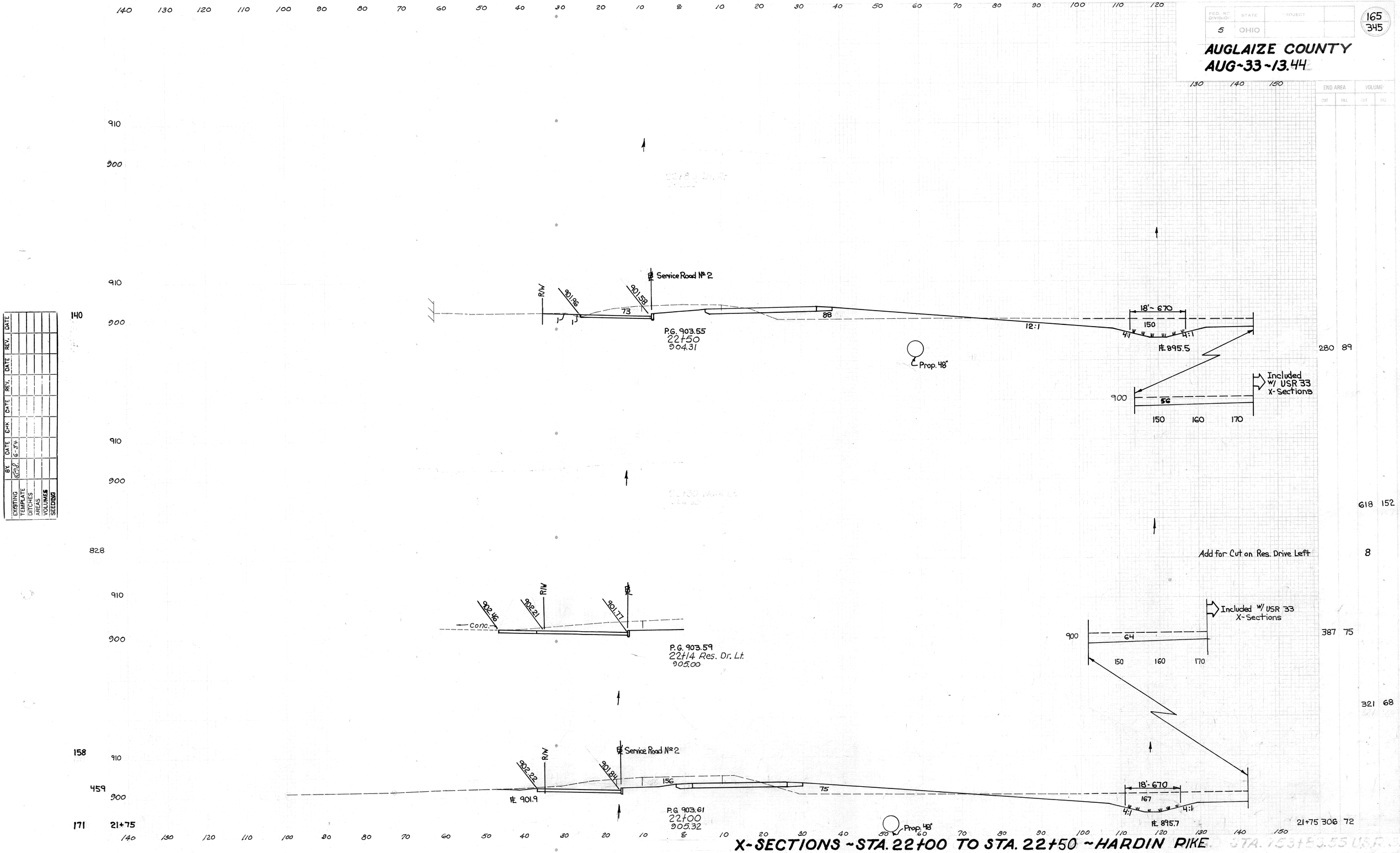


X-SECTIONS - STA. 20+75 TO STA. 21+75 - HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

165
345

AUGLAIZE COUNTY
AUG-33-13.44



	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE		6-84						
DITCHES								
AREAS								
VOLUMES								
SEEDING								

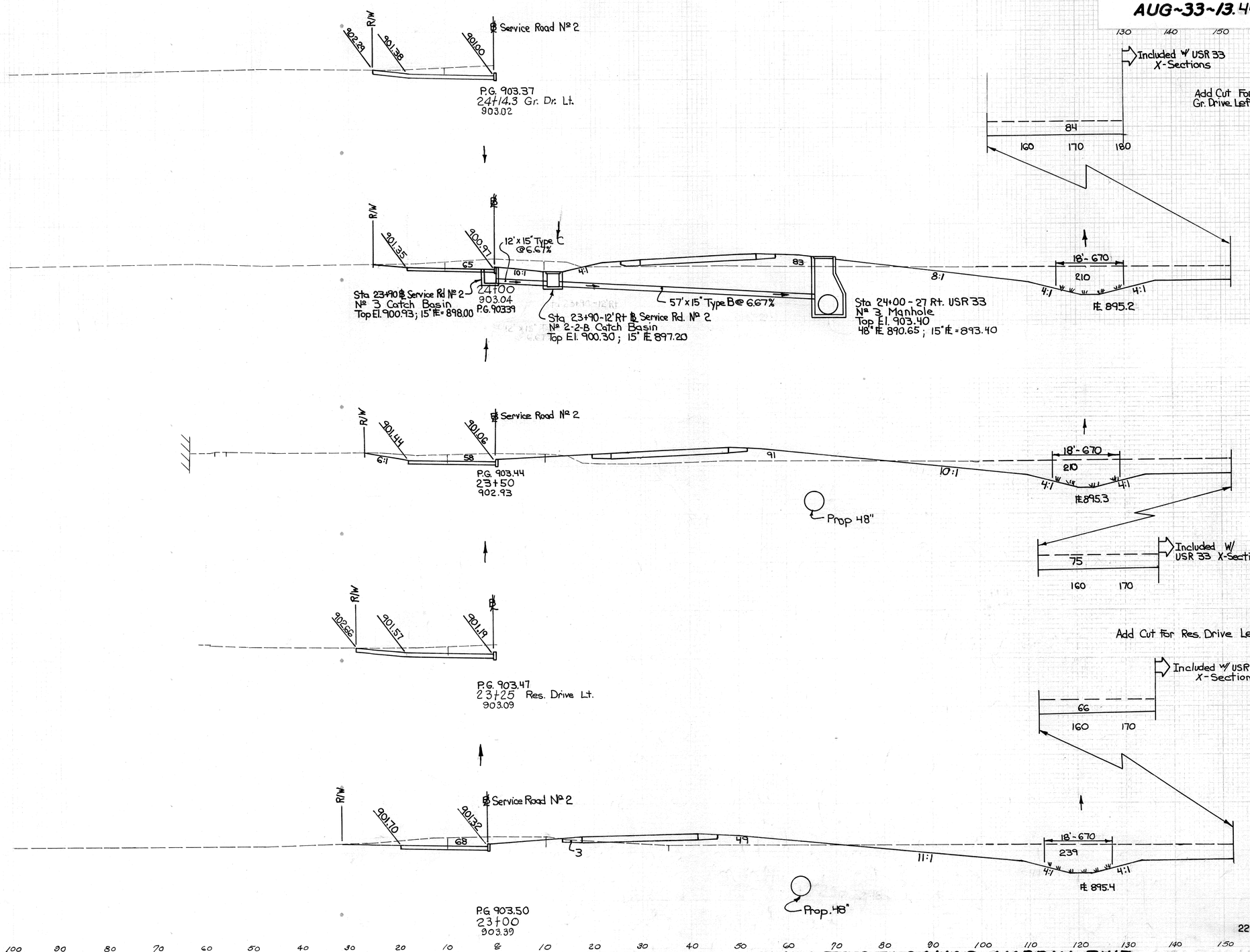
X-SECTIONS ~ STA. 22+00 TO STA. 22+50 ~ HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

166
345

AUGLAIZE COUNTY
AUG-33-13.44

	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								



X-SECTIONS ~ STA. 23+00 TO STA. 24+14.3 ~ HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

167
345

AUGLAIZE COUNTY
AUG-33-13.44

	DATE
EXISTING	
TEMPLATE	
DITCHES	
AREAS	
VOLUMES	
SEEDING	

BY: DATE: C-F-F REV. DATE REV. DATE

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120

R/W

Ahead Included on Sh. 168 — Ahead Included on Sh. 169

114 900

59 — 1/2"/1' — 3:1 — 4:1 — 31 — 33 — 4:1 — 20' 670 — 144 — 3:1

P.G. 902.59
28+00
902.43

℄ 898.7

Prop. 48"

130 140 150

1433

Ahead & Back — Ahead Only; Back Included With Ramp B X-Sections — Included Ramp B X-Sections

900

89 — 1/4"/1' — 4:1 — 3 — 7 — 1/2"/1' — 150 — 2:1 — 3:1 — 10:1

144 Ahead
61 Back

P.G. 903.02
27+00
902.75

℄ 899.0

54" Outlet
℄ 894.50

294

Included With Ramp B X-Sections

45 900

4 — 6 — 53 — Drive

P.G. 903.11
26+50
903.07

Prop. 48"

242

902.78 — 902.40 — 902.90 — Included With Ramp D X-Sections

1 — 19 — 8:1 — 21 — 8:1 — 2 — 14 — Drive

42 900

P.G. 903.17
26+00
903.25

℄ 901.0

117

902.58 — 902.20 — 902.70 — Ahead & Back — Back Only; Ahead Included With Ramp D X-Sections — Included W/ Ramp D X-Sections

28 — 30 — 8:1 — 1 — 2 — Drive — 21 — 6 — 8:1 — 173 — 2:1 — 2:1 — 12:1 — 54" Inlet ℄ 894.80

900

42 Ahead
118 Back

P.G. 903.20
25+75
903.32

℄ 900.9

Prop. 48"

160 170

Back Only
Ahead Included W/ Ramp D X-Sections
84

Included W/ U.S.R. 33 X-Sections

954

901.98 — 901.60 — ℄ — 53 — 8:1 — 2 — 6 — Drive — 8:1 — 278 — 18'-670 — 4:1 — 4:1 — Ahead & Back

900

111 Ahead
136 Back

P.G. 903.28
25+00
903.28

℄ 900.6

℄ 895.0

160 170 180

758

R/W — 901.58 — 901.20 — ℄ Service Road №2 — Included W/ U.S.R. 33 X-Sections

78

137 900

62 — 1 — 31 — 3 — 8:1 — 18'-670 — 217 — 4:1 — 4:1

758

P.G. 903.33
24+50
903.08

℄ 900.5

Prop. 48

℄ 895.1

136 24+00

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

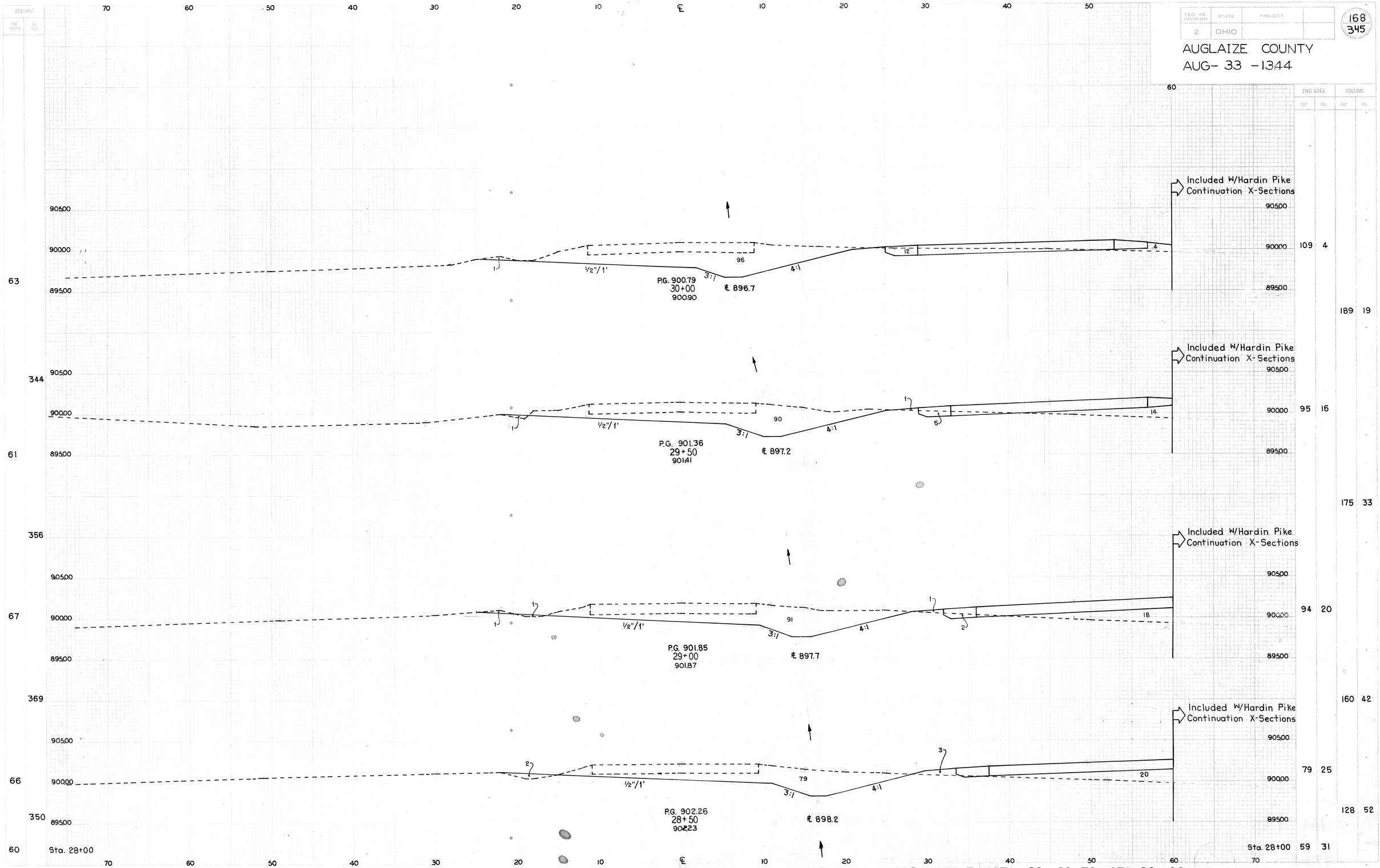
	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	203	64		
			819	137
Ahead	239	10		
Back	89	3		
			88	56
	6	57		
			56	56
	54	3		
			62	2
Ahead	79	1		
Back	258	3		
			826	18
Ahead	337	10		
Back	421	10		
			723	41
			360	34
			666	108
24+00	359	83		

X-SECTIONS ~ STA. 24+50 TO STA. 28+00 ~ HARDIN PIKE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

168
345

AUGLAIZE COUNTY
AUG- 33 -13.44



X SECTIONS ON HARDIN PIKE STA. 28+50 TO STA. 30+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

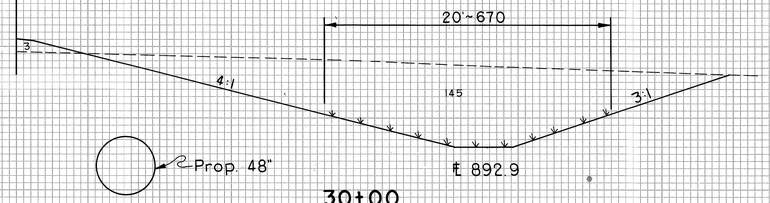
169
345

AUGLAIZE COUNTY
AUG~33~13.44

SEEDING END WIDTH	SEEDING SQ. YDS.
40	233
44	242
43	239
43	273
55	

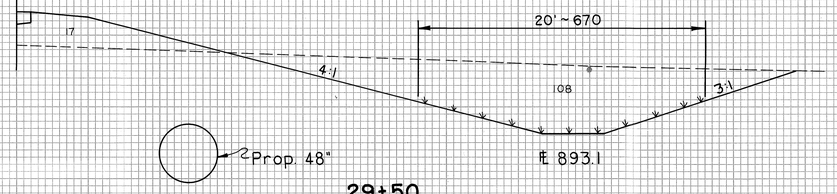
60 70 80 90 100 110 120

Included W/Hardin Pike X-Sections



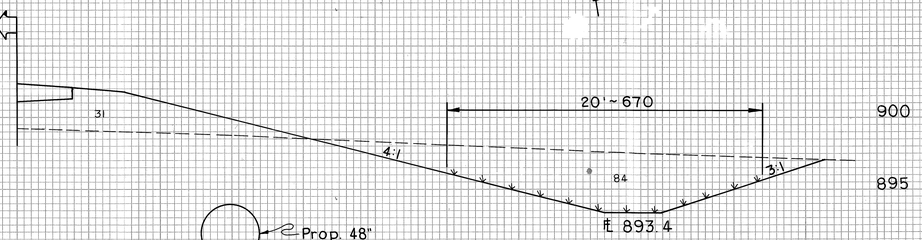
30+00

Included W/Hardin Pike X-Sections



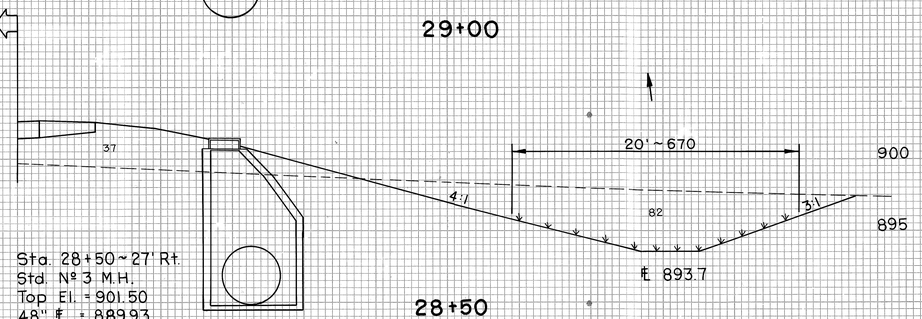
29+50

Included W/Hardin Pike X-Sections



29+00

Included W/Hardin Pike X-Sections



Sta. 28+50~27' Rt.
Std. Nº 3 M.H.
Top El. = 901.50
48" ℄ = 889.93

28+50

28+00 (See Sheet 167)

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
145	3		
		234	19
108	17		
		178	44
84	31		
		154	63
82	37		
		210	65
144	33		

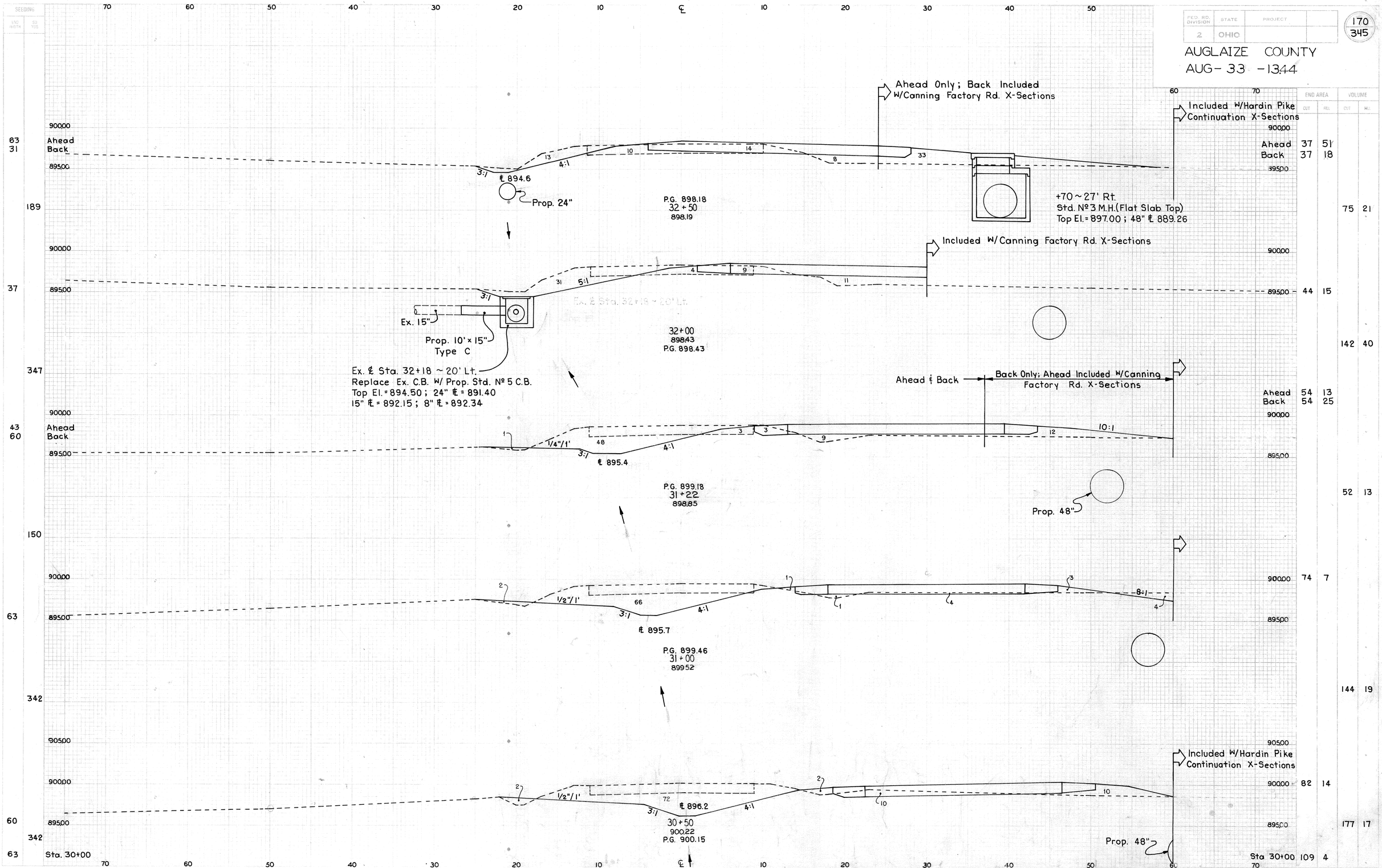
(See Sheet 167) 28+00

HARDIN PIKE STA. 28+50 TO STA. 30+00 CONTINUATION

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

170
345

AUGLAIZE COUNTY
AUG-33-1344



X SECTIONS ON EXISTING HARDIN PIKE STA. 30+50 TO STA. 32+50

AUGLAIZE COUNTY
AUG~33~13.44

SEEDING

END WIDTH	SQ. YDS.
37	Ahead
52	Back
115	
42	
194	
35	
208	
40	30+00 (See Sheet 169)

Included W/Hardin Pike X-Sections

895
890

57
3:1
3:1
Prop. 43" x 68" Ellipt. Conduit Outlet ℄ = 891.70

32+50 Ahead Only; Back Included With Canning Factory Rd. X-Sections

Included W/Hardin Pike X-Sections

Included W/Canning Factory Rd. X-Sections

900
895

138
10:1
3:1
3:1
Prop. 43" x 68" Elliptical Conduit Inlet ℄ = 892.10

31+22 Back Only; Ahead Included W/Canning Factory Rd. X-Sections

Included W/Hardin Pike X-Sections

900
895

8:1
20'~670
146
2.5:1
3:1

31+00 ℄ 892.4

Included W/Hardin Pike X-Sections

900
895

4:1
20'~670
136
3:1
Prop. 48"

30+50 ℄ 892.7

60 70 80 90 100 110

		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
Ahead	57	0			
Back	138	0			
	116	0			
	146	0			
	262	0			
	136	0			
	260	3			
(See Sheet 169) 30+00	145	3			

Fertilizer Calculation
(7638)(9)(20) ÷ (1000)(2000) = 0.69 Ton

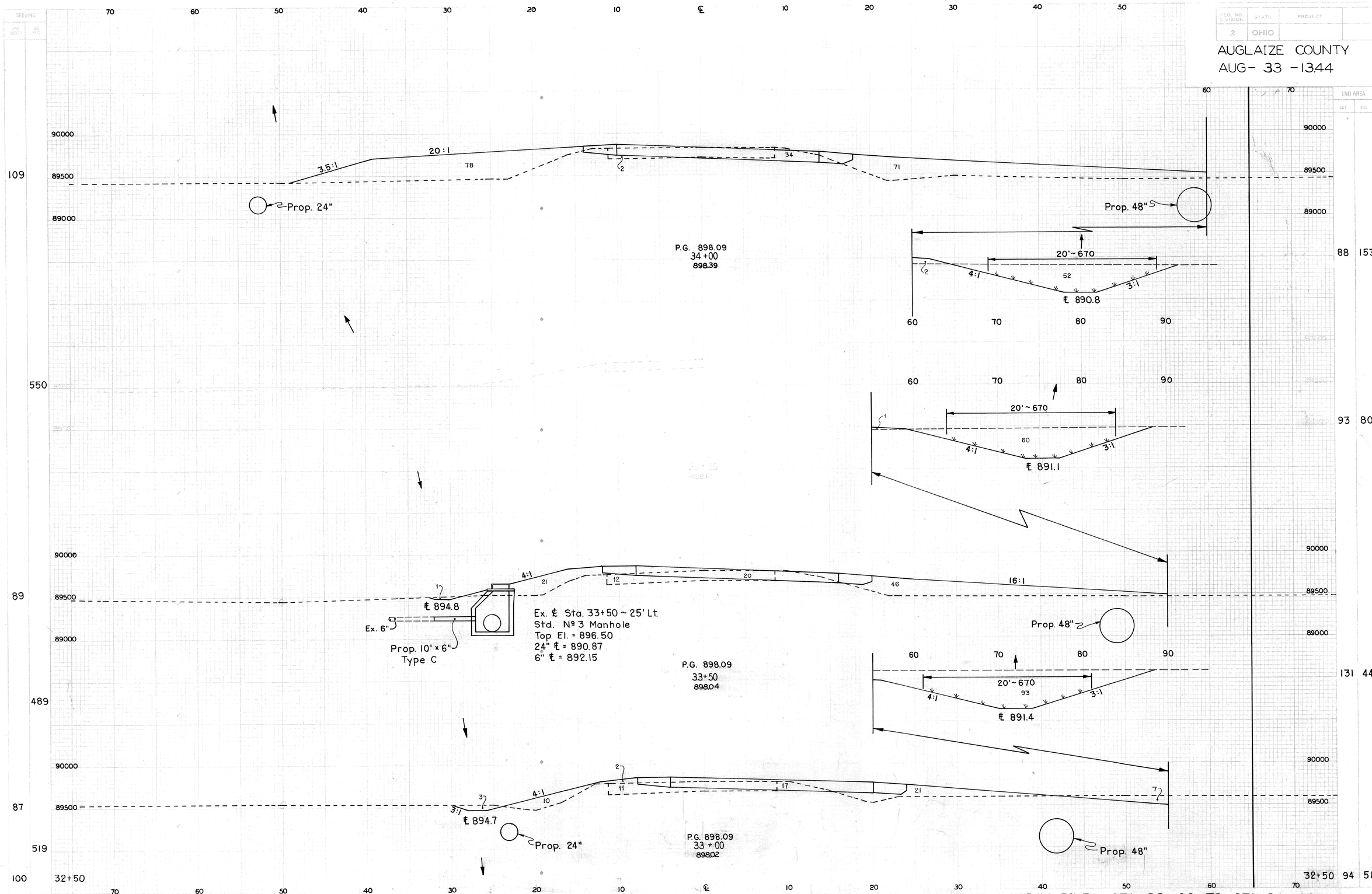
Excavation	3606 Cu.Yd.
Embankment	1627 Cu.Yd.
Seeding	7638 Sq.Yd.
Comm. Fertilizer	0.69 Ton

Quantities Carried to Sheet 156.

HARDIN PIKE STA. 30+50 TO STA. 32+50 CONTINUATION

FED. RD. DIVISION 2 | STATE OHIO | PROJECT
172
345

AUGLAIZE COUNTY
AUG- 33 -13.44



X SECTIONS ON EXISTING HARDIN PIKE STA. 33+00 TO STA. 34+00

AUGLAIZE COUNTY
AUG- 33 -1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

END AREA VOLUME

0 0

78 62

47 37

82 89

42 59

76 259

60 257

71 92

34+00 88 153

900
895

20

375 900.00

55 895.00

890.00

P.G. 898.09
36+39.82 Back Only
897.72 Meet Existing

15 2:1 2.5:1 16 23 6 2.5:1 15 3

℄ 894.2

℄ 893.4

336

900.00

66 895.00

890.00

P.G. 898.09
35+50
897.85

3:1 11 4:1 23 6 22 4:1 30 3

℄ 894.1

℄ 893.2

500

900.00 Ahead Only; Back Included W/Channel Sections

895.00

114 Ahead
84 Back

890.00

P.G. 898.09
35+00
897.94

2 3:1 20:1 88 38 20:1 129 3:1 4

℄ 894.0

900.00

Ahead Only; Back Included W/Channel Sections

895.00

Ahead 40 221
Back 40 217

890.00

333

900.00

87 Ahead
182 Back

Back Only; Ahead Included W/Channel X-Sections

895.00

30 7 84 44 95 2 17

Prop. 24"

Prop. 48"

890.00

P.G. 898.09
34+50
898.50

900.00

Back Only; Ahead Included W/Channel Sections

Ahead 53 179
895.00
Back 168 179

890.00

243 885.00

895
890

68 3:1 6:1

℄ 890.2

80 90 100 110

109 34+00

P.G. 898.09
34+15
898.51

On Skew; Parallel to ℄ of Box Culvert (14' North)

X SECTIONS ON EXISTING HARDIN PIKE STA. 34+15 TO STA. 36+39.82

FHWA REGION	STATE	PROJECT	
5	OHIO		

174
345

AUGLAIZE COUNTY
AUG~33~13.44

Curve C-2 Data
Δ = 9° 28' 00"
R = 537.15'
Dc = 10° 39' 59.9"
Lc = 88.75'
T = 44.48'
E = 1.84'

Curve C-3 Data
Δ = 3° 28' 00"
R = 1909.86'
Dc = 3° 00' 00"
Lc = 115.56'
T = 57.80'
E = 0.87'

Curve Col-1 Data
Δ = 9° 28' 00"
R = 572.96'
Dc = 10° 00' 00
Lc = 94.67'
T = 47.44'
E = 1.95'

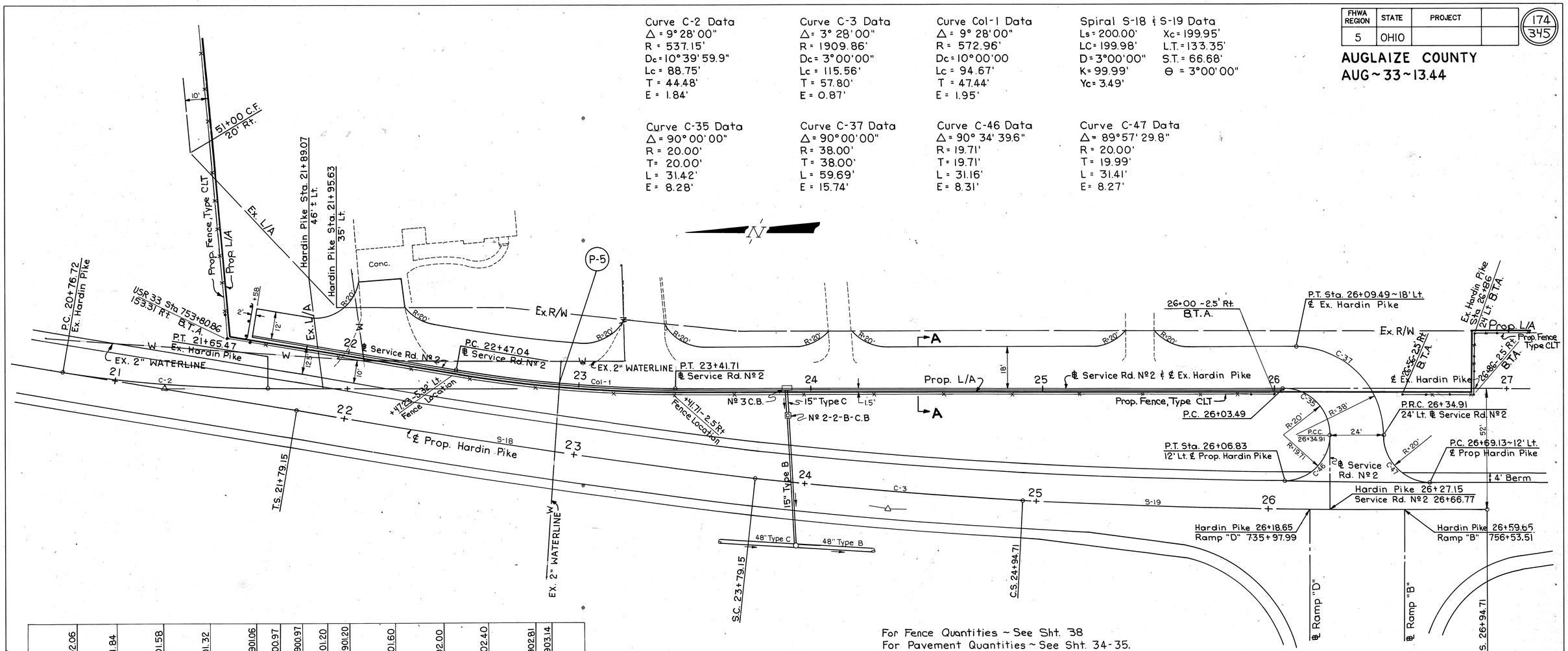
Spiral S-18 & S-19 Data
Ls = 200.00' Xc = 199.95'
LC = 199.98' L.T. = 133.35'
D = 3° 00' 00" S.T. = 66.68'
K = 99.99' Θ = 3° 00' 00"
Yc = 3.49'

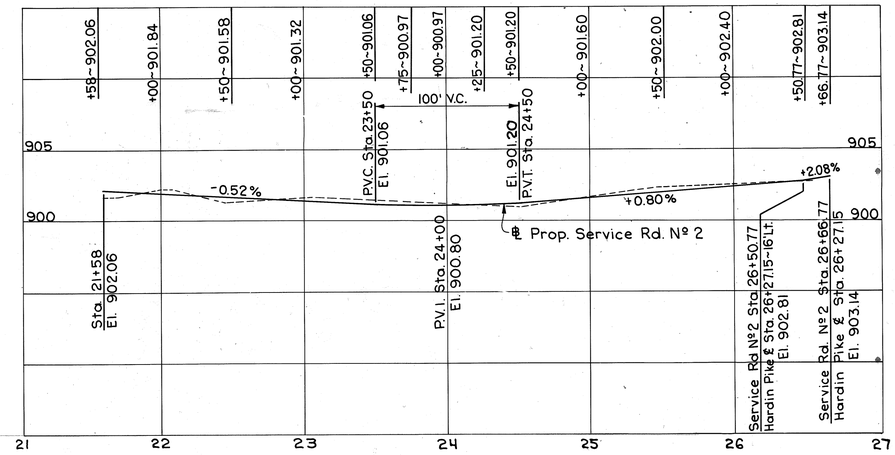
Curve C-35 Data
Δ = 90° 00' 00"
R = 20.00'
T = 20.00'
L = 31.42'
E = 8.28'

Curve C-37 Data
Δ = 90° 00' 00"
R = 38.00'
T = 38.00'
L = 59.69'
E = 15.74'

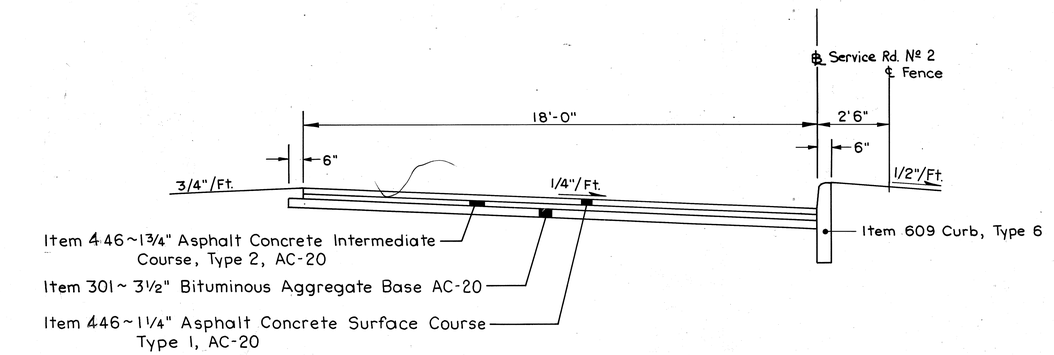
Curve C-46 Data
Δ = 90° 34' 39.6"
R = 19.71'
T = 19.71'
L = 31.16'
E = 8.31'

Curve C-47 Data
Δ = 89° 57' 29.8"
R = 20.00'
T = 19.99'
L = 31.41'
E = 8.27'





For Fence Quantities ~ See Sht. 38
For Pavement Quantities ~ See Sht. 34-35.
For Ballooned Quantities ~ See Sht. 36 .
For Ramp B & D Intersection Detail ~ See Sht. 48.
For Storm Sewer ~ Sta. 23+90 ~ See Sht. 166.



SERVICE RD. Nº 2 TYPICAL SECTION A-A

PLAN & PROFILE SERVICE ROAD Nº 2

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

175
345

For Pavement Quantities ~ See Sht 34-35
For Underdrain Quantities ~ See Sht 37
For Dearbaugh Rd. Intersection Detail ~ See Sht 49
For Culvert Detail ~ Sta. 14+70 ~ See Sht 180
For Storm Sewer Detail ~ Sta. 14+70 (Rt) ~ See Sht 231
For Symbol Legend ~ See Sht 54

Sta. 10+00.00 ℄ Prop. Ashland Ave. =
Sta. 16+38.91 ℄ Deardaugh St.

Ex R/W — Dearbaugh Rd. — Ex R/W

346' Punched R.R. Spike 90.25 30' 72.34' 28' 49.70' 33.8'

℄ Dearbaugh Rd. — ℄ Prop. Ashland St.

Punched R.R. Spike +15

Begin Work
Station Equation
Dearbaugh Rd. Sta. 15+26.13 =
Ashland Ave. Sta. 9+09.31

P-1 — D-1 — 40 L.F. -12" Type D

Prop. 6" U'drain

16+38.91 Dearbaugh Rd.
10+00.00 Ashland Ave.

Precast Conc. Outlet — 6" Type F, A.P.P.

+26.13 ~ 12' Field Drive

+50-6" Tee

℄ Ashland Ave.

S-89°-02'-51"-E

+75-6"x90° Bend

14"x23" Type A

Prop. 6" U'drain

6" Type F, A.P.P.

Precast Conc. Outlet

Prop. R/W

Underground Line

Conc. Slab

Light Meter

P-2

18' Gr. Dr.

Remove Ex. 48" x 12" CMP

℄ 9' Gravel Dr.

℄ 11' Gravel Dr.

6" Well Casing

Map

Wapakoneta Baptist Church

Parking

4" Gas Line ± Abd.

R-1

Ex R/W — 70' — Ex R/W

Bench Mark #1A - R.R. Spike in ℄ 83.4' Rt. Sta. 10+53.0 ℄ Prop. Ashland Ave. El. 893.03

72-2" to 8" Trees in old Fence row 30' ± Lt.

6' Chain Link Fence

Conc. Slab with L.P. Gas Tank

Mobil Homes

2" Gas Line (30" ± Deep)

Elm

Hackb.

Gas Line Marker

W.V.

12-15-15 Oak

Box Elder

Shed

Tulip

Work Limits

Prop. 6" U'drain

+00-6"x90° Bend

6" Type F, A.P.P.

Precast Conc. Outlet

7-2" to 6" Trees in old Fence row 65' ± Rt.

Oaks

SEE SHEET 176

MATCH LINE

Tree Removal
4 Trees ~ 12" to 24"

PEK & Co.

Bench Mark #2A - 4' Sign Post set at S.W. Cor. of Chain Link fence 67.0 Lt. Sta. 15+25.0 El. 893.46

+75-892.85 | +00-892.64 | +25-892.47 | +50-892.34 | +75-892.24 | +00-892.19 | +25-892.18 | +50-892.21 | +75-892.27 | +00-892.38 | +25-892.53 | +50-892.69 | 893.02 | 893.35 | 893.68 | 894.01 | 894.34 | 894.67 | 895.00 | 895.33 | 895.66 | 895.99 | 896.32 | 896.65 | 896.98

℄ Dearbaugh Rd.
10' 10'
7" Aggregate Base
4" Asphalt Concrete

TYPICAL ABUTTING PAV'T
DEARBAUGH RD. STA. 15+28.13

905
900
895
890

250' V.C.

PVC 10+75
El. 892.85

PVT 13+25
El. 892.53

℄ Prop. Ashland Ave

+0.66%

-0.92%

0.52%

0.14%

Dearbaugh Rd. Sta. 15+26.13 ~ 10' Lt.
El. 891.00

Prop. 6"-605 (Lt)
(UNC) Pipe U'drain

+50 ~ 13' Lt. El. 890.40
27' Lt. El. 890.33

+00 (Lt) El. 890.61

PVI 12+00
El. 891.70

Prop. 6"-605 (Lt)
Shallow Pipe Underdrain
1.33' Below Prop. Surface

+65 (Lt) El. 891.87

+70 - Prop. 14"x23" Type A

Prop. 6"-605 (Lt & Rt)
Shallow Pipe Underdrain
1.80' Below Prop. Surface

+75 - 12' (Lt & Rt) El. 891.47
24' (Lt & Rt) El. 891.30

Ex Ground

+95-12' Rt
El. 893.58

+00-12' Rt El. 893.11
26' Rt El. 892.90

Prop. 6"-605 (Lt.)
Shallow Pipe Underdrain
1.80' Below Prop. Surface

Prop. 6"-605 (Rt)
Shallow Pipe Underdrain
2.30' Below Prop. Surface

+10-893.86 | +10-893.71 | +20-891.8 | +25-892.4 | +50-892.2 | +75-891.8 | 891.5 | 891.4 | 891.4 | 891.7 | 892.3 | 892.8 | 893.0 | 893.5 | 892.7 | 891.5 | 891.3 | 891.8 | 892.1 | 893.0 | 893.2 | 894.8 | 895.6 | 896.2 | 896.1

10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

PLAN & PROFILE STA. 10+00 TO STA. 20+00 ASHLAND AVENUE

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Pipe Removed 24"ℓ Under Lin.Ft.	304 Aggregate Base Cu.Yd.	404 Asphalt Concrete AC-20 Driveways Cu.Yd.	408 Prime Coat Gal.	603 Conduit 12" Type D Lin.Ft.	659 Seeding & Mulching Sq.Yd.	659 Comm. Fertilizer Ton	203 Excavation Embankment Cu.Yd.	203 Excavation Embankment Cu.Yd.	SEE SHEET NO.
P-1	15+26 (Dearbaugh Rd.)	Rt.		7.0								
P-2	13+55	Rt.		12.4	4.2	30						
D-1	15+06 to 15+46 (Dearbaugh Rd.)	Rt.					40					
R-1	16+46 to 16+94 (Dearbaugh Rd.)	Lt.	48									
	10+25 to 20+00	L&R										180
TOTALS	TO SHT. 30-32		48	20	5	30	40	3000	0.27	779	973	

AUGLAIZE COUNTY
AUG~33~13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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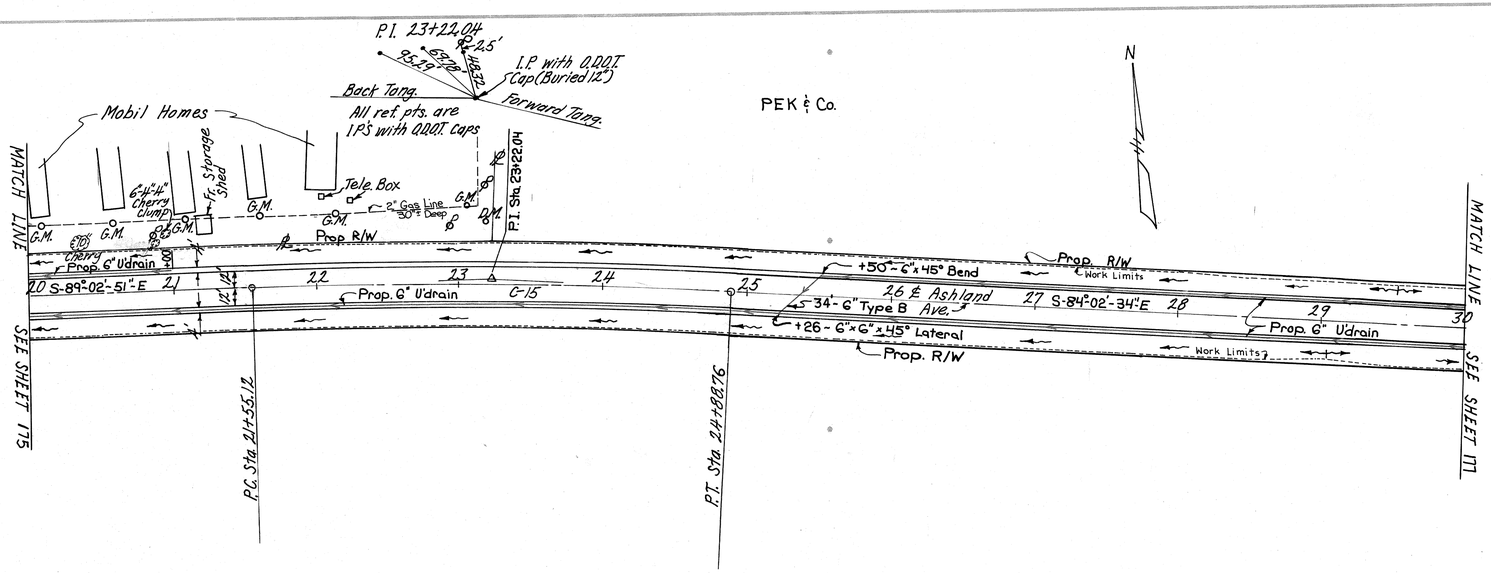
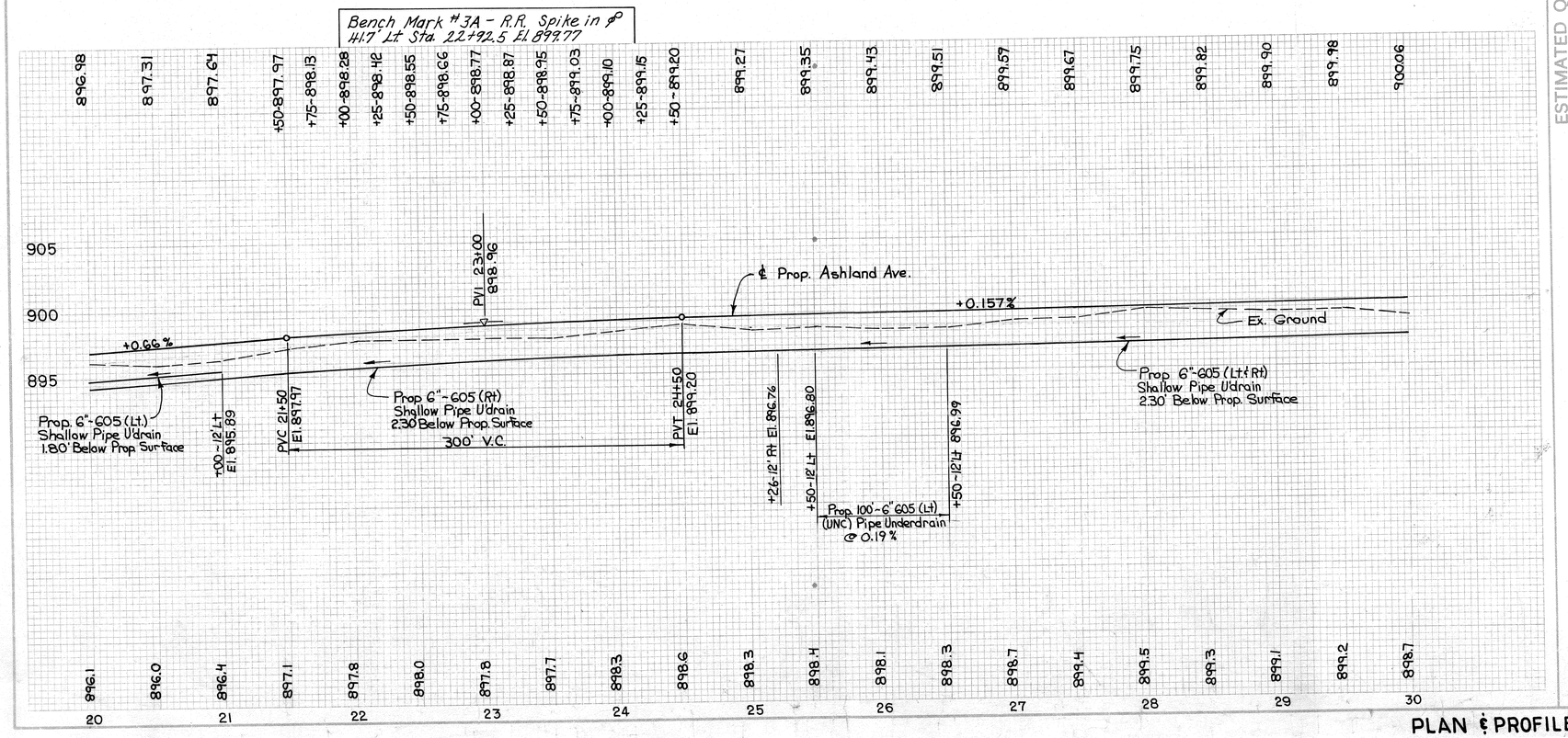


CURVE C-15 DATA
P.I. = Sta. 23+22.04
Δ = 5°-00'-16"
R = 3819.72
Dc = 1°30'-00"
Lc = 333.64'
T = 166.92'
E = 3.65'

PEK & Co.

For Pavement Quantities ~ See Sht 34-35
For Underdrain Quantities ~ See Sht 37



ESTIMATED QUANTITIES

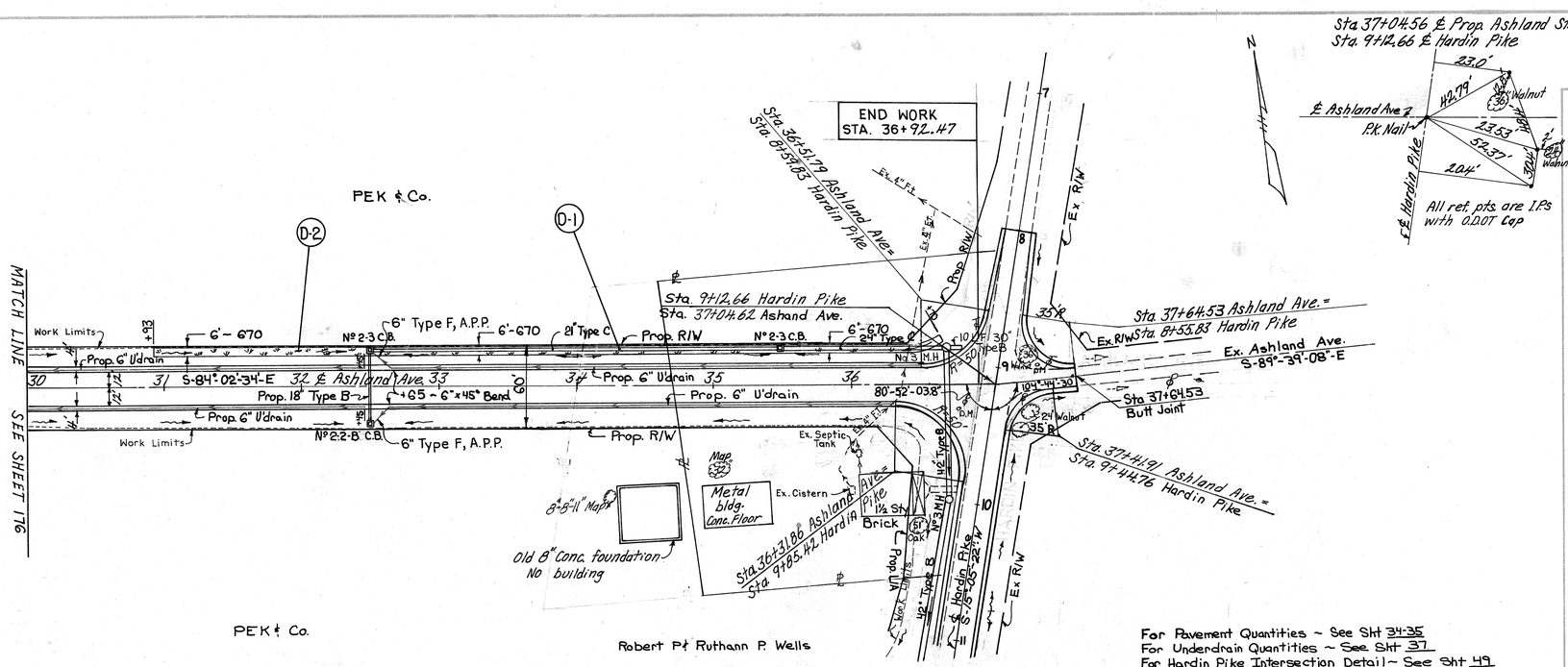
REF. NO.	STATION TO STATION	SIDE	203 Excavation Cu. Yd.	203 Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Ton
	20+00 to 30+00	L&R	568	306	3160	0.29
	TOTALS TO SHT. 33		568	306	3160	0.29

PLAN & PROFILE STA. 20+00 TO STA. 30+00 ASHLAND AVENUE

AUGLAIZE COUNTY
AUG~33~13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

177/345

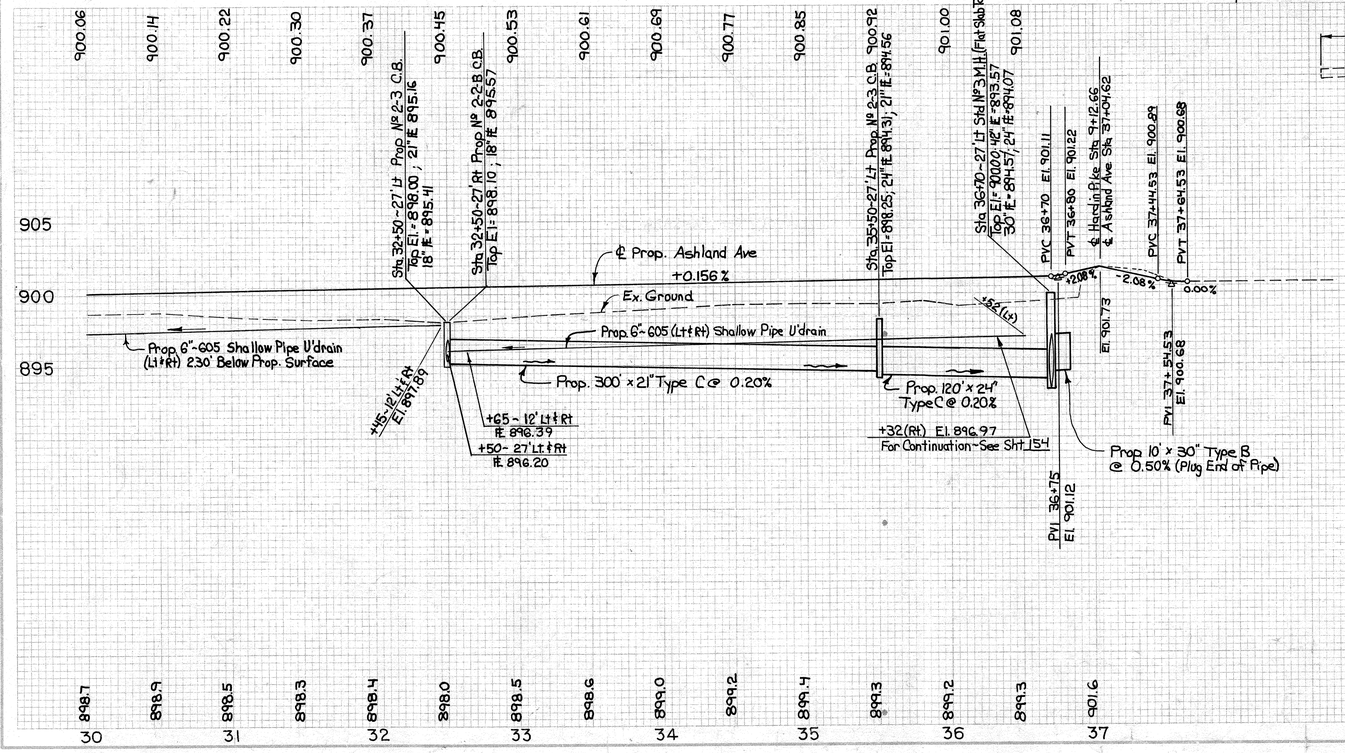


For Pavement Quantities ~ See Sht 34-35
For Underdrain Quantities ~ See Sht 37
For Hardin Pike Intersection Detail ~ See Sht 49
For Storm Sewer Detail (Sta. 32+50) ~ See Sht 186
For Storm Sewer Detail (Hardin Pike West) ~ See Sht 154

Bench Mark #14A ~ R.R. Spike in root of 13" Walnut Tree 113.0' Lt. Sta. 8+47.5 ℄ Existing Hardin Pike Elev. 900.54



TYPICAL ABUTTING PAV'T
STA. 37+64.53
ASHLAND AVE.



PLAN & PROFILE STA. 30+00 TO STA. 37+04.62 ASHLAND AVENUE

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	604 Catch Basin 2-2-B Each	604 Catch Basin 2-3 Each	604 Manhole № 3 (Flat Slab Top) Each	670 Ditch Erosion Protection Sq. Yd.	603 Conduit 18" Type B L.F.	603 Conduit 21" Type C L.F.	603 Conduit 24" Type C L.F.	603 Conduit 30" Type B L.F.
D-1	32+50 to 36+80	Lt.	1	2	1	381		54	300	120
D-2	30+93 to 36+70	Lt.								10
	30+00 to 36+29.7	L & R								
TOTALS TO SHT. 30-32			1	2	1	381		54	300	120

SEE SHEET NO.	659 Seeding & Mulching	659 Commin. Fertilizer	203 Excavation	203 Embankment
	Sq. Yd.	Ton	Cu. Yd.	Cu. Yd.
186	2099	0.19	158	934
	2099	0.19	158	934

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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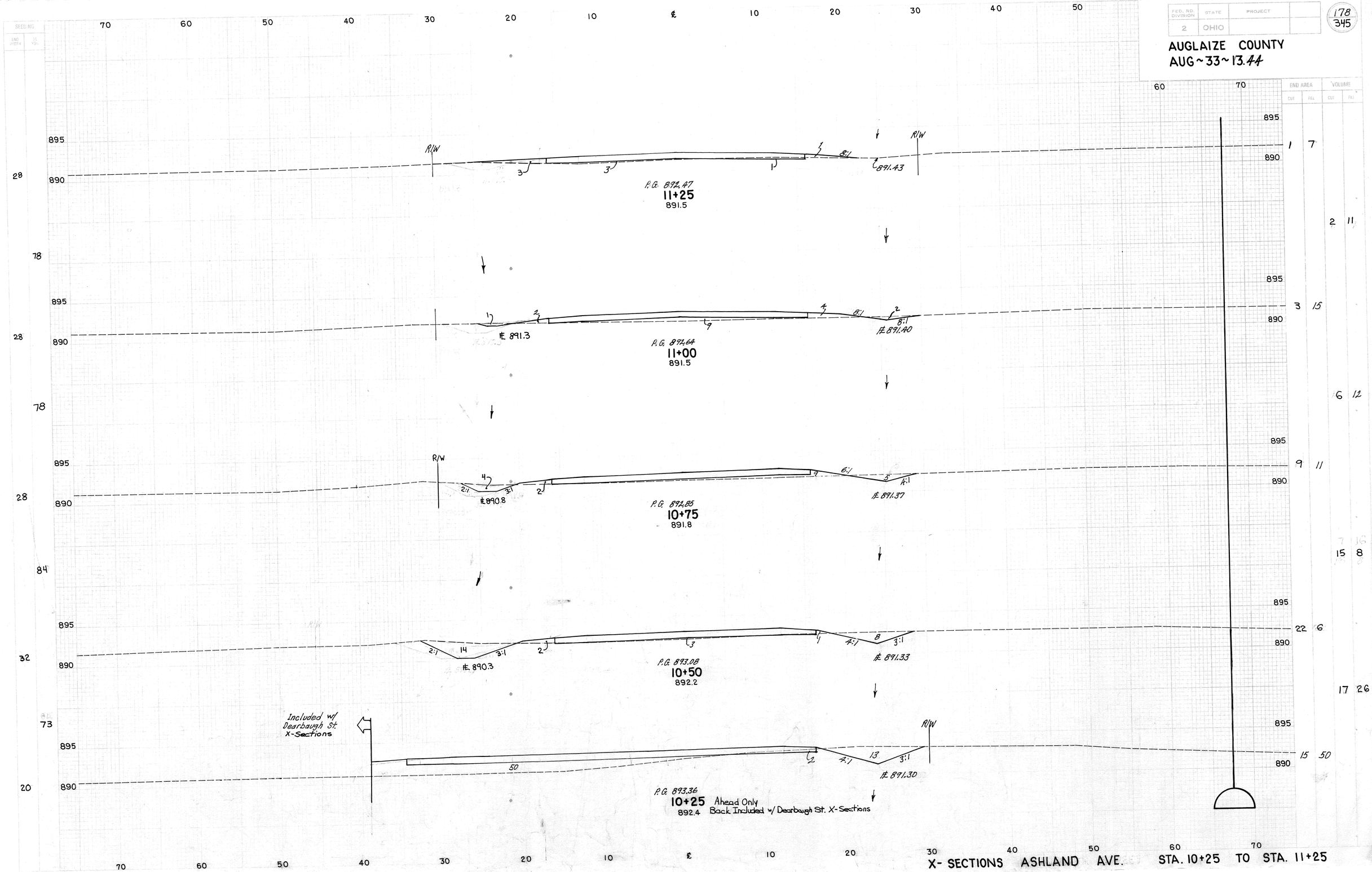
345

AUGLAIZE COUNTY
AUG~33~13.44

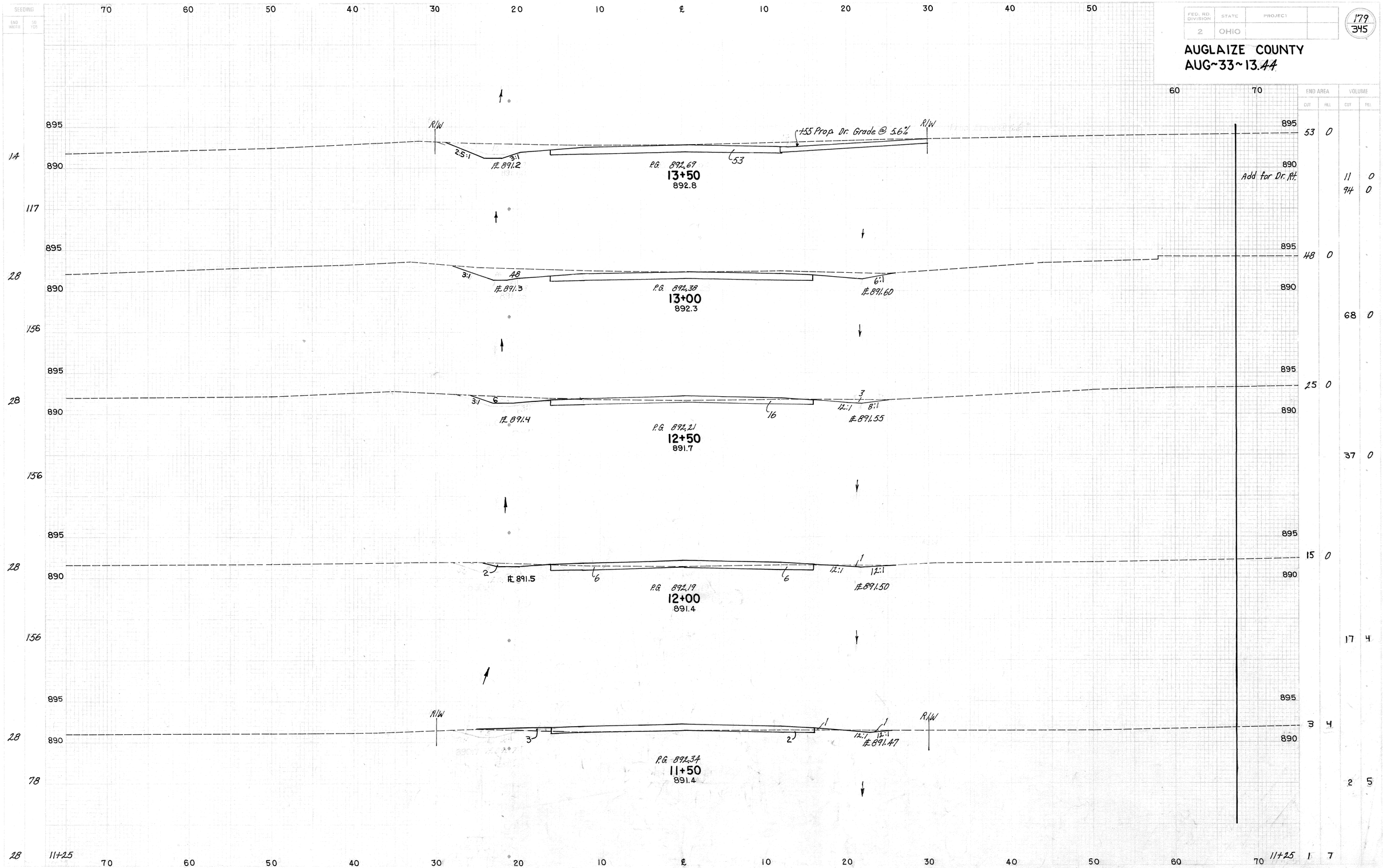


X- SECTIONS ASHLAND AVE. STA. 10+25 TO STA. 11+25

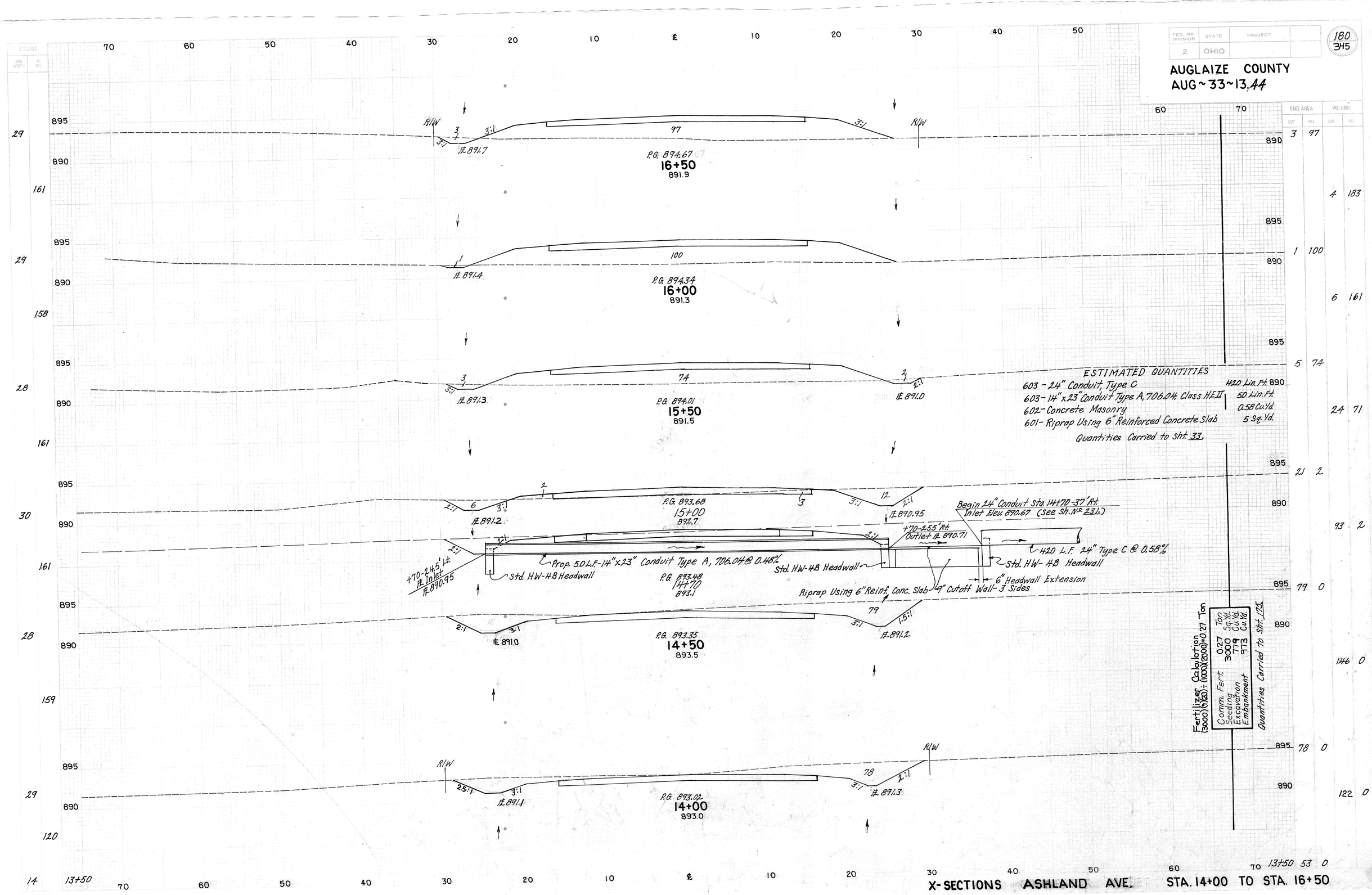
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

179
345

AUGLAIZE COUNTY
AUG~33~13.44



X-SECTIONS ASHLAND AVE. STA. 11+50 TO STA. 13+50



FED. RD. DIVISION 2
STATE OHIO
PROJECT
180
345
AUGLAIZE COUNTY
AUG~33~13,44
END AREA
VOLUME
CUT
FILL
P.G. 894.67
16+50
891.9
P.G. 894.34
16+00
891.3
P.G. 894.01
15+50
891.5
P.G. 893.68
15+00
892.7
P.G. 893.48
14+70
893.1
P.G. 893.35
14+50
893.5
P.G. 893.02
14+00
893.0
Begin 24" Conduit Sta. 14+70-37' Rt.
Inlet Elev. 890.67 (See Sh. No. 23L)
+70-255' Rt.
Outlet ℄ 890.71
+70-245' Lt.
℄ Inlet
℄ 890.95
Prop. 50 L.F.-14"x23" Conduit Type A, 706.04 @ 0.48%
Std. HW-4B Headwall
420 L.F. 24" Type C @ 0.58%
6" Headwall Extension
Riprap Using 6" Reinf. Conc. Slab
9" Cutoff Wall-3 Sides
Fertilizer Calculation
(3000)(9)(20) ÷ (1000)(2000) = 0.27 Ton
Comm. Fert. 0.27 Ton
Seeding 3000 Sq. Yd.
Excavation 779 Cu. Yd.
Embankment 973 Cu. Yd.
Quantities Carried to Sht. 175.
ESTIMATED QUANTITIES
603 - 24" Conduit, Type C 420 Lin. Ft.
603 - 14"x23" Conduit Type A, 706.04, Class HE II 50 Lin. Ft.
602 - Concrete Masonry 0.58 Cu. Yd.
601 - Riprap Using 6" Reinforced Concrete Slab 5 Sq. Yd.
Quantities Carried to Sht. 33.
X-SECTIONS ASHLAND AVE. STA. 14+00 TO STA. 16+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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345

AUGLAIZE COUNTY
AUG~33~13.44

SEEDING				END AREA		VOLUME	
STA	END WIDTH	SQ YDS		CUT	FILL	CUT	FILL
19+00			P.G. 896.32				
			895.6				
	28	156		14	2	21	10
18+50			P.G. 895.99				
			894.8				
	28	159		8	9	12	55
18+00			P.G. 895.66				
			893.7				
	29	159		5	50	9	105
17+50			P.G. 895.33				
			893.0				
	28	156		4	63	7	141
17+00			P.G. 895.00				
			892.1				
	28	159		3	89	6	172
16+50	29			3	97		

X- SECTION ASHLAND AVE. STA. 17+00 TO STA. 19+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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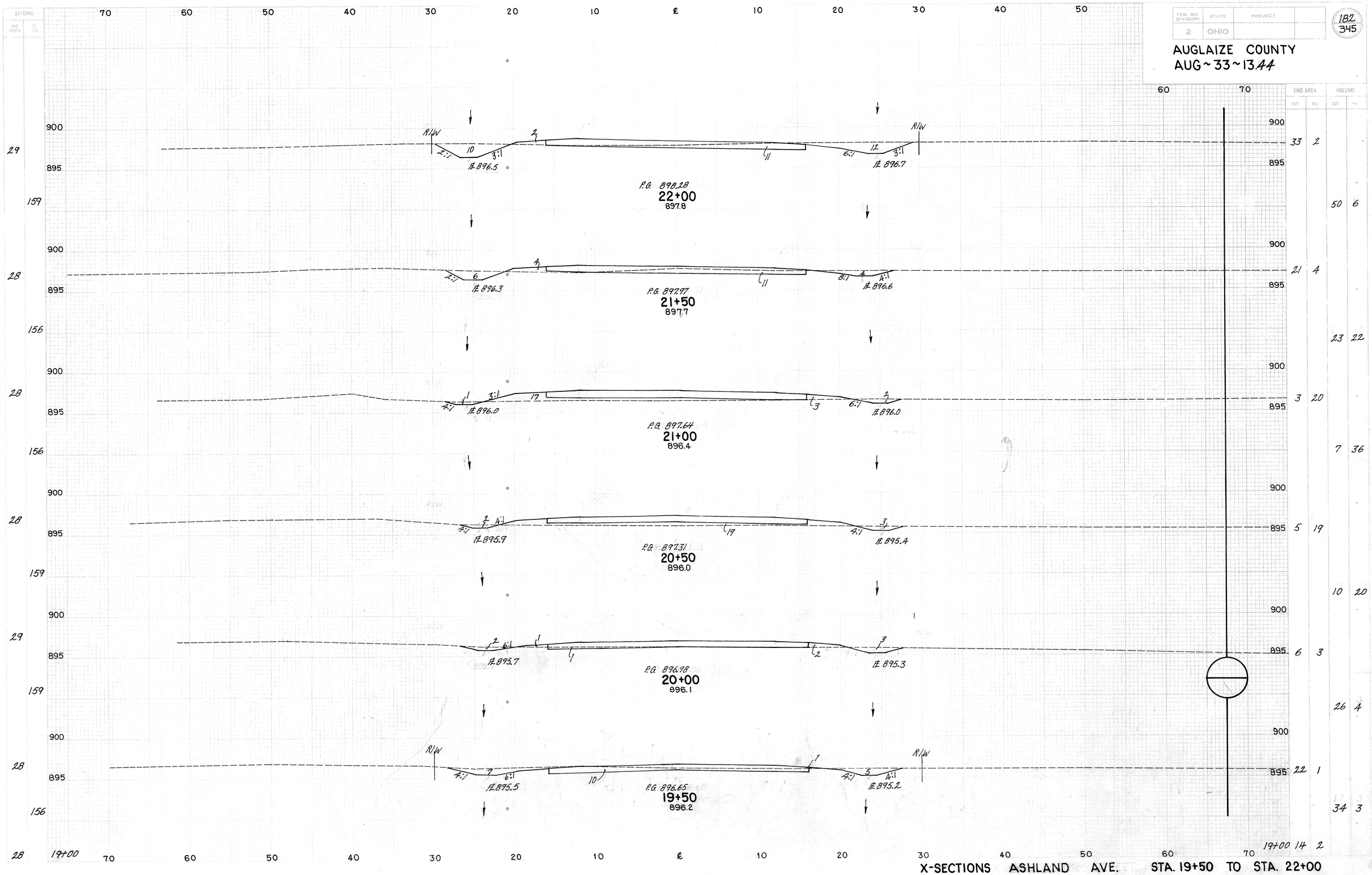
345

AUGLAIZE COUNTY
AUG~33~13.44

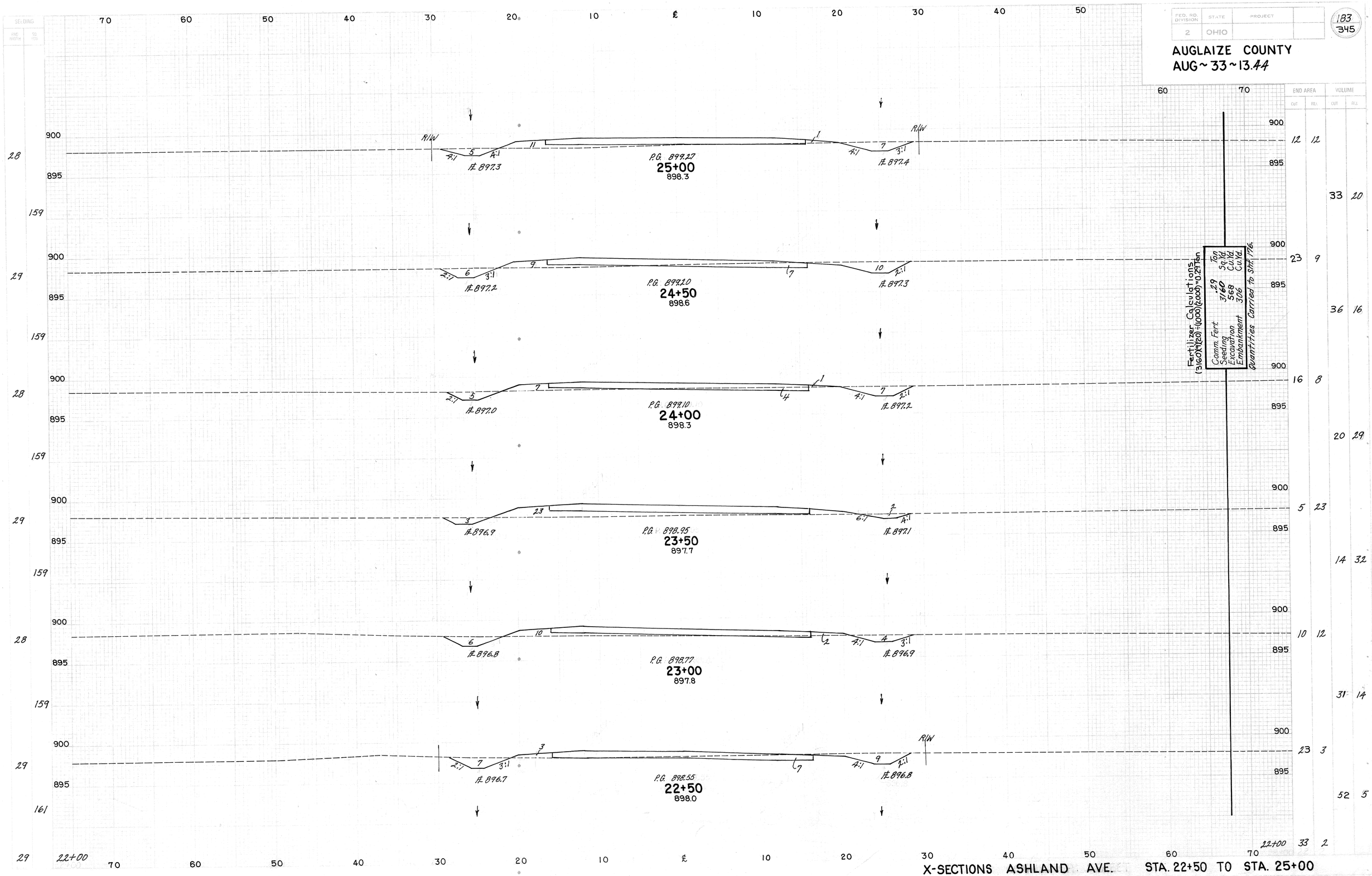


X-SECTIONS ASHLAND AVE. STA. 19+50 TO STA. 22+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

183
345

AUGLAIZE COUNTY
AUG ~ 33 ~ 13.44

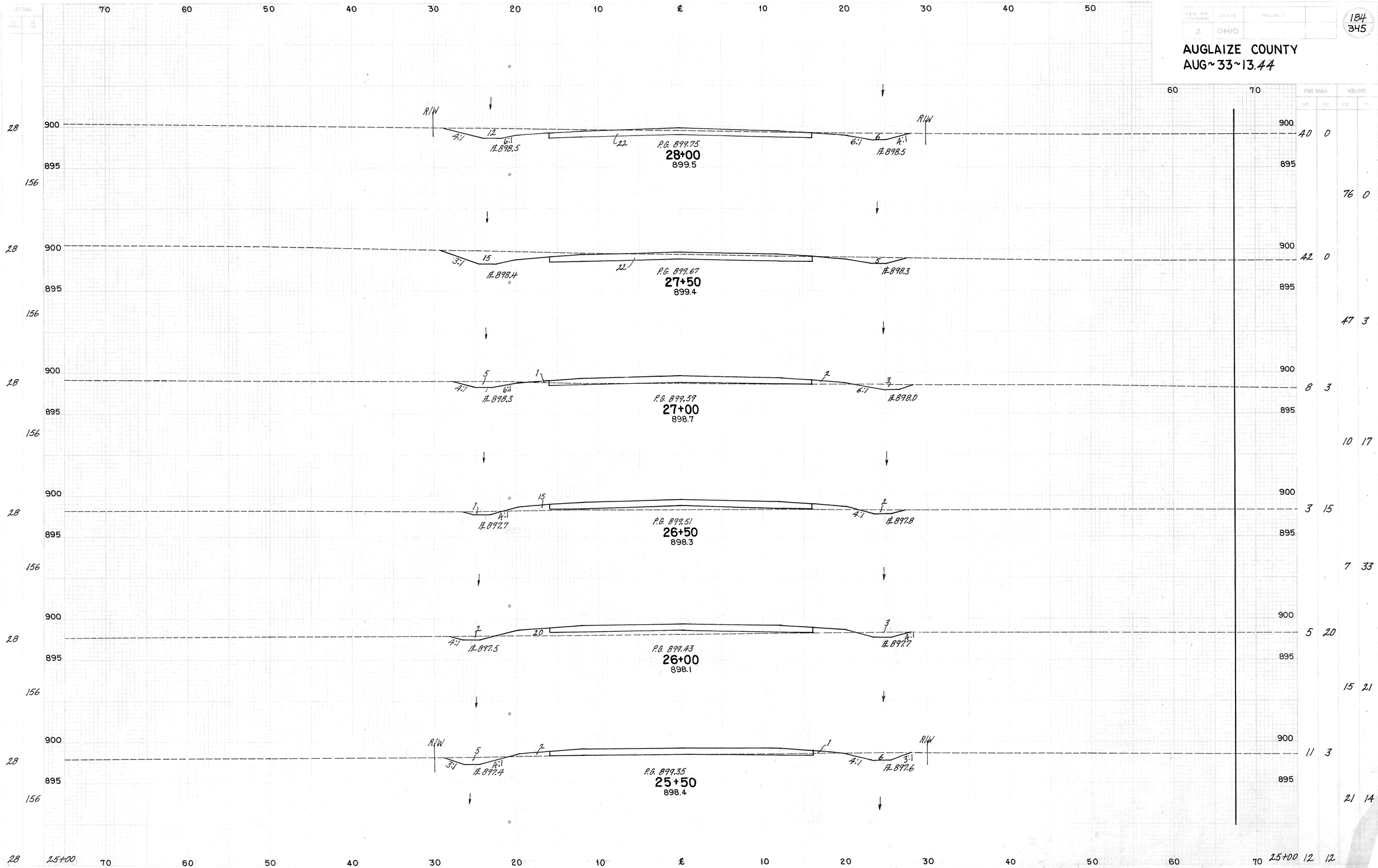


X-SECTIONS ASHLAND AVE. STA. 22+50 TO STA. 25+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

184
345

AUGLAIZE COUNTY
AUG~33~13.44



X-SECTIONS ASHLAND AVE. STA. 25+50 TO STA. 28+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

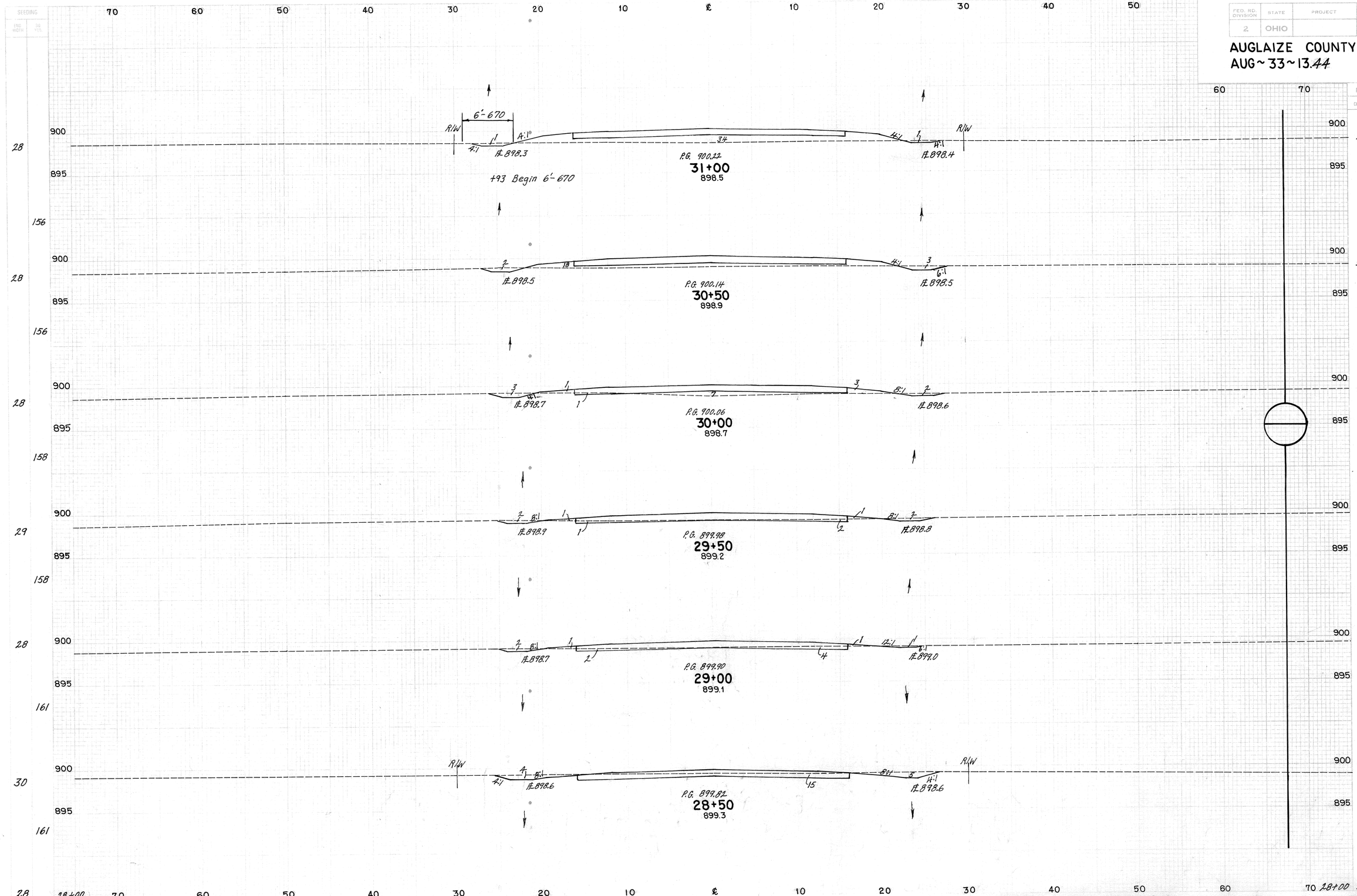
185
345

AUGLAIZE COUNTY
AUG~33~13.44

SEEDING
END WIDTH | SQ. YDS.

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

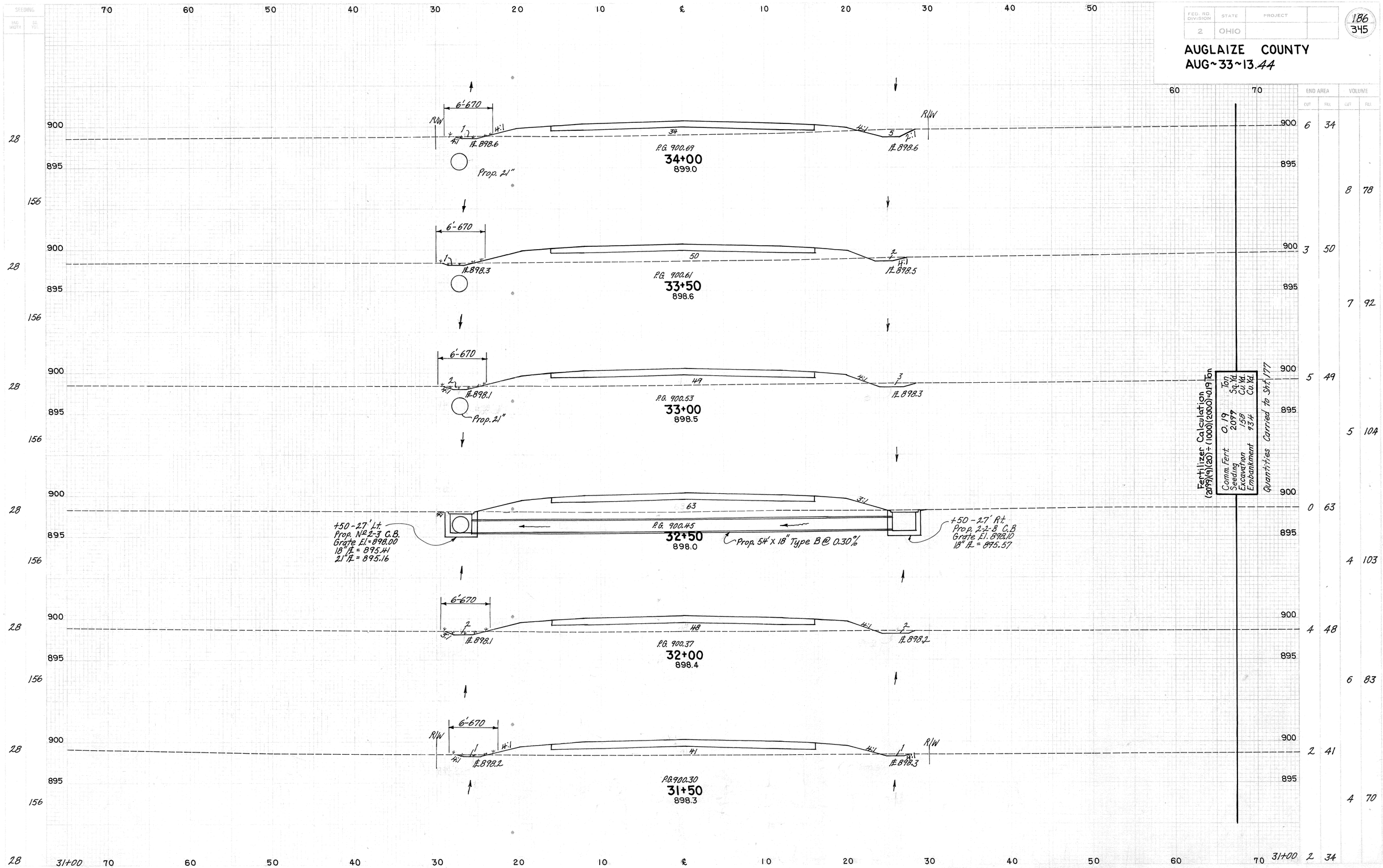
END AREA CUT | END AREA FILL | VOLUME CUT | VOLUME FILL



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

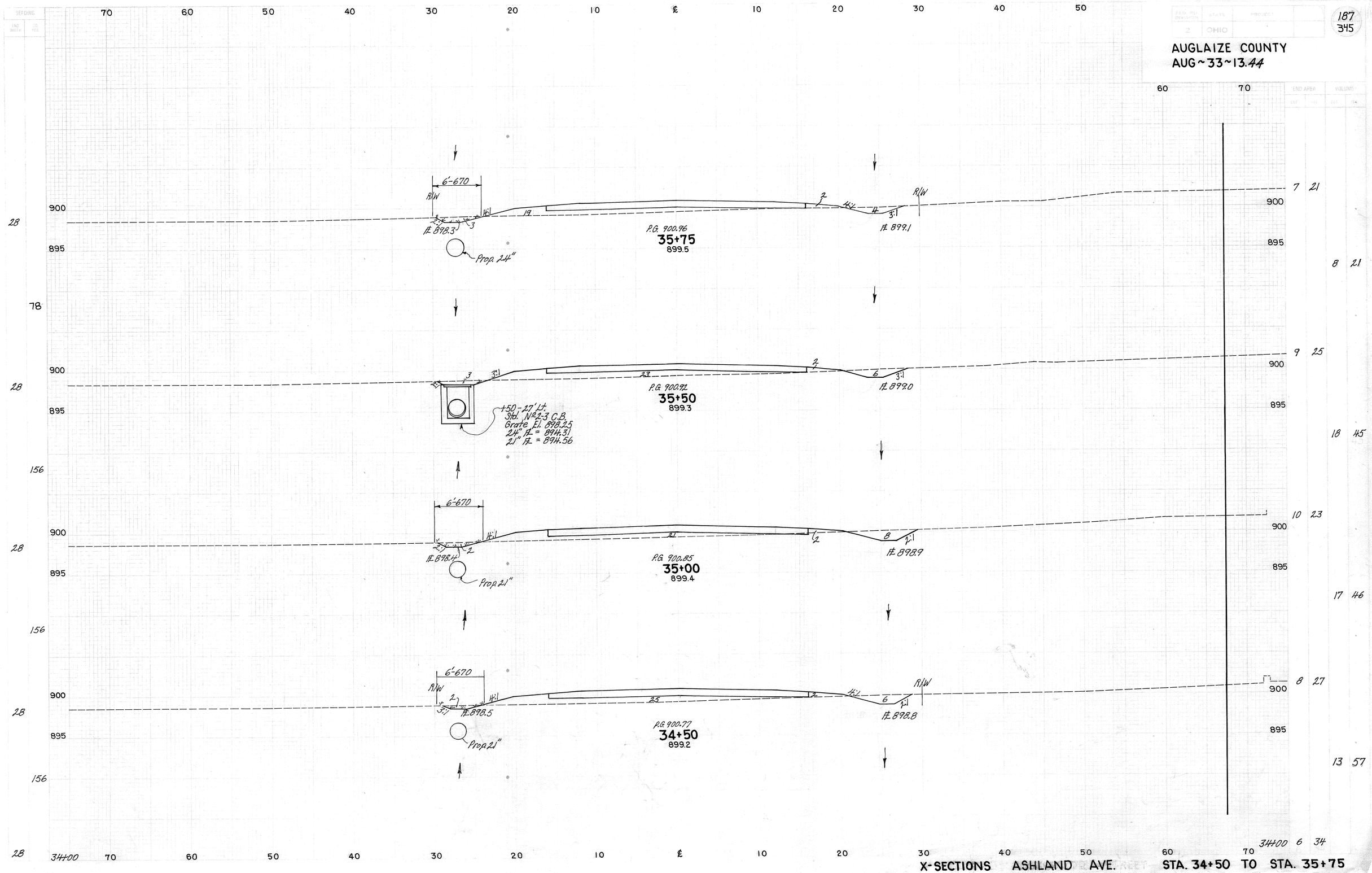
186
345

AUGLAIZE COUNTY
AUG~33~13.44



X-SECTIONS ASHLAND AVE. STA. 31+50 TO STA. 34+00

AUGLAIZE COUNTY
AUG~33~13.44



X-SECTIONS ASHLAND AVE. STA. 34+50 TO STA. 35+75

188
345

AUGLAIZE COUNTY
AUG~33~13.44

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

Included with Hardin Pike X-Sections

P.G. 901.48
36+92.47 Back Only
901.4

P.G. 901.11
36+70
899.4

111' x 42" Type B @ 0.16%

+70 - 27' Lt.
Std N°-3 M.H. (Flat Slab Top)
42" IE = 893.57
30" IE = 894.57
24" IE = 894.07

+70 End 6'-670

IE 898.8

Included with Hardin Pike X-Sections

6'-670

898.60

Prop. 24"

P.G. 901.08
36+50
899.3

R/W

IE 899.40

6'-670

IE 898.43

Prop. 24"

P.G. 901.04
36+25
899.2

IE 899.30

6'-670

IE 898.37

Prop. 24"

P.G. 901.00
36+00
899.2

R/W

IE 899.24

35+75 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 35+75

X-SECTIONS ASHLAND AVE. STA. 36+00 TO STA. 36+92.47

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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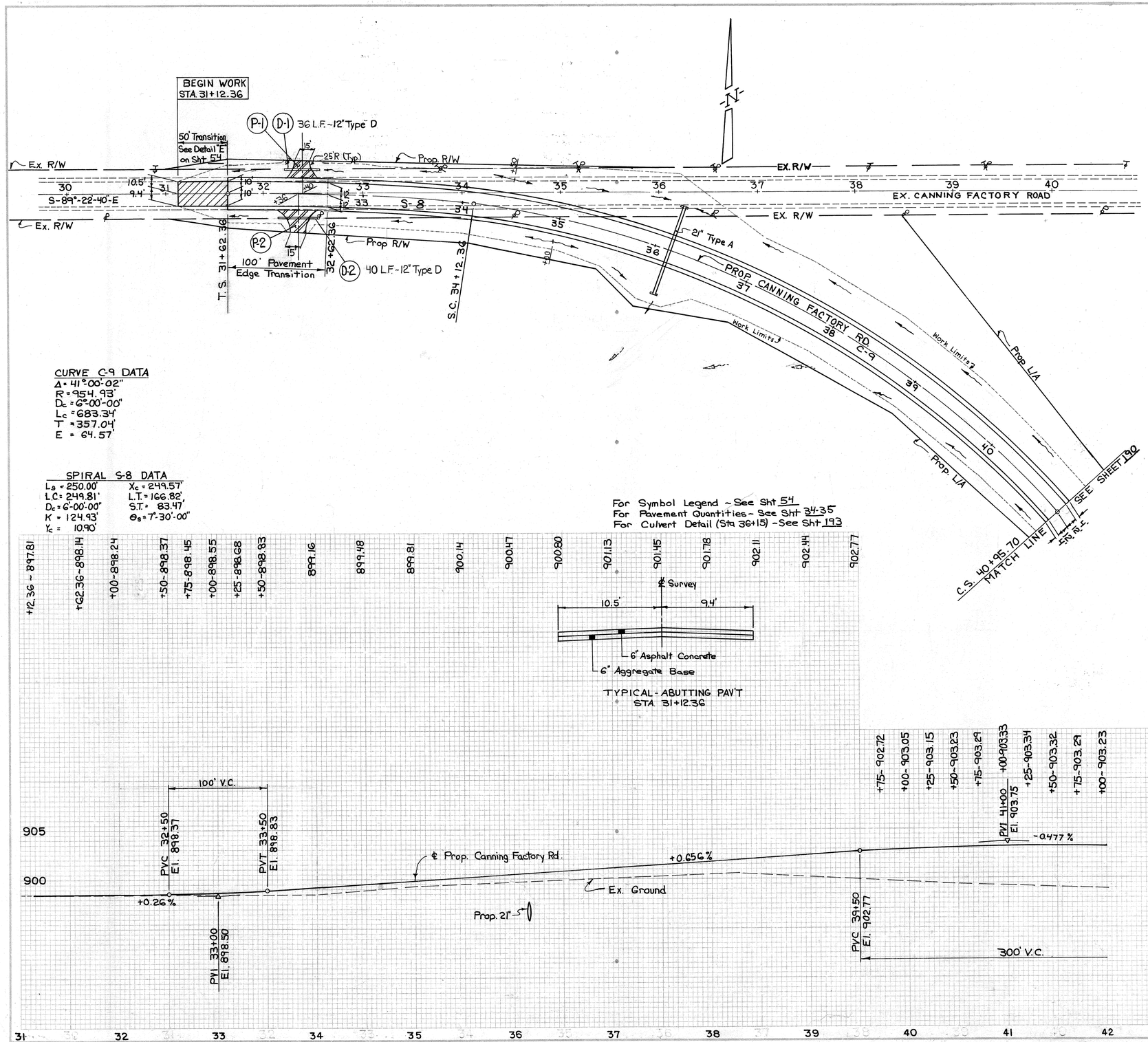
345



CURVE C-9 DATA
Δ = 41°00'-02"
R = 954.93'
D_c = 6°00'-00"
L_c = 683.34'
T = 357.04'
E = 64.57'

SPIRAL S-8 DATA

L_s = 250.00'	X_c = 249.57'
LC = 249.81'	L.T. = 166.82'
D_c = 6°00'-00"	S.T. = 83.47'
K = 124.93'	θ_s = 7°30'-00"
k_c = 10.90'	

For Symbol Legend ~ See Sht 54
For Pavement Quantities ~ See Sht 34-35
For Culvert Detail (Sta 36+15) ~ See Sht 193

+12.36 ~ 897.81
+62.36 ~ 898.14
+00 ~ 898.24
+50 ~ 898.37
+75 ~ 898.45
+00 ~ 898.55
+25 ~ 898.68
+50 ~ 898.83
899.16
899.48
899.81
900.14
900.47
900.80
901.13
901.45
901.78
902.11
902.44
902.77

TYPICAL - ABUTTING PAV'T
STA. 31+12.36

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	203 Excavation Cu. Yd.	203 Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd	659 Comm. Fertilizer Ton	304 6" Aggr. Base Cu. Yd	603 12" Conduit Type D Lin. Ft.
	31+62.36 to 41+00	L & R	749	3826	6139	0.55		
P-1	32+40	Lt.					7.2	
P-2	32+36	Rt.					9.0	
D-1	32+22 to 32+58	Lt.						36
D-2	32+16 to 32+56	Rt.						40
TOTALS	TO SHT. 33		749	3826	6139	0.55	17	76

SEE SHEET NO. 194

PLAN & PROFILE ~ STA. 30+00 TO STA. 40+95.70 CANNING FACTORY ROAD

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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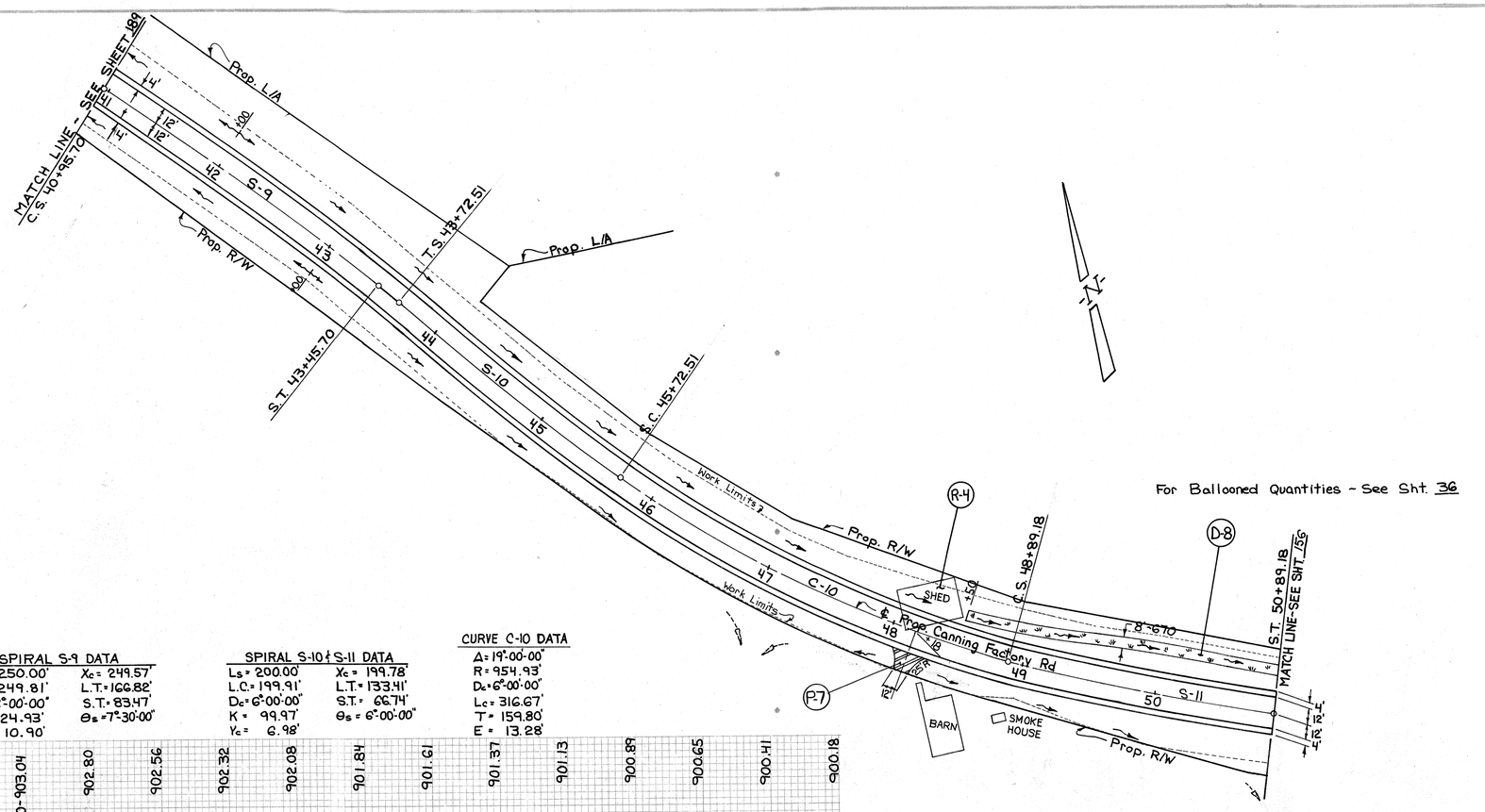


For Ballooned Quantities - See Sht. 36

SPIRAL S-9 DATA

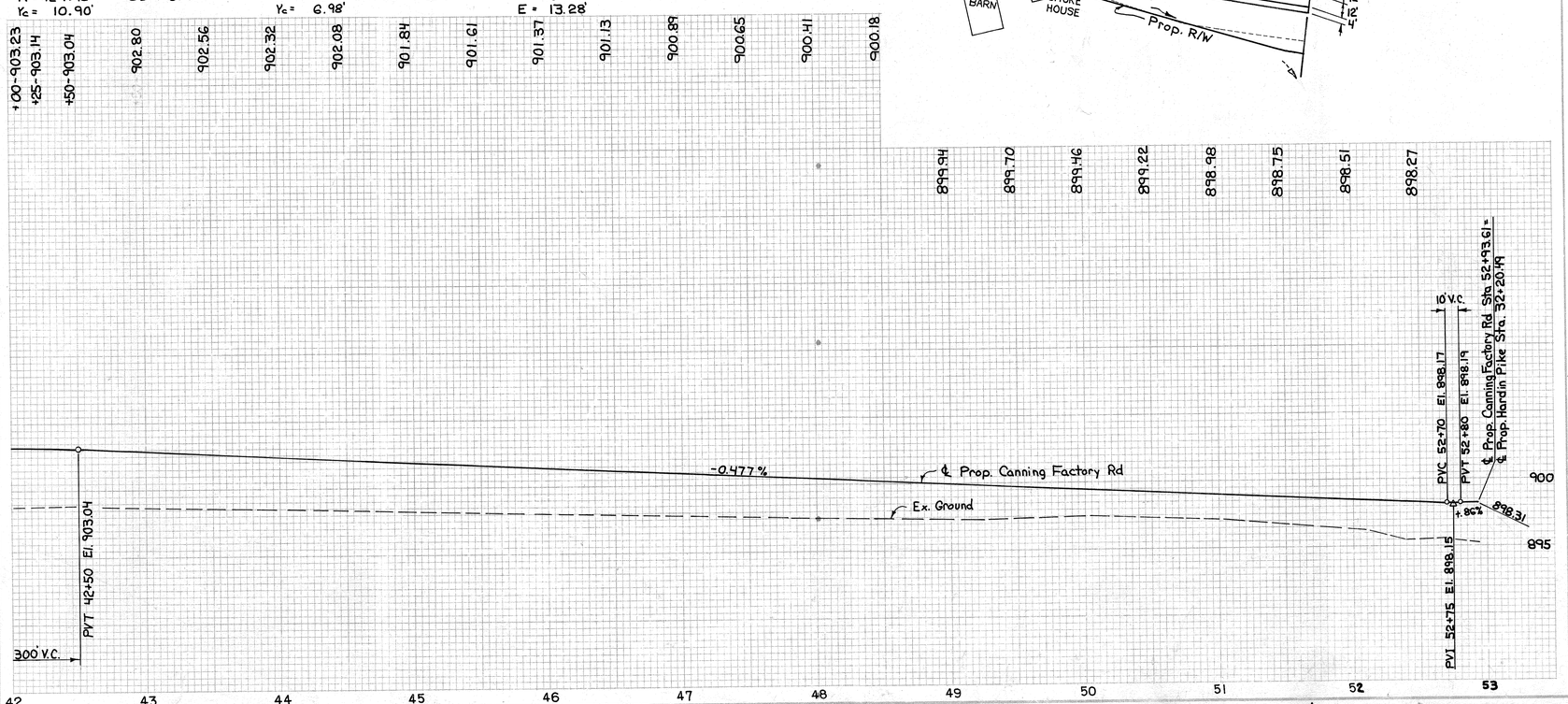
L_s = 250.00'	X_c = 249.57'
L.C. = 249.81'	L.T. = 166.82'
D_c = 6°-00'-00"	S.T. = 83.47'
K = 124.93'	θ_s = 7°-30'-00"
Y_c = 10.90'	

SPIRAL S-10 & S-11 DATA

L_s = 200.00'	X_c = 199.78'
L.C. = 199.91'	L.T. = 133.41'
D_c = 6°-00'-00"	S.T. = 66.74'
K = 99.97'	θ_s = 6°-00'-00"
Y_c = 6.98'	

CURVE C-10 DATA

Δ = 19°-00'-00"	
R = 954.93'	
D_c = 6°-00'-00"	
L_c = 316.67'	
T = 159.80'	
E = 13.28'	



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	203 Excavation Embankment		659 Seeding & Mulching		659 Comm Fertilizer	
			Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton		
	41+00 to 52+80.49	L+R	1030	2461	6597	0.60		
TOTALS	TO SHT. 33		1030	2461	6597	0.60		

SEE SHEET NO. 198

PLAN & PROFILE STA. 40+95.70 TO STA. 50+89.18 ~ CANNING FACTORY ROAD

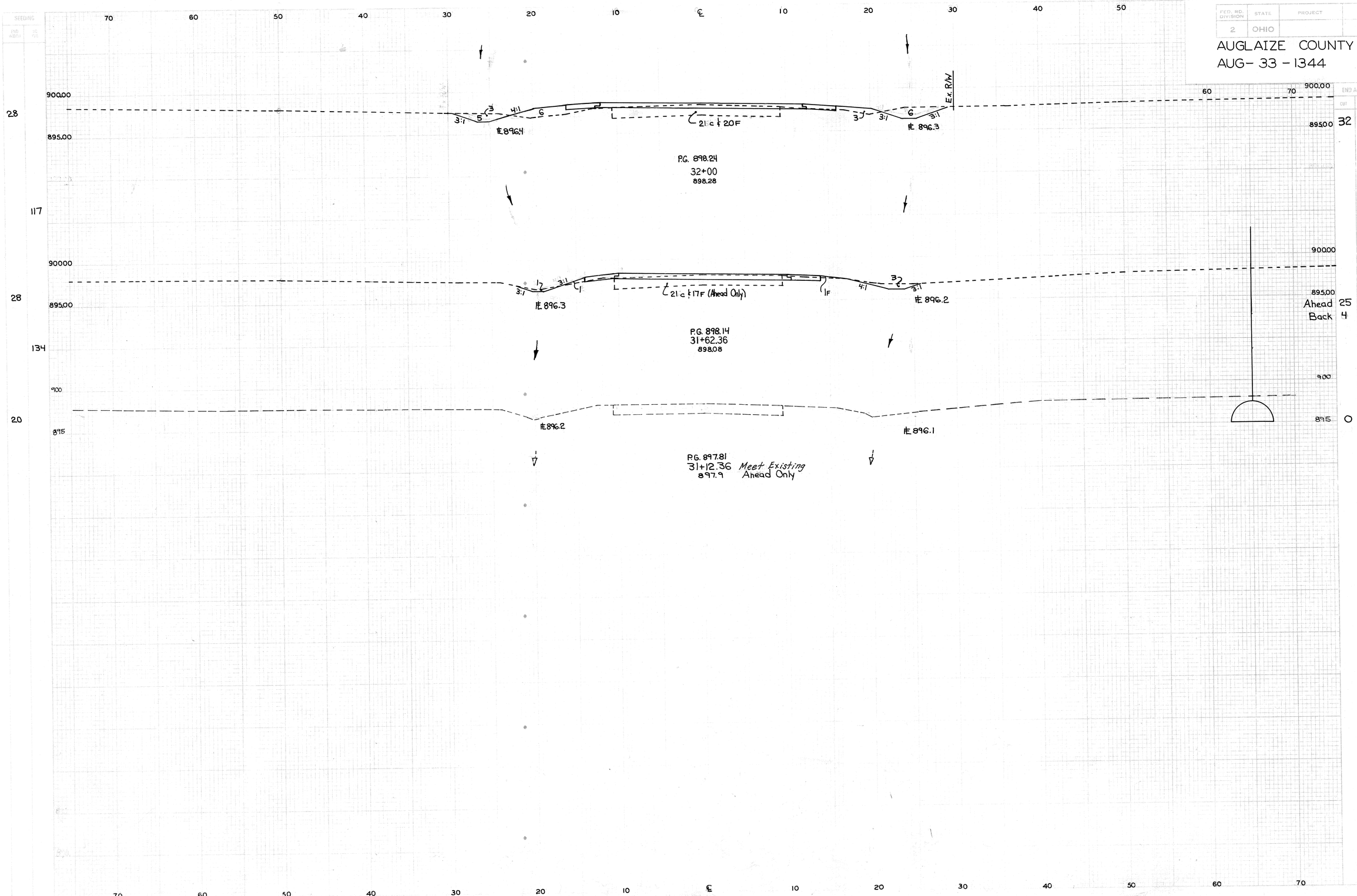
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

191
345

AUGLAIZE COUNTY
AUG- 33 - 1344

SEEDING
END WIDTH | SQ. YDS.

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70



	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
900.00				
895.00	32	29	40	35
900.00				
895.00				
Ahead	25	20		
Back	4	3	4	3
900				
895	0	0		

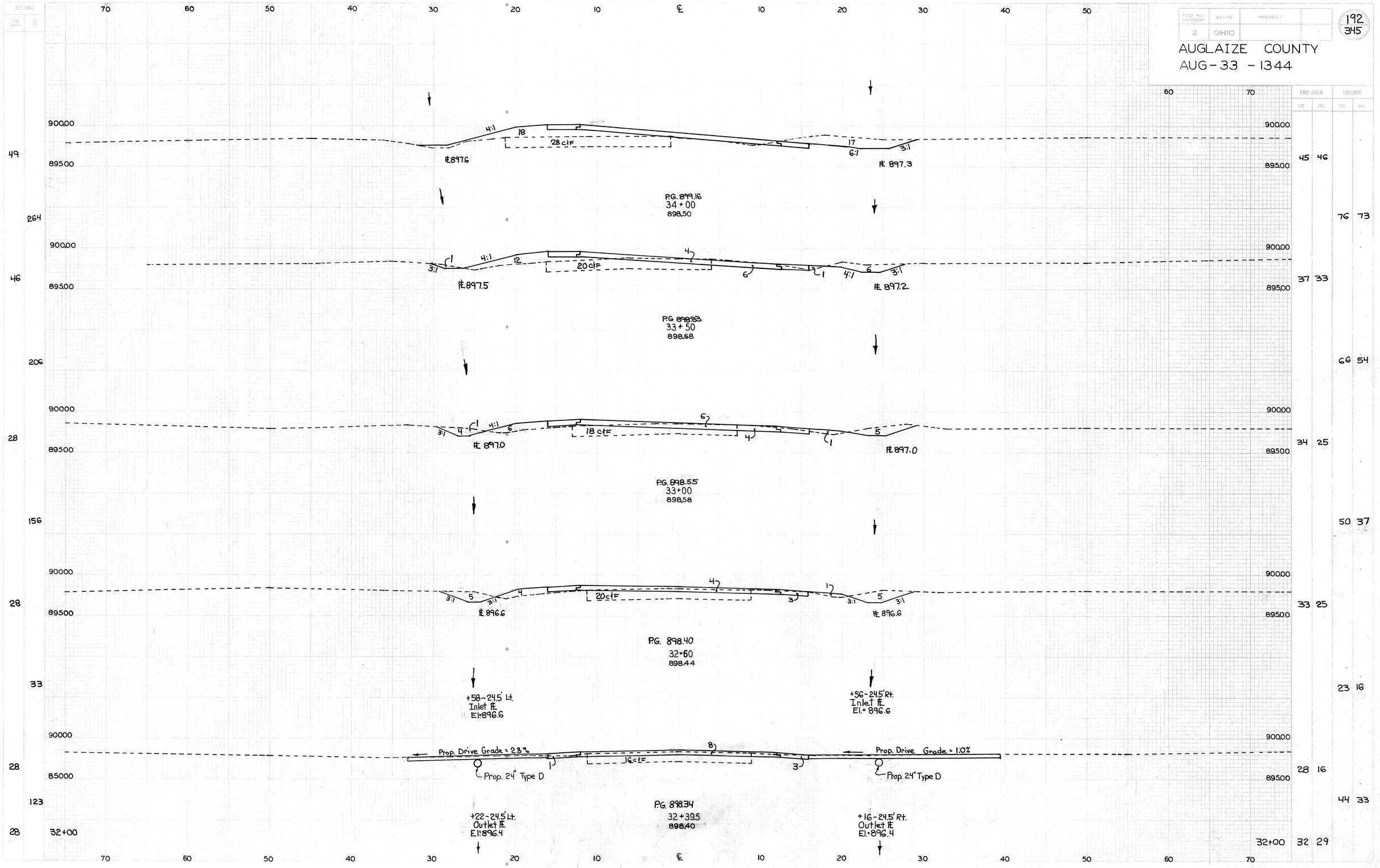
70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

X SECTIONS ON PROPOSED CANNING FACTORY RD STA 31+12.36 TO STA 32+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

192
345

AUGLAIZE COUNTY
AUG-33 - 1344

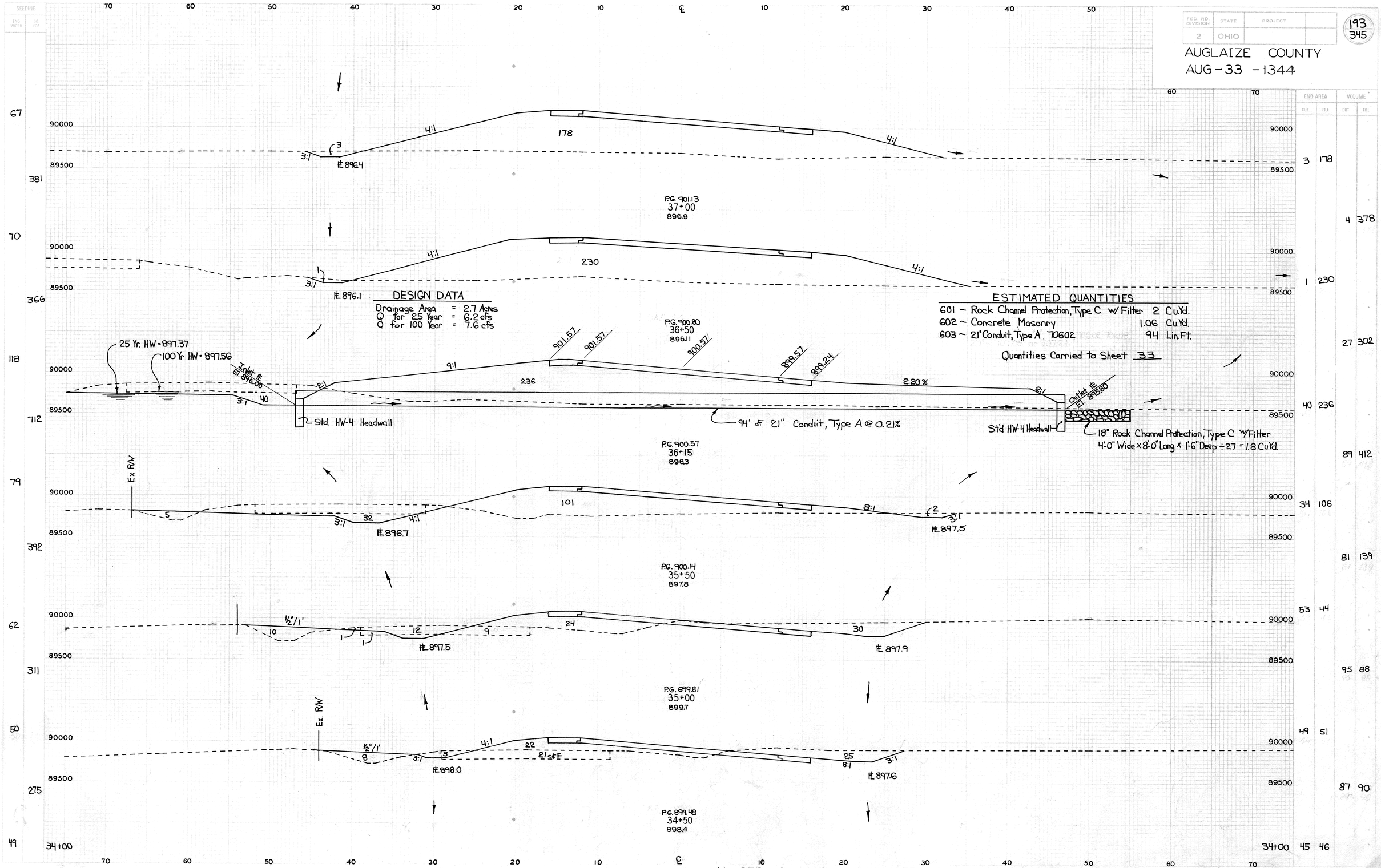


X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA 32+39.5 TO STA 34+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

193
345

AUGLAIZE COUNTY
AUG-33 -1344



X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA 34+50 TO STA 37+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

AUGLAIZE COUNTY
AUG-33 -13.44

194
345

SEEDING

LINE WIDTH	SQ YDS

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

								END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
62	90000	4:1	2 3:1	160	4:1	1	℄ 898.8				
	89500		℄ 899.0					3	160		
		P.G. 902.77 39+50 899.4								6	320
344	90000		3	185							
			℄ 898.5					3	185		
62	89500										
		P.G. 902.44 39+00 898.4								6	347
347	90000	4:1	3 3:1	190	4:1						
			℄ 897.9					3	190		
63	89500										
		P.G. 902.11 38+50 898.2								8	337
353	90000		6	174							
			℄ 897.6					6	174		
64	89500										
		P.G. 901.78 38+00 898.0								14	296
353	90000	4:1	9 3:1	146	4:1						
			℄ 897.0					9	146		
63	89500										
		P.G. 901.45 37+50 898.2								11	306
361											
67	37+00							37+00	3	178	

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

Fertilizer Calculation
(6139)(9)/(20)÷(1000/2000)= 0.55 Ton

Excavation	749 Cu. Yd.
Embankment	3826 Cu. Yd.
Seeding	6139 Sq. Yd.
Comm. Fertilizer	0.55 Ton

Quantities Carried to Sheet 189

X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA. 37+50 TO STA. 39+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

195
345

AUGLAIZE COUNTY
AUG - 33 - 13.44

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
47		70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 905.00 / 900.00	10	27		
	270				13	72
50		905.00 / 900.00	4	51		
	278				8	108
50		905.00 / 900.00	4	65		
	286				8	130
53		905.00 / 900.00	4	75		
	300				6	178
55		905.00 / 900.00	2	117		
	325				5	256
62	39+50	39+50	3	160		

P.G. 903.23
42+00
902.0

P.G. 903.32
41+50
901.7

P.G. 903.33
41+00
901.2

P.G. 903.23
40+50
901.3

P.G. 903.05
40+00
900.5

X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA.40+00 TO STA. 42+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

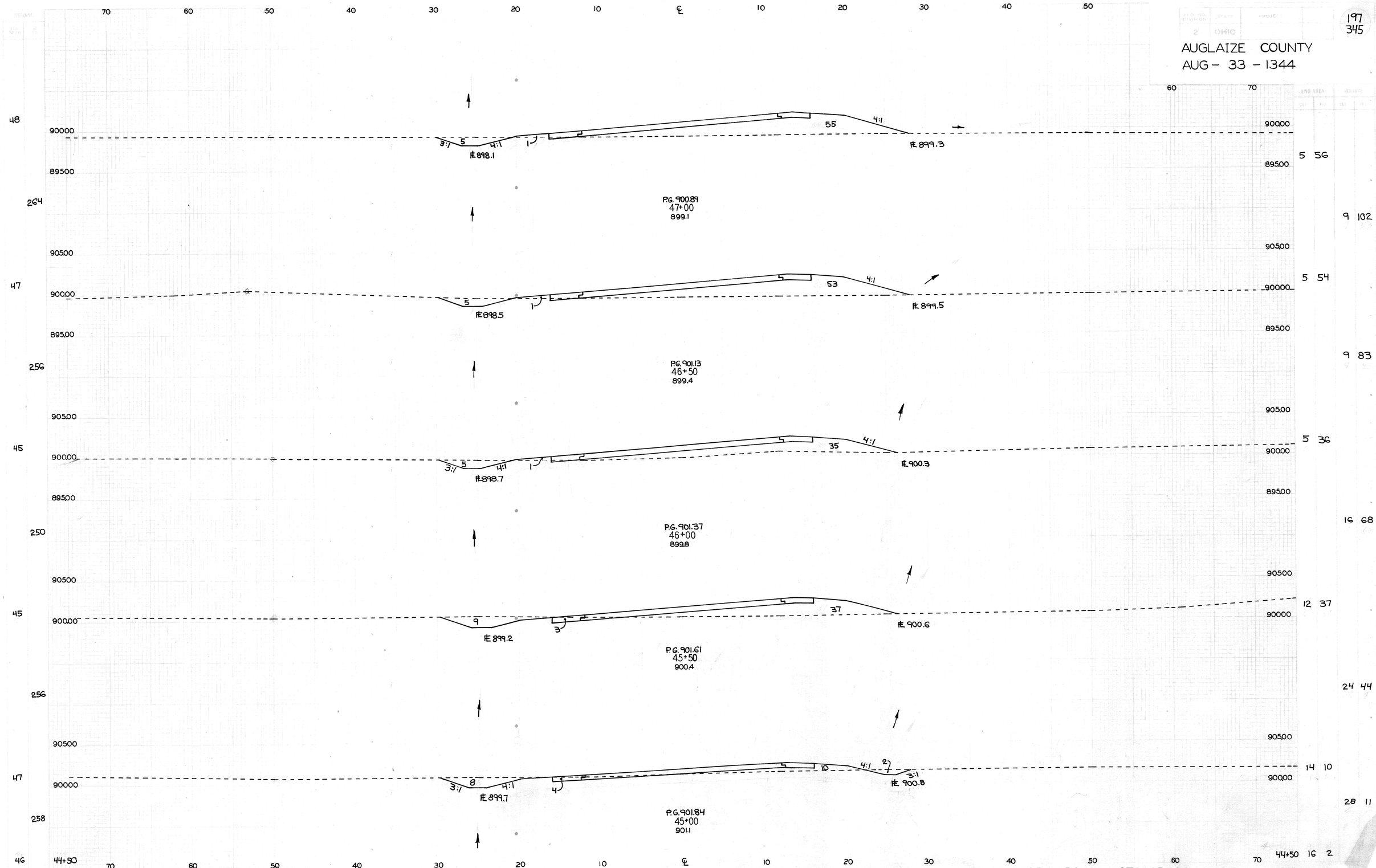
196
345

AUGLAIZE COUNTY
AUG - 33 - 1344

SEEDING				END AREA		VOLUME	
END WIDTH	SQ YDS			CUT	FILL	CUT	FILL
		70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70					
		905.00					
46		900.00	3:1 8 4:1 FE 900.2 6 2 4:1 2 3:1 FE 901.0	16	2		
		P.G. 902.08 44+50 901.5					
253						28	2
		905.00					
45		900.00	8 FE 900.5 3 1 2 FE 901.2	14	0		
		P.G. 902.32 44+00 901.7					
250						25	1
		905.00					
45		900.00	3:1 7 4:1 FE 900.6 1 4 2 4:1 3:1 FE 901.5	13	1		
		P.G. 902.56 43+50 902.0					
253						28	2
		905.00					
46		900.00	10 FE 900.7 1 1 3 3 FE 901.8	17	1		
		P.G. 902.80 43+00 902.2					
258						29	13
		905.00					
47		900.00	3 3:1 4:1 13 FE 901.0 6 5 4:1 3:1 FE 901.7	14	13		
		P.G. 903.04 42+50 902.5					
261						22	37
47	42+00	905.00		42+00	10	27	
		70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70					

X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA. 42 + 50 TO STA. 44 + 50

AUGLAIZE COUNTY
AUG - 33 - 1344



X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA. 45+00 TO STA. 47+00

198
345

AUGLAIZE COUNTY
AUG-33-1344

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

45 135 52 143 51 300 57 281 44 256 48

90500 90000 89500

8'-670 29 3:1 4:1 ℄ 896.3 5 19 4:1 ℄ 899.5

P.G. 899.94
49+00
899.0

8-670 96 3:1 4:1 ℄ 897.3 12:1 ℄ 900.3

P.G. 900.06
48+75
901.1

8-670 142 3:1 4:1 ℄ 897.5 12:1 4:1 ℄ 900.5

P.G. 900.18
48+50
902.3

+50~ Begin 8'-670

TOP OF BARN FOUNDATION

114 3:1 4:1 ℄ 897.8 5 12:1 ℄ 900.3

P.G. 900.41
48+00
901.2

13 3:1 4:1 5 ℄ 898.0 23 4:1 ℄ 900.0

P.G. 900.65
47+50
899.8

47+00

END AREA VOLUME
CUT FILL CUT FILL

34 19
60 9
96 0
110 0
142 0
242 0
119 0
127 21
18 23
21 73
47+00 5 56

Fertilizer Calculation
(6597)(9)(20)÷(1000)(2000) = 0.060 Ton

Quantities Carried to Sht 190	
Excavation	1030 Cu. Yd.
Embankment	2461 Cu. Yd.
Seeding	6597 Sq. Yd.
Comm. Fertilizer	0.60 Ton

X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA. 47+50 TO STA. 49+00

199
345

AUGLAIZE COUNTY
AUG - 33 -1344

Included w/ Hardin Pike X-Sections

Back Only; Ahead Included with Hardin Pike X-Sections

Ahead & Back

70 60 50 40 30 20 10 ℄ 10 20 30 40 50

895

60 Ahead
76 Back

82 | 8-670 | 20

4:1 4:1

½"/1'

95

4:1

℄E 893.0

℄E 895.1

P.G. 898.63
51+75
895.7

90000

203

8-670

45

4:1 4:1

12:1

98

4:1

70

89500

℄E 894.0

℄E 895.1

P.G. 898.75
51+50
895.7

89000

350

90000

8'-670

19

4:1

112

4:1

56

89500

℄E 894.3

℄E 895.5

P.G. 898.98
51+00
895.0

89000

311

90000

8'-670

4

4:1

183

3:1

56

89500

℄E 894.6

℄E 895.0

P.G. 899.22
50+50
895.1

89000

311

90000

8'-670

2

4:1

184

3:1

56

89500

℄E 894.8

℄E 895.5

P.G. 899.46
50+00
895.5

289

90000

8'-670

5

4:1

107

4:1

48

89500

℄E 895.3

℄E 897.5

P.G. 899.70
49+50
896.7

258

89000

311

45 49+00

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 49+00

900

895

	ENG AREA	VOLUME
Ahead	20 95	
900.00		
Back	102 95	68 89
895.00	45 98	
890.00		59 195
900.00		
895.00	19 112	
890.00		21 273
900.00		
895.00	4 183	
890.00		6 340
900.00		
895.00	2 184	
900.00		7 270
895.00	5 107	
890.00		36 117
49+00	34 19	

X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA. 49+50 TO STA. 51+50

AUGLAIZE COUNTY
AUG - 33 - 13.44

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

Included w/ Hardin Pike X-Sections

90 80 900 895

90000 89500

0 138

Included w/ Hardin Pike X-Sections

90000 89500 0 138

P.G. 898.20
52+80.49
895.4
On Skew Along Rt. Edge of Pav't (Hardin Pike)
Back Only; Ahead Included w/ Hardin Pike

66 39 196 20:1 2:1 8

90000 89500 890.00

Included w/ Hardin Pike X-Sections

90000 89500 8 196

P.G. 898.27
52+50
895.3

176 88 148 8:1

90000 89500 890.00

43"x68" Elliptical Conduit, Type A, 706.04

0 148

ft. 895.1

P.G. 898.41
52+25
895.4

For Culvert Detail ~ See Sheet 237

225 74 186 17 76 4:1

Included w/ Hardin Pike X-Sections

90000 89500 89000

ft. 894.7

P.G. 898.51
52+00
895.5

60 51+75 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 51+75

200
345

5 189
4 159
8 104
17 76
17 79
8 196
20 95

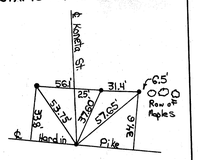
X SECTIONS ON PROPOSED CANNING FACTORY ROAD STA. 52+00 TO STA. 52+80.49

AUGLAIZE COUNTY
AUG~33~13.44

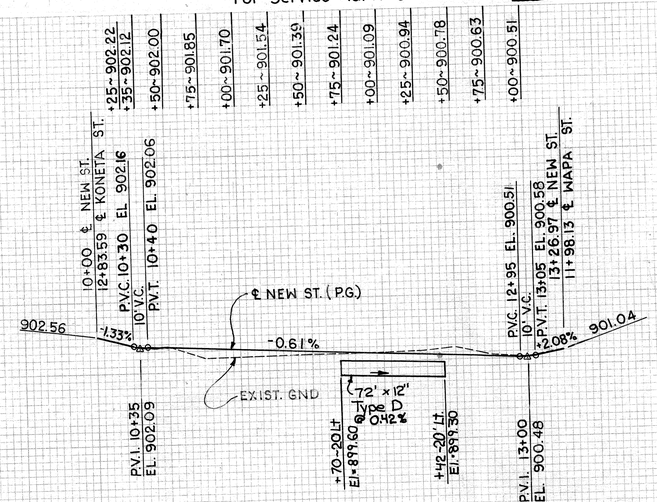
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

201
345

STA. 10+00 ℄ KONETA ST. =
STA. 15+77.96 ℄ HARDIN PIKE



All Ref. Pts are I.P.'s w/ Caps



PLAN & PROFILE STA. 10+00 TO STA. 13+26.97 ~ NEW STREET

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	304 Aggregate Base	404 Asph. Conc. AC20 (Driveways)	408 Prime Coat	606 Guardrail Type 5 Lin. Ft.	603 Conduit 12" Type D Lin. Ft.
			Cu. Yd.	Cu. Yd.	Gal.		
D-1	10+64 to 11+20 (Koneta St.)	Lt.					56
D-2	11+70 to 12+42	Lt.					72
G-1	10+40 (Koneta St.)	L&R				25	
P-1	10+80 (Koneta St.)	Lt.	28.3	9.4	98		
P-2	12+00	Lt.	21.8	9.3	67		
	10+10.30 to 13+14.97	L&R					
			56	19	135	25	128

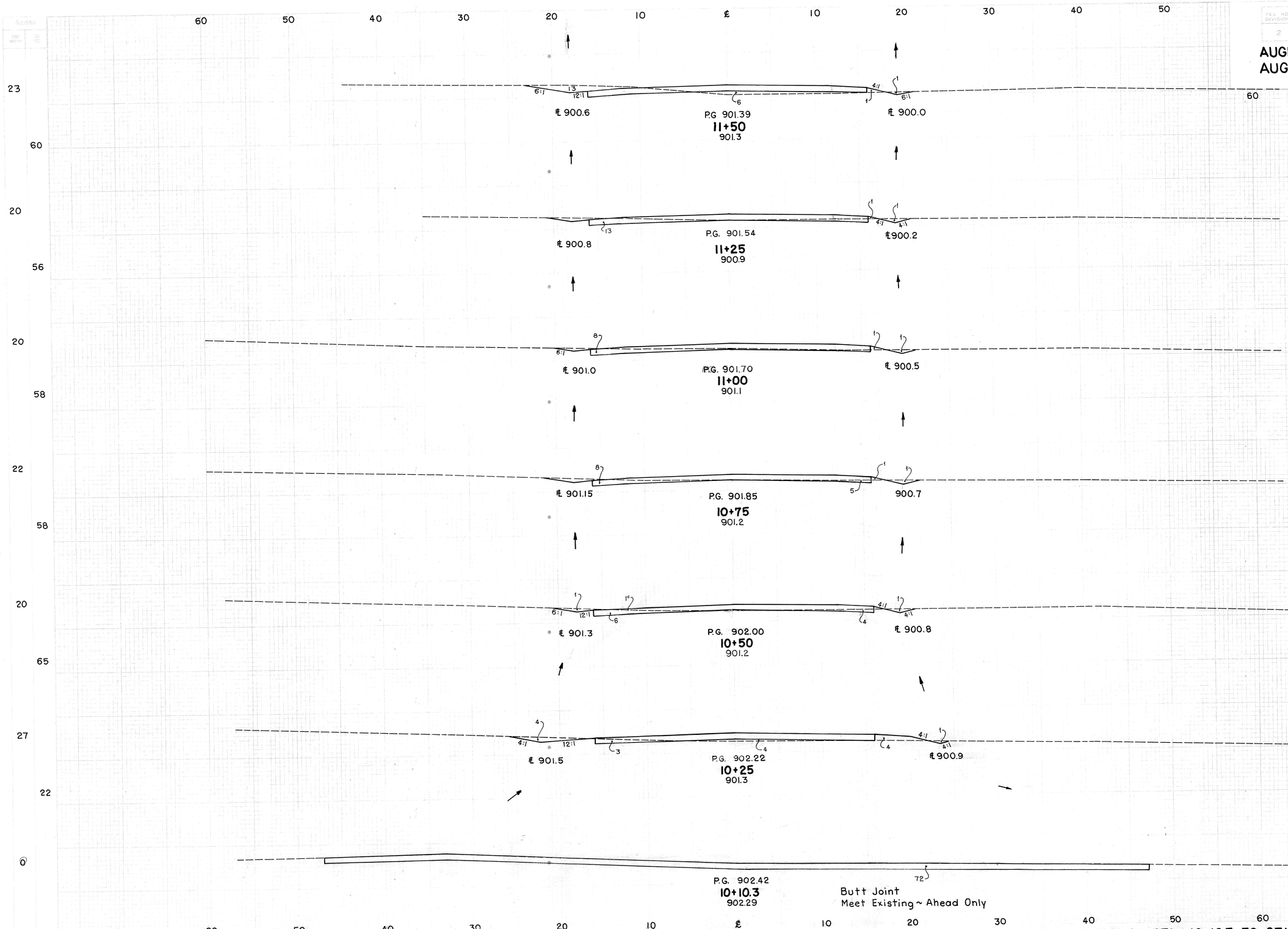
TOTALS TO SHT. 30-32

SEE SHEET NO.							
203	659 Comm. Fertilizer	Cu. Yd.					
203	659 Seeding & Mulching	Cu. Yd.					
203	Excavation Embankment	Cu. Yd.					
203			306	32	306	32	615	0.06	615	0.06

FED. NO. DIVISION	STATE	PROJECT
2	OHIO	

202
345

AUGLAIZE COUNTY
AUG~33~13.44



X- SECTIONS ~ STA. 10+10.3 TO STA. 11+50 NEW ST.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

203
345

AUGLAIZE COUNTY
AUG~33~13.44

Included With Wapa St. X-Sections

Included With Wapa St. X-Sections

P.G. 900.79
13+14.97
Back Only
Ahead Included With Wapa St. X-Sections

P.G. 900.51
13+00
899.3

℄ 899.2

P.G. 900.63
12+75
900.0

℄ 899.4

℄ 899.3

P.G. 900.78
12+50
900.3

℄ 899.5

+70~20' Lt.
Outlet El.= 899.30

P.G. 900.94
12+25
900.7

℄ 899.6

Prop. Drive Grade 0.5%

Prop. 12" Type D

P.G. 901.09
12+00
901.2

℄ 899.7

+42~20' Lt.
Inlet El. 899.60

P.G. 901.24
11+75
901.3

℄ 899.8

Add Cut For Prop. Drive (Lt.) → 38

Fertilizer Calculation
(6.5)(9)(20)÷(1000)(2000)=0.06 Ton

Comm. Fert	.06 Ton
Seeding	6.5 Sq. Yd.
Excavation	306 Cu. Yd.
Embankment	32 Cu. Yd.

Quantities Carried to Sheet 201.

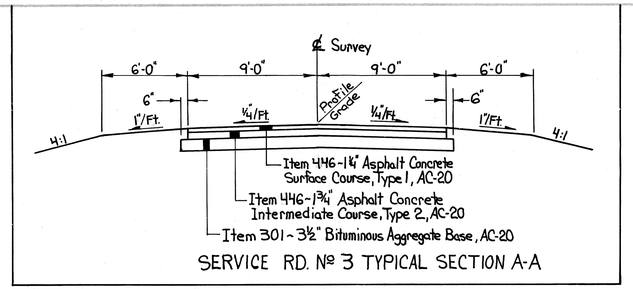
Sta.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
11+50	14	7		
			34	3
11+75	13	0		
			21	0
12+00	11	0		
			10	0
12+25	4	22		
			7	10
12+50	0	31		
			10	6
12+75	0	31		
			0	0
13+00	0	31		
			0	0
13+14.97	0	31		

X-SECTIONS STA. 11+75 TO STA. 13+14.97 NEW ST.

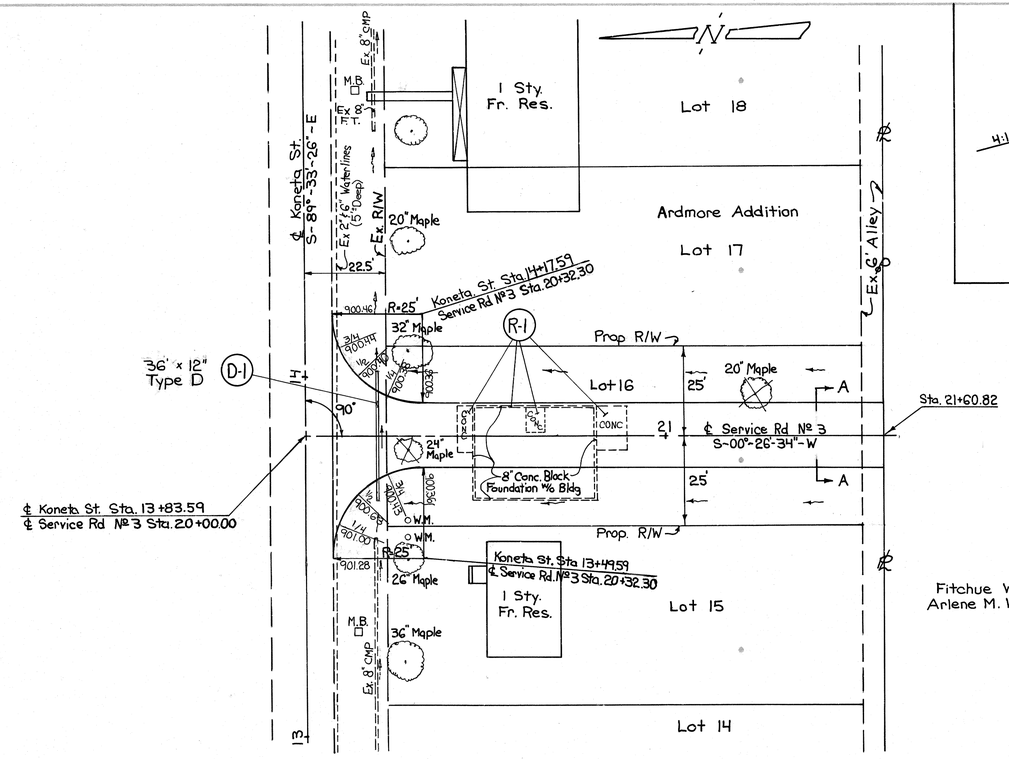
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

203A
345

AUGLAIZE COUNTY
AUG - 33 - 13.44



SERVICE RD. Nº 3 TYPICAL SECTION A-A

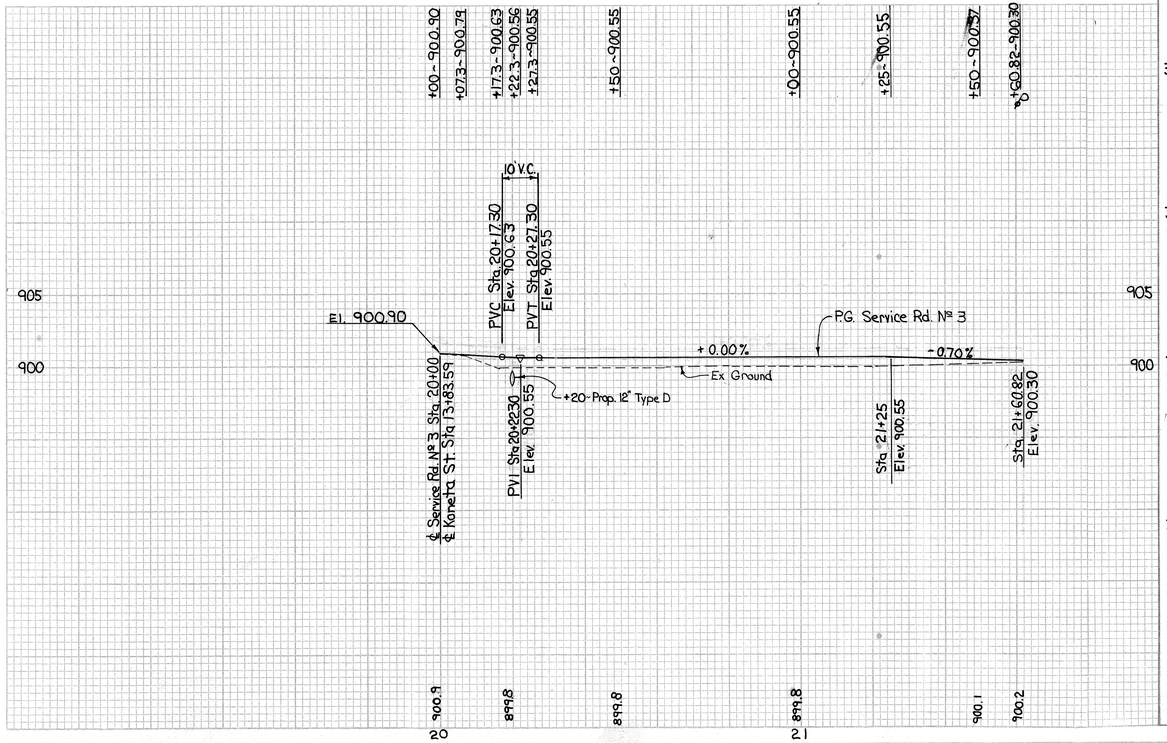


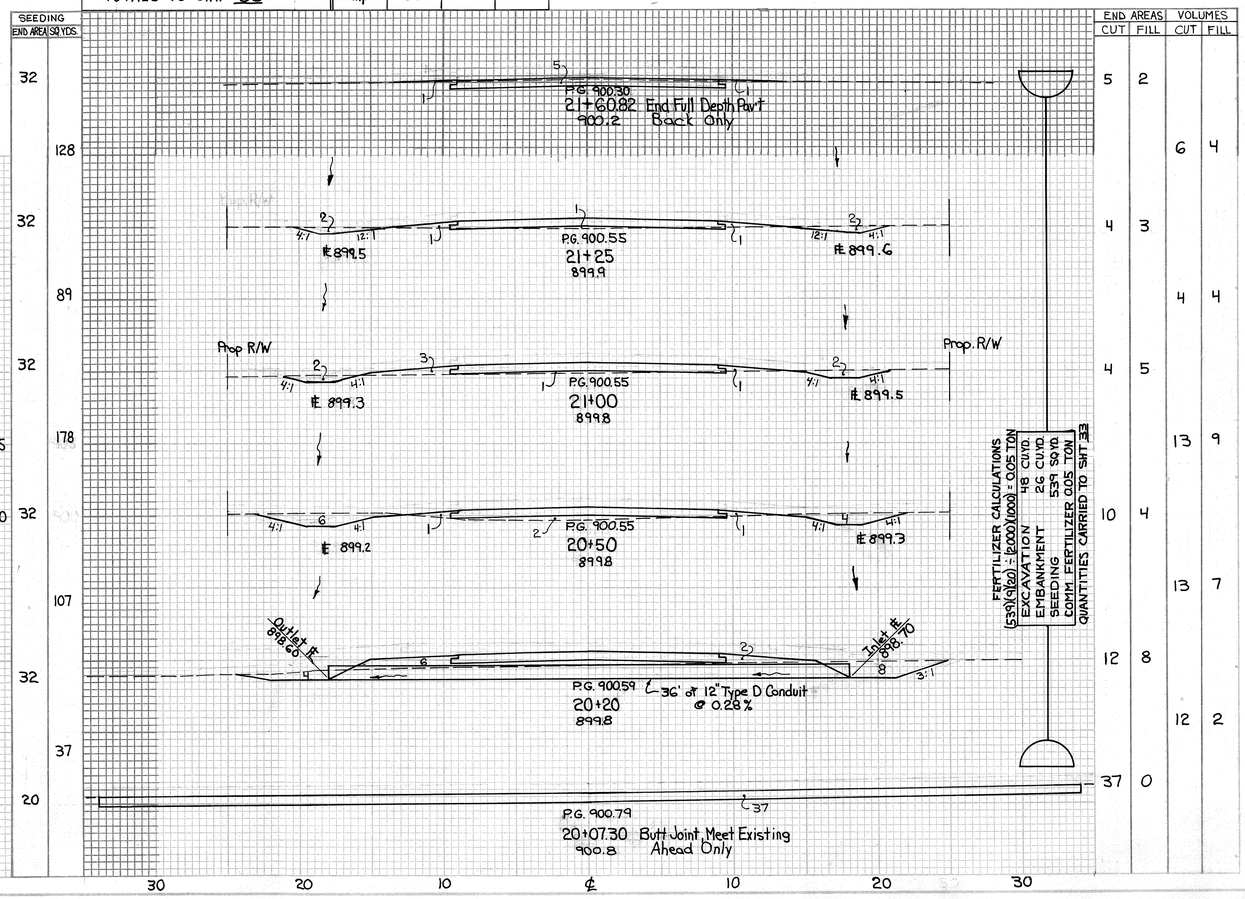
Fitchue Webb
Arlene M. Webb

For Pavement Quantities - See Sht 35

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Buildings Demolished	603 12" Conduit Type D		
			Lump	Lin. Ft.		
R-1	20+38 TO 20+89	Lt. & Rt.	Lump			
D-1	20+20	Lt. & Rt.		36		
TOTALS TO SHT. 33			Lump	36		





END AREAS CUT	END AREAS FILL	VOLUMES CUT	VOLUMES FILL
5	2		
		6	4
4	3		
		4	4
4	5		
		13	9
10	4		
		13	7
12	8		
		12	2
37	0		

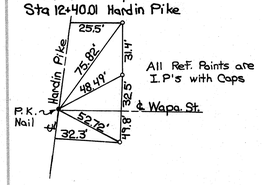
SERVICE ROAD Nº 3 STA. 20+00.00 TO STA 21+80.62 PLAN & PROFILE AND X-SECTIONS

AUGLAIZE COUNTY
AUG~33~13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

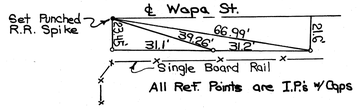
204
345

Sta. 10+00 Wapa St =
Sta 12+40.01 Hardin Pike

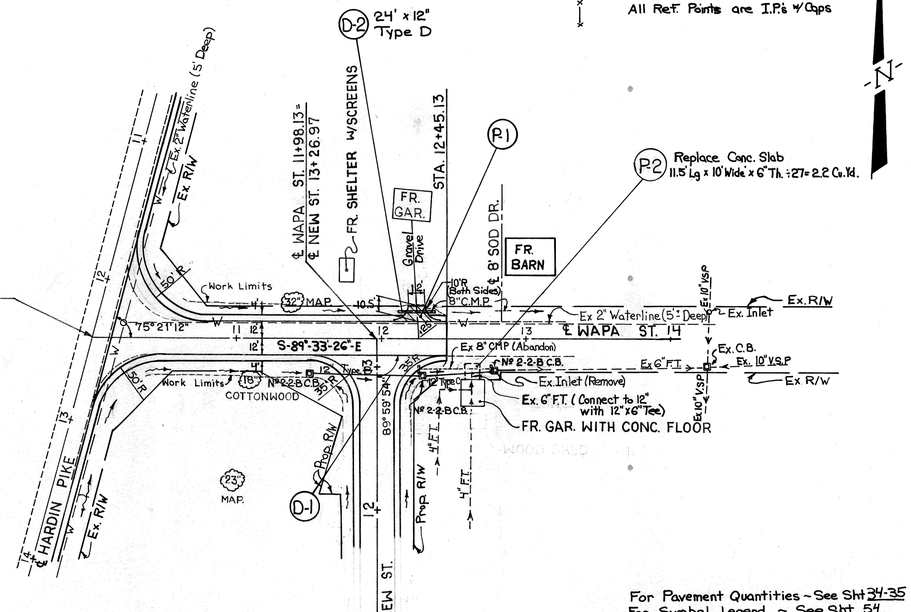


All Ref. Points are I.P's with Caps

POT 17+79.22
℄ Wapa St.

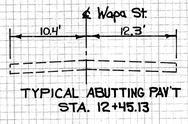


All Ref. Points are I.P.'s w/ Caps



For Pavement Quantities ~ See Sht 34-35
For Symbol Legend ~ See Sht. 54

Bench Mark #15A – RR Spike in root of 32" Maple
Sta. 13+48.5 – 35.0' Lt. ℄ Hardin Pike, Elev. 902.72



TYPICAL ABUTTING PAV'T
STA. 12+45.13

ESTIMATED QUANTITIES

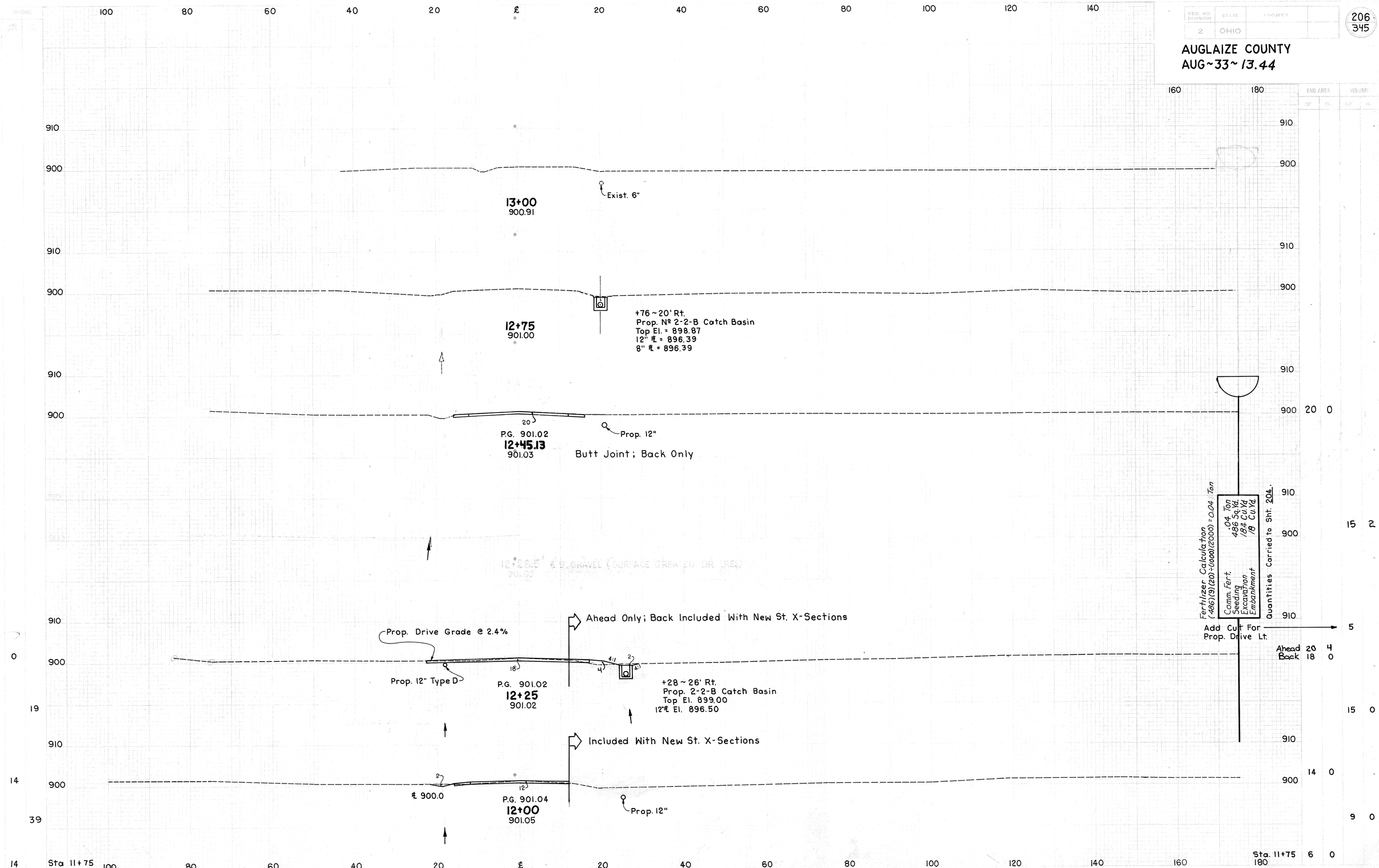
REF. NO.	STATION TO STATION	SIDE	202 Pavement Removed Sq. Yd.	202 Inlet Removed Each	304 Aggregate Base Cu. Yd.	404 Asph. Conc. AC-20 (Driveways) Cu. Yd.	408 Prime Coat Gal.	452 6" Plain Concrete Pavement Sq. Yd.	601 Catch Basin № 2-2-B Each	603 Conduit 8" Type C L.F.	603 Conduit 12" Type B L.F.	603 Conduit 12" Type C L.F.	603 Conduit 12" Type D L.F.
D-1	11+50 to 12+86	Rt.		1					2	10	78	48	24
D-2	12+13 to 12+37	Lt.											
P-1	12+25 to 12+69	Lt.			3.5	1.2	9	13					
P-2	12+58 to 12+69	Rt.	13										
	10+12.40 to 12+45.13	Lt & R											
TOTALS TO SHT. 30-32			13	1	4	2	9	13	2	10	78	48	24

603 Conduit 12" Type D L.F.	659 Comm Fertilizer Ton	659 Seeding & Mulching Sq. Yd.	203 Excavation Embankment Cu. Yd.	203 Excavation Bends & Branches Cu. Yd.	SEE SHEET NO.
24					
	0.04	486	18	184	106
	0.04	486	18	184	204
48					24

PLAN & PROFILE STA. 10+00 TO STA. 13+00 WAPA ST.

FED. RD. DIVISION 2 | STATE OHIO | PROJECT
206
345

AUGLAIZE COUNTY
AUG~33~13.44



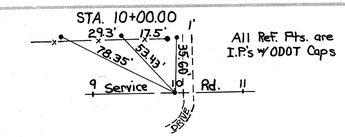
X-SECTIONS STA. 12+00 TO STA. 13+00 WAPA ST.

AUGLAIZE COUNTY
AUG-33-13.44

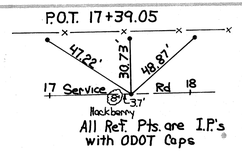
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

2.07
345

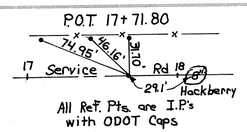
SEE SHEET NO. 2.10



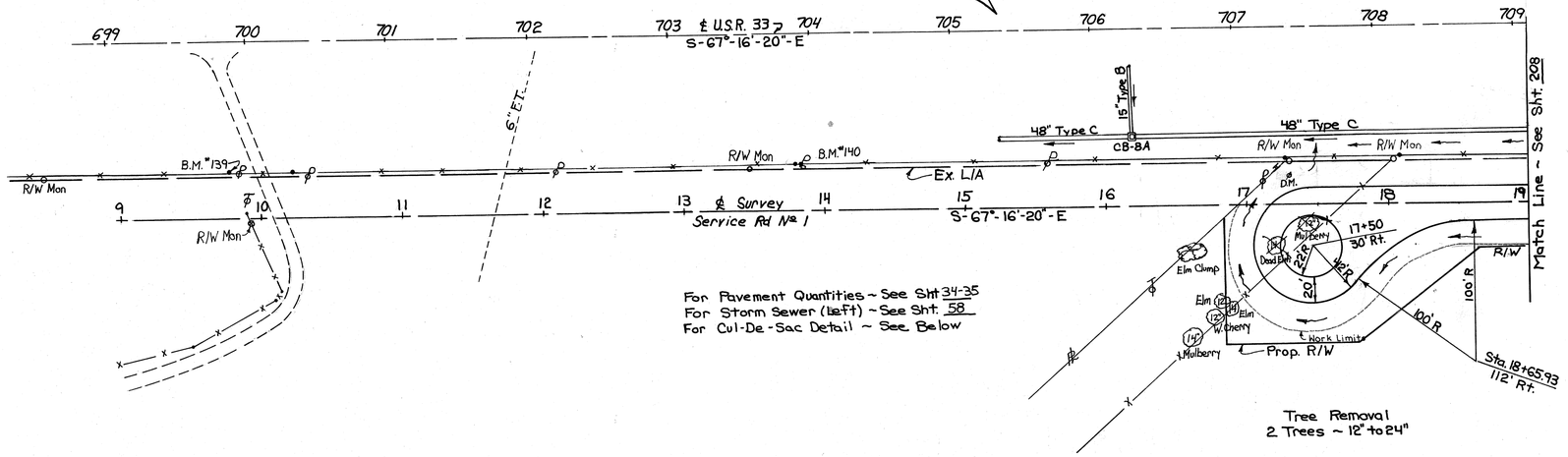
All Ref. Pts. are I.P.'s w/ ODOT Caps



All Ref. Pts. are I.P.'s with ODOT Caps



All Ref. Pts. are I.P.'s with ODOT Caps

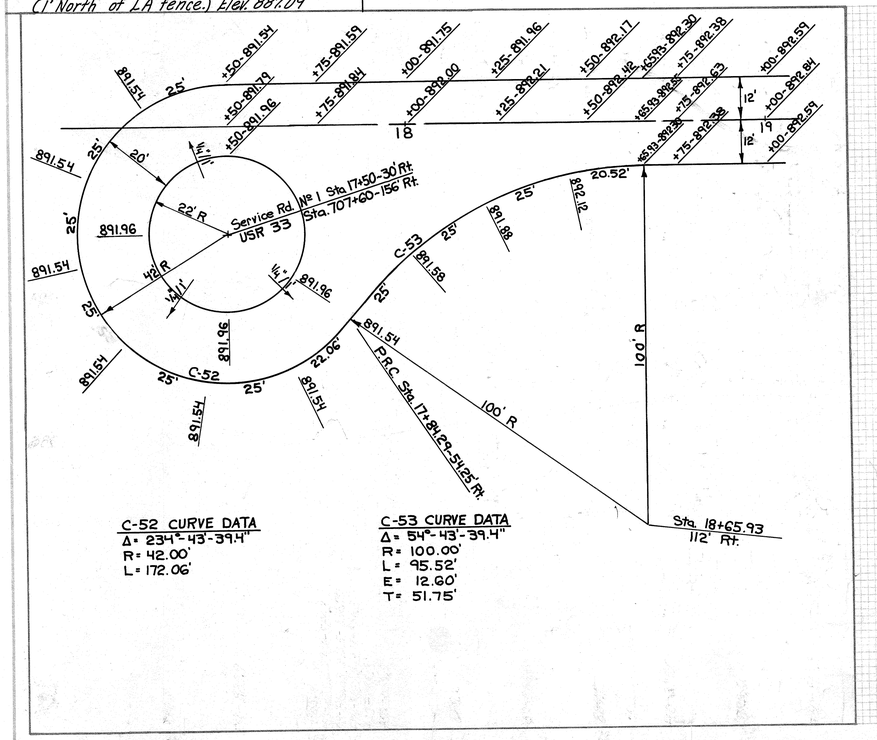


For Pavement Quantities - See Sht 34-35
For Storm Sewer (left) - See Sht. 58
For Cul-De-Sac Detail - See Below

Tree Removal
2 Trees - 12" to 24"

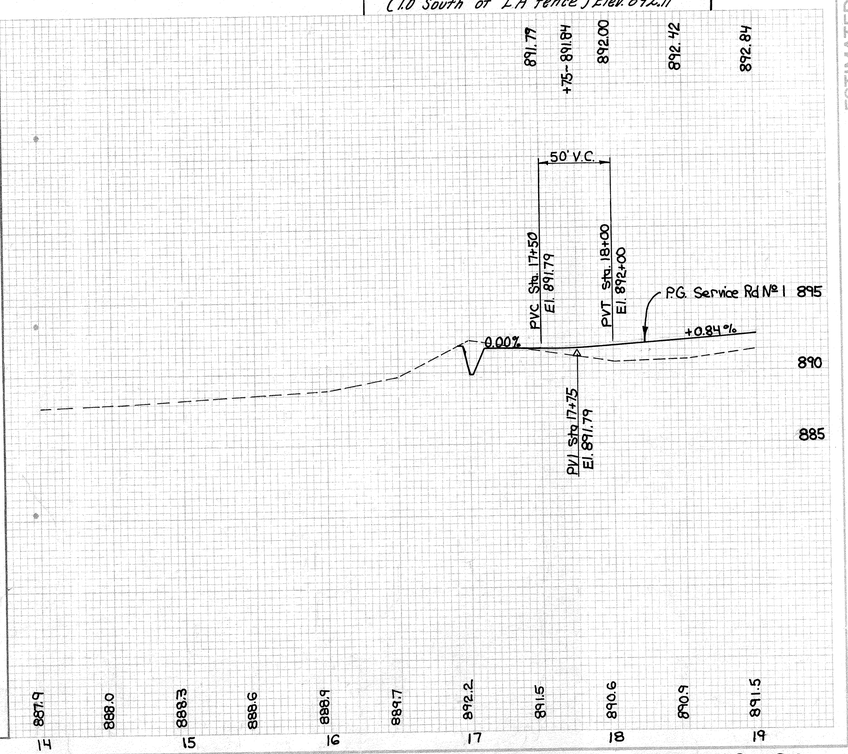
Bench Mark #139
4' Sign Post, set flush, 86.4' Lt. Sta. 699+00
(1' North of LA fence.) Elev. 887.09

Bench Mark #141
4' Sign Post, set flush, 94.8' Rt. Sta. 709+00
(1.0' South of LA fence.) Elev. 892.11



C-52 CURVE DATA
Δ = 234°-43'-39.4"
R = 42.00'
L = 172.06'

C-53 CURVE DATA
Δ = 54°-43'-39.4"
R = 100.00'
L = 95.52'
E = 12.80'
T = 51.75'



PLAN & PROFILE STA. 10+00 TO STA. 19+00 SERVICE ROAD NO. 1

ESTIMATED QUANTITIES

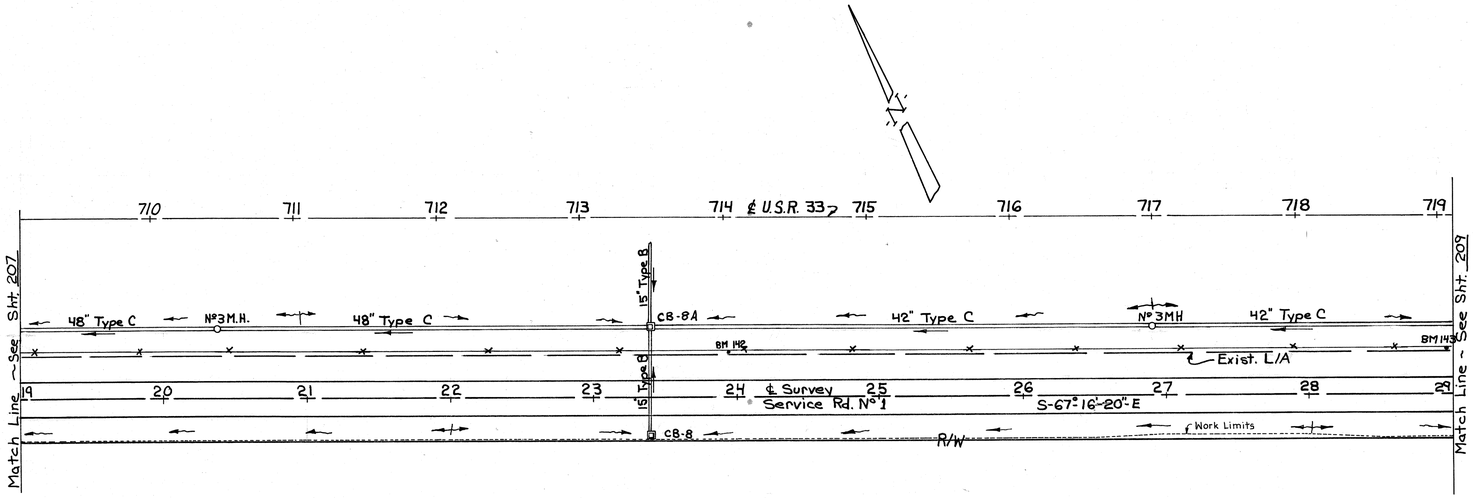
REF. NO.	STATION TO STATION	SIDE	203 Excavation	203 Embankment	659 Seeding & Mulching	659 Comm. Fertilizer
			Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
	16+50 to 19+00	Lt & R	277	299	1333	0.12
TOTALS TO SHT. 33			277	299	1333	0.12

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

208
345

SEE SHEET NO. 2/2



For Pavement Quantities ~ See Sht 34-35
For Storm Sewer (Left) ~ See Sht 59

PLAN & PROFILE STA. 19+00 TO STA. 29+00 SERVICE ROAD NO. 1

ESTIMATED QUANTITIES

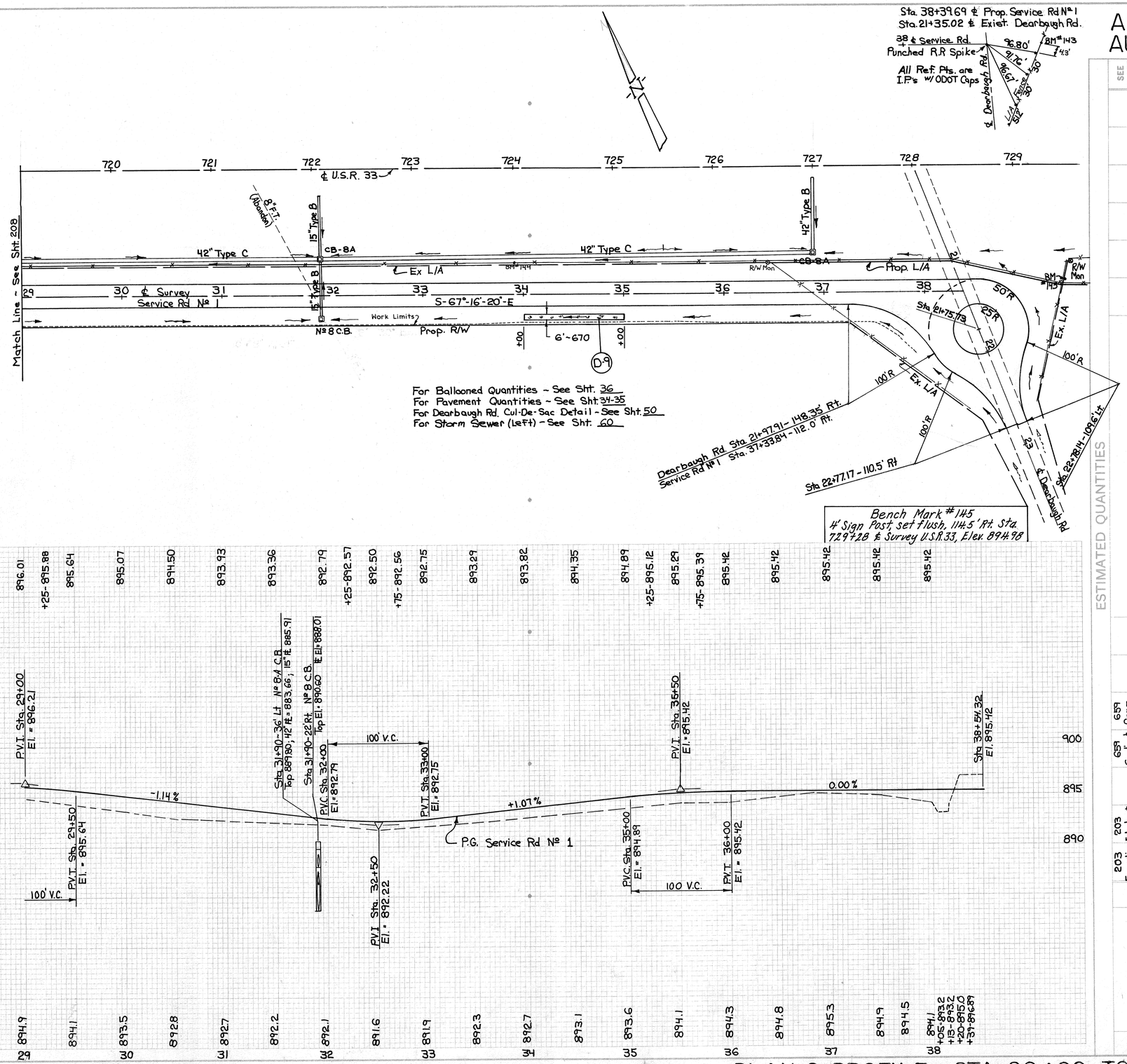
REF. NO.	STATION TO STATION	SIDE	203 Excavation Cu. Yd.	203 Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Ton
	19+00 to 29+00	L&R	655	779	5500	0.50
TOTALS TO SHT. 33			655	779	5500	0.50

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

209
345

Sta. 38+39.69 ℄ Prop. Service Rd Nº 1
Sta. 21+35.02 ℄ Exist. Dearbaugh Rd.
38 ℄ Service Rd.
Punched R.R Spike
All Ref. Pts. are I.P.'s w/ ODOT Caps



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	203 Excavation Embankment Cu. Yd.	203 Excavation Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Ton
	29+00 to 37+90	L&R	348	724	3757	0.34
	TOTALS TO SHT. 33		348	724	3757	0.34

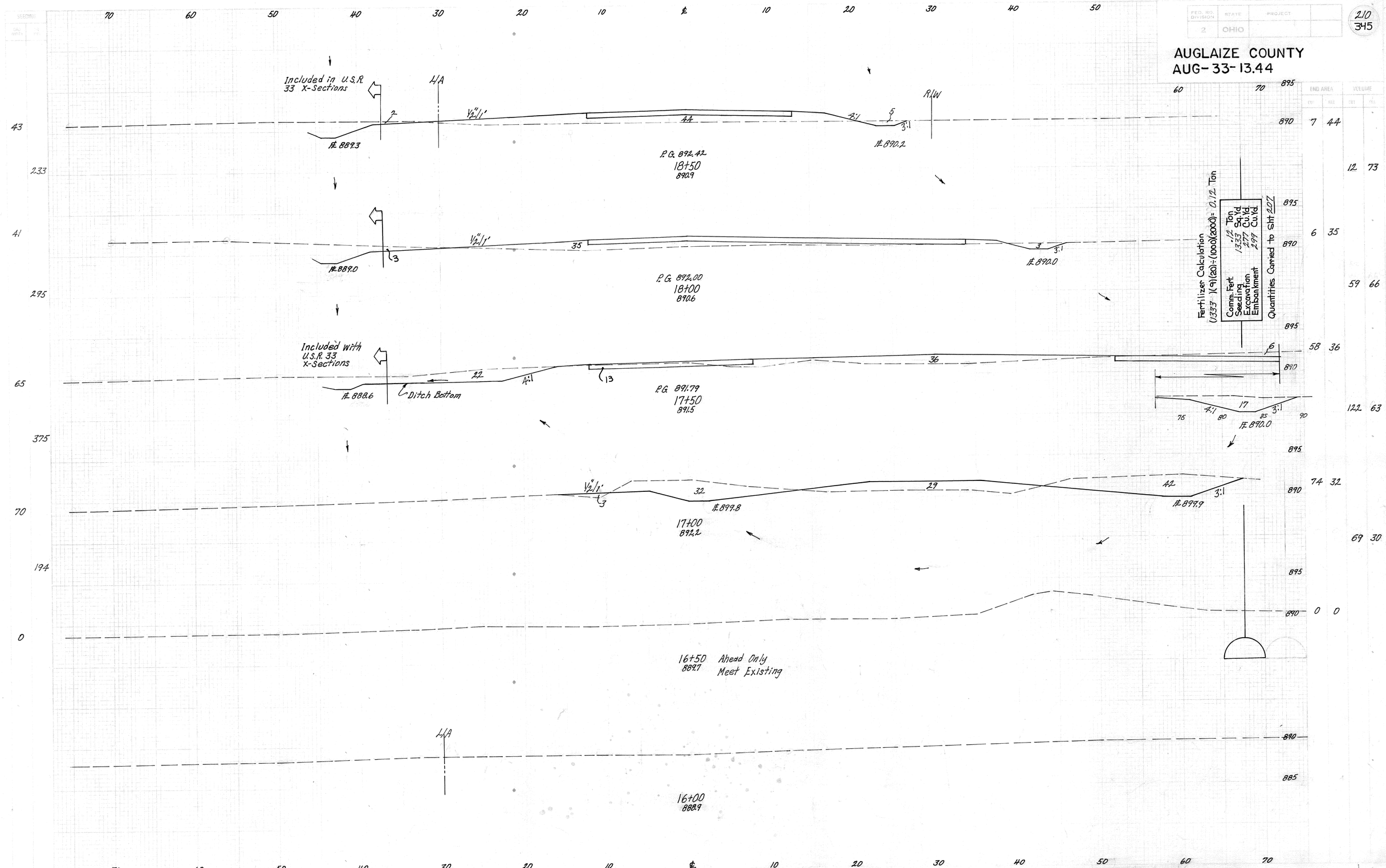
SEE SHEET NO. 216

PLAN & PROFILE STA. 29+00 TO STA. 38+54.32 SERVICE ROAD NO. 1

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

210
345

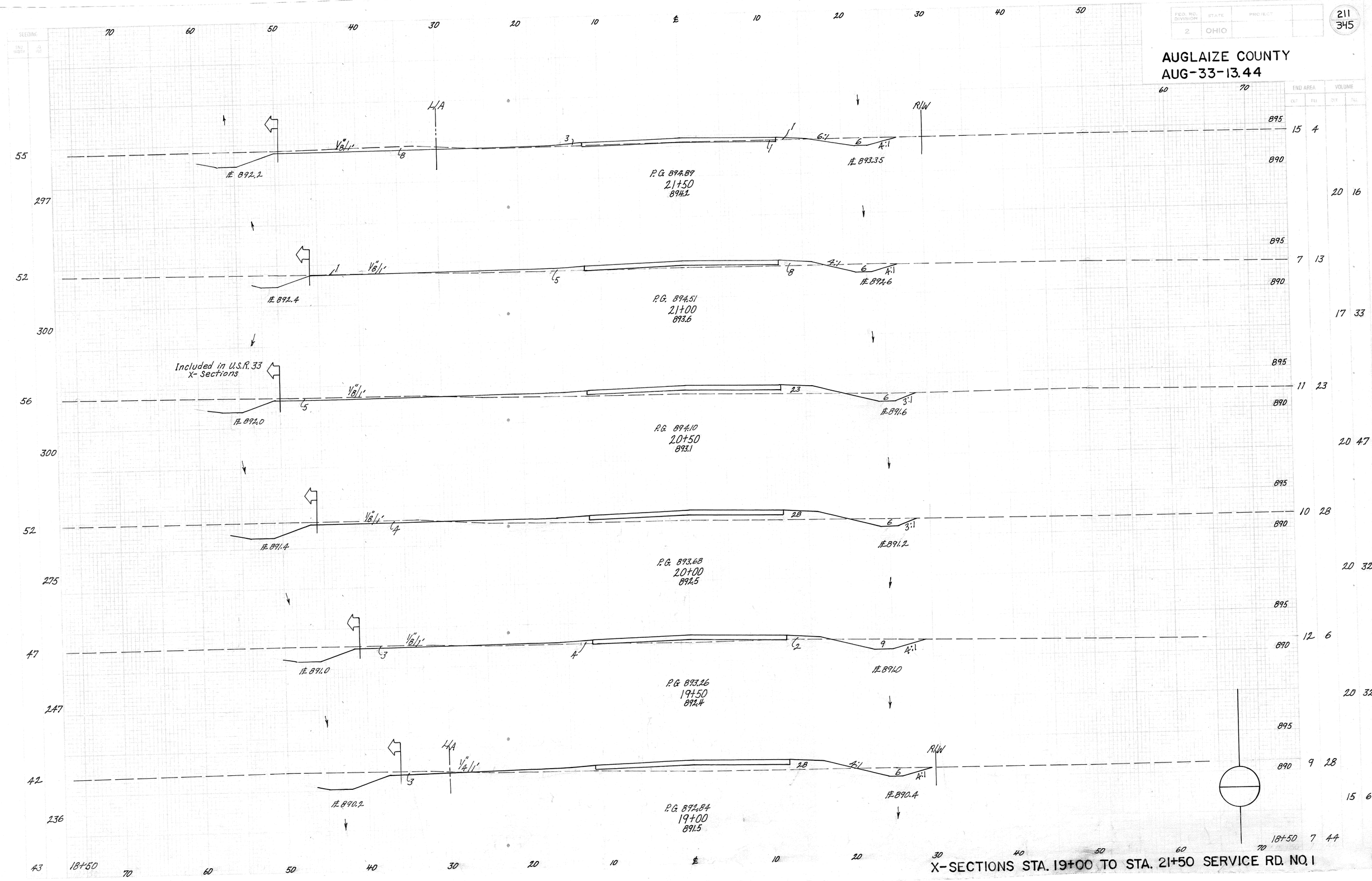
AUGLAIZE COUNTY
AUG-33-13.44



X-SECTIONS STA. 16+00 TO STA. 18+50 SERVICE RD. NO. 1

FED. RD. DIVISION 2 | STATE OHIO | PROJECT
211
345

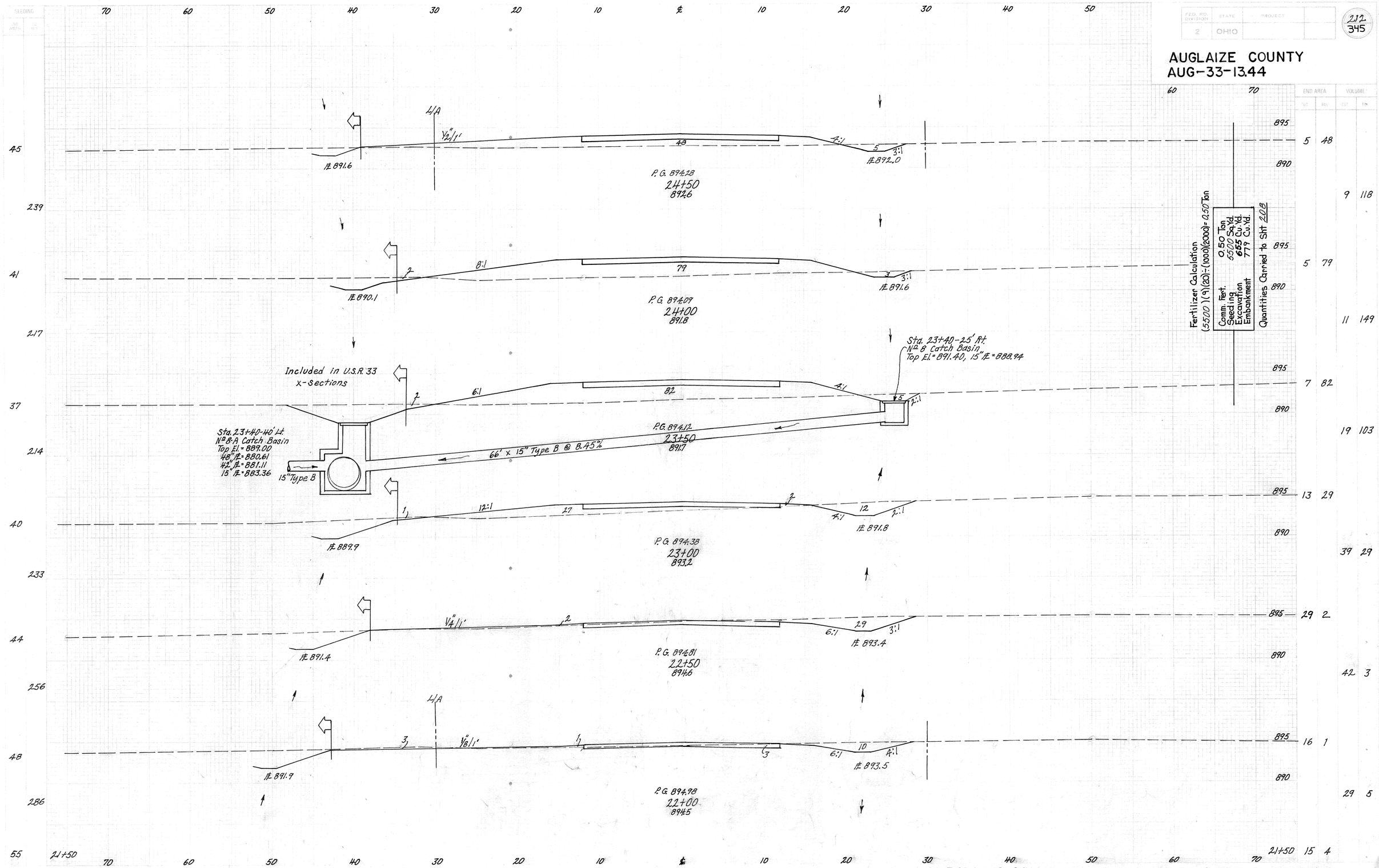
AUGLAIZE COUNTY
AUG-33-13.44



X-SECTIONS STA. 19+00 TO STA. 21+50 SERVICE RD. NO. 1

FED. RD. DIVISION 2 | STATE OHIO | PROJECT
212
345

AUGLAIZE COUNTY
AUG-33-13.44

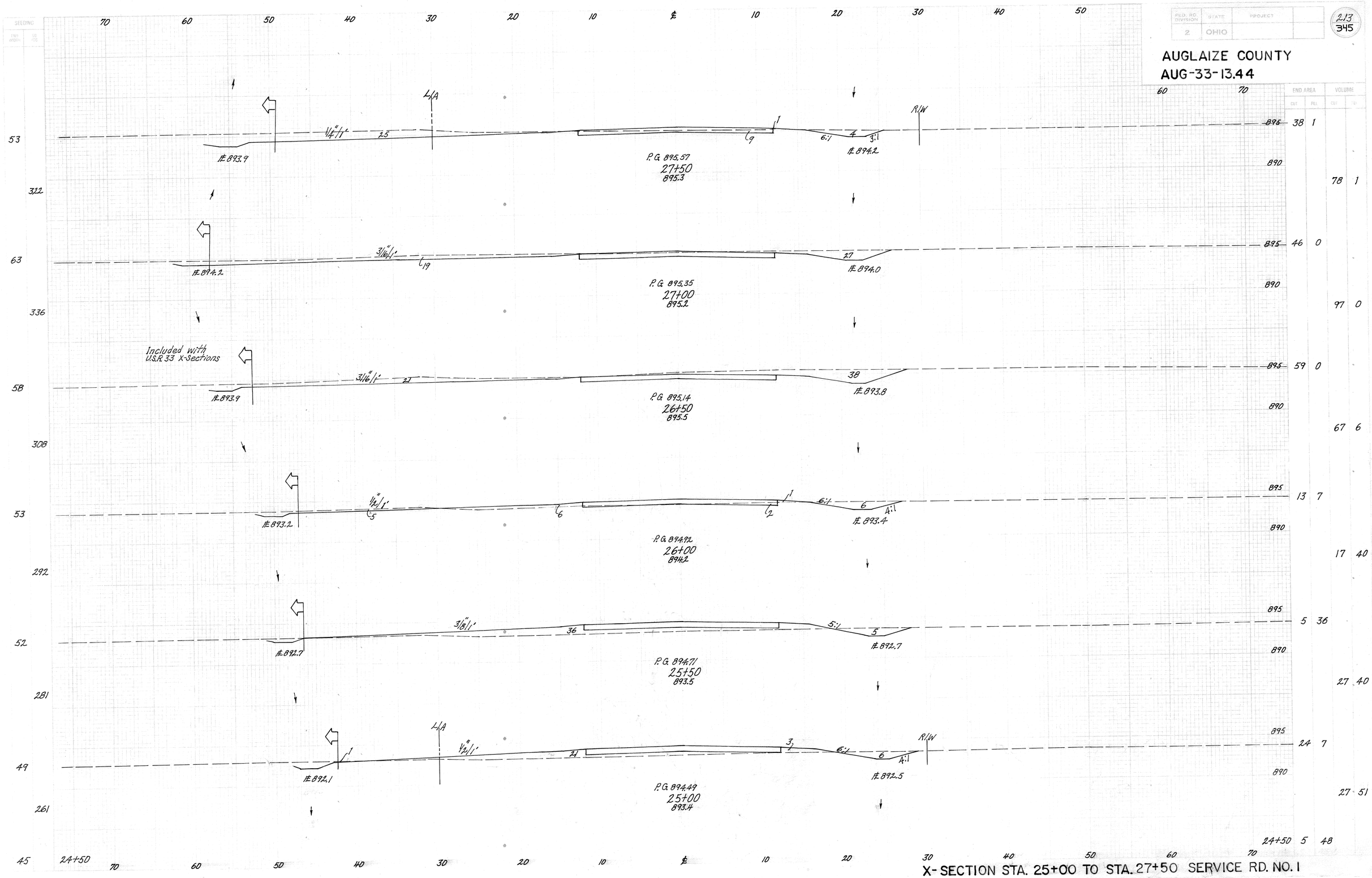


X-SECTIONS STA. 22+00 TO STA. 24+50 SERVICE RD. NO. 1

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

213
345

AUGLAIZE COUNTY
AUG-33-13.44



X-SECTION STA. 25+00 TO STA. 27+50 SERVICE RD. NO. 1

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

214
345

AUGLAIZE COUNTY
AUG-33-13.44

SEEDING

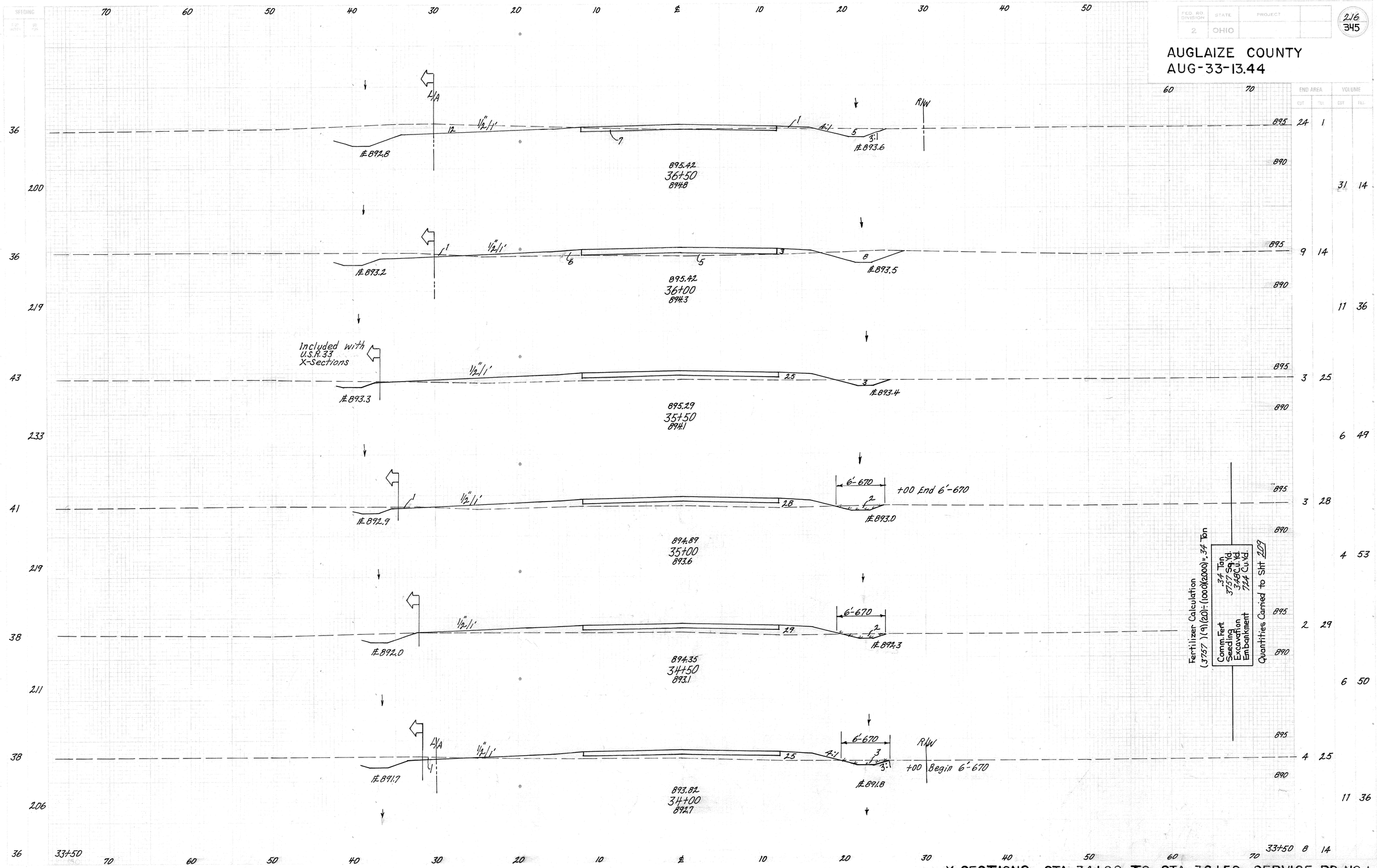
END WIDTH	SQ. YDS.

| | | |

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

216
345

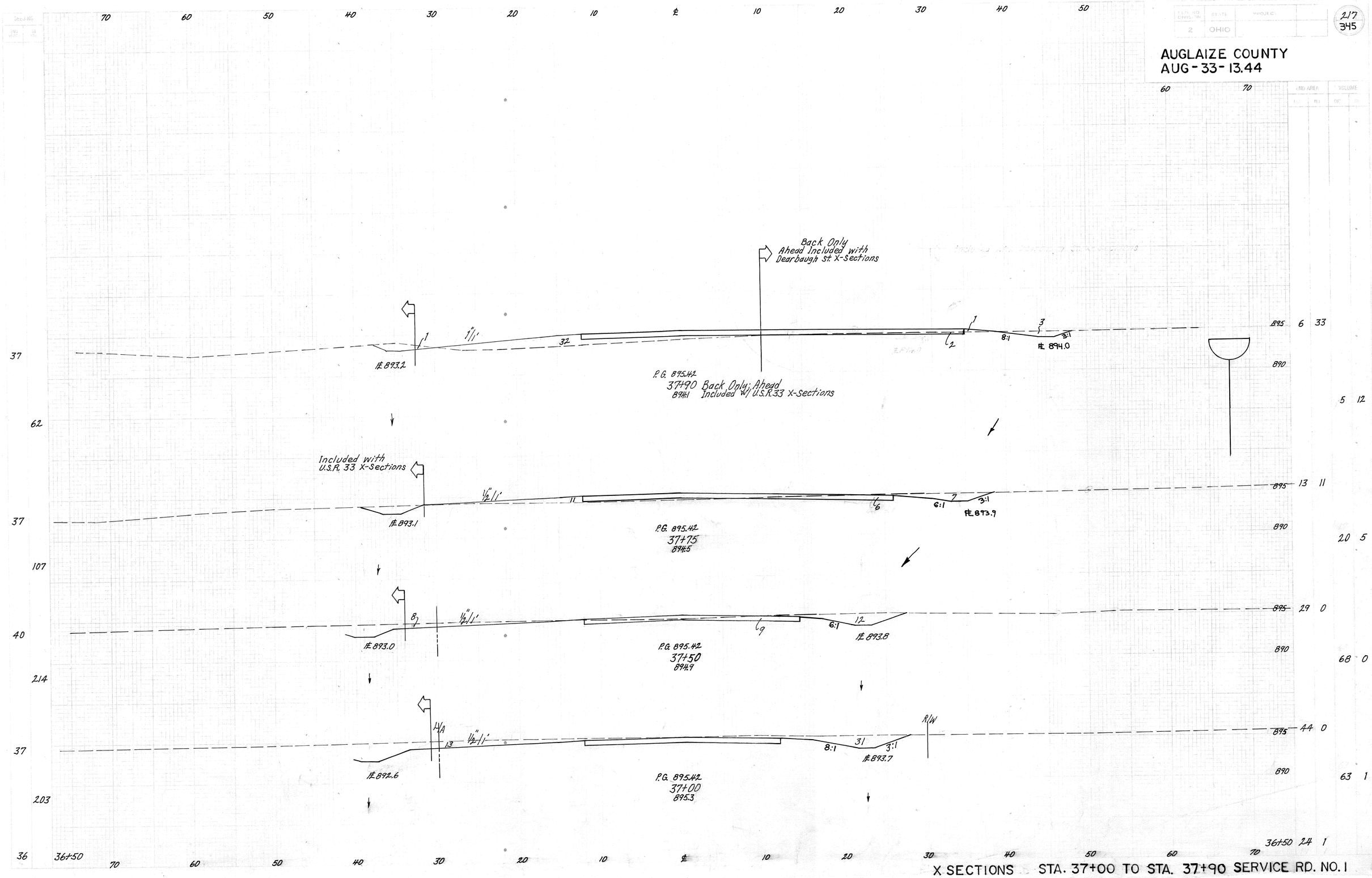
AUGLAIZE COUNTY
AUG-33-13.44



X SECTIONS STA. 34+00 TO STA. 36+50 SERVICE RD. NO. 1

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

AUGLAIZE COUNTY
AUG-33-13.44



X SECTIONS STA. 37+00 TO STA. 37+90 SERVICE RD. NO. 1

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

2/8
345

All Ref. Pts. I. Ps. With O.D.O.T. Caps

P.O.T. Sta. 16+08.91 ℄ Survey Dearbough Rd. Punched RR Spike

℄ Survey Dearbough Sta. 20+00 Punched RR Spike

Sta. 728+01.18 - ℄ Survey USR. 33 = Sta. 20+00 - ℄ Survey Dearbough Rd.

L.A. R/W Fence

All Ref. Pts. I. Ps. With O.D.O.T. Caps

℄ Survey Dearbough Road P.O.T. Sta. 23+59.79 Punched RR Spike

Large Conc. Post

Prop. R/W

℄ Ashland Ave.

Ex. R/W

Ex. L/A

4" West Ohio Gas Line

Gas Valve

Luth. Dr. To Church

Work Limits

℄ Survey Dearbough Road - 3-1/2"-40'-18"-W

Prop. 20" Water Casing By City

Prop. 16" San. Casing BY City

Prop. L/A

Prop. Fence

Type 4T Type C&T

USR 33 W.B. Lanes

USR 33 EB Lanes

℄ Survey Exist. USR. 33 - S 67° E - 1320'

68°-16'-38" Rt. - 420' ℄

Service Road № 1

R/W Mon.

Sta. 729+48 - 114.5' Rt. Elev. 894.98

METAL STORAGE BLDG.

℄ 20' Gr. Drive

℄ 15' Gr. Drive

50' R

25' R

100' R

12" CMP

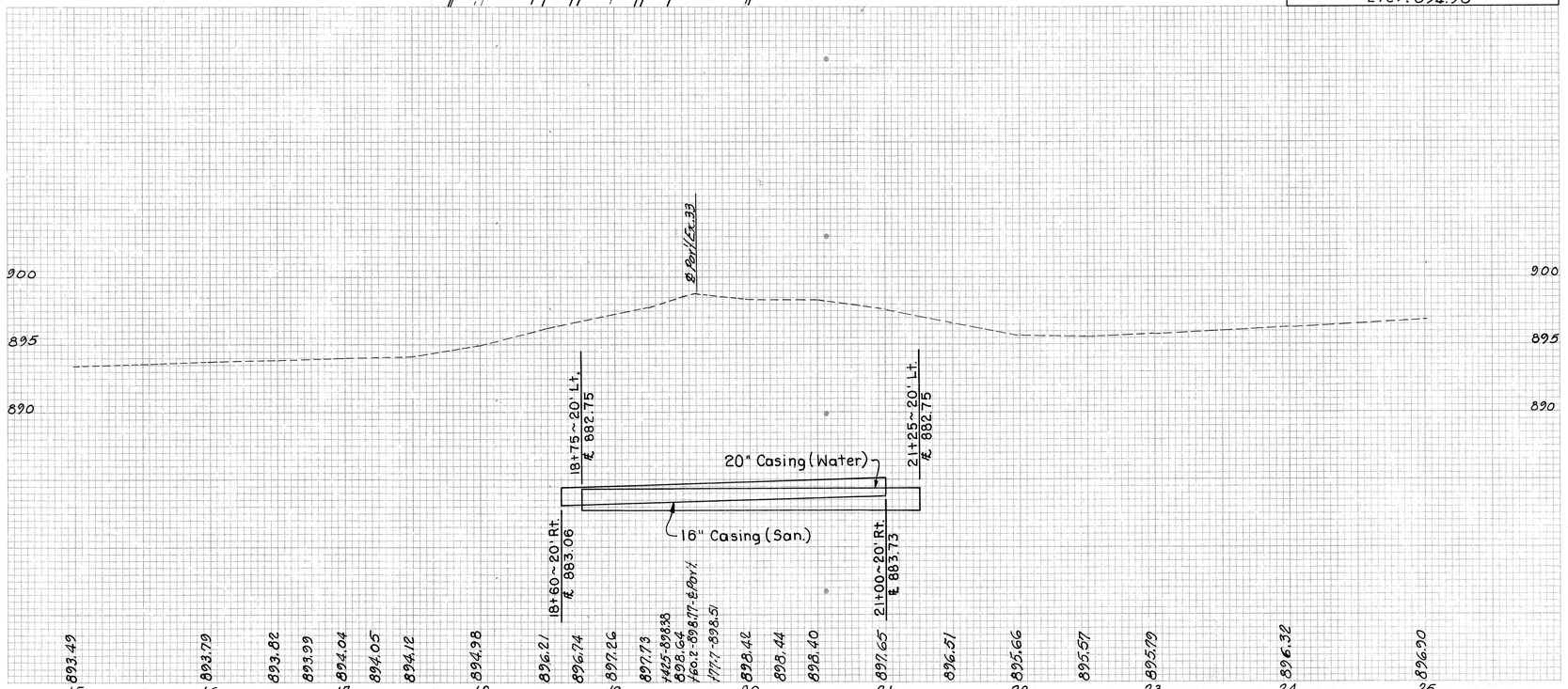
Cons. Post

For Ashland Ave. Intersection Detail - See Sht 49
For Service Rd № 1 Cul-De-Sac Detail - See Sht. 50
For Pavement Quantities - See Sht 34-35
For Fence Quantities - See Sht 38

B.M. #145 - 4' Sign Post Set Flush 1' South L.A. R/W Fence - Sta. 729+48 - 114.5' Rt. Elev. 894.98

PLAN	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
TOPO	KCS	6-84						
GEOMETRICS								
DITCHES								
STRUCTURES								
CULVERTS								
PAVT QUANT								
WORK LIMITS								
PROP. R/W								
DRAIN QUANT								

PROFILE	BY	DATE	CHK	Dr.	REV.	DATE	REV.	DATE
EXISTING GRADE	ZCB	6-84						
B.M.'S	ZCB	6-84						



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	203 Excavation	203 Embankment	659 Seeding & Mulching	659 Comm. Fertilizer
			Cu. Yd.	Cu. Yd.	Sq. Yd.	Ton
	15+00 to 22+77.17	L & R	1088	385	2880	0.26
	TOTALS TO SHT. 33		1088	385	2880	0.16

SEE SHEET NO. 221

PLAN AND PROFILE - STA. 15+00 TO STA. 25+00 - DEARBAUGH RD.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

219
345

AUGLAIZE COUNTY
AUG~33~13.44

SEEDING

38 163 22 67 24 189 10

60 50 40 R/W 30 20 10 ℄ 10 20 30 R/W 40 50

℄ 890.1 — 3 @ 2:7, 3:1, 16, 13, 3:1, 6, 2:1 — ℄ 891.3

15+75
893.71

R/W R/W

℄ 890.0 — 2 @ 2:7, 3:1, 14, 26, 6

Ahead Only

15+26.13 Butt Joint
893.57

Prop. Field Dr. @ 4.0%

Prop. 12" Type D

R/W R/W

℄ 889.9 — 2 @ 2:7, 3:1

15+00
892.34

Begin Work
Ahead Only

R/W R/W

℄ 889.7

14+00
892.04

Meet Existing
Ahead Only

13+00
891.69

R/W R/W

12+00
891.45

60 50 40 30 20 10 ℄ 10 20 30 40 50 60

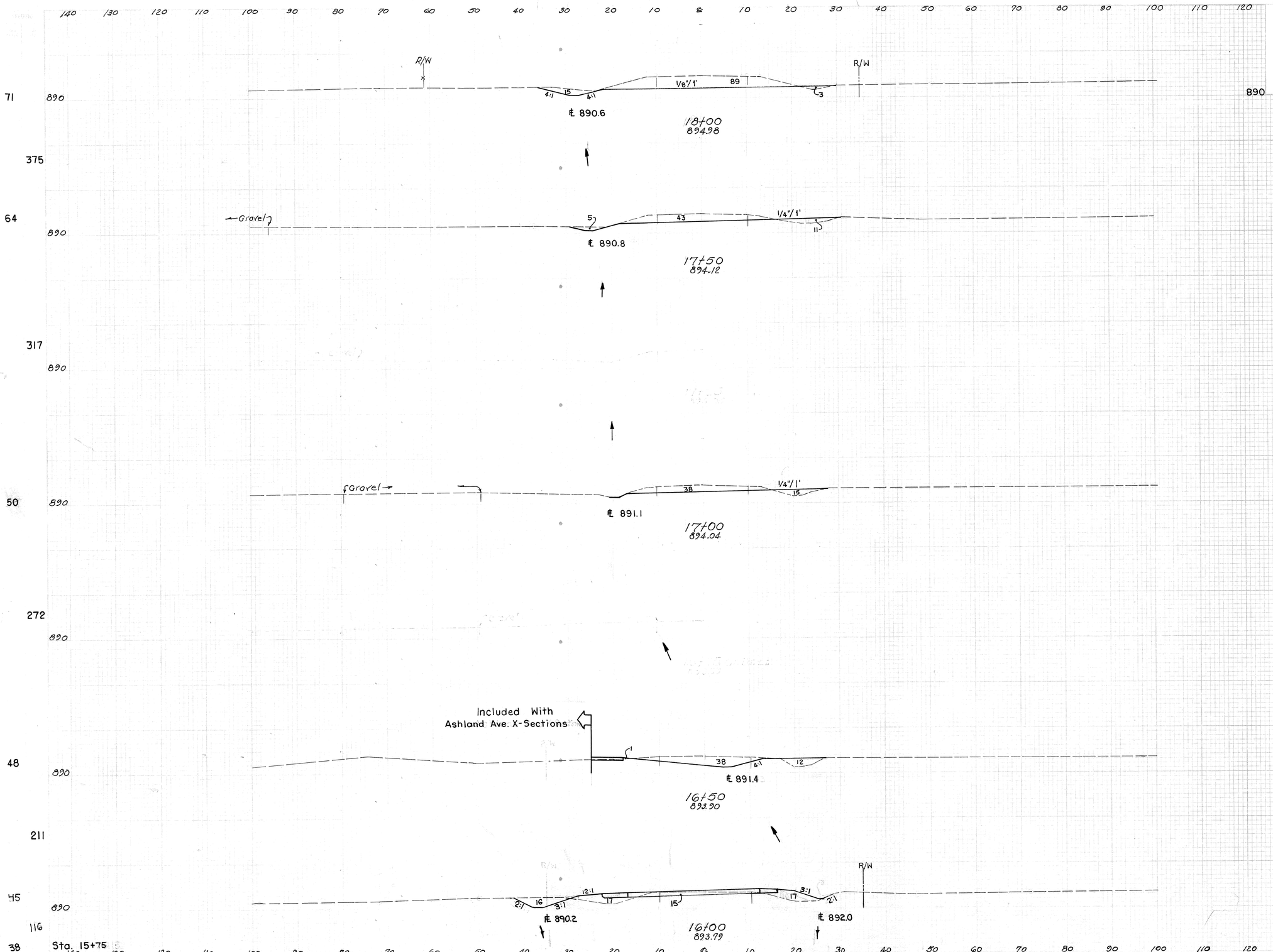
	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
+75	22	29	46	45
+26.13	28	20		
			15	10
			2	0
			4	0
			0	0

X-SECTIONS STA. 11+00 TO STA. 15+00 DEARBAUGH ROAD

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

220
345

AUGLAIZE COUNTY
AUG~33~13.44



	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	104	3		
			141	13
890	48	11		
			80	24
890	38	15		
			70	26
890	38	13		
			64	44
	31	34		
			25	29
Sta. 15+75	22	29		

	BY	DATE	CHK.	DATE	REV.	DATE	REV.	DATE
EXISTING	[illegible]	5-84						
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

X-SECTIONS ~ STA. 16+00 TO STA. 18+00 ~ DEARBAUGH ROAD ~ STA. 728+21.18 U.S.R. 33

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

221
345

AUGLAIZE COUNTY
AUG-33-13.44

	DATE	REV.	DATE	REV.	CHK	DATE	BY
EXISTING						5-84	
TEMPLATE							
DITCHES							
AREAS							
VOLUMES							
SEEDING							

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

890

20+50
898.40

890

20+25
898.44

890

19+25
897.73

890

19+00
897.86

90 890

1/8"/1' 191 17 3

18+75
896.74 Back Only
Ahead Included With
U.S.R. 33 X-Sections

℄ 890.3

239

82 890

R/W

1/8"/1' 145 4:1 11 4:1 3

℄ 890.4

425

71 Sta. 18+00

18+50
896.21

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Fertilizer Calculation
(2880)(3)(20)÷(1000)(2000) = 0.26 Ton

Comm. Fert	0.26 Ton
Seeding	2880 Sq.Yd.
Excavation	1088 Cu.Yd.
Embankment	385 Cu.Yd.

Quantities Carried to Sh. 218.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

222
345

AUGLAIZE COUNTY
AUG-33-13.44

| | | |

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

223
345

All Ref. Pts. I.Ps With O.D.O.T. Caps

℄ Survey Presar Punched RR Spike

Line 33.03'

Road Sta. 3+56.50

26.57' 5.18'

4.7' 32.22'

Fr. Bldg.

½ Sec. Split Rail Fence

Field Dr.

Sta. 3+56.50 - 105.5' Lt. ℄ Presar Road

10' Gravel 3+56.5 Butt Joint

100' R

Prop. R/W

30' R

Sta. 4+92.44 - 42.1' Lt. ℄ Presar Road

25' R

P6

P.M.

Exist. R/W

℄ Survey Presar Road (T.R. 131)

N. 0°-56'-51"-E.

4" West Ohio Gas Line

C.B.

Gravel

Fr. Shed

Fr. Shed

Fr. Shed

D.M.

Leach Bed

3' Cedar

3' Cedars

18' Gravel Dr.

Inlet

Pines

R/W Mon.

R.O.T. Sta. 699+87.36 I.P. With ODOT Cap

U.S.R. 33

Edge of Dr. 56.66' 22.1'

℄ Survey 72.31' 19.7'

All Ref. Pts. I.Ps with O.D.O.T. Caps

Sta. 699+70.42 - ℄ Survey U.S.R. 33 = Sta. 10+00 - ℄ Survey Presar Rd.

4" West Ohio Gas Line

12" Tile

19.8' ℄ Ditch

B.M. Drive

R/W Mon.

708

707

706

705

704

703

702

701

700

6"

C.B.

L/A

USR 33 W.B. Lanes

USR 33 E.B. Lanes

℄ Survey U.S.R. 33 - Sta. 698+16.20 Ahead

08°-13'-17" 699.97'

For Ballooned Quantities - See Sht. 36
For Cul-De-Sac Detail - See Sht. 51
For Pavement Quantities - See Sht. 34-35
For Symbol Legend - See Sht. 54
For Fence Quantities - See Sht. 38

B.M. #139: - 4" Sign Post Set Flush 86.4' Lt. Sta. 698+00 (1' North of L/A Fence) Elev. 887.43

PLAN	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
TOPO	JDS	6-84						
GEOMETRICS								
DITCHES								
STRUCTURES								
CULVERTS								
PAVT QUANT								
WORK & MITS								
PROP. ROW								
RAMP QUANT								

PR	LT.	8"	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING									
GRADE									
℄ & R/W									

886.99 | 887.39 | 887.95 #56.5 - 888.02 | 888.50 | 888.95 | 888.77 | 888.62 | 888.53 | 888.39 | 888.18 | 887.98 | 888.02 | 888.21 | 1/95 - 888.23 | 123 - 888.43 | 138.55 | 110 - 888.72 | 125 - 889.84 | 135 - 889.44 | 145 - 890.11 | 160.4 - 890.26 ℄ Pavt. | 183 - 890.01 | 180 - 889.63 | 888.25

+0.64%

160.4' ℄ Pavt.

886.38 12" CMP 886.39

890 | 885

2 3 4 5 6 7 8 9 10

SEE SHEET NO. 225

ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	203 Excavation Cu. Yd.	203 Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Ton
	3+56.50 to 7+44.44	L&R	43	368	579	0.05
TOTALS TO SHT. 33			43	368	579	0.05

PLAN AND PROFILE - STA. 2+00 TO STA. 10+00 - PRESAR ROAD

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

224
345

AUGLAIZE COUNTY
AUG-33-13.44

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
20		Ahead 8	0		

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

890
885

888.02
3+56.50 P.C. 888.02
Butt Joint
Begin Full Depth (Ahead Only)

890
885

887.84
3+40.5
Gravel Field Dr.

Bldg.
890
885

887.39
3+00

890
885

887.15
2+71 Gravel Dr.

890
885

886.99
2+50

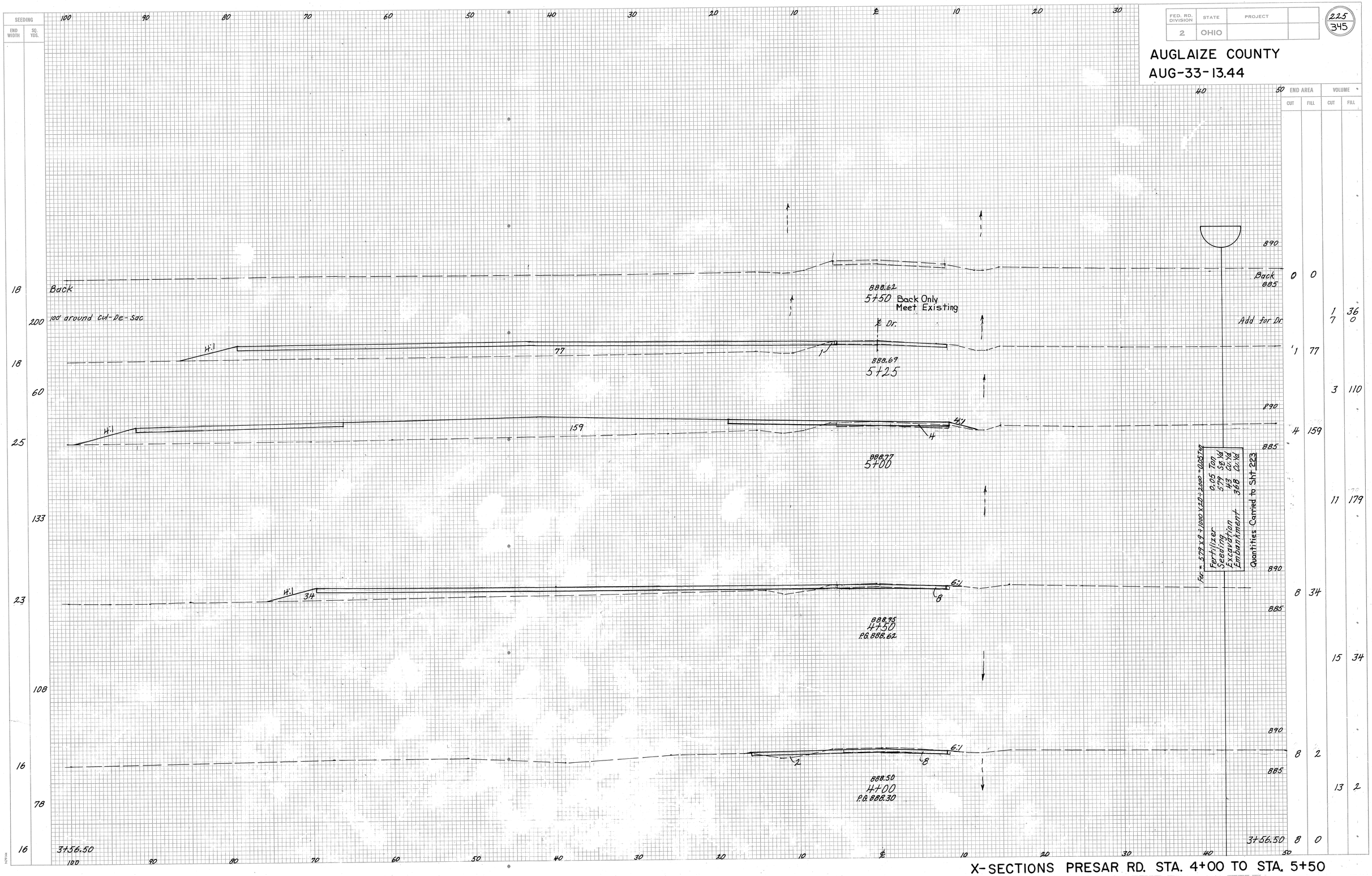
100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

X-SECTIONS PRESAR RD. STA. 2+50 TO STA. 3+56.50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

225
345

AUGLAIZE COUNTY
AUG-33-13.44



X-SECTIONS PRESAR RD. STA. 4+00 TO STA. 5+50

AUGLAIZE COUNTY
AUG-33-13.44

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

226
345

P.O.T. Sta. 260+52.42 - Co. Rd. 25A
All I.P.s/Caps.
86.66' 56.41' 60.92'
50' 50'
25' 8.7'

℄ Survey USR 33 - Sta 768+23.86 = ℄ Survey Co. Rd. 25A Sta. 267+99.89
Star Drill Hole
267
Survey
60.42'
I.P./Cap
269
53.68'
C.I.P./Cap
2.3'
(Conc. Bldg.)
2.1'

Sta. 767+14.38 ℄ Survey U.S.R. 33 = Sta. 6153+69.26 - Gage West Rail Main Line

B & O R.R.
24.4' 50' 24'
T.B./Cap
I.P./Cap
Ref. Mon.
1.4'
93.74'
275 PK Nail
POT Sta. 275+48
276
Co. Rd. 25A
Ref. Mon.

4" Gas Line - 30"± Deep
Sign Marker

46 Trees 3" to 8"
7 Trees 2" to 6"
R/W Mon.
O.B.
℄ Survey U.S.R. 33 - S. 68°-30'-16" E. 765.
765
R/W Mon.

6148 6149 6150 6151 N. 2°-53'-39" W. 6152 ℄ Survey Gage 6153 6154 W. Rail B&O. 6155 R.R. Main 6156 Line 2 6157 6158

24" Conc.
18" Conc.
O.H.
4" West Ohio Gas Line 30"± Deep 125 lbs.?
8.31' G'rail Offset (Typ.)
Guardrail Offset 6' from E/P (Typ.)
G-1
G-2
R-1
R-2
AUG-33-1507 R
AUG-33-1507 L
9.0'-14.3'
20m Hints
Sta. 768+23.86 - U.S.R. 33
Sta. 267+99.89 - Co. Rd. 25A
C.B.
Conc.
36" CMP
Twin 18" Conc.
℄ Survey Co. Rd. 25A N. 2°-41'-35" W.
262 263 264 265 266 267 269 270 271 272 273
+17.5 +97.5 +80
N° 2-2-8 C.B. Conc. Rpr. (Buhrer)
For Pavement Quantities - See Sht 34-35
For Storm Sewer Quantities - See Sht 64

B.M. #153 - ▫ Cut on NE. Cor. Bridge Headwall (Br. # AUG-33-1507 Sta. 769+36.4 - 55' Lt. Elev. 933.96

Ramp A
Ramp B
Ramp C
Ramp D

PLAN | BY | DATE | CHK | DATE | REV. | DATE | REV. | DATE
TORO | KEC | 6-84 | | | | | |
GEOMETRICS | | | | | | | |
DITCHES | | | | | | | |
STORM SEWERS | | | | | | | |
CULVERTS | | | | | | | |
PAVT QUANT | | | | | | | |
WORK LIMITS | | | | | | | |
PROP. R/W | | | | | | | |
DRAIN QUANT | | | | | | | |

PROFILE | BY | DATE | CHK | DATE | REV. | DATE | REV. | DATE
EXISTING GRADE | KEC | 6-84 | KEC | 6-84 | | | | |
B. M.'S | KEC | | KEC | | | | | |

930 925 920 915 910 905 900 895

6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158

908.10 908.97 908.87 908.81 908.72 908.64 908.57 908.46 908.41 908.28 908.25 908.18 907.98 907.85 907.80 907.77 907.76 907.73 907.63 907.53

Sta. 264+05.5 - 38.6' Rt. To CB 900.07 - E. 895.22
Sta. 6149+62.1 - 39.4' Lt. To CB 898.41 - E. 894.41
Sta. 6149+62.1 - 28.5' Rt. To CB 899.52 - E. 895.77
Connected With 24" Conc.
Sta. 267+82 - 52' Rt. To CB 900.07 - E. 896.69
Sta. 271+00 - 77' Rt. To CB 900.59 - E. 897.41
Sta. 272+52 - 40.4' Lt. To CB 900.72 - E. 897.93
Sta. 272+52 - 66.9' Rt. To CB 900.83 - E. 897.70
Elev. for R.R.
Sta. for R.R.

Profile ℄ Survey B. & O. R.R. ?
Profile ℄ Survey Co. Rd. 25A ?
Ex. 36" CMP - Under 25A
Ex. 24" C.I.P. Under R.R. 899.19 ± Rt. 899.20 ± Lt.
15" Conc. Rt. Co. Rd. 25A
899.77 & 899.78
Twin 15" Conc. Rt.
899.96 & 900.06
15" Conc. Rt. Co. Rd. 25A
10" C.M.P. Rt.

904.55 904.46 904.45 904.44 904.40 904.25 904.23 904.25 904.21 904.37 904.55 904.70 904.80 905.03 905.17 905.37 905.32 905.12 905.19 905.26 905.40 905.41 905.35 905.25 905.20 905.11 905.14 905.13 905.00 904.95 904.95

263 264 265 266 267 268 269 270 271 272 273

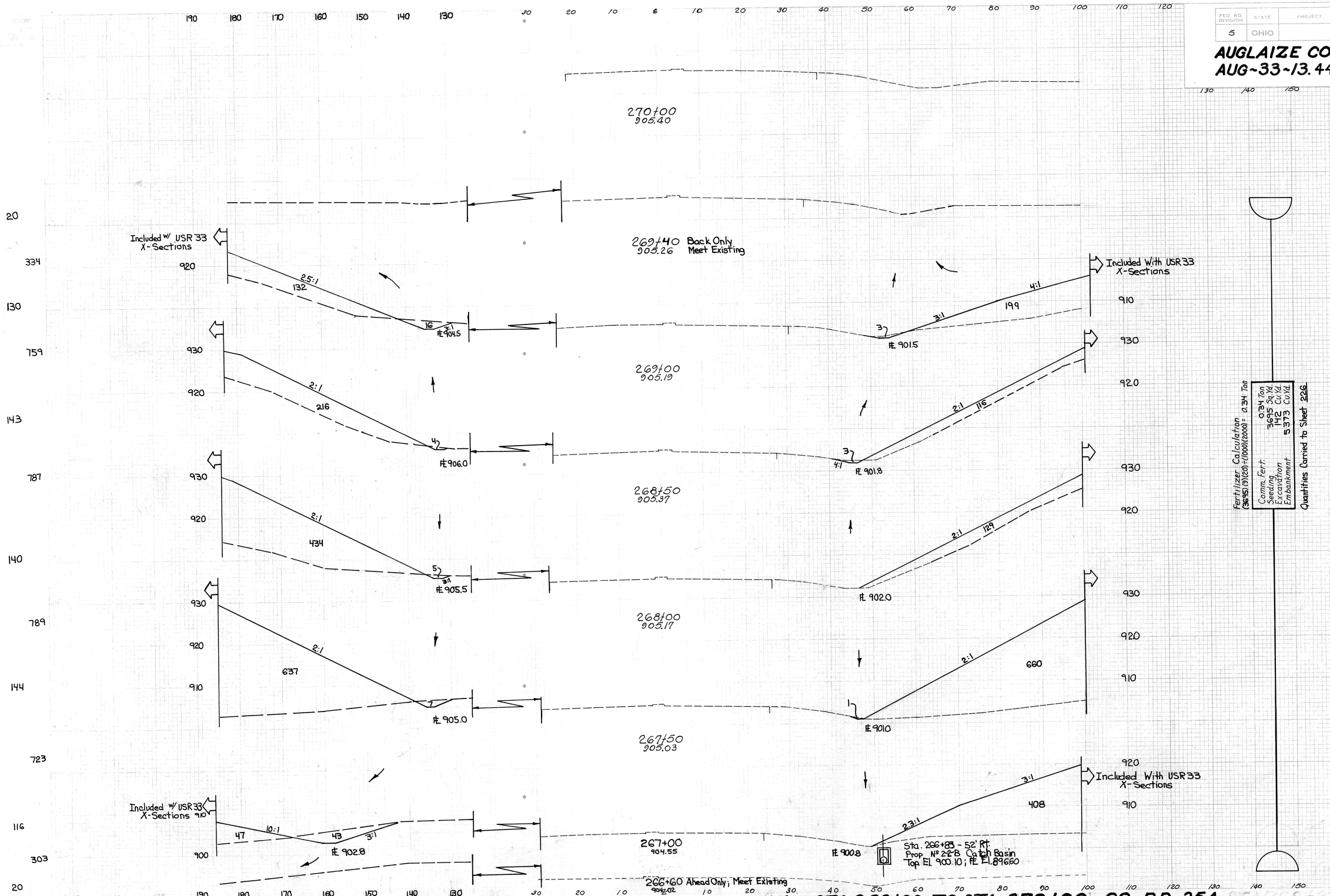
ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 Guardrail Removed Lin. Ft.	606 Guardrail Type S Lin. Ft.	606 Anchor Assembly Type A Each	802 Barrier Reflector Type A Each (White)	203 Excavation Embankment Cu. Yd.	203 Excavation Embankment Cu. Yd.	659 Seeding & Mulching Sq. Yd.	659 Comm. Fertilizer Ton	SEE SHEET NO.
G-1	266+25 to 269+87.5	Lt.		312.5	2	5		142	3695	0.34	227
G-2	266+17.5 to 269+80	Rt.		312.5	2	5		5373			
R-1	267+09 to 268+84	Lt.	175								
R-2	267+02 to 268+77	Rt.	175								
	266+80 to 269+50	L&R									
TOTALS TO SHT. 30-32			350	625.0	4	10		142	5373	3695	0.34

PLAN AND PROFILE - STA. 6148+00 TO STA. 6158+00 B.& O.R.R. - STA. 263+00 TO STA. 273+00 CO. RD. 25A

FED. RD. DIVISION 5 | STATE OHIO | PROJECT
227/345

AUGLAIZE COUNTY
AUG~33~13.44



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
		14	246
19	331		
		24	614
7	332		
		12	829
5	563		
		12	1723
8	1297		
		48	1623
43	455		
		32	338
0	0		

	BY	DATE	CHK	DATE	REV.	DATE	REV.	DATE
EXISTING								
TEMPLATE								
DITCHES								
AREAS								
VOLUMES								
SEEDING								

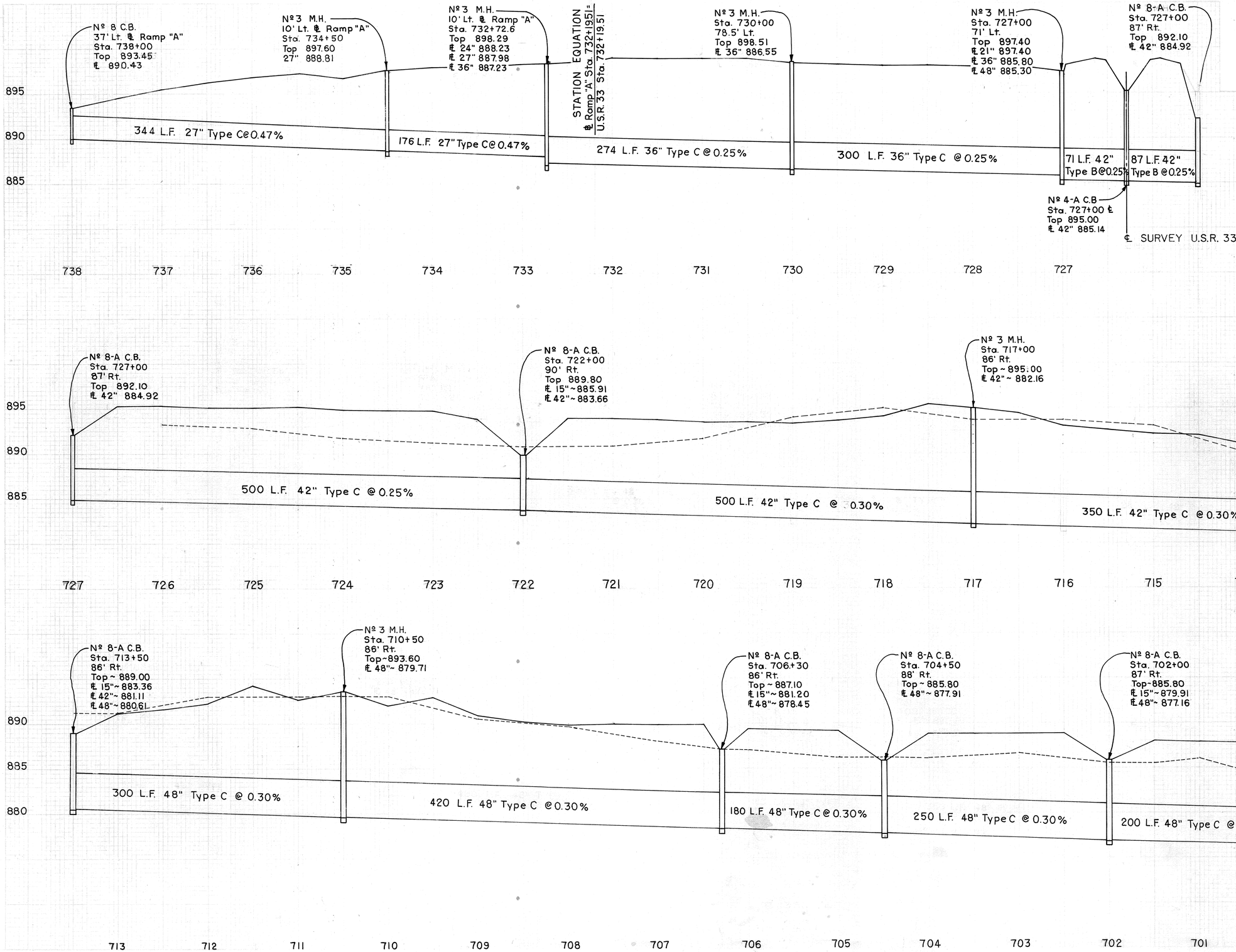
X~SECTIONS ~ STA. 266+80 TO STA. 270+00 ~ CO. RD. 25A

STA 768+23.86 USR.3

FED. ROAD DIVISION | STATE | PROJECT
2 | OHIO

AUGLAIZE COUNTY
AUG~33~13.44

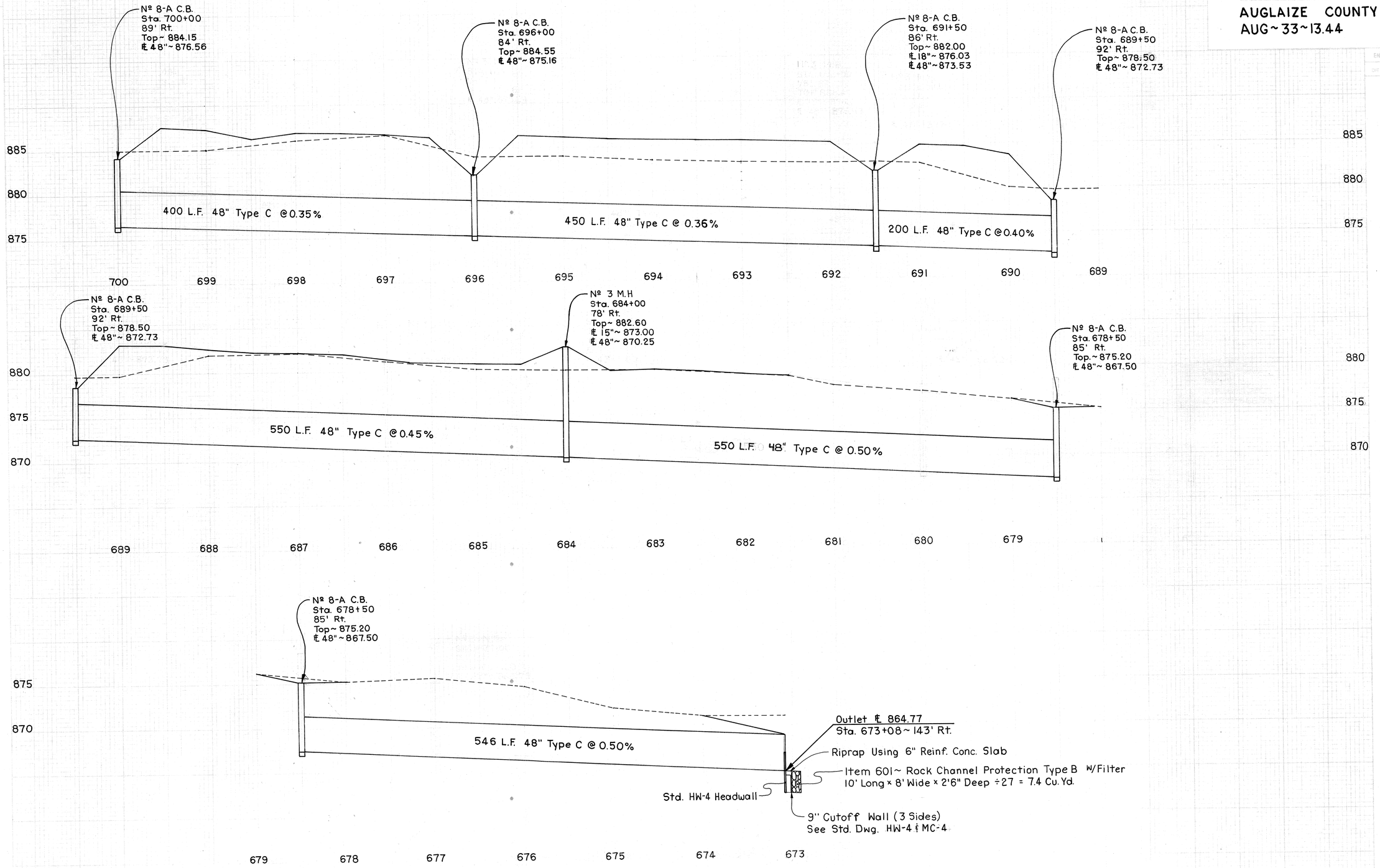
END AREA: CUT | FILL — VOLUME: CUT | FILL



STORM SEWER DETAIL

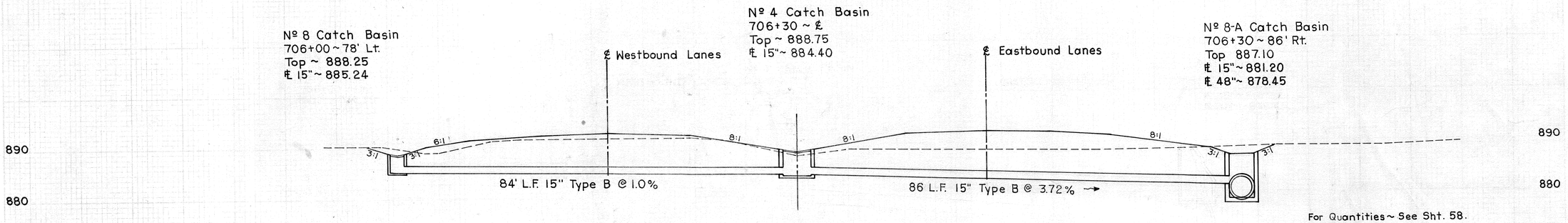
SEC. NO. DIVISION	STATE	PROJECT
2	OHIO	

AUGLAIZE COUNTY
AUG~33~13.44



STORM SEWER DETAILS

AUGLAIZE COUNTY
AUG~33~13.44



For Quantities~ See Sht. 58.

STA. 706+30

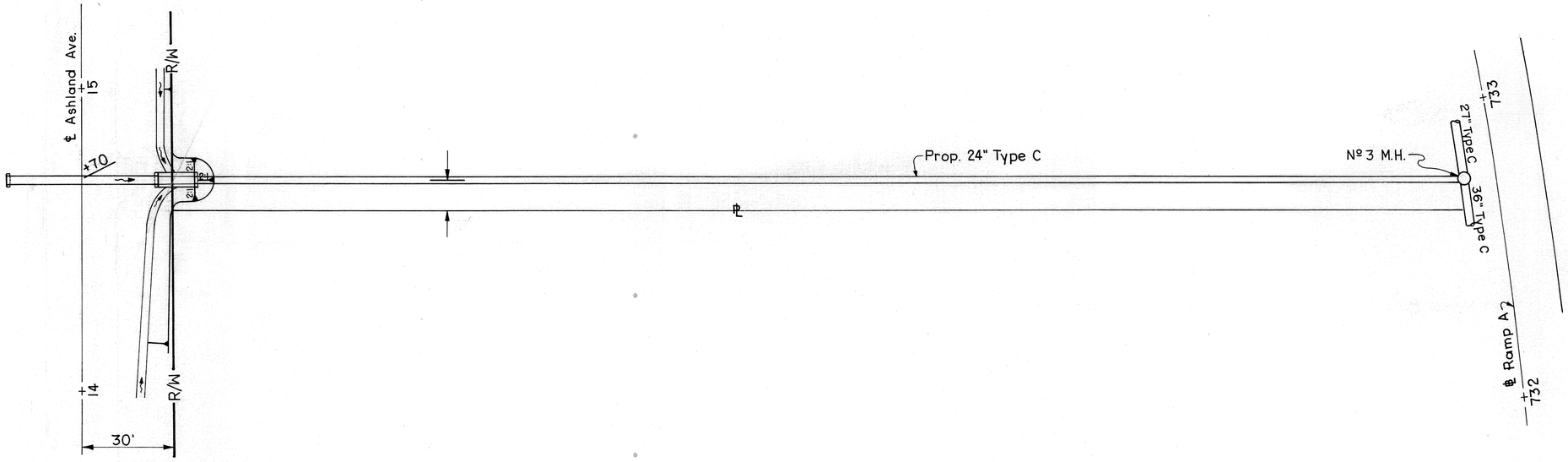
100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100

STORM SEWER DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

231
345

AUGLAIZE COUNTY
AUG~33~13.44



For Drainage Quantities See Sht. 180.

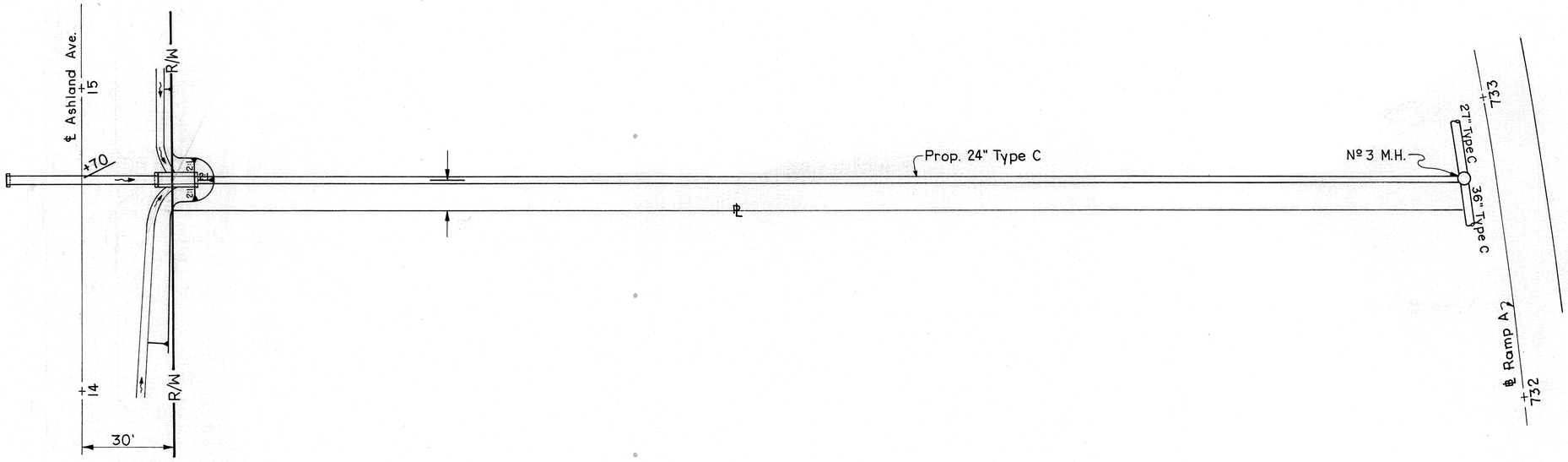


STORM SEWER From ASHLAND AVE. TO RAMP A

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

231
345

AUGLAIZE COUNTY
AUG~33~13.44



For Drainage Quantities See Sht. 180.



STORM SEWER From ASHLAND AVE. TO RAMP A

AUGLAIZE COUNTY
AUG-33-13.44

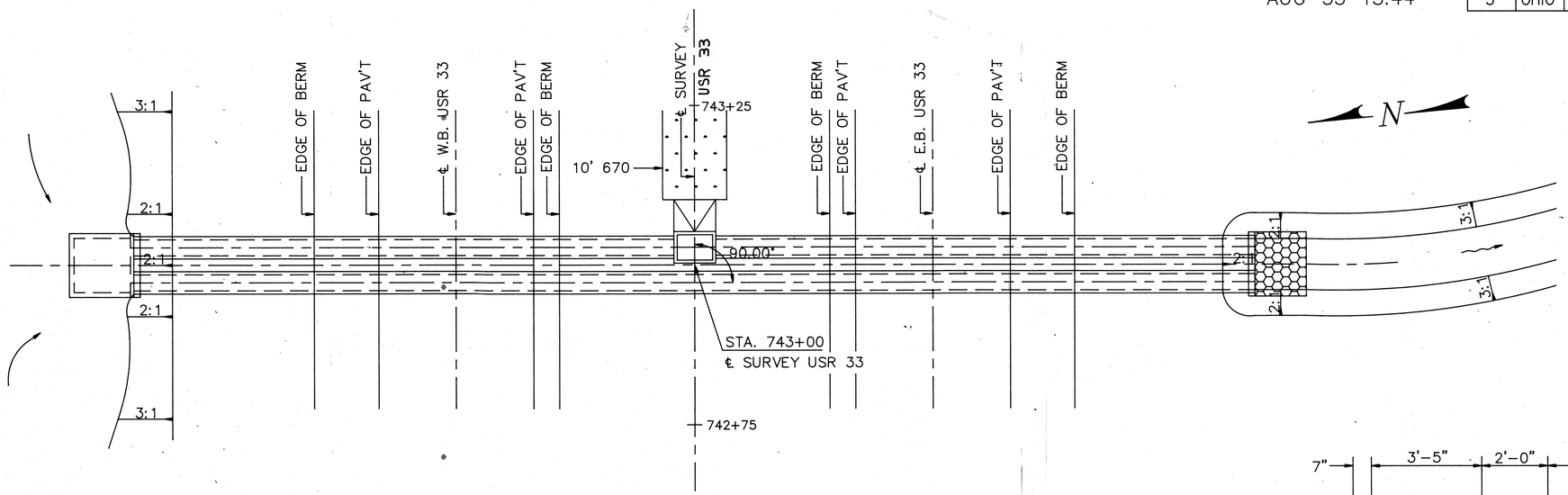
FHWA REGION	STATE	PROJECT	
5	OHIO		

232
345

STRUCTURE STA. 743+00 U.S.R.33

SCALE IN FEET
0 5 10 20

FOR GRADING ~ SEE CONTOUR DETAIL ON SHEET 7-9 .



PLAN VIEW

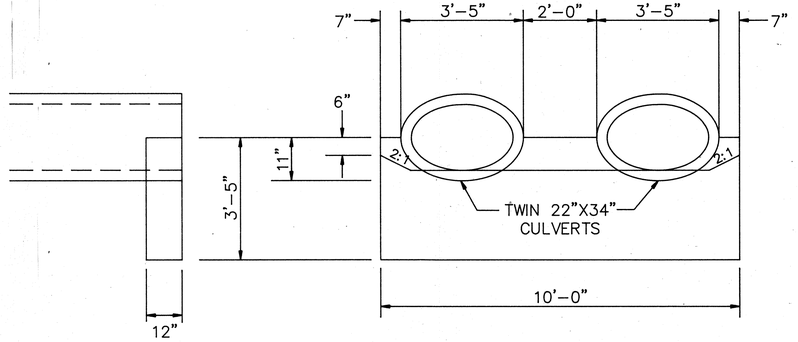
DESIGN DATA

DRAINAGE AREA	= 10.2 ACRES
Q(50 YR.)	= 26.1 cfs
Q(100 YR.)	= 29.0 cfs

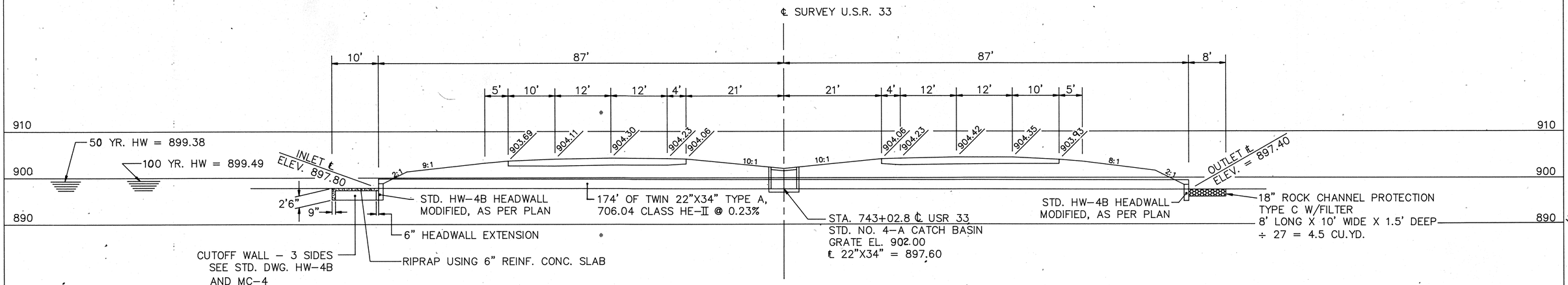
ESTIMATED QUANTITIES

601	RIPRAP USING 6" REINFORCED CONCRETE SLAB	12	SQ.YD.
601	ROCK CHANNEL PROTECTION, TYPE C W/FILTER	5	CU.YD.
602	CONCRETE MASONRY	2.41	CU.YD.
603	22" X 34" CONDUIT, TYPE A, 706.04, CLASS HE-II	348	LIN. FT.
604	CATCH BASIN STANDARD NO 4-A	1	EACH

QUANTITIES CARRIED TO SHEET 33



HEADWALL DETAIL



SECTION ON ℄ OF STRUCTURE

STRUCTURE DETAIL ~ U.S.R. 33 STA. 743+00

AUGLAIZE COUNTY
AUG-33-13.44

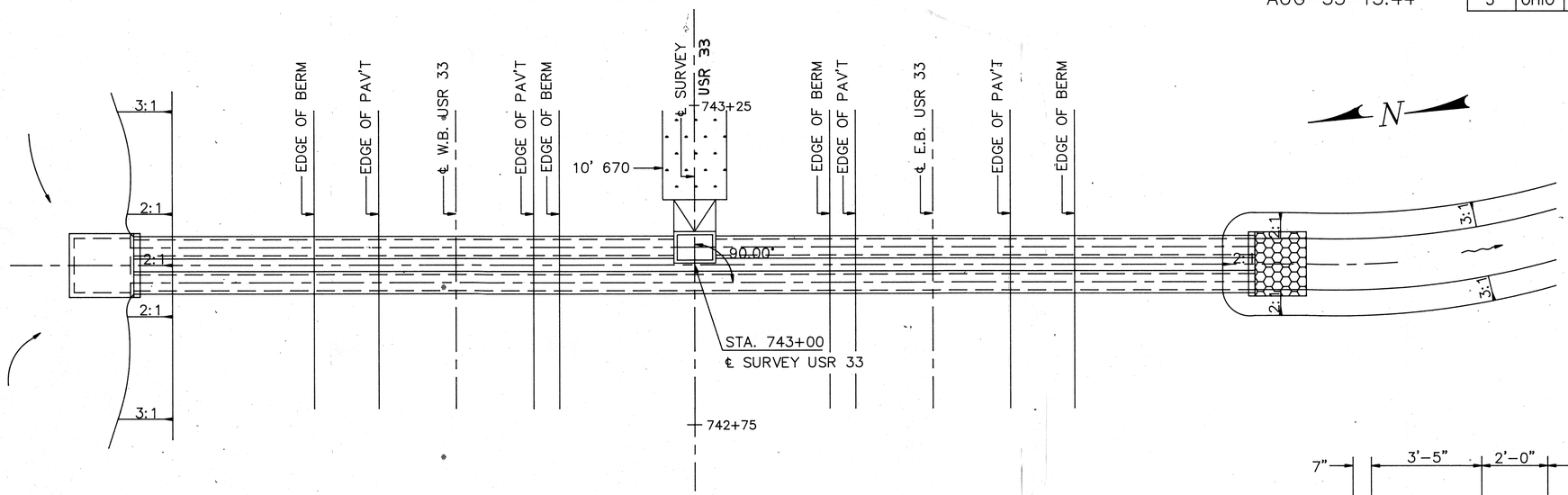
FHWA REGION	STATE	PROJECT	
5	OHIO		

232
345

STRUCTURE STA. 743+00 U.S.R.33

SCALE IN FEET
0 5 10 20

FOR GRADING ~ SEE CONTOUR DETAIL ON SHEET 7-9 .



PLAN VIEW

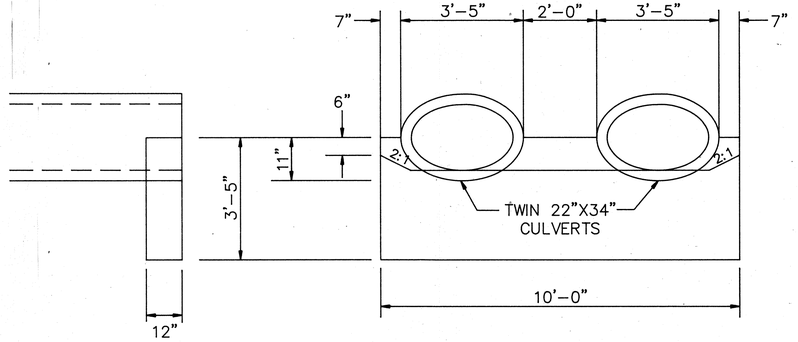
DESIGN DATA

DRAINAGE AREA	= 10.2 ACRES
Q(50 YR.)	= 26.1 cfs
Q(100 YR.)	= 29.0 cfs

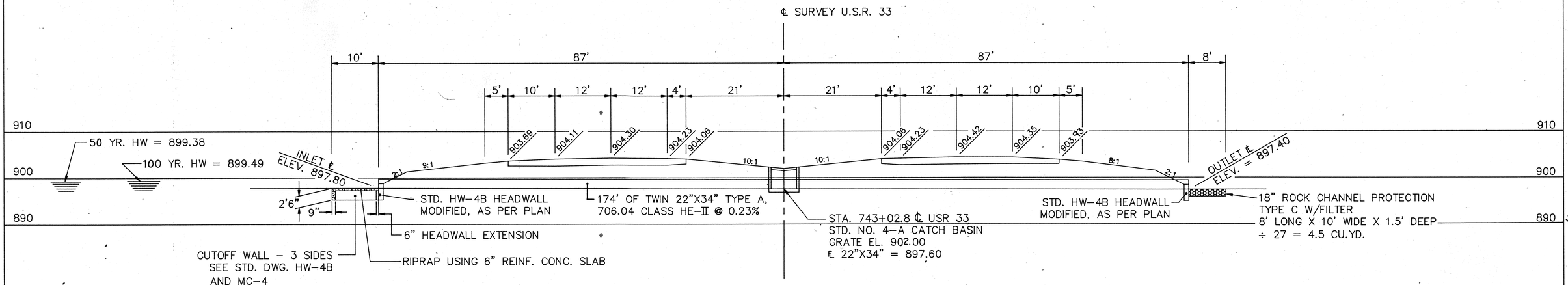
ESTIMATED QUANTITIES

601	RIPRAP USING 6" REINFORCED CONCRETE SLAB	12	SQ.YD.
601	ROCK CHANNEL PROTECTION, TYPE C W/FILTER	5	CU.YD.
602	CONCRETE MASONRY	2.41	CU.YD.
603	22" X 34" CONDUIT, TYPE A, 706.04, CLASS HE-II	348	LIN. FT.
604	CATCH BASIN STANDARD NO 4-A	1	EACH

QUANTITIES CARRIED TO SHEET 33



HEADWALL DETAIL



SECTION ON ℄ OF STRUCTURE

STRUCTURE DETAIL ~ U.S.R. 33 STA. 743+00

AUGLAIZE COUNTY
AUG-33-13.44

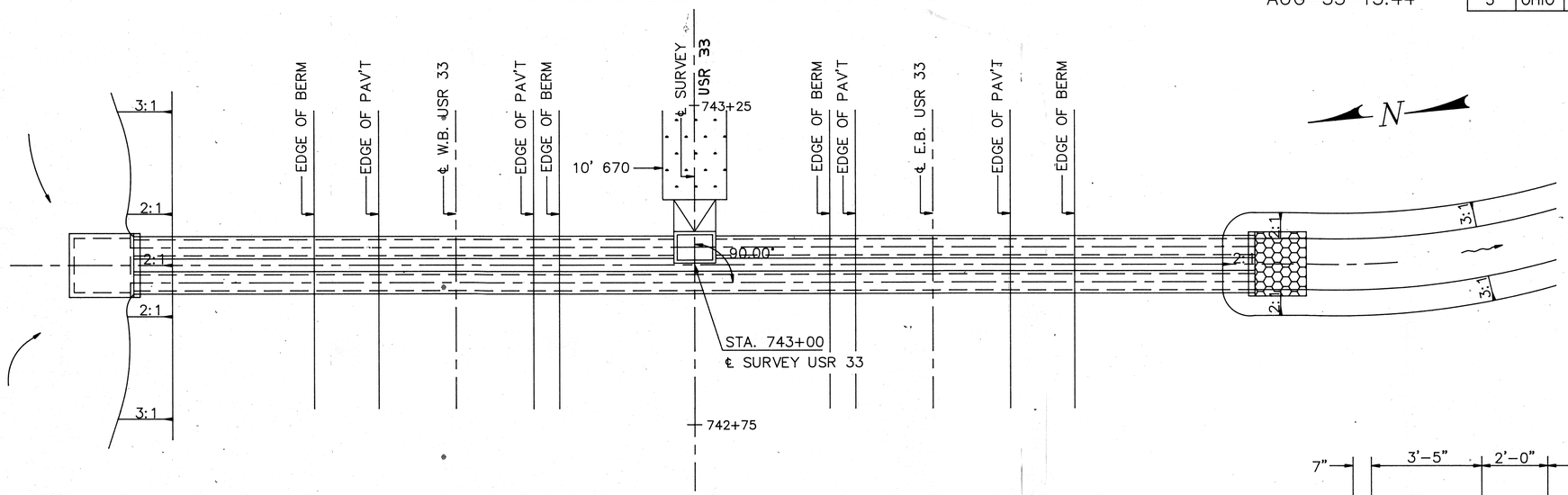
FHWA REGION	STATE	PROJECT	
5	OHIO		

232
345

STRUCTURE STA. 743+00 U.S.R.33

SCALE IN FEET
0 5 10 20

FOR GRADING ~ SEE CONTOUR DETAIL ON SHEET 7-9 .



PLAN VIEW

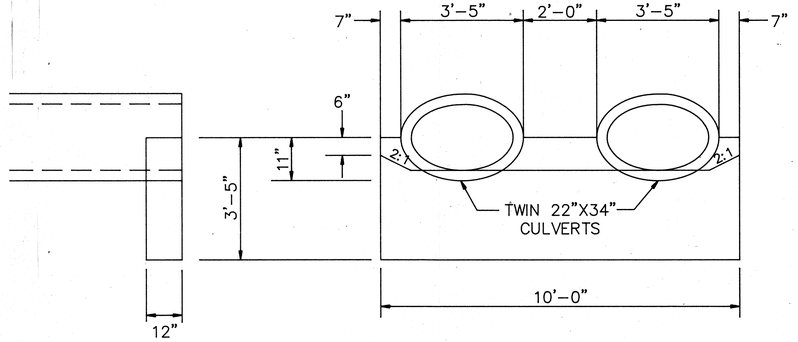
DESIGN DATA

DRAINAGE AREA	= 10.2 ACRES
Q(50 YR.)	= 26.1 cfs
Q(100 YR.)	= 29.0 cfs

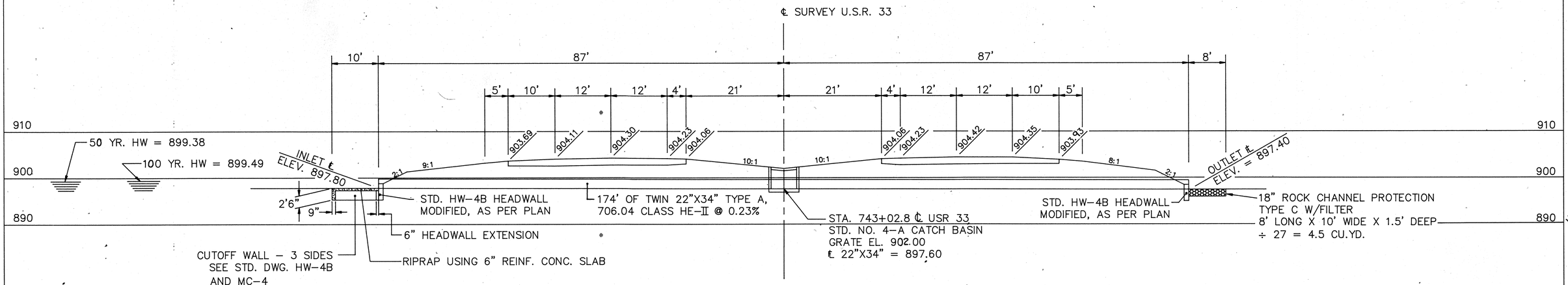
ESTIMATED QUANTITIES

601	RIPRAP USING 6" REINFORCED CONCRETE SLAB	12	SQ.YD.
601	ROCK CHANNEL PROTECTION, TYPE C W/FILTER	5	CU.YD.
602	CONCRETE MASONRY	2.41	CU.YD.
603	22" X 34" CONDUIT, TYPE A, 706.04, CLASS HE-II	348	LIN. FT.
604	CATCH BASIN STANDARD NO 4-A	1	EACH

QUANTITIES CARRIED TO SHEET 33



HEADWALL DETAIL



SECTION ON ℄ OF STRUCTURE

STRUCTURE DETAIL ~ U.S.R. 33 STA. 743+00

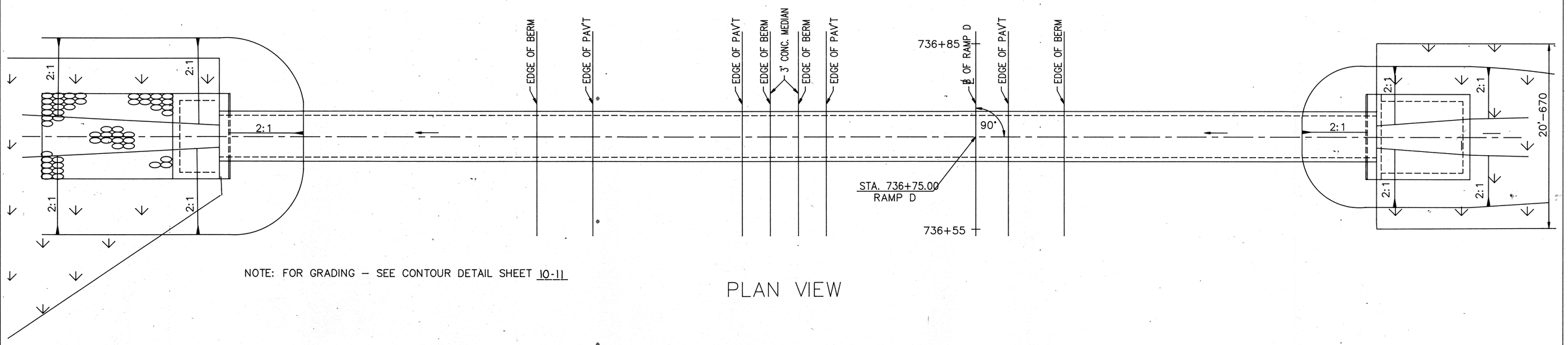
STRUCTURE – STA.736+75 RAMP D

FHWA REGION	STATE	PROJECT	
5	OHIO		

233
345

AUGLAIZE COUNTY
AUG–33–13.44

0 5 10 15
SCALE IN FEET



NOTE: FOR GRADING – SEE CONTOUR DETAIL SHEET 10-11

PLAN VIEW

ESTIMATED QUANTITIES

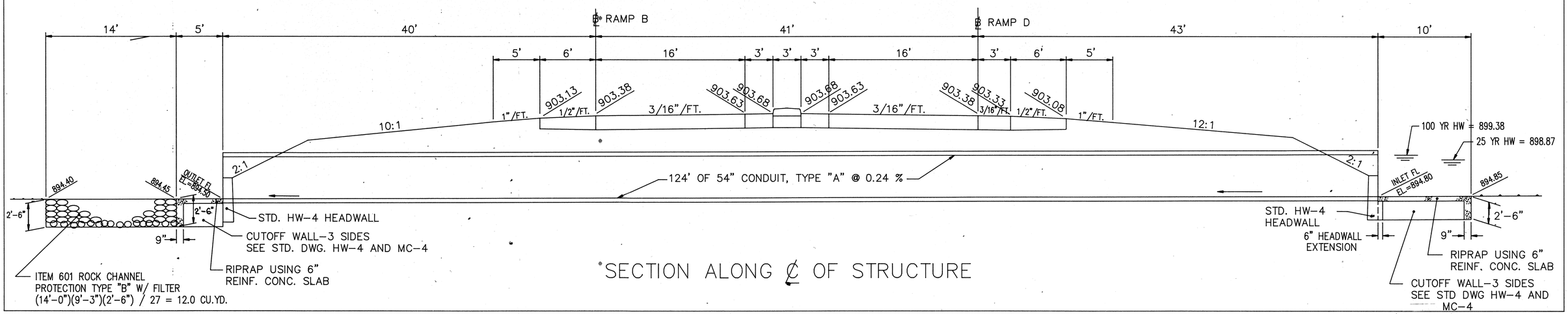
601	RIPRAP USING 6" REINFORCED CONCRETE SLAB	16	SQ.YD.
601	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	12	CU.YD.
602	CONCRETE MASONRY	4.56	CU.YD.
603	54" CONDUIT, TYPE "A", 706.02, 66"–707.07 OR 707.22	124	LIN.FT.

QUANTITES CARRIED TO SHEET 33

DESIGN DATA

DRAINAGE AREA	=	44.6 ACRES
Q (25 YR)	=	85.3 C.F.S.
Q (100 YR)	=	103.4 C.F.S.

DATUM ELEV. = 920



SECTION ALONG ℄ OF STRUCTURE

STRUCTURE DETAIL STA.736+75 RAMP D

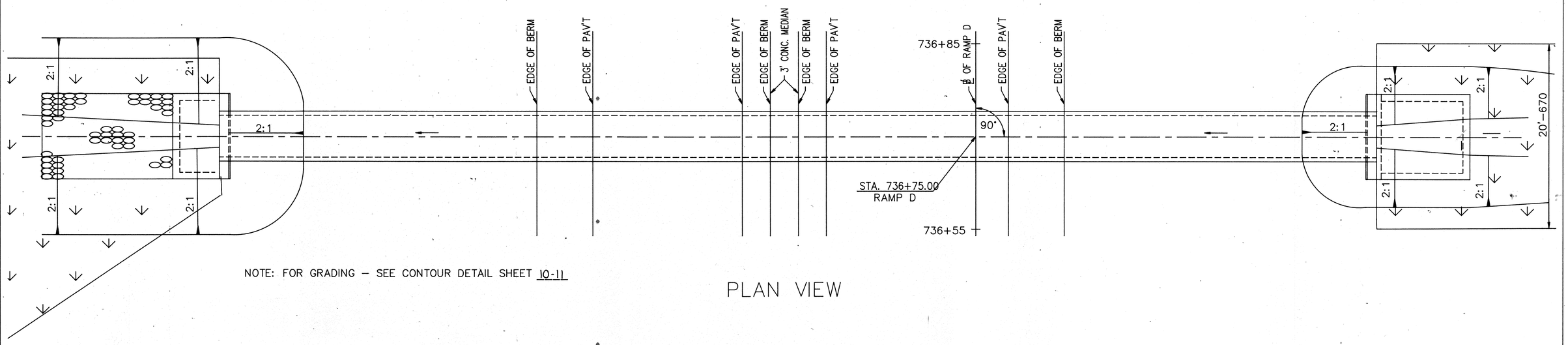
STRUCTURE – STA.736+75 RAMP D

FHWA REGION	STATE	PROJECT	
5	OHIO		

233
345

AUGLAIZE COUNTY
AUG–33–13.44

0 5 10 15
SCALE IN FEET



NOTE: FOR GRADING – SEE CONTOUR DETAIL SHEET 10-11

PLAN VIEW

ESTIMATED QUANTITIES

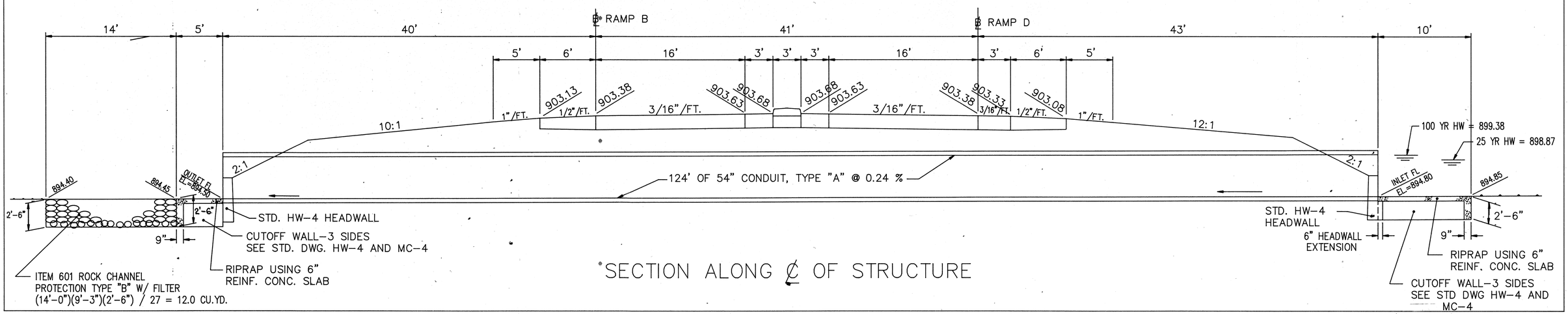
601	RIPRAP USING 6" REINFORCED CONCRETE SLAB	16	SQ.YD.
601	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	12	CU.YD.
602	CONCRETE MASONRY	4.56	CU.YD.
603	54" CONDUIT, TYPE "A", 706.02, 66"–707.07 OR 707.22	124	LIN.FT.

QUANTITES CARRIED TO SHEET 33

DESIGN DATA

DRAINAGE AREA	=	44.6 ACRES
Q (25 YR)	=	85.3 C.F.S.
Q (100 YR)	=	103.4 C.F.S.

DATUM ELEV. = 920



SECTION ALONG ℄ OF STRUCTURE

STRUCTURE DETAIL STA.736+75 RAMP D

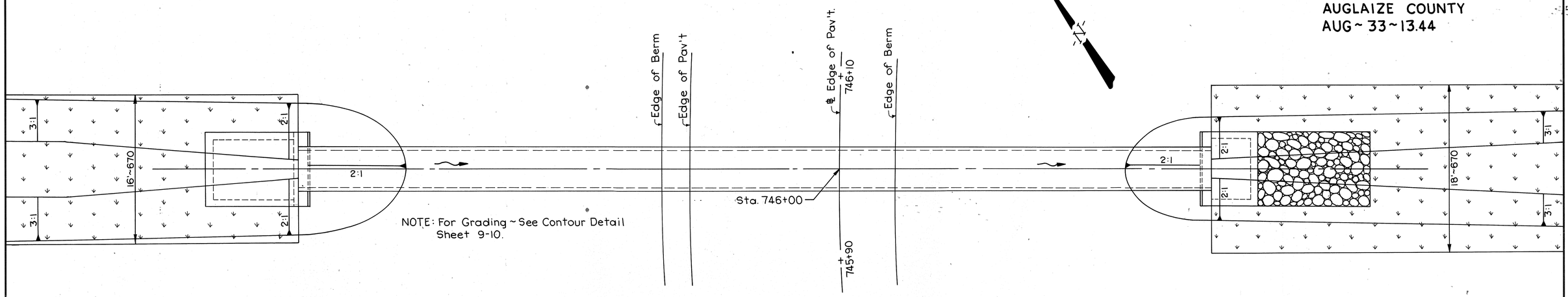
FHWA REGION	STATE	PROJECT	
5	OHIO		

234/345

AUGLAIZE COUNTY
AUG~33~13.44

0 5 10 15
Scale in Feet

STRUCTURE ~ STA. 746+00 RAMP D



PLAN VIEW

ESTIMATED QUANTITIES

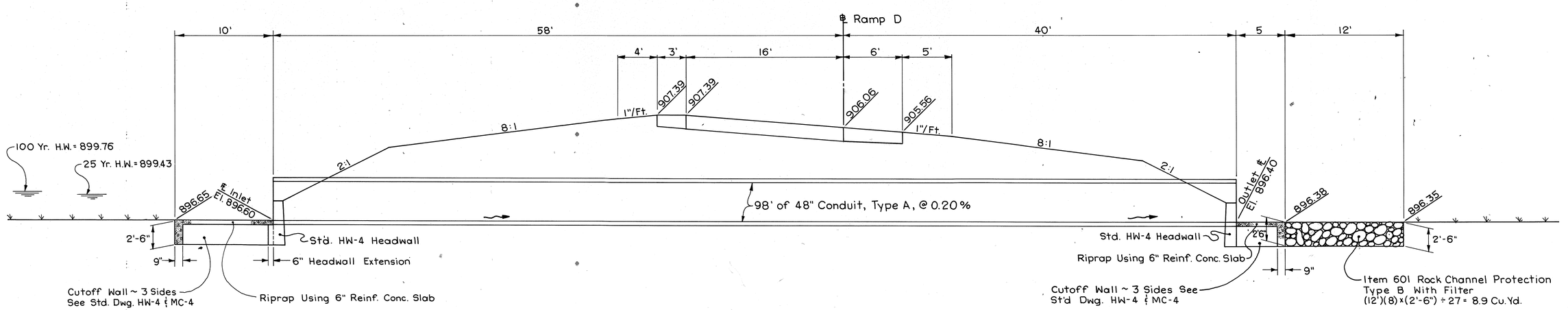
601	Riprap Using 6" Reinforced Concrete Slab	14 Sq. Yd.
601	Rock Channel Protection, Type B, W/Filter	9 Cu. Yd.
602	Concrete Masonry	3.00 Cu. Yd.
603	48" Conduit, Type A, 706.02, 54" ~ 707.07 or 707.22	98 Lin. Ft.

Quantities Carried to Sheet 33

DESIGN DATA

Drainage Area	= 19.3 Acres
Q (25 Yr.)	= 41.5 cfs
Q (100 Yr.)	= 50.4 cfs

Datum Elev. 920



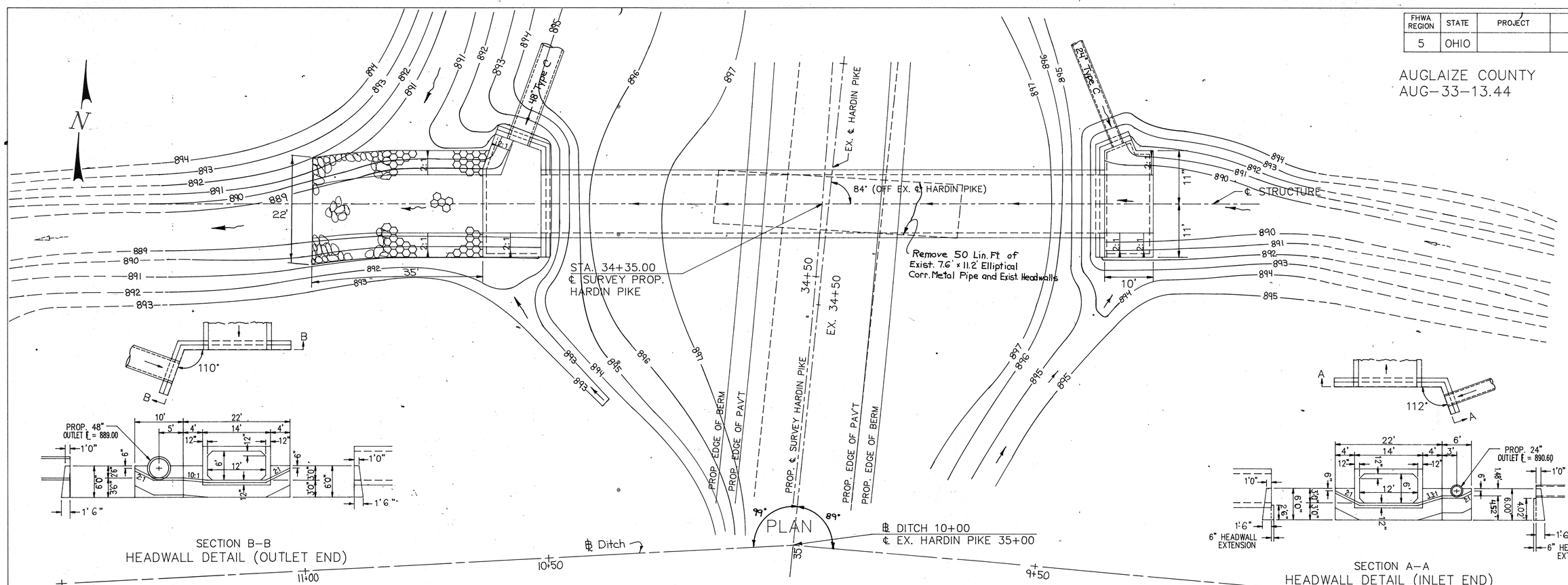
SECTION ALONG ℄ OF STRUCTURE

STRUCTURE DETAIL STA. 746+00 RAMP D

FHWA REGION	STATE	PROJECT	
5	OHIO		

235
345

AUGLAIZE COUNTY
AUG-33-13.44


N
48" Type C
22' Type C
EX. ℄ HARDIN PIKE
84° (OFF EX. ℄ HARDIN PIKE)
℄ STRUCTURE
STA. 34+35.00
℄ SURVEY PROP.
HARDIN PIKE
Remove 50 Lin. Ft of
Exist. 7.6' x 11.2' Elliptical
Corr. Metal Pipe and Exist. Headwalls
PROP. EDGE OF BERM
PROP. EDGE OF PAV'T
PROP. ℄ SURVEY HARDIN PIKE
EX. 34+50
34+50
PLAN
℄ DITCH 10+00
℄ EX. HARDIN PIKE 35+00
℄ Ditch
11+50
11+00
10+50
9+50
9+00
8+50

SECTION B-B
HEADWALL DETAIL (OUTLET END)

SECTION A-A
HEADWALL DETAIL (INLET END)

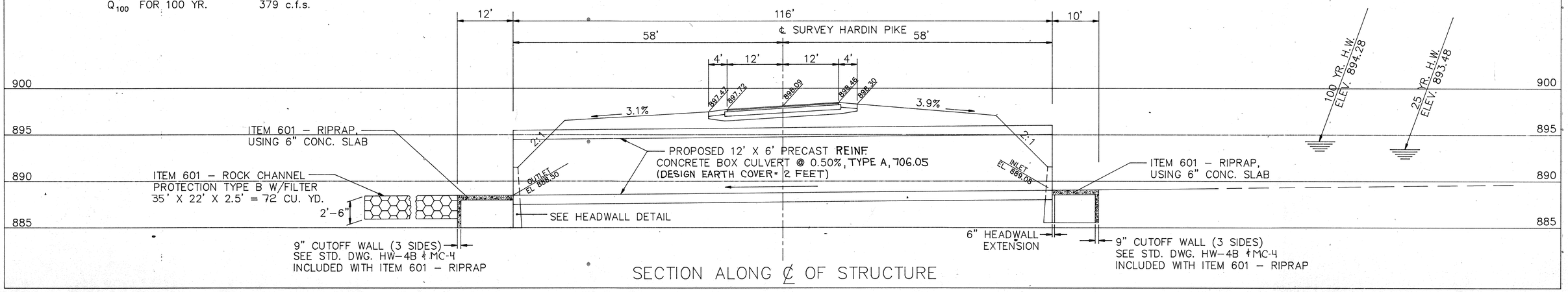
ESTIMATED QUANTITIES

ITEM 603 - 12' x 6' Conduit, Type A, 706.05, PRECAST REINFORCED CONCRETE BOX SECTIONS (DESIGN EARTH COVER = 2 FEET) . . . . 116 LIN. FT.
ITEM 601 - ROCK CHANNEL PROTECTION TYPE B W/FILTER . . . . . 72 CU. YD.
ITEM 601 - RIPRAP, USING 6" REINFORCED CONCRETE SLAB . . . . . 57 SQ. YD.
ITEM 602 - CONCRETE MASONRY . . . . . 13.48 CU. YD.
ITEM 202 - EXISTING STRUCTURE REMOVED . . . . . LUMP

QUANTITIES CARRIED TO SHT. 33

DESIGN DATA

DRAINAGE AREA	1284 ACRES
Q_{25} FOR 25 YR.	299 c.f.s.
Q_{100} FOR 100 YR.	379 c.f.s.



SECTION ALONG ℄ OF STRUCTURE

STRUCTURE DETAIL HARDIN PIKE STA. 34+35.00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

236
345

AUGLAIZE COUNTY
AUG-33-13.44

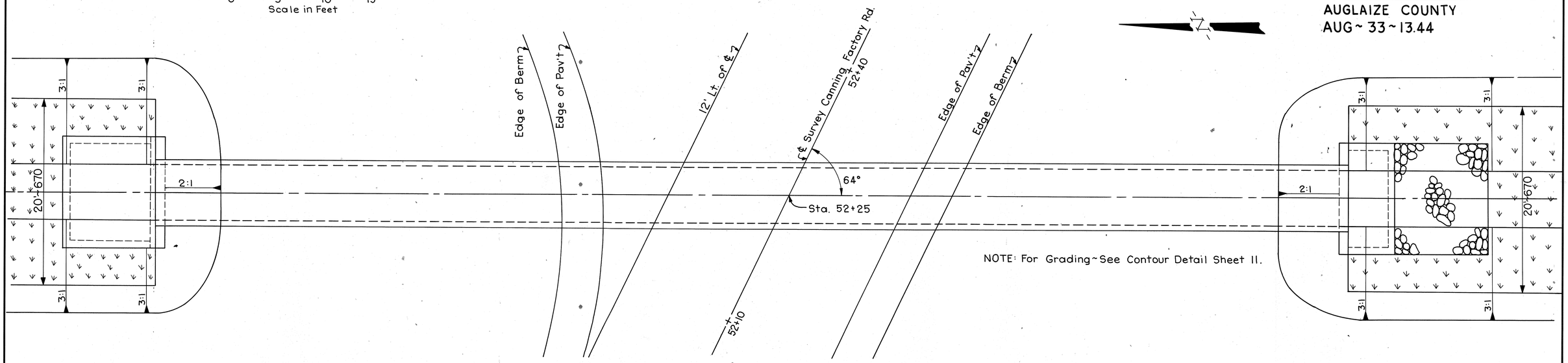
| STATIONS | | |

STRUCTURE STA. 52+25 CANNING FACTORY RD.

FHWA REGION	STATE	PROJECT	
5	OHIO		

237/345

AUGLAIZE COUNTY
AUG~33~13.44



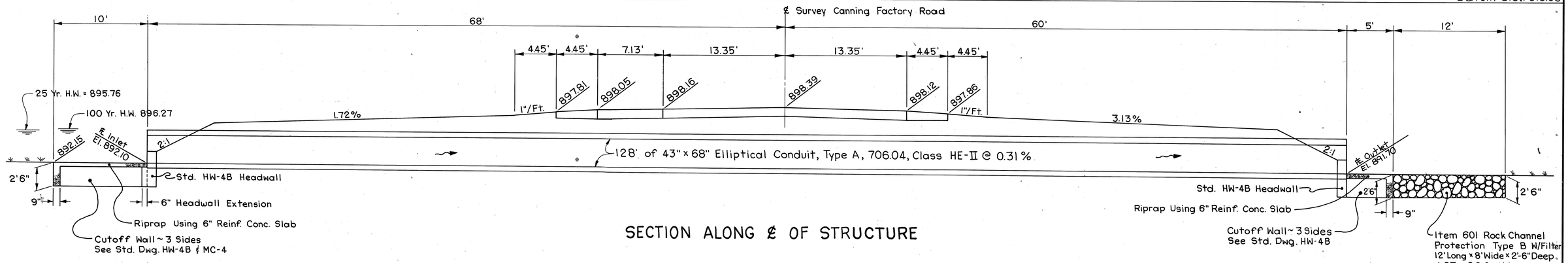
PLAN VIEW

ESTIMATED QUANTITIES

601	Riprap Using 6" Reinforced Concrete Slab	14 Sq. Yd.
601	Rock Channel Protection, Type B W/Filter	9 Cu. Yd.
602	Concrete Masonry	2.91 Cu. Yd.
603	43"×68" Conduit, Type A, 706.04, Class HE-II	128 Lin. Ft.
	Quantities Carried to Sheet 33.	

DESIGN DATA

Drainage Area = 51.9 Ac.
Q (25 Yr.) = 96.4 cfs
Q (100 Yr.) = 117.5 cfs



SECTION ALONG ℄ OF STRUCTURE

STRUCTURE DETAIL STA. 52+25 CANNING FACTORY RD.

TRAFFIC CONTROL SUMMARY

CALC. BY T.K. DATE 12/88	AUGLAIZE COUNTY AUG– 33 –13.44	OHIO
CHKD. BY J.S. DATE 12/88		FHWA REGION 5
		FEDERAL PROJECT

238
345

SHEET NUMBER																										PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
								36	63	65	155	226	239		240		241	242	243	244	246												
																																	SIGNS
													11.0		13.1		2.7	1.9	4.9									630		33.6	CU.YD.	CONCRETE FOR EMBEDDED FOUNDATIONS
																	30	138	197									630		365	LIN.FT.	GROUND–MOUNTED SUPPORTS, NO. 3 POST
													76		62		62	98										630		298	LIN.FT.	GROUND–MOUNTED SUPPORTS, NO. 4 POST
																		32										630		32	LIN.FT.	ONE WAY SUPPORT, NO. 4 POST
															68		32	35	34									630		169	LIN.FT.	GROUND–MOUNTED SUPPORTS, S4 X 7.7 BEAM
																		70										630		70	LIN.FT.	GROUND–MOUNTED SUPPORTS, W6 X 9 BEAM
													173				43		84									630		300	LIN.FT.	GROUND–MOUNTED SUPPORTS, W10 X 12 BEAM
													46		47													630		93	LIN.FT.	GROUND–MOUNTED SUPPORTS, W8 X 18 BEAM
															218													630		218	LIN.FT.	GROUND–MOUNTED SUPPORTS, W10 X 22 BEAM
													10		6		4	6	4									630		30	EACH	BREAKAWAY BEAM CONNECTION
																		117	25									630		142	SQ.FT.	SIGNS, FLATSHEET, TYPE G
													28		32		29	51	43									630		183	SQ.FT.	SIGNS, FLATSHEET
													455		502		91	165	187									630		1400	SQ.FT.	SIGNS, EXTRUSHEET
													20		24		20	7	10									630		81	EACH	REMOVAL OF GROUND–MOUNTED SIGN AND DISPOSAL
																	2											630		2	EACH	REMOVAL OF GROUND–MOUNTED SIGN AND REERECTION
													5		1													630		6	EACH	REMOVAL OF GROUND–MOUNTED MAJOR SIGN AND DISPOSAL
																	1											630		1	EACH	REMOVAL OF GROUND–MOUNTED MAJOR SIGN AND REERECTION
													1															630		1	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL
													20		20		27	5	9									630		81	EACH	REMOVAL OF GROUND–MOUNTED POST SUPPORT AND DISPOSAL
													10		2		4											630		16	EACH	REMOVAL OF GROUND–MOUNTED BEAM SUPPORT AND DISPOSAL
																																	DELINEATORS
																				139								620		139	EACH	DELINEATOR, TYPE C, FLEXIBLE POST MOUNTED
																				73								620		73	EACH	DELINEATOR, TYPE D, FLEXIBLE POST MOUNTED
																				4								620		4	EACH	DELINEATOR, TYPE C, BRACKET MOUNTED
																				58								620		58	EACH	DELINEATOR REMOVED FOR DISPOSAL
									10	55	10	10																	802		85	EACH	BARRIER REFLECTORS, TYPE A
													2																620		2	EACH	REFLECTOR, TYPE D
								28	6	17																			802		51	EACH	BARRIER REFLECTORS, TYPE B
																																	PAVEMENT MARKING
																					14.38							621		14.38	MILE	EDGE LINES
																					4.22							621		4.22	MILE	LANE LINES
																					1.57							621		1.57	MILE	CENTERLINES
																					1251							621		1251	LIN.FT.	CHANNELIZING LINES
																					364							621		364	LIN.FT.	STOP LINES
																					463							621		463	LIN.FT.	TRANSVERSE LINES

TRAFFIC CONTROL QUANTITIES

CALC. BY TK DATE 12/88
CHKD. BY JS DATE 12/88

AUGLAIZE COUNTY
AUG – 33 – 13.44

OHIO
FHWA REGION 5
FEDERAL

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DETAILS GROUND MOUNTED SIGNS

SHT. NO.	REF. NO.	LOCATION AND STATION	SIDE	SIGN CODE NUMBER	SIGN SIZE		REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED * SIGN AND DISPOSAL			SIGNS		ITEM 630 GROUND MOUNTED SUPPORTS											620 REFLECTOR TYPE D	ITEM 630 BREAKAWAY BEAM CONNECTION		ITEM 630 CONCRETE FOR EMBEDDED FOUNDATIONS		
														FLAT SHEET	EXTRU SHEET			NO. 3 POST	NO. 4 POST		S4x7.7 BEAM	W6x9 BEAM	W10x12 BEAM	W8x18 BEAM	W10x22 BEAM	W12x30 BEAM						
							EACH	EACH	EACH	EACH	EACH		SQ. FT.			LIN. FT.												EACH	EACH		CU. YD.		
		USR–33 MAINLINE																														
247	1	590+00	RT.	W–55–144					1	2																						
			MED	W–55–144					1	2																						
247	2	645+70	RT.	W–54B–144							1																					
247	3	673+33.5	RT.	W–54C–144					1	2																						
			MED	W–54C–144					1	2																						
247	4	675+90	LT.	GE		DO NOT DISTURB																										
247	5	677+52	RT.	W–60C–48			1	2																								
			MED	W–60C–48			1	2																								
247	6	685+00	RT.	GB	13' X 7'										91.00								46.00					2		2.20		
247	7	685+52	RT.	R–33–30			1	1																								
247	8	689+52.5	MED	R–38R–36			1	1																								
247	9	689+92.5	MED	W–86–36			1	2																								
				W–145B			1																										
247	10	695+00	LT.	GB	13' X 7'										91.00								43.50					2		2.20		
247	11	696+92	LT.	W–86–36			1	2																								
				W–145B			1																										
247	12	696+95.5	MED	R–34–30			1	1																								
247	13	699+71	MED	W–48–30			1	1																								
247	14	705+80	MED	R–123–36	36" X 36"									9.00					38.00								1					
				R–19–24	24" X 30"									5.00																		
247	15	706+20	MED	R–123–36	36" X 36"									9.00					38.00								1					
				R–19–24	24" X 30"									5.00																		
247	16	709+60	RT.	GB	13' X 7'										91.00								41.00					2		2.20		
248	17	718+29.5	MED	MILE POST			1	1																								
248	18	718+69.5	MED	GB					1	2																						
248	19	720+00	LT.	GB	13' X 7'										91.00								43.50					2		2.20		
248	20	722+89.5	MED	W–24–36			1	1																								
				D–8G–8			1																										
248	21	725+88	LT.	M–1–30			1	1																								
248	22	727+45.5	LT.	R–1–30			1	1																								
248	23	727+86	MED	SIGN			1	1																								
248	24	728+24.5	MED	R–1–30			1	1																								
248	25	729+70	RT.	GE	13' X 7'										91.00								45.00					2		2.20		
248	26	729+89.5	MED	M–1–30			1	1																								
248	27	732+43	LT.	W–24–36			1	1																								
				D–8G–8			1																										
		*TOTALS					20	20	5	10	1			28.00	455.0				76.00				173.00	46.00				2	10		11.00		
		TOTALS CARRIED TO TRAFFIC CONTROL SUMMARY																														

AC=AUG33SS1

GROUND MOUNTED SIGN QUANTITIES

TRAFFIC CONTROL QUANTITIES

CALC. BY TK DATE 12/88
CHKD. BY JS DATE 12/88

AUGLAIZE COUNTY
AUG – 33 – 13.44

OHIO
FHWA REGION 5
FEDERAL

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DETAILS GROUND MOUNTED SIGNS

SHT. NO.	REF. NO.	LOCATION AND STATION	SIDE	SIGN CODE NUMBER	SIGN SIZE		REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL		SIGNS		ITEM 630 GROUND MOUNTED SUPPORTS													ITEM 630 BREAKAWAY BEAM CONNECTION		ITEM 630 CONCRETE FOR EMBEDDED FOUNDATIONS		
												FLAT SHEET	EXTRU SHEET			NO. 3 POST	NO. 4 POST		S4x7.7 BEAM	W6x9 BEAM	W10x12 BEAM	W8x18 BEAM	W10x22 BEAM	W12x30 BEAM						
							EACH	EACH	EACH	EACH		SQ. FT.		LIN. FT.													EACH		CU. YD.		
		USR–33 MAINLINE CONT.																													
248	28	736+00	LT.	W–49R–48	48" X 48"							16.00					31.00														
248	29	737+80	RT.	GF	72" X 60"								30.00						34.00								2		0.54		
249	30	740+00	RT.	GB	13' X 10'								130.00									47.00					2		2.20		
249	31	744+57	LT.	R–10–36			1	2																							
249	32	746+50	LT.	W–49R–48	48" X 48"							16.00					31.00														
249	33	748+09	MED	W–24–36			1	1																							
				W–143–24			1																								
249	34	748+16	LT.	W–24–36			1	1																							
				W–143–24			1																								
249	35	749+00	LT.	GF	72" X 60"								30.00						33.50								2		0.54		
249	36	751+94.5	LT.	M–1–30			1	1																							
249	37	753+60.5	MED	R–1–36			1	1																							
249	38	753+74.5	MED	D–11A			1																								
249	39	753+82	LT.	R–1–30			1	1																							
249	40	754+02.5	MED	R–1–36			1	1																							
249	41	754+06.5	MED	D–11A			1																								
249	42	754+31.5	LT.	R–1–30			1	1																							
249	43	755+90	MED	M–1–30			1	1																							
249	44	757+15	LT.	GE	13' X 7'								91.00										52.50						2.46		
249	45	757+78	LT.	W–85–36			1	2																							
249	46	757+79.5	MED	W–85–36			1	2																							
249	47	760+87	LT.	W–5–36			1	2																							
				W–24–36			1																								
				W–143–24			1																								
249	48	760+90	MED	W–5–36			1	2																							
				W–24–36			1																								
				W–143–24			1																								
249	49	762+50	RT.	GB	13' X 10'								130.00										56.50						2.46		
249	50	762+57	MED	MILE POST			1	1																							
249	51	764+37	MED	GB					1	2																					
				COUNTY RD SIGN			1																								
249	52	765+50	LT.	GB	13' X 7'								91.00										50.50						2.46		
250	53	770+60	RT.	GE	13' X 10'																		58.50						2.46		
250	54	771+58.5	LT.	W–71–36			1	1																							
TOTALS							24	20	1	2		32.00	502.00				62.00		68.00			47.00	218.00				6		13.12		

TOTALS CARRIED TO TRAFFIC CONTROL SUMMARY

AC=AUG33SS2

GROUND MOUNTED SIGN QUANTITIES

TRAFFIC CONTROL QUANTITIES

CALC. BY T.K. DATE 12/88	AUGLAIZE COUNTY AUG – 33 – 13.44	OHIO
CHKD. BY JS DATE 12/88		FHWA REGION 5
		FEDERAL

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DETAILS GROUND MOUNTED SIGNS

SHT. NO.	REF. NO.	LOCATION AND STATION	SIDE	SIGN CODE NUMBER	SIGN SIZE	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	SIGNS		ITEM 630 GROUND MOUNTED SUPPORTS										ITEM 630 BREAKAWAY BEAM CONNECTION	ITEM 630 CONCRETE FOR EMBEDDED FOUNDATIONS
															NO. 3 POST	NO. 4 POST		S4x7.7 BEAM	W6x9 BEAM	W10x12 BEAM	W8x18 BEAM	W10x22 BEAM	W12x30 BEAM		
												FLAT SHEET	EXTRU SHEET												
						EACH	EACH	EACH	EACH	EACH	EACH	SQ. FT.					LIN. FT.								EACH	CU. YD.
		USR 33 MAINLINE CONT.																								
250	55	774+69	LT.	R-33-30			1	1																		
250	56	774+81	MED	GE						2	1															
250	57	775+70	MED	R-38R-36			1	1																		
250	58	776+83	RT.	W-97-48	48" X 60"	1		2								31.00										
250	59	777+47	LT.	R-1-36			1	2																		
				R-41B-36			1																			
				R-43L-36			1																			
250	60	777+58	MED	R-43R-36			1	2																		
250	61	777+68	MED	R-121-24			1	1																		
250	62	777+80	LT.	R-41B-36			1	1																		
				R-43L-36			1																			
250	63	778+00	LT.	W-49R-48	48" X 48"							16.00				31.00										
250	64	779+14	RT.	GF	72" X 60"	1				2							32.00								2	0.54
250	65	779+35	LT.	R-41A-36			1	2																		
				KEEP RIGHT			1																			
			MED	R-41A-36			1	2																		
				KEEP RIGHT			1																			
250	66	782+00	LT.	GB	13' X 7'								91.00							43.00					2	2.20
250	67	783+00	LT.	W-60D-48			1	2																		
			MED	W-60D-48			1	2																		
250	68	783+75	RT.	W-49R-36	DO NOT DISTURB																					
250	69	784+26.5	LT.	GF	DO NOT DISTURB																					
250	70	787+75	RT.	R-2-36	DO NOT DISTURB																					
250	71	789+85	LT.	GE	DO NOT DISTURB																					
250	72	791+95.5	LT.	W-52-48			1	2																		
			MED	W-52-48			1	2																		
250	73	791+95.5	RT.	M-39-36	DO NOT DISTURB																					
				M-1-36																						
250	74	795+78.5	LT.	W-85-48			1	2																		
			MED	W-85-48			1	2																		
		PRESAR RD.																								
247	75	100' SOUTH OF CR 33A	RT.	W-48-30	30" X 30"							6.25			15.00											
247	76	9+00	RT.	R-1-30			1	1																		
		DEARBAUGH RD.																								
248	77	29+25	LT.	W-48-30	30" X 30"							6.25			15.00											
TOTALS						2	20	27		4	1	29.00	91.00		30.00	62.00		32.00		43.00					4	2.74
TOTALS CARRIED TO TRAFFIC CONTROL SUMMARY																										

AC=AUG33SS3

GROUND MOUNTED SIGN QUANTITIES

TRAFFIC CONTROL QUANTITIES

CALC. BY TK DATE 12/89
CHKD. BY JS DATE 12/89

AUGLAIZE COUNTY
AUG – 33 – 13.44

OHIO
FHWA REGION 5
FEDERAL

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DETAILS GROUND MOUNTED SIGNS

SHT. NO.	REF. NO.	LOCATION AND STATION	SIDE	SIGN CODE NUMBER	SIGN SIZE	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	SIGNS		SIGNS TYPE G SHEETING		ITEM 630 GROUND MOUNTED SUPPORTS												ITEM 630 BREAKAWAY BEAM CONNECTION	ITEM 630 CONCRETE FOR EMBEDDED FOUNDATIONS
										FLAT SHEET	EXTRU SHEET	FLAT SHEET	EXTRU SHEET			NO. 3 POST	NO. 4 POST	ONE WAY SUPPORT NO. 4	S4x7.7 BEAM	W6x9 BEAM	W10x12 BEAM	W8x18 BEAM	W10x22 BEAM	W12x30 BEAM			
						EACH	EACH	EACH	EACH	SQ. FT.				LIN. FT.												EACH	CU. YD.
		COUNTY RD. 25-A																									
249	78	267+00	RT.	M-40-24	24" X 12"					2.00							13.75										
				M-1-24	24" X 24"					4.00																	
				M-19-21	21" X 15"					2.19																	
249	79	267+32	RT.	M-40-24		1	1																				
				M-1-24		1																					
				M-19-24		1																					
249	80	269+00	LT.	M-39-24		DO NOT DISTURB																					
				M-1-24																							
				M-19-21																							
		USR 33 AND HARDIN PIKE																									
251	81	733+60 (RAMP C)	RT.	R-38R-36	36" X 48"					12.00							28.00										
251	82	733+60 (RAMP C)	LT.	R-1-48	48" X 48"							16.00					14.00	16.00									
				R-41B-36	36" X 36"							9.00															
				R-43R&L-36	36" x 12"							6.00															
251	83	736+00 (RAMP C)	LT.	R-41A-36	36" X 24"							6.00				13.00											
251	84	744+00 (RAMP C)	RT.	R-41A-36	36" X 24"							6.00				13.00											
251	85	744+00 (RAMP C)	LT.	D-4B-48	11' X 4'						44.00									35.00						2	0.66
				R-41A-36	36" X 24"							6.00															
252	86	755+95 (RAMP B)	LT.	R-38R-36	36" X 48"					12.00							28.00										
252	87	755+95 (RAMP B)	RT.	R-1-48	48" X 48"							16.00					14.00	16.00									
				R-41B-36	36" X 36"							9.00															
				R-43R&L-36	36" x 12"							6.00															
252	88	753+50 (RAMP B)	RT.	R-41A-36	36" X 24"							6.00				13.00											
252	89	746+00 (RAMP B)	RT.	D-4B-48	11' X 4'						44.00									35.00						2	0.66
				R-41A-36	36" X 24"							6.00															
252	90	746+00 (RAMP B)	LT.	R-41A-36	36" X 24"							6.00				13.00											
		HARDIN PIKE																									
254	91	4+00	3' RT.	M-17-24	24" X 12"					2.00						14.00											
				M-1-24	24" X 24"					4.00																	
254	93	8+00	RT.	D-1-72	72" X 12"					6.00						27.00											
				D-1-72	72" X 12"					6.00																	
254	94	11+80	RT.	GH-1	7' X 5.5'						38.50								35.00							2	0.54
				GH-1	7' X 5.5'						38.50																
254	95	10+40 (WAPA)	LT.	R-1-30		1	1																				
254	96	10+50 (WAPA)	LT.	R-1-30	30" X 30"							6.25				15.00											
254	97	15+01.5	RT.	W-45-36		1	1																				
254	98	15+19.5	LT.	W-45-36		1	1																				
254	99	15+48.5	LT.	R-1-30		1	1																				
254	100	12+67 (NEW)	RT.	R-1-30	30" X 30"							6.25				15.00											
254	101	10+30 (NEW)	LT.	R-1-30	30" X 30"							6.25				15.00											
TOTALS						7	5			51	165	117				138	98	32	35	70						6	1.86

TOTALS CARRIED TO TRAFFIC CONTROL SUMMARY

AC=AUG33SS4

GROUND MOUNTED SIGN QUANTITIES

TRAFFIC CONTROL QUANTITIES

CALC. BY T.K. DATE 12/88
CHKD. BY J.S. DATE 12/88

AUGLAIZE COUNTY
AUG – 33 – 13.44

OHIO
FHWA REGION 5
FEDERAL

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DETAILS GROUND MOUNTED SIGNS

SHT. NO.	REF. NO.	LOCATION AND STATION	SIDE	SIGN CODE NUMBER	SIGN SIZE	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	SIGNS		SIGNS TYPE G SHEETING		ITEM 630 GROUND MOUNTED SUPPORTS										ITEM 630 BREAKAWAY BEAM CONNECTION	ITEM 630 CONCRETE FOR EMBEDDED FOUNDATIONS
										FLAT SHEET	EXTRU SHEET	FLAT SHEET	EXTRU SHEET	NO. 3 POST	NO. 4 POST		S4x7.7 BEAM	W6x9 BEAM	W10x12 BEAM	W8x18 BEAM	W10x22 BEAM	W12x30 BEAM			
						EACH	EACH	EACH	EACH	SQ. FT.				LIN. FT.										EACH	CU. YD.
		HARDIN PIKE CONT.																							
254	102	21+08	RT.	D–11		1	1																		
				MILE MARKER		1																			
254	103	21+21.	LT.	W–30–48		1	2																		
254	104	45+06.5 (CANNING)	RT.	W–45–36		1	1																		
254	105	46+46	RT.	R–1–30		1	1																		
254	106	21+72.5	RT.	D–11		1	1																		
				MILE MARKER		1																			
255	107	24+53.5	LT.	W–45–36		1	1																		
255	108	24+56.5	LT.	W–45–36		1	1																		
255	109	25+90	RT.	GH–1	7' X 5.5'						38.50						34.00							2	0.54
				GH–1	7' X 5.5'						38.50														
255	110	26+41	LT.	R–1–30	30" X 30"							6.25			15.00										
255	111	29+00	LT.	D–1–72	72" X 12"					6.00					27.00										
				D–1–72	72" X 12"					6.00															
255	113	34+50	LT.	M–17–24	24" X 12"					2.00					16.00										
				M–1–24	24" X 24"					4.00															
		CANNING FACTORY RD.																							
256	114	52+65	RT.	R–1–30	30" X 30"							6.25			15.00										
		ASHLAND AVE.																							
257	115	10+00 (DEARBAUGH)	RT.	W–14–30	30" X 30"					6.25					14.50										
257	116	9+90	℄	W–32–48	48" X 24"					6.00					25.00										
257	117	16+50 (DEARBAUGH)	℄	W–32–48	48" X 24"					6.00					25.00										
257	118	16+00	LT.	W–13–30	30" X 30"					6.25					14.50										
257	119	36+35	RT.	R–1–30	30" X 30"							6.25			15.00										
257	120	37+45	LT.	R–1–30		1	1																		
257	121	35+55	LT.	R–1–30	30" X 30"							6.25			15.00										
247	122	605+00	RT.	GCP	11' X 5.5'						55.00								39.50					2	2.20
250	123	771+50	LT.	GCP	11' X 5.5'						55.00								44.50						2.20
254	124	20+25(Service Rd №3)	Lt	R-1-30	30" x 30"							6.25			15.00										
TOTALS						10	9			43	187	32			197		34		84					4	4.94

TOTALS CARRIED TO TRAFFIC CONTROL SUMMARY

GROUND MOUNTED SIGN QUANTITIES

AC=AUG33SS5

Calc. by T.K. 12/88
Chkd by J.S. 12/88

AUGLAIZE COUNTY
AUG-33-13.44

CALC. BY-T.A.K. DATE 11/88	FHWA REGION	STATE	PROJECT	
CHKD. BY-J.L.O. DATE 11/88	5	OHIO		

244
345

620 DELINEATOR TABLE

	STATION FROM	STATION TO	SIDE	INTERVAL	620 DELINEATOR REMOVED FOR DISPOSAL		C POST	C BRACKET	D POST	D BRACKET
	USR 33 MAINLINE									
WB	680+00	720+00	LT.	400	6		11			
WB	735+50	747+50	LT.	400			4			
WB	757+20	759+75	LT.	260			1			
WB	759+75	762+45	LT.	270			1			
WB	778+50	782+50	LT.	400			2			
EB	681+70	729+70	RT.	400	9		12			
EB	739+45	747+45	RT.	400			3			
EB	761+00	763+80	RT.	280			1			
EB	763+80	767+80	RT.	400			1			
EB	767+80	770+60	RT.	280			1			
EB	781+00	785+00	RT.	400			2			
	USR 33 AND HARDIN PIKE									
	RAMP A									
RAMP A	722+20	732+20	LT.	200			6			
RAMP A	732+20	734+50	LT.	115			2			
RAMP A	734+50	741+40	RT.	115					7	
RAMP A	741+40	747+40	LT.	200			4			
RAMP A	747+40	748+40	LT.	100			1			
RAMP A	748+40	748+90	LT.	50			1			
RAMP A	748+90	749+90	LT.	100			1			
RAMP A	749+90	753+90	LT.	200			2			
	RAMP B									
RAMP B	729+70	734+95	RT.	175			4			
RAMP B	734+95	738+40	RT.	115			3			
RAMP B	738+40	744+40	LT.	120					6	
RAMP B	744+40	749+20	RT.	120			5			
RAMP B	749+20	751+00	RT.	60			2			
RAMP B	751+00	752+20	RT.	60			3			
RAMP B	752+20	753+40	RT.	120			1			
RAMP B	753+40	755+40	RT.	200				1		
	RAMP C									
RAMP C	757+20	753+20	LT.	200			2	1		
RAMP C	753+20	750+20	LT.	100			3			
RAMP C	750+20	749+25	LT.	95			1			
RAMP C	749+25	748+75	LT.	50			1			
RAMP C	748+75	739+75	RT.	50					19	
RAMP C	739+75	737+75	LT.	50			5			
RAMP C	737+75	736+75	LT.	100			1			
RAMP C	736+75	734+75	LT.	200			1			
SUBTOTALS TABLE ONE					15		88	2	32	

620 DELINEATOR TABLE

	STATION FROM	STATION TO	SIDE	INTERVAL	620 DELINEATOR REMOVED FOR DISPOSAL		C POST	C BRACKET	D POST	D BRACKET
	USR 33 AND HARDIN PIKE CONT.									
	RAMP D									
RAMP D	737+20	739+00	RT.	180			2			
RAMP D	739+00	739+90	RT.	90			1			
RAMP D	739+90	741+25	RT.	45			3			
RAMP D	741+25	748+90	LT.	45					18	
RAMP D	748+90	749+80	RT.	45			3			
RAMP D	749+80	751+00	RT.	120			1			
RAMP D	751+00	761+00	RT.	200			5			
	USR 33 AND CR 25A									
	RAMP B									
RAMP B	770+60	776+60	RT.	200	23		4			
RAMP B	776+60	778+70	RT.	30			7			
RAMP B	778+70	781+70	LT.	30					11	
RAMP B	781+70	782+30	RT.	30			3			
STA. 9+50 = 782+30										
RAMP B	9+50	8+90	RT.	60			1			
RAMP B	8+90	7+70	RT.	120			1			
RAMP B	7+70	1+70	RT.	200			3			
	RAMP C									
RAMP C	765+05	775+05	LT.	200	20		4	2		
RAMP C	775+05	776+85	LT.	30			6			
RAMP C	776+85	780+15	RT.	30					12	
RAMP C	780+15	780+75	LT.	30			3			
STA. 8+35 = 780+75										
RAMP C	8+35	7+75	LT.	60			1			
RAMP C	7+75	6+55	LT.	120			1			
RAMP C	6+55	2+55	LT.	200			2			
SUBTOTALS TABLE TWO					43		51	2	41	
SUBTOTALS FROM TABLE ONE					15		88	2	32	
TOTALS TO TRAFFIC CONTROL SUMMARY					58		139	4	73	

AC=CLA70DT1

DELINEATOR TABLE

Calc. by T.K. 12/88
Chkd. by J.S. 12/88

AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

245
345

621~ESTIMATED PAVEMENT MARKING QUANTITIES

LOCATION	STATION TO STATION	SIDE		4" YELLOW EDGE LINE	4" WHITE EDGE LINE		4" DOUBLE SOLID CENTER LINE	4" WHITE LANE LINE		8" WHITE CHANNEL LINES	24" STOP LINES		24" YELLOW TRANSVERSE LINES	24" WHITE TRANSVERSE LINES				
WESTBOUND USR 33	679+00.00 TO 782+50.00	LT.		10350														
WESTBOUND USR 33	679+00.00 TO 732+19.51	LT.			5320													
WESTBOUND USR 33	679+00.00 TO 782+50.00	LT.						10350										
EASTBOUND USR 33	679+00.00 TO 782+50.00	RT.		10350														
EASTBOUND USR 33	679+00.00 TO 734+94.22	RT.			5595													
EASTBOUND USR 33	679+00.00 TO 782+50.00	RT.						10350										
RAMP A (HARDIN PIKE)	732+19.51 TO 754+22.51	℄			2203													
RAMP A (HARDIN PIKE)	732+19.51 TO 754+70.24	RT.		2251														
RAMP B (HARDIN PIKE)	734+94.22 TO 755+84.12	℄			2090													
RAMP B (HARDIN PIKE)	737+71.23 TO 756+33.00	LT.		1862														
WESTBOUND USR 33	728+60.00 TO 731+00.00	LT.						240										
WESTBOUND USR 33	731+00.00 TO 732+19.51	LT.								120								
WESTBOUND USR 33	731+00.00 TO 749+15.07	LT.			1816													
EASTBOUND USR 33	733+37.00 TO 736+02.00	RT.						265										
EASTBOUND USR 33	736+02.00 TO 737+72.58	RT.								171								
RAMP B (HARDIN PIKE)	736+01.00 TO 737+71.23	LT.								171								
EASTBOUND USR 33	736+02.00 TO 737+72.58	RT.												164				
EASTBOUND USR 33	737+72.58 TO 752+20.00	RT.			1448													
EASTBOUND USR 33	751+00.00 TO 776+89.11	RT.			2590													
EASTBOUND USR 33	751+00.00 TO 752+20.00	RT.								120								
RAMP D (HARDIN PIKE)	736+18.00 TO 751+00.00	LT.		1482														
RAMP D (HARDIN PIKE)	736+66.75 TO 751+00.00	℄			1434													
EASTBOND USR 33	752+20.00 TO 754+60.00	RT.						240										
WESTBOUND USR 33	749+15.07 TO 751+64.00	LT.												190				
RAMP C (HARDIN PIKE)	733+79.51 TO 753+20.00	℄			1941													
RAMP C (HARDIN PIKE)	733+32.14 TO 749+25.79	RT.		1594														
RAMP C (HARDIN PIKE)	749+25.79 TO 751+68.00	RT.								243								
WESTBOUND USR 33	749+15.07 TO 751+64.00	LT.								249								
WESTBOUND USR 33	753+20.00 TO 775+41.67	LT.			2222													
WESTBOUND USR 33	751+64.00 TO 753+90.00	LT.						226										
RAMP C (CR 25A)	775+41.67 TO 780+65.82	℄			525													
RAMP C (CR 25A)	775+41.67 TO 780+65.82	RT.		525														
WESTBOUND USR 33	772+61.00 TO 775+01.00	LT.						240										
WESTBOUND USR 33	775+01.00 TO 775+41.67	LT.								41								
WESTBOUND USR 33	775+01.00 TO 782+50.00	LT.			749													
EASTBOUND USR 33	774+23.00 TO 777+89.00	RT.						366										
EASTBOUND USR 33	777+89.00 TO 778+57.77	RT.												109				
EASTBOUND USR 33	777+89.00 TO 778+57.77	RT.								69								
RAMP B (CR 25A)	777+87.00 TO 778+53.21	LT.								67								
RAMP B (CR 25A)	776+89.11 TO 782+34.09	℄			545													
RAMP B (CR 25A)	778+53.21 TO 782+34.09	LT.		381														
EASTBOUND USR 33	778+57.77 TO 782+50.00	RT.			393													
RAMP C (HARDIN PIKE)	733+32.00	LT.–RT.									50							
RAMP B (HARDIN PIKE)	756+33.00	LT.–RT.									50							
RAMP A (CR 25A)	8+50.00 TO 10+20.00	LT.		170														
RAMP B (CR 25A)	0+25.00 TO 9+47.82	LT.			923													
RAMP B (CR 25A)	8+50.00 TO 9+47.82	RT.		98														
RAMP C (CR 25A)	0+50.00 TO 8+45.54	RT.			796													
RAMP C (CR 25A)	8+00.00 TO 8+45.54	LT.		46														
RAMP D (CR 25A)	8+00.00 TO 9+50.00	RT.		150														
				29,259	30,590			22,277										
SUB–TOTAL CARRIED TO SHEET NO. 246				11.34 Mi.				4.22 Mi		1251	100			463				

Calc. by T.K. 12/88
Chkd by J.S. 12/88

621~ESTIMATED PAVEMENT MARKING QUANTITIES

AUGLAIZE COUNTY
AUG– 33 –13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

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LOCATION	STATION TO STATION	SIDE		4" YELLOW EDGE LINE	4" WHITE EDGE LINE		4" DOUBLE SOLID CENTER LINE	4" WHITE LANE LINE		8" WHITE CHANNEL LINES	24" STOP LINES		24" YELLOW TRANSVERSE LINES	24" WHITE TRANSVERSE LINES		4" SINGLE BROKEN CENTER LINE		
ASHLAND AVE.	10+62.78 TO 36+84.00	℄					2622											
ASHLAND AVE.	10+62.78 TO 36+51.79	LT.			2589													
ASHLAND AVE.	10+38.48 TO 36+31.86	RT.			2594													
DEARBAUGH TO ASHLAND	15+26.13 TO 10+62.78	℄					166											
DEARBAUGH TO ASHLAND	16+00.43 TO 10+38.48	RT.			80													
DEARBAUGH TO ASHLAND	15+76.13 TO 10+62.78	LT.			80													
ASHLAND AVE.	36+84.00	RT.									50							
ASHLAND AVE.	37+25.00 TO 38+00.00	L					75											
ASHLAND AVE.	37+25.00	LT.									36							
CANNING FACTORY RD.	31+32.36 TO 52+76.00	℄					2144											
CANNING FACTORY RD.	31+32.36 TO 51+93.56	LT.			2062													
CANNING FACTORY RD.	31+32.36 TO 52+54.82	RT.			2123													
CANNING FACTORY RD.	52+76.00	RT.									28							
HARDIN PIKE	8+00.00 TO 8+59.00	LT.			59													
HARDIN PIKE	8+00.00 TO 8+59.00	℄					59											
HARDIN PIKE TO ASHLAND	8+59.83 TO 36+51.79	RT.–LT.			71													
ASHLAND TO HARDIN PIKE	36+31.86 TO 9+85.42	RT.			87													
HARDIN PIKE	9+85.00 TO 11+62.00	℄					177											
HARDIN PIKE	9+45.00 TO 11+59.72	LT.			215													
HARDIN PIKE	9+85.42 TO 11+55.78	RT.			171													
HARDIN PIKE	8+00.00 TO 8+59.83	RT.			60													
HARDIN PIKE TO RAMP A	11+55.78 TO 754+22.51				83													
HARDIN PIKE TO WAPA	11+59.72 TO 10+80.29	LT.			92													
WAPA TO HARDIN PIKE	10+47.88 TO 12+87.89	RT.–LT.			66													
RAMP C TO HARDIN PIKE	733+79.35 TO 13+00.68	℄ –RT.			69													
HARDIN PIKE	13+00.68 TO 25+62.64	RT.			1262													
HARDIN PIKE	12+87.89 TO 26+07.00	LT.			1320													
HARDIN PIKE	13+03.00 TO 25+63.00	℄					1260											
HARDIN PIKE TO RAMP D	25+62.64 TO 736+66.75	RT.			81													
RAMP B TO HARDIN PIKE	755+84.12 TO 27+01.76	℄ –RT.			71													
HARDIN PIKE	26+71.00 TO 36+05.00	LT.			940													
HARDIN PIKE	27+01.76 TO 31+20.36	RT.			419													
HARDIN PIKE	27+02.00 TO 31+29.00	℄					427											
HARDIN PIKE	32+60.00 TO 36+05.00	℄					351											
HARDIN PIKE TO CANNING FACTORY	31+20.36 TO 51+93.56	RT.–LT.			102													
CANNING FACTORY TO HARDIN PIKE	52+54.82 TO 32+59.58	RT.			57													
HARDIN PIKE	32+59.58 TO 36+05.00	RT.			352													
SERVICE RD. NO. 2	26 + 50.91	RT.–LT.									24							
SERVICE RD. NO. 2	22+48.00 TO 26+51.00	LT.														419		
SERVICE RD. NO. 3	20 + 15.00	LT.									18							
SERVICE RD. NO. 3	20+15.00 TO 21+60.82	℄														146		
WAPA ST.	10+17.00	LT.									48							
WAPA ST.	10+17.00 TO 11+51.00	℄					134											
WAPA ST.	10+80.29 TO 12+45.13	LT.			165													
WAPA ST.	10+47.88 TO 11+51.13	RT.			104													
WAPA ST. TO NEW ST.	11+51.13 TO 12+79.97	RT.–LT.			55													
NEW ST. TO WAPA ST.	12+79.97 TO 12+45.13	RT.			55													
KONETA ST. TO NEW ST.	13+30.59 TO 10+47.00	LT.			55													
NEW ST. TO KONETA ST.	10+47.00 TO 12+36.59	RT.–LT.			55													
NEW ST.	10+16.00	LT.									30							
NEW ST.	10+16.00 TO 13+11.00	℄					295											
NEW ST.	13+11.00	RT.									30							
NEW ST.	10+47.00 TO 12+79.97	LT.			233													
NEW ST.	10+47.00 TO 12+79.97	RT.			233													
				0	16,060		7710											
				3.04 Mi.			1.46 Mi.	0 Mi.		0	264			0		565		
SUB–TOTAL BROUGHT FORWARD FROM SH. 245				11.34 Mi.			0 Mi.	4.22 Mi.		1251	100			463		0		
TOTALS CARRIED TO TRAFFIC CONTROL SUMMARY				14.38 Mi.			1.46 Mi.	4.22 Mi.		1251	364			463		0.11 Mi.		

FHWA REGION	STATE	PROJECT	
5	OHIO		

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AUGLAIZE COUNTY
AUG-33-13.44

1 — FREEWAY ENDS 2 MILES
STA. 590+00
REMOVE EXISTING DUAL SIGNS AND SUPPORTS
W-55
12'x4'

2 — LEFT LANE ENDS 1/4 MILE
STA 645+70
REMOVE EXISTING OVERHEAD SIGN AND SUPPORTS
12'x4' W-54B-144

3 — LEFT LANE ENDS MERGE RIGHT
REMOVE EXISTING SIGNS AND SUPPORTS
STA. 673+33.5
12'x4' W-54C-144

4 — CO. RD. 33A WAPAKONETA
EXISTING SIGN (DO NOT DISTURB)
675+90 GE
16'x7'

5 — REMOVE EXISTING SIGN AND SUPPORTS
STA. 677+52
W-60C-48
48"x48"

5 — REMOVE EXISTING SIGN AND SUPPORTS
STA. 677+52
W-60C-48
48"x48"

6 — HARDIN PIKE WAPAKONETA EXIT 1 MILE
STA. 685+00
G.B.
LEVEL II
13'x7'
ERECT NEW SIGN ON NEW BEAM SUPPORT

7 — DO NOT PASS
REMOVE EXISTING SIGN AND SUPPORT
STA. 685+52
R-33-30
30"x36"

8 — REFLECTOR
REMOVE EXISTING SIGN AND SUPPORT
STA. 689+52.5
R-38R-36
36"x48"

9 — DIVIDED HIGHWAY ENDS
REMOVE EXISTING SIGNS AND SUPPORT
STA. 689+92.5
W-86-36
36"x36"
ALSO
18"x24" SIGN

10 — CO. RD. 33A WAPAKONETA EXIT 1/2 MILE
STA. 695+00
G.B.
LEVEL II
13'x7'
ERECT NEW SIGN ON NEW BEAM SUPPORT

673 674 675 676 677 678 685 686 687 688 689 690 691 692 693 694 695
℄ SURVEY U.S.R. 33
LINE BELOW
MATCH

Auglaize Co. Fairgrounds NEXT RIGHT

122 — STA. 605+00
GCP
LEVEL III
11'x5.5'
ERECT NEW SIGN ON NEW BEAM SUPPORT

11 — DIVIDED HIGHWAY ENDS
REMOVE EXISTING SIGNS AND SUPPORTS
STA. 696+92
W-85-36
36"x36"
ALSO SIGN
18"x24"

12 — PASS WITH CARE
REMOVE EXISTING SIGN AND SUPPORT
STA. 696+95.5
R-34-30
30"x36"

13 — LEFT LANE ENDS
REMOVE EXISTING SIGN AND SUPPORT
STA. 699+71
W-48-30
30"x30"

75 — 100' SOUTH OF CR. 33A ON PRESAR RD.
W-48-30
30"x30"
ERECT NEW SIGN ON NEW SUPPORT

76 — STA. 9+00
REMOVE EXISTING SIGN AND SUPPORT
R-1-30
30"x30"

PRESAR RD.

14 — TYPE D DELINEATOR
EMERGENCY AND AUTHORIZED VEHICLES ONLY
STA. 705+80
R-19-24
24"x30"
STA. 705+80
R-123-36
36"x36"

15 — STA. 706+20
R-123-36
36"x36"
EMERGENCY AND AUTHORIZED VEHICLES ONLY
STA. 706+20
R-19-24
24"x30"
TYPE D DELINEATOR

16 — HARDIN PIKE WAPAKONETA EXIT 1/2 MILE
STA. 709+60
G.B.
LEVEL II
13'x7'
ERECT NEW SIGN ON NEW BEAM SUPPORT

+81.28
+89.72

695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710
℄ SURVEY U.S.R. 33
LINE ABOVE
MATCH
SEE SHEET 248.
MATCH LINE

U.S.R. 33 STA. 673+00 TO STA. 710+00 SIGNING

FHWA REGION	STATE	PROJECT	
5	OHIO		

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AUGLAIZE COUNTY
AUG-33-13.44

STA. 720+00
G.B.
LEVEL II
13' x 7'
ERECT NEW SIGN ON
NEW BEAM SUPPORT
19

CO. RD. 33A
WAPAKONETA
EXIT 1 MILE

STA. 722+89.5
REMOVE EXISTING
SIGNS AND SUPPORT
W-24-36
36" x 36"
D-8G-8
48" x 8"
20

SEE SHEET 247

MATCH LINE

710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725

℄ SURVEY U.S.R. 33

LINE BELOW

MATCH LINE

STA. 718+29.5
REMOVE EXISTING
SIGN AND SUPPORT
MILE POST
17

STA. 718+69.5
REMOVE EXISTING
SIGN AND SUPPORTS
G.B.
9' x 15'

WAPAKONETA
EXIT 1 MILE
694
698
702
18

℄ RAMP "A"

MATCH SEE SHEET 251

738 737 736 735 734 733

27

STA. 732+43
REMOVE EXISTING
SIGN AND SUPPORT
W-24-36
36" x 36"
D-8G-8
48" x 8"

28

STA. 736+00
W-49R-48
48" x 48"
ERECT NEW SIGN ON
NEW POST SUPPORT

LINE ABOVE

725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740

LINE SEE SHEET 249

℄ SURVEY U.S.R. 33

MATCH

MATCH

735 736 737 738 739 740

℄ RAMP "B"

29

EXIT

STA. 737+80
G.F.
72" x 60"
ERECT NEW SIGN ON
NEW BEAM SUPPORT

MATCH LINE
SEE SHEET 252

STA. 725+88
REMOVE EXISTING
SIGN AND SUPPORT
M-1-30-2
30" x 30"
21

STA. 727+45.5
REMOVE EXISTING
SIGN AND SUPPORT
R-1-30
30" x 30"
22

+19

STA. 728+24.5
REMOVE EXISTING
SIGN AND SUPPORT
R-1-30
30" x 30"
24

STA. 727+86
REMOVE EXISTING
SIGN AND SUPPORT
SIGN
15" x 15"
23

+21

℄ DEARBAUGH RD.

STA. 729+89.5
REMOVE EXISTING
SIGN AND SUPPORT
M-1-30-2
30" x 30"
26

25

HARDIN PIKE
WAPAKONETA

STA. 729+70
G.E.
LEVEL II
13' x 7'
ERECT NEW SIGN
ON NEW BEAM SUPPORT

+29

℄ CANNING FACTORY RD.

29+42.53

NO OUTLET

77

STA. 29+25
W-48-30
30" x 30"
ERECT NEW SIGN
ON NEW SUPPORT

U.S.R. 33 STA. 710+00 TO STA. 740+00 SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

249
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SEE SHEET 248

MATCH LINE

℄ SURVEY U.S.R. 33

740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755

(30) STA. 740+00
G.B.
LEVEL II
13' x 10'
ERECT NEW SIGN ON
NEW BEAM SUPPORT

WAPAKONETA
CO. RD. 25A
EXIT ¾ MILE
67 198 501

(31) STA. 744+57
REMOVE EXISTING
SIGN AND POSTS
R-10-36
36" x 48"

SPEED LIMIT 55

(32) STA. 746+50
W-49R-48
48" x 48"
ERECT NEW SIGN
ON NEW SUPPORT

(33) STA. 748+09
REMOVE EXISTING
SIGNS AND POST
W-24-36
36" x 36"
W-143-24
24" x 24"

55 MPH

(34) STA. 748+16
REMOVE EXISTING
SIGNS AND POSTS
W-24-36
36" x 36"
W-143-24
24" x 24"

55 MPH

MATCH LINE SEE SHEET 251

(35) STA. 749+00
G. F.
72" x 60"
ERECT NEW SIGN ON
NEW BEAM SUPPORT

EXIT

(36) STA. 751+94.5
REMOVE EXISTING
SIGN AND SUPPORT
M-1-30-2
30" x 30"

℄ RAMP "C"

(37) STA. 753+60.5
REMOVE EXISTING
SIGN AND SUPPORT
R-1-36
36" x 36"

STOP

℄ HARDIN PIKE

(38) STA. 753+74.5
REMOVE EXISTING
SIGN ON LIGHT POLE
6' x 1'

(39) STOP

(40) STA. 754+02.5
REMOVE EXISTING
SIGN AND SUPPORT
R-1-36
36" x 36"

STOP

(41) STA. 754+06.5
REMOVE EXISTING
SIGN ON LIGHT POLE
6' x 1'

(42) STA. 754+31.5
REMOVE EXISTING
SIGN AND SUPPORT
R-1-30
30" x 30"

STOP

MATCH LINE BELOW

MATCH LINE SEE SHEET 252

℄ RAMP "D"

749 750 751 752 753 754 755

(43) STA. 755+90
REMOVE EXISTING
SIGN AND SUPPORT
M-1-30-2
30" x 30"

(44) HARDIN PIKE
WAPAKONETA

(45) STA. 757+78
REMOVE EXISTING
SIGN AND SUPPORTS
W-85-36
36" x 36"

(46) STA. 757+79.5
REMOVE EXISTING
SIGN AND SUPPORTS
W-85-36
36" x 36"

(47) STA. 760+87
REMOVE EXISTING
SIGNS AND SUPPORTS
W-5-36
36" x 36"
W-24-36
36" x 36"
W-143-24
24" x 24"

45 MPH

(48) STA. 760+90
REMOVE EXISTING
SIGNS AND SUPPORTS
W-5-36
36" x 36"
W-24-36
36" x 36"
W-143-24

25 MPH

(49) STA. 762+50

WAPAKONETA
CO. RD 25A
EXIT ¼ MILE
67 198 501

G.B LEVEL II 13'x10'
ERECT NEW SIGN ON
NEW BEAM SUPPORT

(50) STA. 762+57
REMOVE EXISTING
SIGN AND SUPPORT
MILE POST

(51) STA. 764+37
REMOVE EXISTING
SIGNS AND SUPPORTS
G.B.
13' x 8'
COUNTY RD. SIGN
2' x 2'

WAPAKONETA
NEXT RIGHT
67 198 501
CR 25A

(52) STA. 765+50
G.B.
LEVEL II
13' x 7'
ERECT NEW SIGN ON
NEW BEAM SUPPORT

HARDIN PIKE
WAPAKONETA
EXIT ¼ MILE

Do Not Disturb
269+00
M-39-24
M-2-24
M-19-24

℄ SURVEY C.R. 25A

(80) 33 EAST

(78) STA. 267+00 (CR 25A)
WEST 33
M-40-24
24" x 12"
M-1-24-2
24" x 24"
M-19-21
21" x 15"
ERECT NEW SIGNS ON
NEW SUPPORT

(79) WEST 33
STA. 267+32 (C.R. 25A)
REMOVE EXISTING
SIGNS AND SUPPORT
M-1-24-2
24" x 24"
M-19-24
24" x 18"
M-40-24
24" x 12"

266 267 268 269

MATCH LINE ABOVE

SEE SHEET 250

℄ SURVEY U.S.R. 33

755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770

MATCH LINE

U.S.R. 33 STA. 740+00 TO STA. 770+00 SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

250
345

(123) STA. 771+50
GCP
LEVEL II
11'x 5.5'
ERECT NEW SIGN ON NEW BEAM SUPPORT

Auglaize Co Fairgrounds NEXT RIGHT

(54) STA. 771+58.5
REMOVE EXISTING
SIGN AND SUPPORT
W-71-36
36"x36"

(55) STA. 774+69
REMOVE EXISTING
SIGN AND SUPPORT
R-33-30
30"x36"

DO NOT PASS

SEE SHEET 249

MATCH LINE SHEET 253

776

STA. 777+47
REMOVE EXISTING
SIGNS AND SUPPORT
R-1-36 36"x36"
R-41B-36 36"x36"
R-43L-36 36"x12"

(59)

STOP

DO NOT ENTER

(62) STA. 777+80
REMOVE EXISTING
SIGNS AND SUPPORT
R-41B-36 36"x36"
R-43L-36 36"x12"

DO NOT ENTER

(61) STA. 777+68
REMOVE EXISTING
SIGNS AND SUPPORTS
R-12I-24 24"x24"

(60) R-43R-36
36"x15"
STA 777+58

ONE WAY

KEEP RIGHT

(65) STA. 779+35
REMOVE EXISTING
SIGNS AND SUPPORTS
R-41A-36
36"x36"
KEEP RIGHT SIGN
48"x48"

(67) STA. 783+00
REMOVE EXISTING
SIGNS AND SUPPORTS
W-60D-48
48"x48"

EXIT

(69) STA. 784+26.5
SIGN AND SUPPORTS
TO REMAIN
G.F
6'x5'

770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785

℄ SURVEY U.S.R. 33

MATCH LINE

778

(57) STA. 775+70
REMOVE EXISTING
SIGN AND SUPPORT
R-38R-36
36"x48"

WAPAKONETA
CO RD 25A
67
198
501

(53) STA. 770+60
RE-ERECT EXISTING
SIGN ON NEW SUPPORTS
G.E.
13'x10'

STA. 774+81
REMOVE EXISTING
SIGN AND SUPPORTS
G.E.
13'x10'
(56)

EXIT
20
MPH

(58) STA. 776+83
REMOVE EXISTING
SIGN AND SUPPORTS
STA. 776+83
RE-ERECT EXISTING
SIGN ON NEW SUPPORTS
EXIT 20 MPH SIGN
4'x5'

MATCH LINE
SEE SHEET 253

(63) STA. 778+00
W-49R-48
48"x48"
ERECT NEW SIGN
ON NEW SUPPORT

EXIT

(64) STA. 779+14
REMOVE EXISTING
SIGN AND SUPPORTS
STA. 778+65
ERECT EXISTING
SIGN ON NEW BEAM SUPPORTS
G.F.
72" x 60"

HARDIN PIKE
WAPAKONETA
EXIT 3/4 MILE

(66) STA. 782+00
ERECT NEW SIGN ON
NEW BEAM SUPPORT
G.B.
LEVEL II
13'x7'

EXIT

(68) STA. 783+75
SIGN AND SUPPORT
TO REMAIN
W-49R-36
36"x36"

(71) STA. 789+85
SIGN AND SUPPORTS
TO REMAIN
GE
156"x120"

WAPAKONETA
CO. RD. 25A
67
198
501

785 786 787 788 789 790

(70) STA. 787+75
SIGN AND SUPPORT
TO REMAIN
R-2-36
36"x36"x36"

YIELD

(72) STA. 791+95.5
REMOVE EXISTING
SIGNS AND SUPPORTS
W-52-48
48"x48"

LEFT LANE ENDS

(73) STA. 791+95.5
SIGNS AND SUPPORT
TO REMAIN
M-1-36-2
36"x36"
M-39-36
36"x18"

(33) EAST

(74) STA. 795+78.5
REMOVE EXISTING
SIGN AND SUPPORT
W-85-48
48"x48"

791 792 793 794 795 796

U.S.R. 33 STA. 770+00 TO STA. 796+00 SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

251
345

N

℄ RAMP "A"

℄ RAMP "C"

℄ HARDIN PIKE

(81) STA. 733+60
R-38R-36
36"x48"
ERECT NEW SIGN ON
NEW SUPPORT

(82) STOP
DO NOT ENTER
ONE WAY
ONE WAY
STA. 733+60 (14' LT.)
R-1-48 48"x48"
R-41B-36 36"x36"
R-43R-36 36"x12"
R-43L-36 36"x12"
ERECT NEW SIGN ON
NEW SUPPORT

(83) WRONG WAY
STA. 736+00 RAMP "C"
R-41B-36
36"x24"
ERECT NEW SIGN ON
NEW SUPPORT

(84) WRONG WAY
STA. 744+00 RAMP "C"
R-41A-36
36"x24"
ERECT NEW SIGNS ON
NEW SUPPORTS

(85) Hardin Pike
Wapakoneta 1
STA. 744+00 RAMP "C"
D-4B-48"
11'x4'
ERECT NEW SIGN ON
NEW SUPPORT

SEE SHEET 248
MATCH LINE

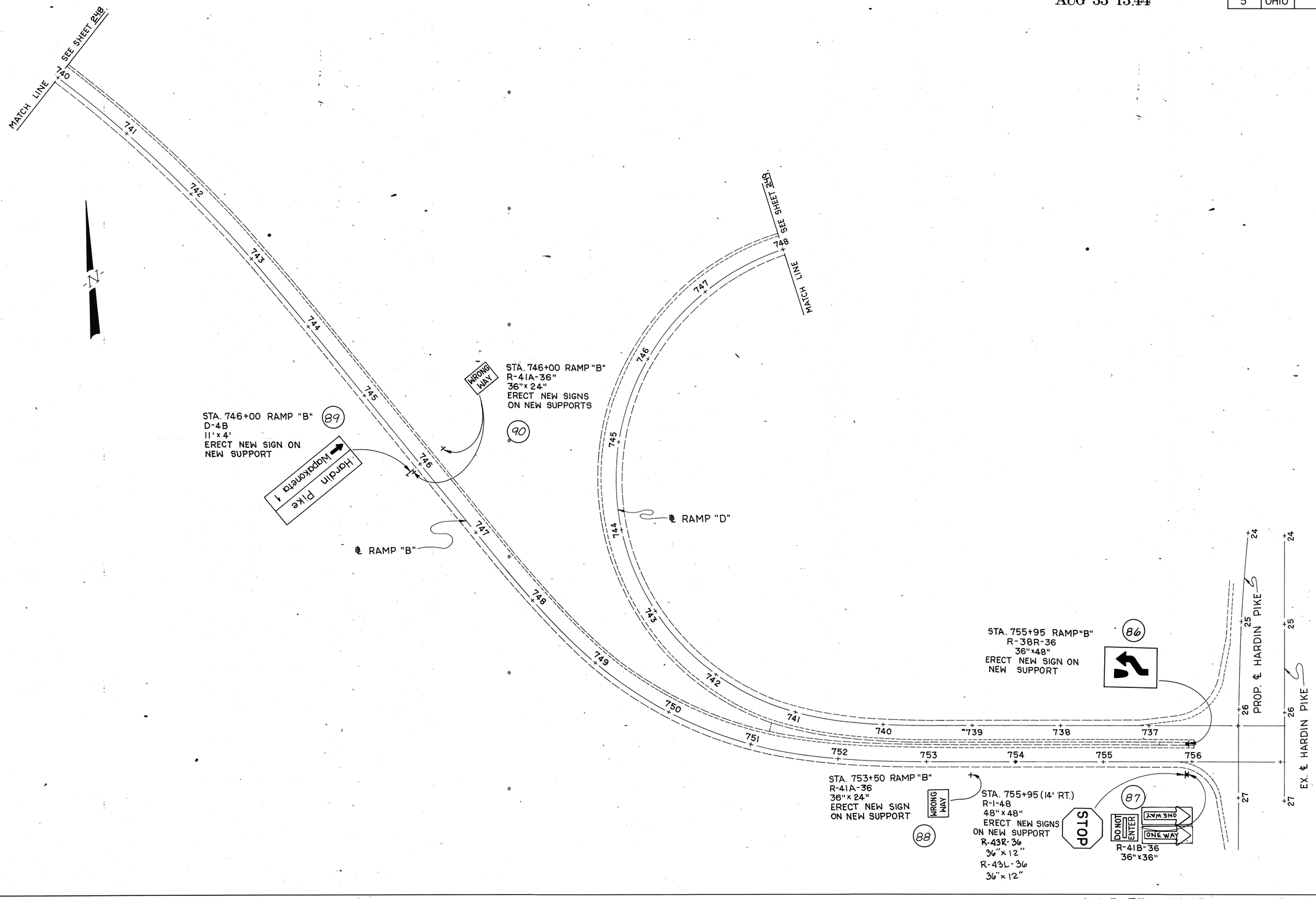
SEE SHEET 249
MATCH LINE

U.S.R. 33 RAMPS "A" AND "C" SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

252
345

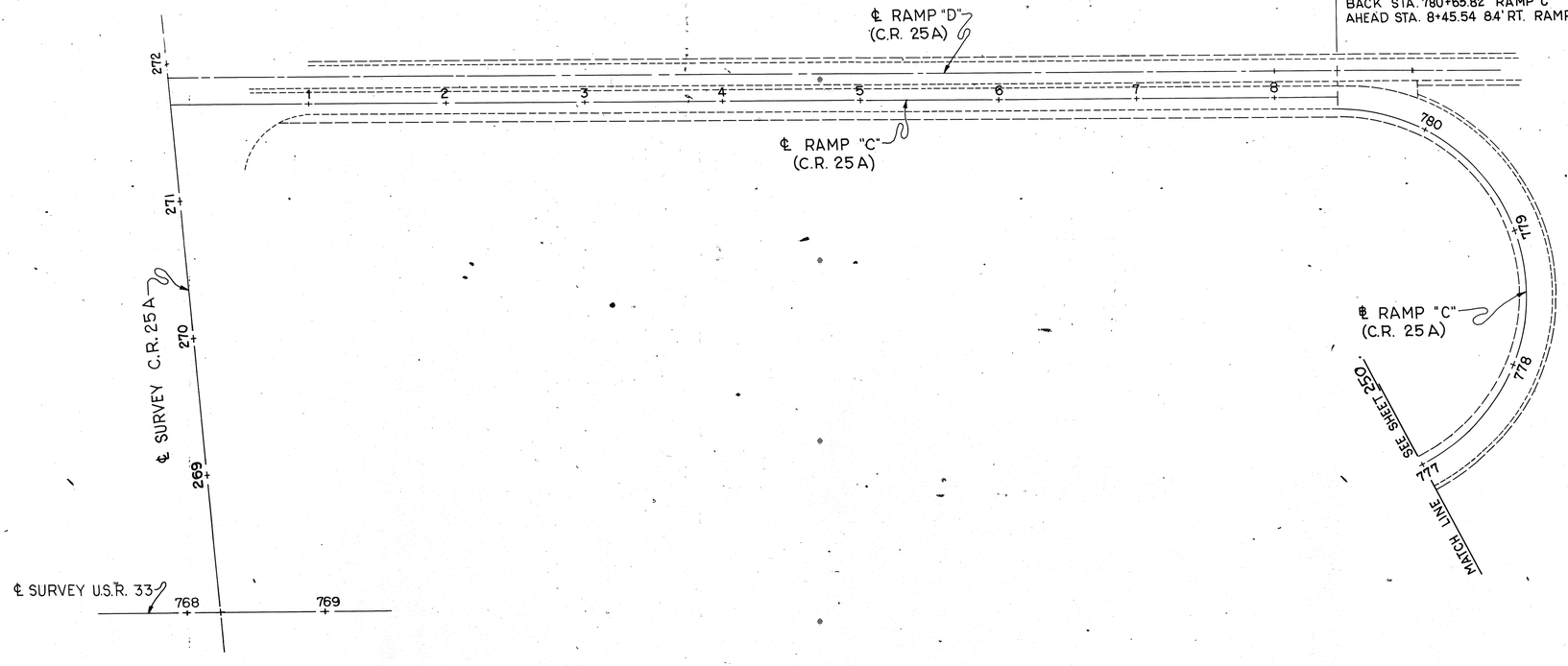


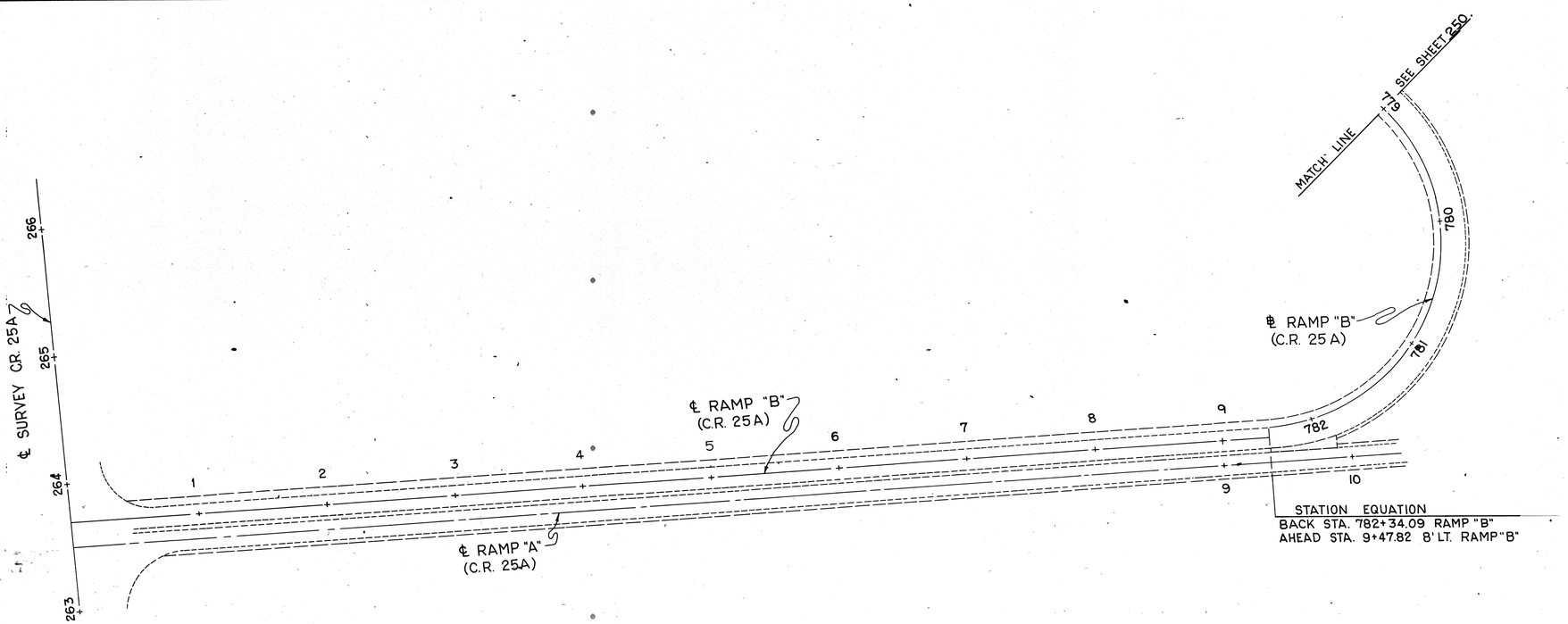
U.S.R. 33 RAMPS "B" AND "D" SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

253
345



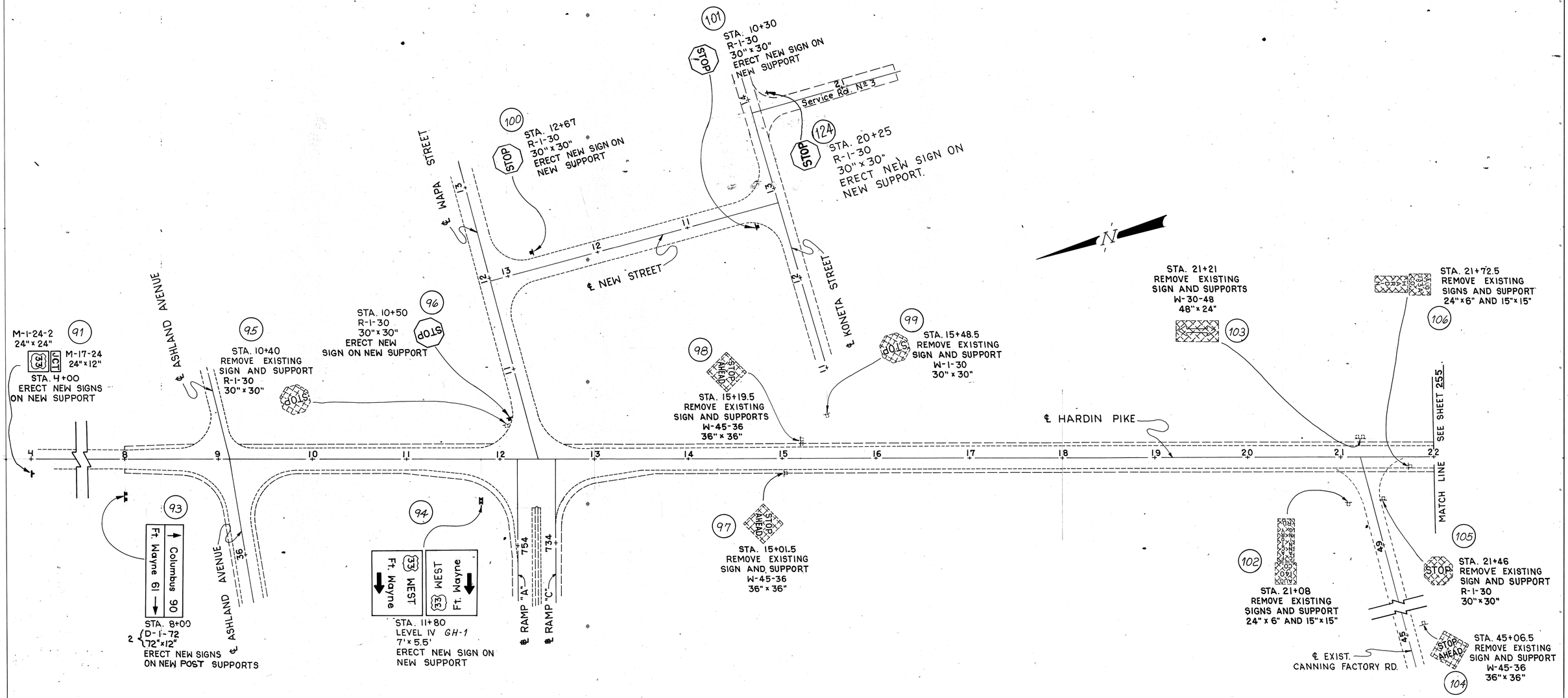


U.S.R. 33 RAMPS "B" AND "C" (C.R. 25A) SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

254
345

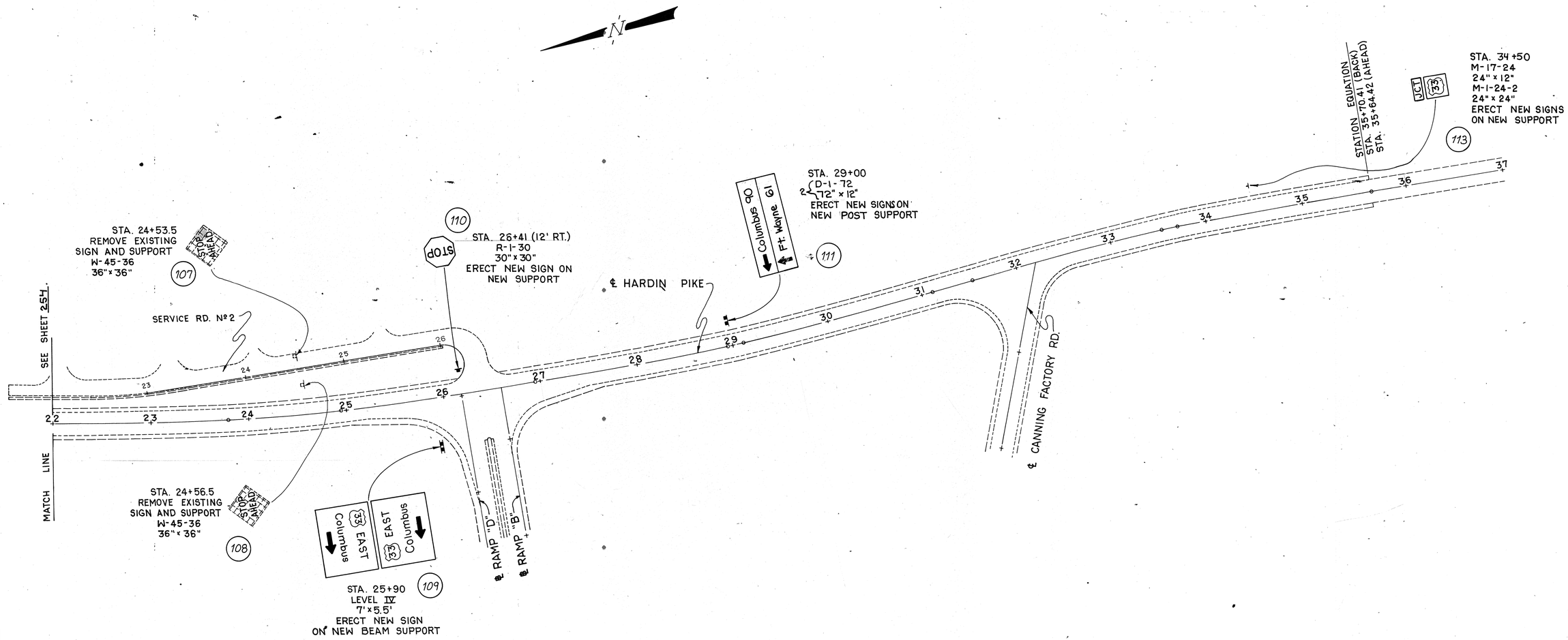


NEW ST., WAPA ST. AND HARDIN PIKE STA. 4+00 TO STA. 22+00 SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

255
345

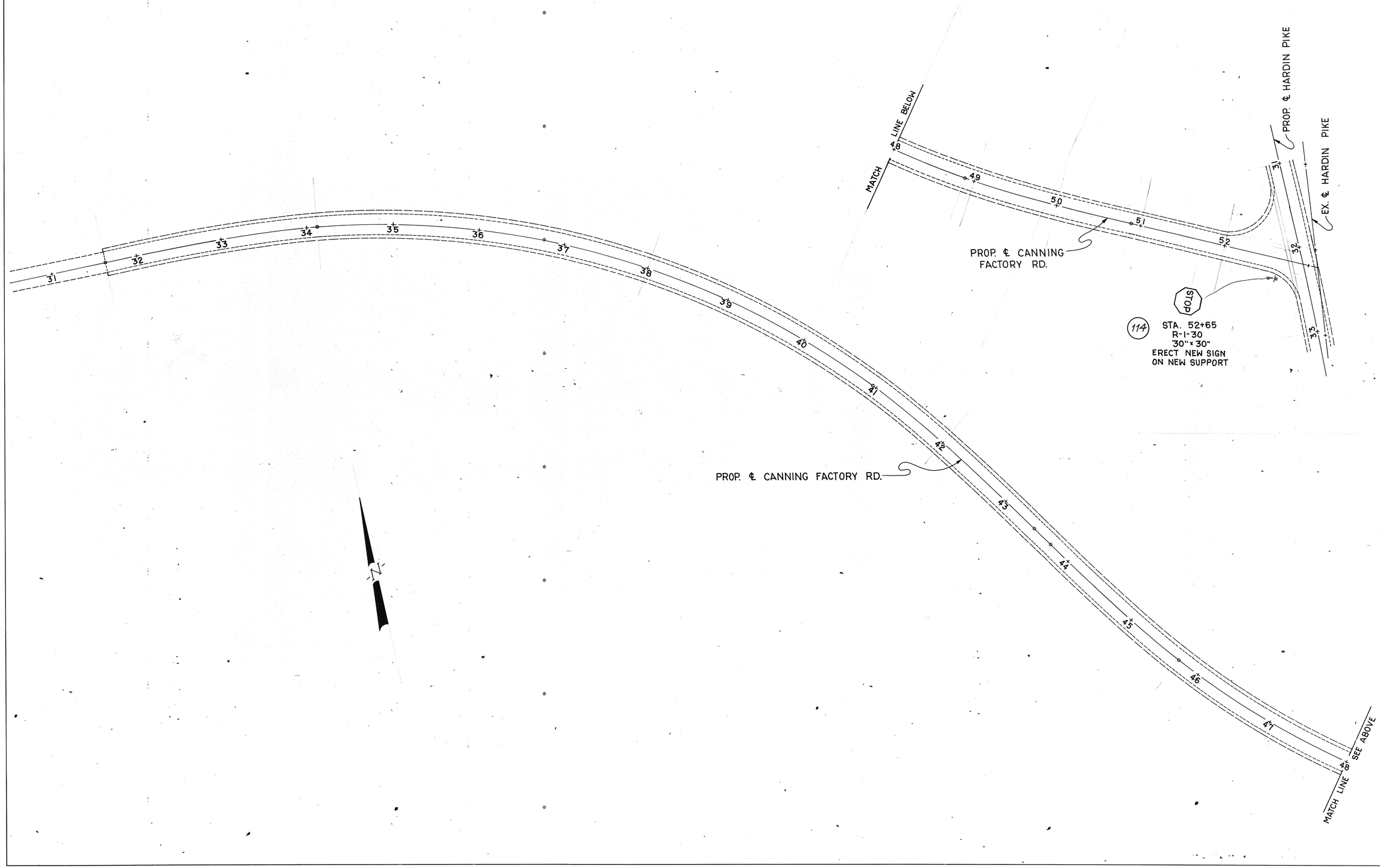


HARDIN PIKE STA. 22+00 TO STA. 36+00 SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

256
345

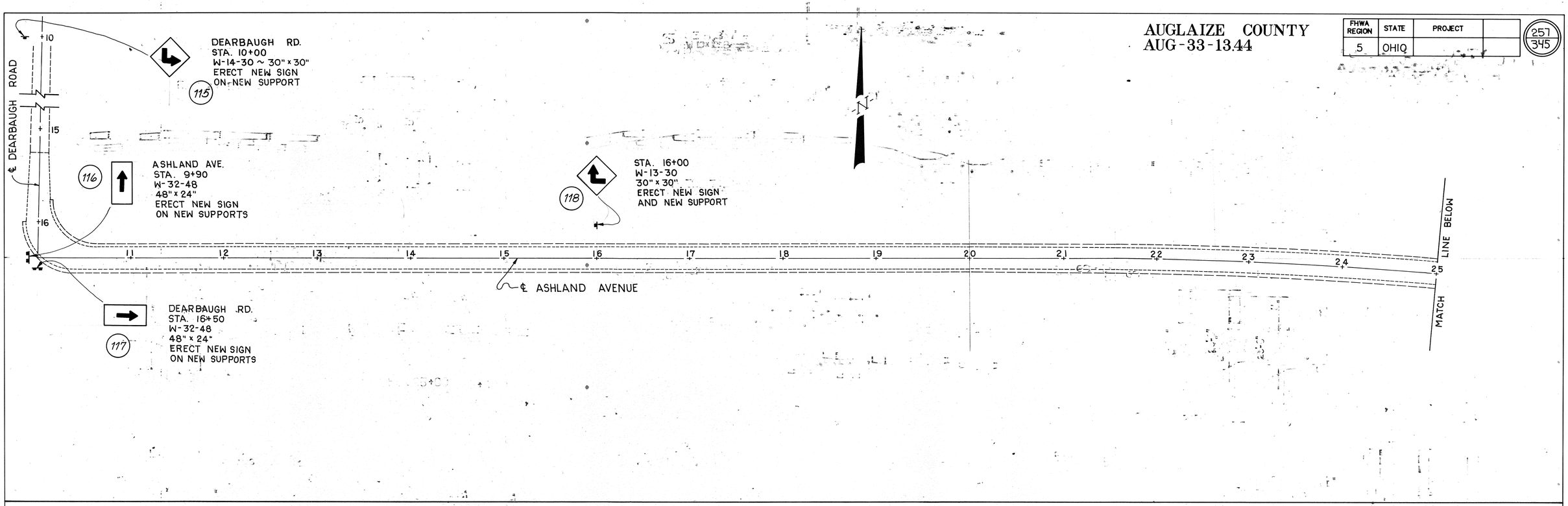


CANNING FACTORY RD. SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

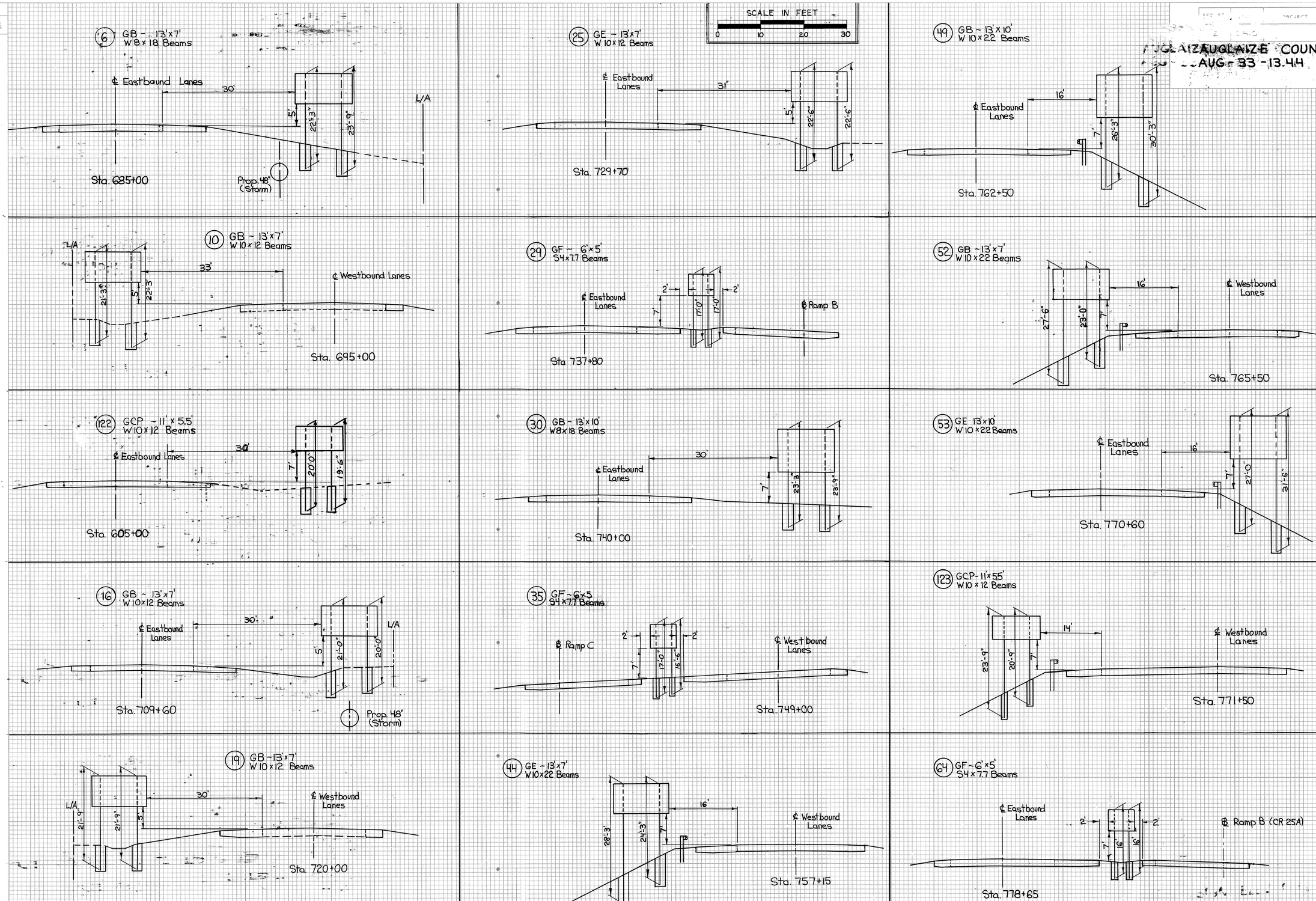
257
345



ASHLAND AVE. SIGNING

AUGLAIZE COUNTY
AUG-33-13.44

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

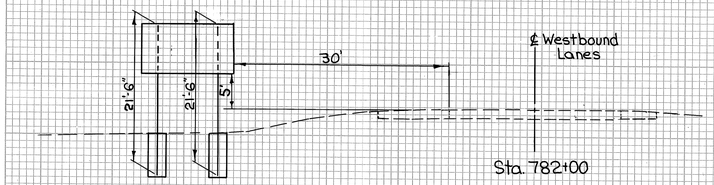


ESIGN ELEVATION VIEWS

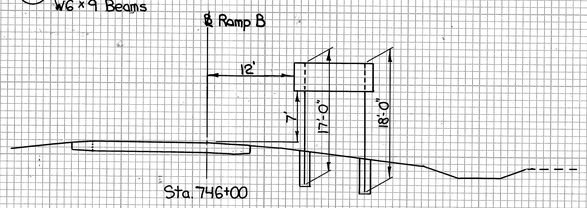
SEEDING	
END WIDTH	SQ. YDS.

SCALE IN FEET
0 10 20 30

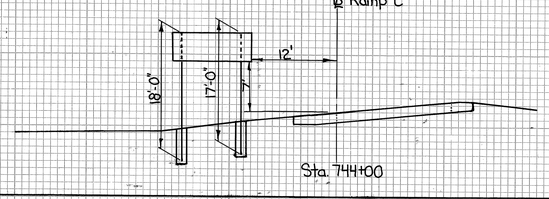
(66) GB - 13' x 7'
W10 x 12 Beams



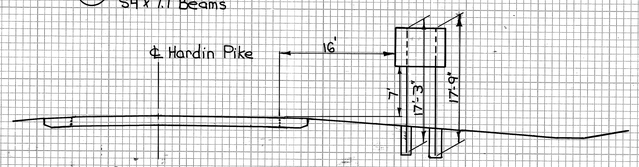
(89) D-4B-48
11' x 4'
W6 x 9 Beams



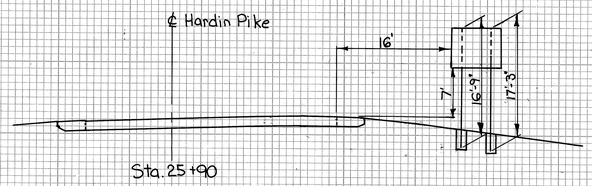
(85) D-4B-48
11' x 4'
W6 x 9 Beams



(94) GH-1 - 7' x 5.5'
S4 x 7.7 Beams



(109) GH-1 - 7' x 5.5'
S4 x 7.7 Beams



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

259
345

AUGLAIZE COUNTY
AUG - 33 - 13.44

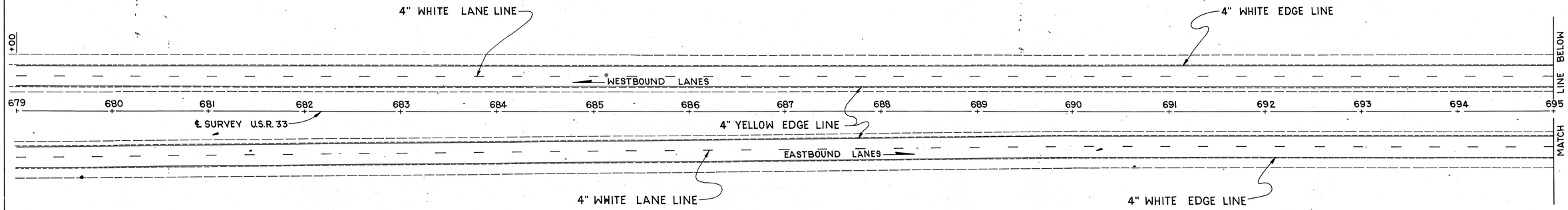
END AREA		VOLUME	
CUT	FILL	CUT	FILL

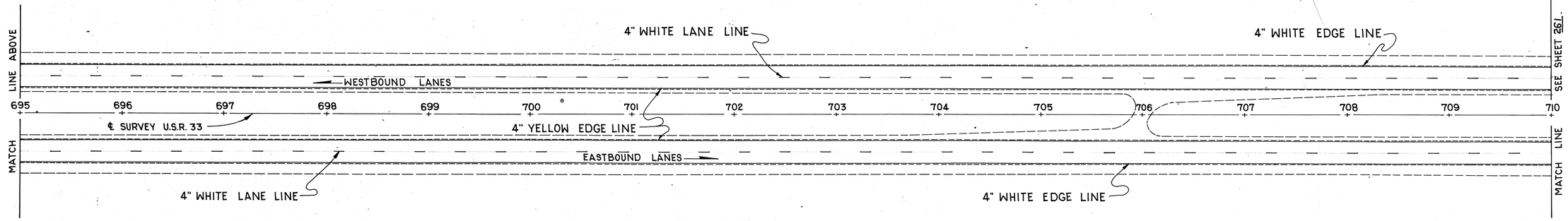
SIGN ELEVATION VIEWS

FHWA REGION	STATE	PROJECT	
5	OHIO		

260
345

AUGLAIZE COUNTY
AUG-33-13.44



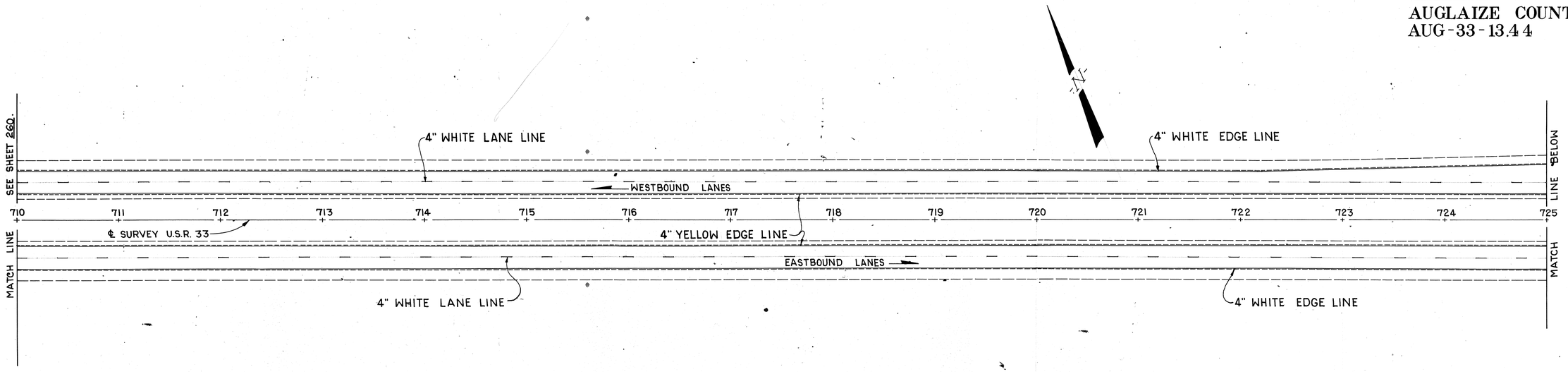


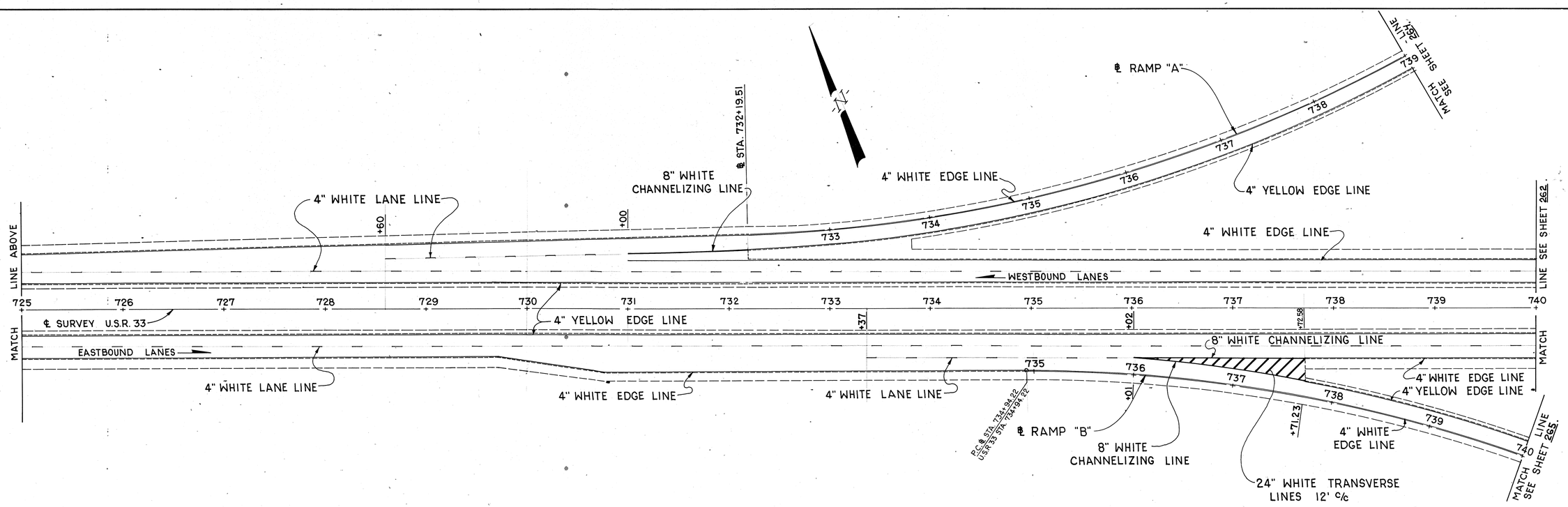
U.S.R. 33 STA. 679+00 TO STA. 710+00 PAVEMENT MARKING

FHWA REGION	STATE	PROJECT	
5	OHIO		

261
345

AUGLAIZE COUNTY
AUG-33-13.44



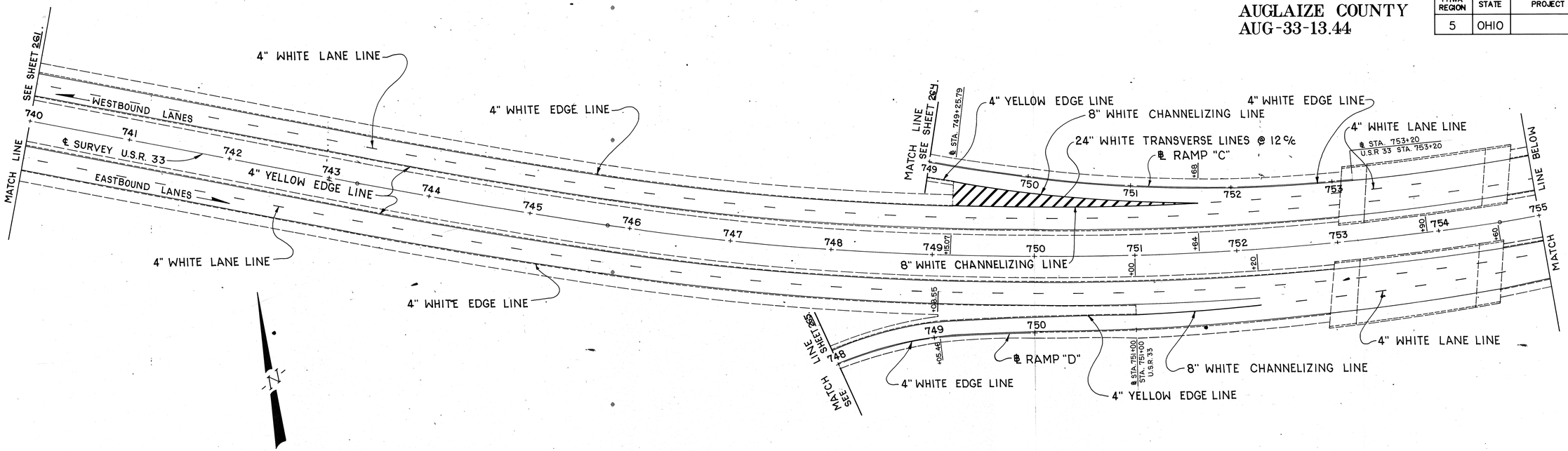


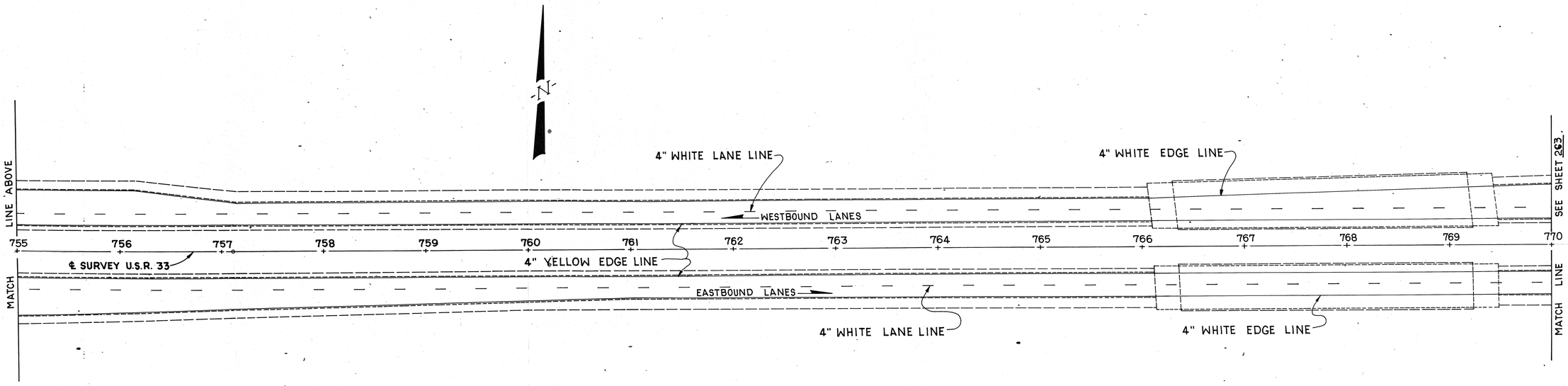
U.S.R. 33 STA. 710+00 TO STA. 740+00 PAVEMENT MARKINGS

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

262
345



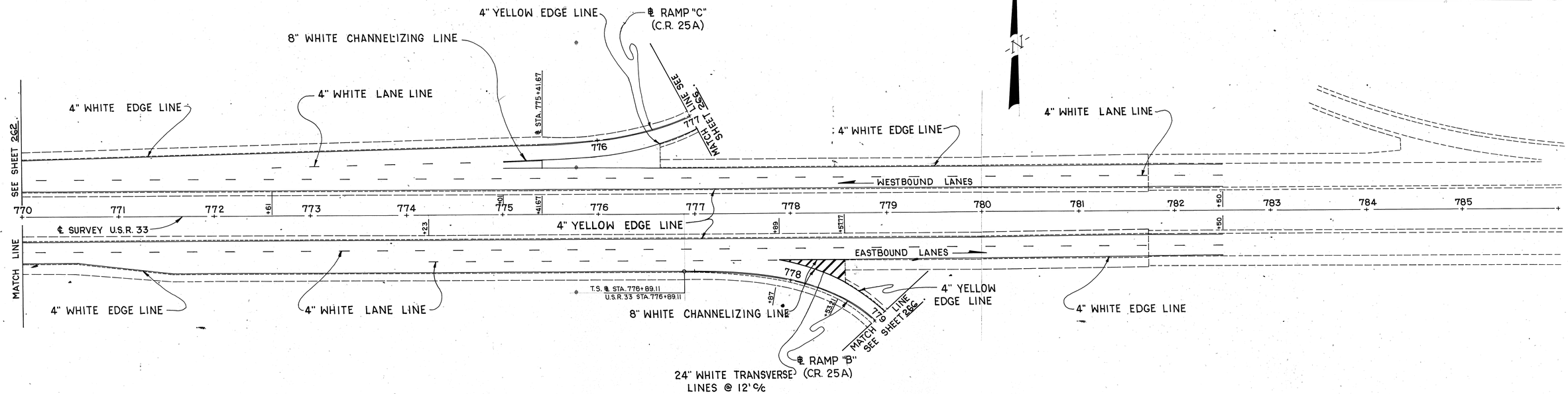


U.S.R. 33 STA. 740+00 TO STA. 770+00 PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

263
345



U.S.R. 33 STA. 770+00 TO STA. 782+50 PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

264
345

N

℄ RAMP "A"

4" WHITE EDGE LINE

4" YELLOW EDGE LINE

4" YELLOW EDGE LINE

4" WHITE EDGE LINE

℄ RAMP "C"

24" STOP LINE

℄ HARDIN PIKE

+22.51

+70.24

+32.14

+19.35

+32

SEE SHEET 261

MATCH LINE

SEE SHEET 262

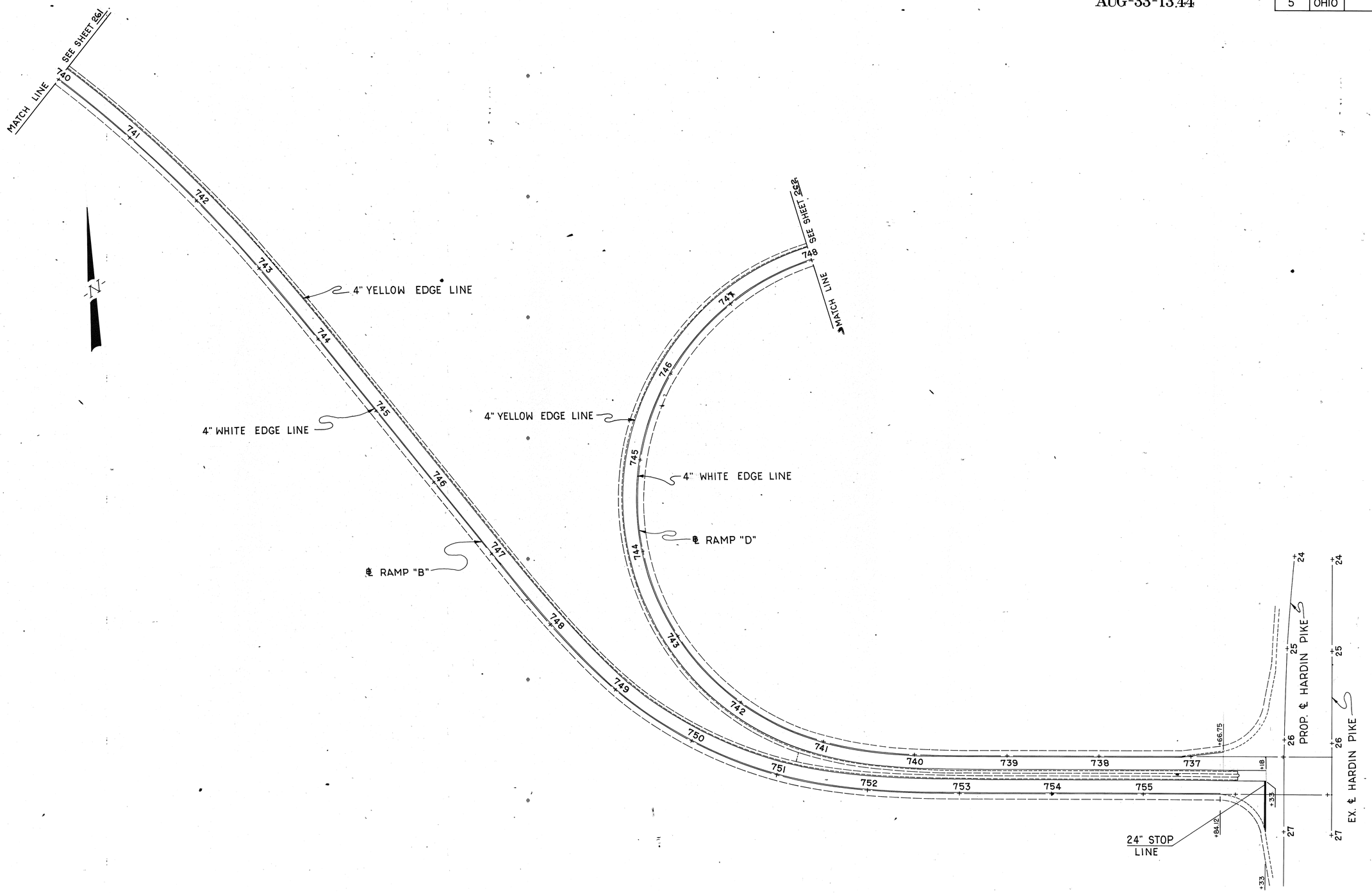
MATCH LINE

U.S.R. 33 RAMPS "A" & "C" (HARDIN PIKE) PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

265
345

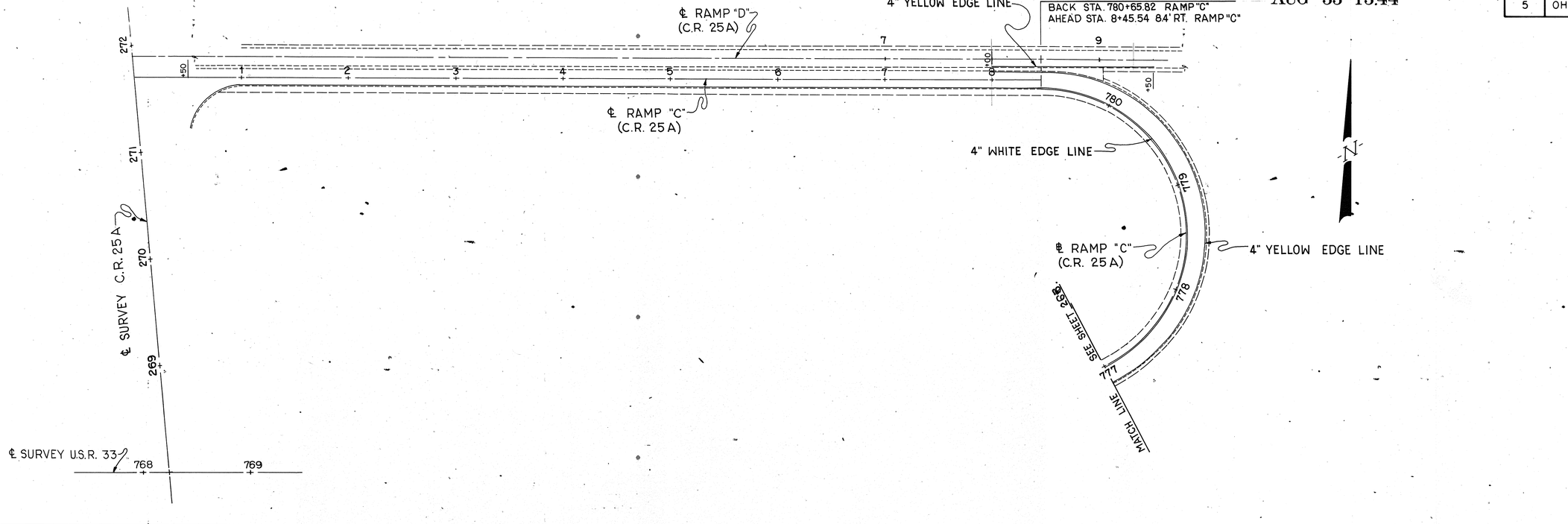


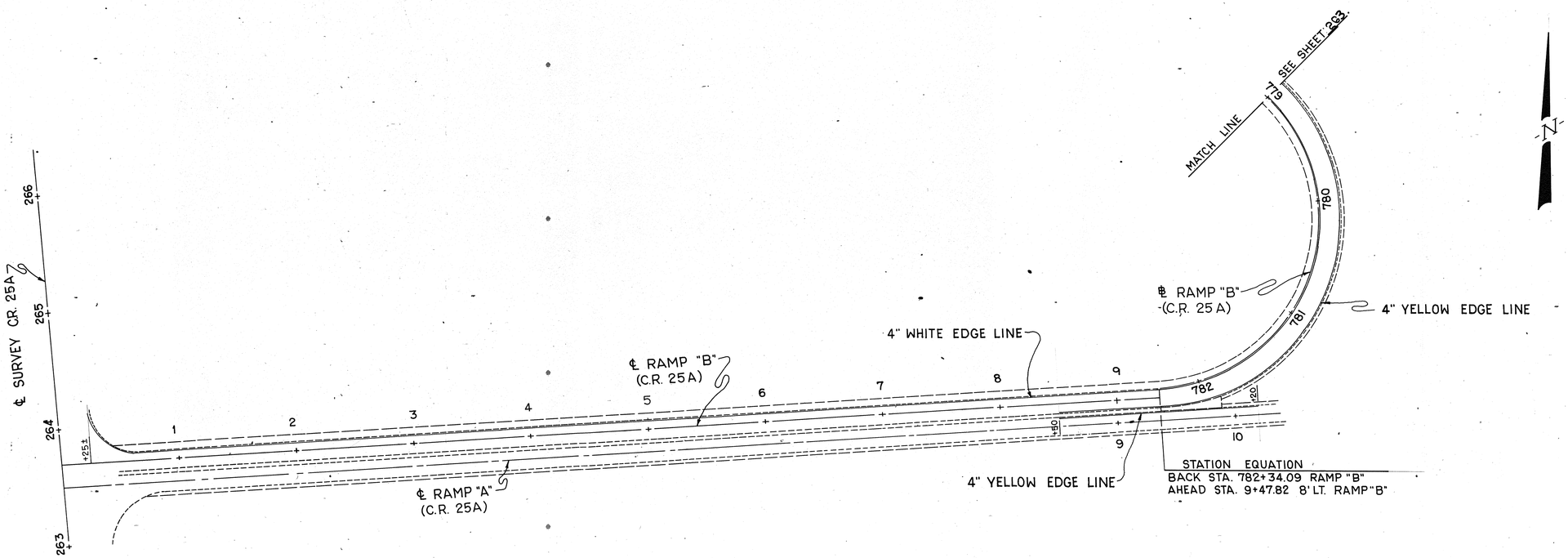
U.S.R. 33 RAMPS "B" & "D"(HARDIN PIKE) PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

266
345



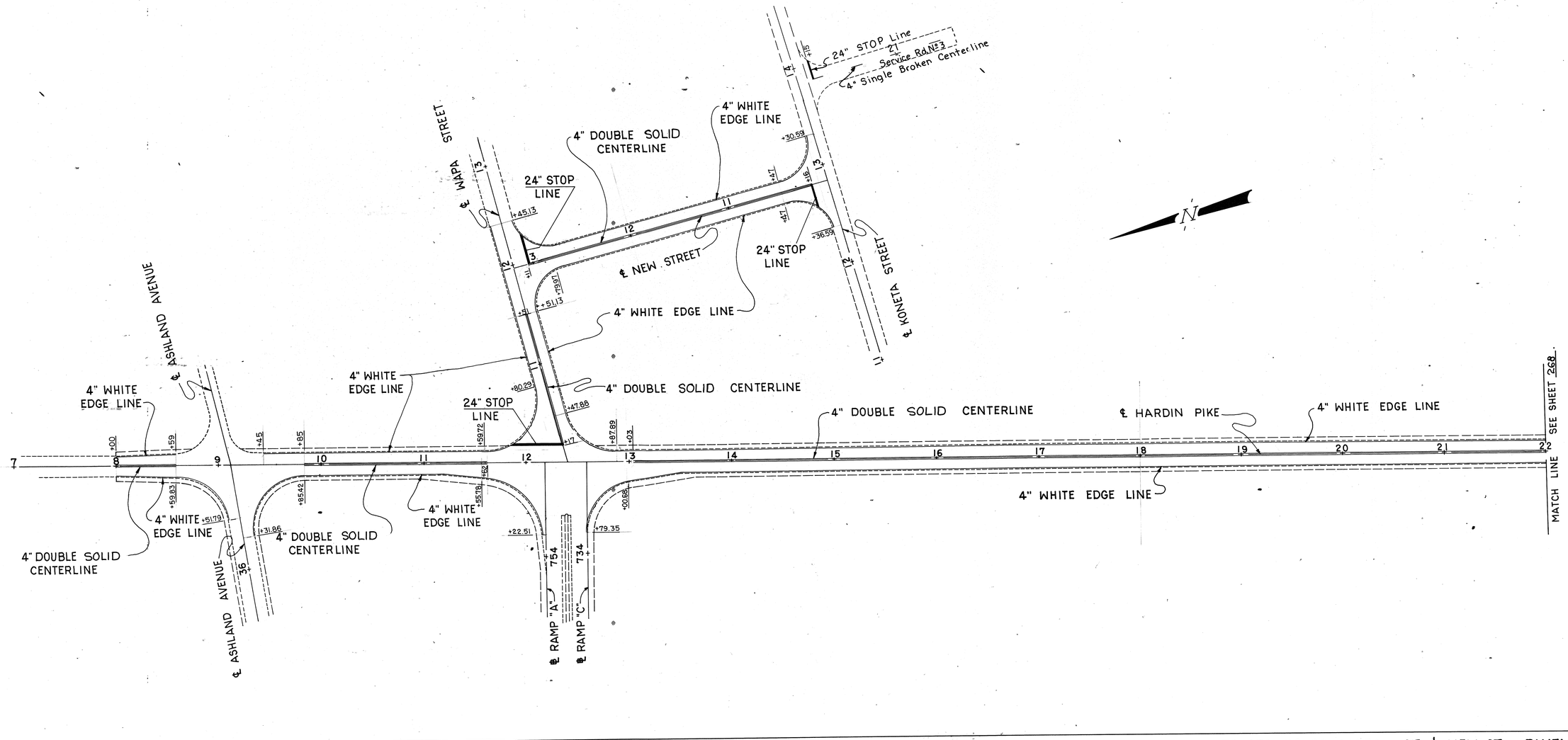


U.S.R. 33 RAMPS "B" & "C" (CR 25A) PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

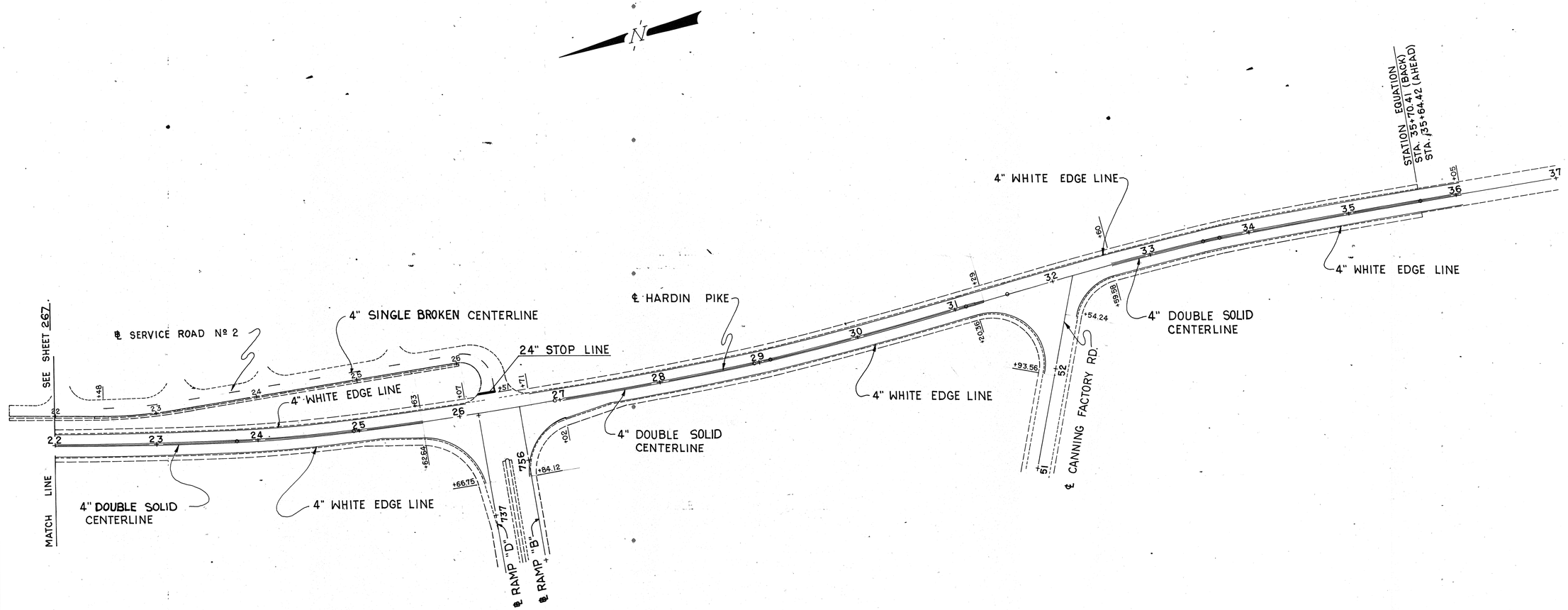
267
345



HARDIN PIKE STA. 8+00 TO STA. 22+00, WAPA ST. & NEW ST. PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO	-	

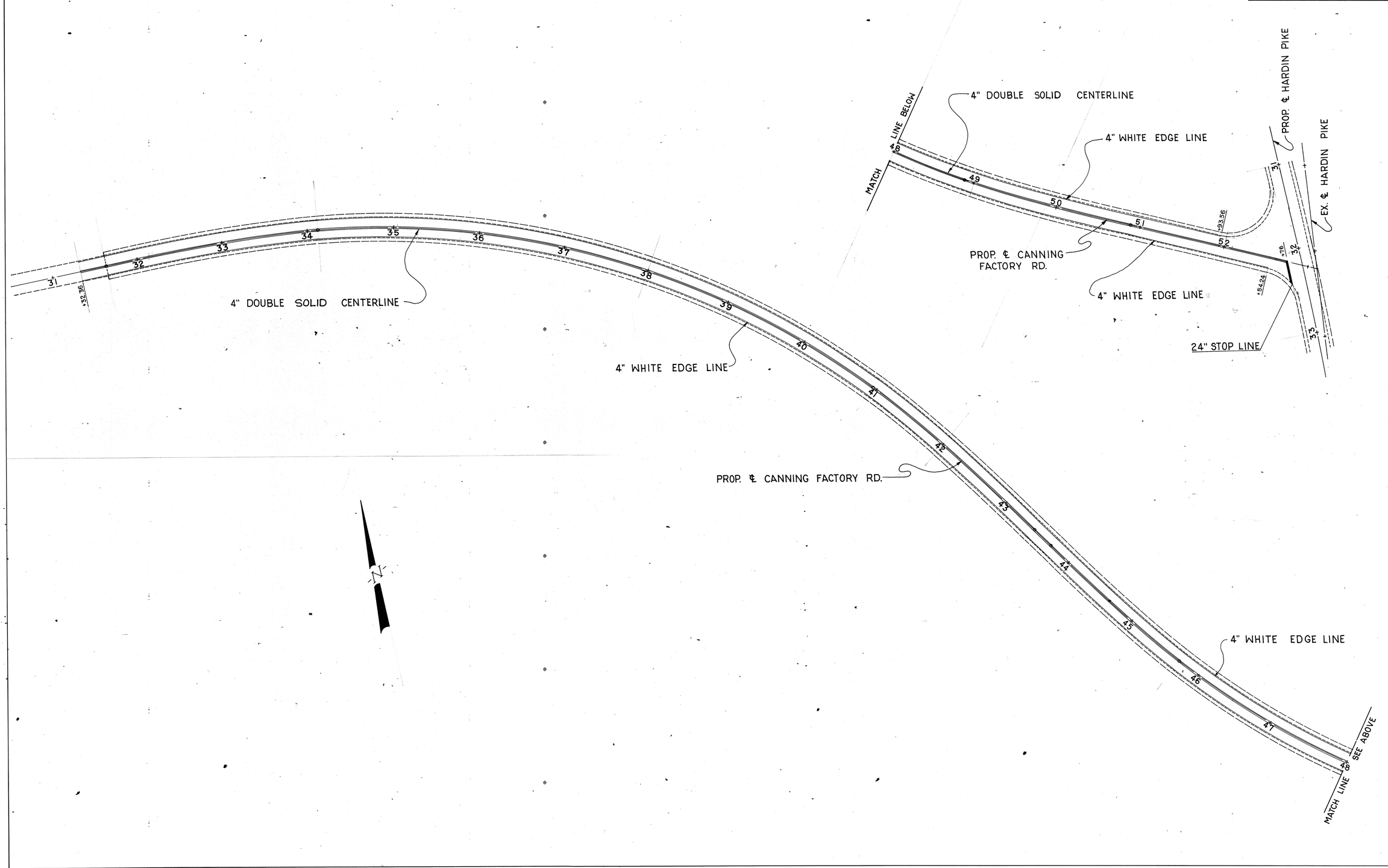


SERVICE ROAD Nº 2 ℄ HARDIN PIKE STA. 22+00 TO STA. 37+00 PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

269
345

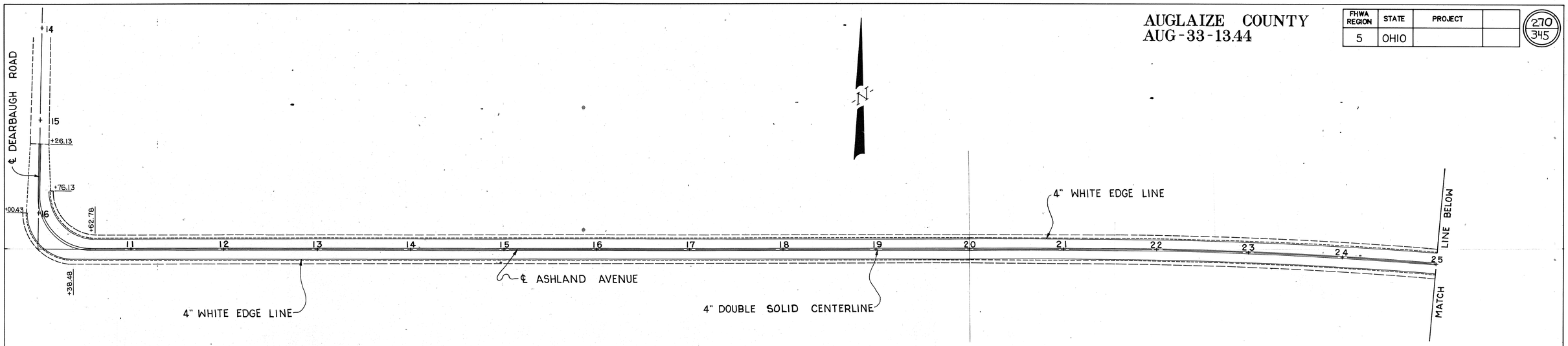


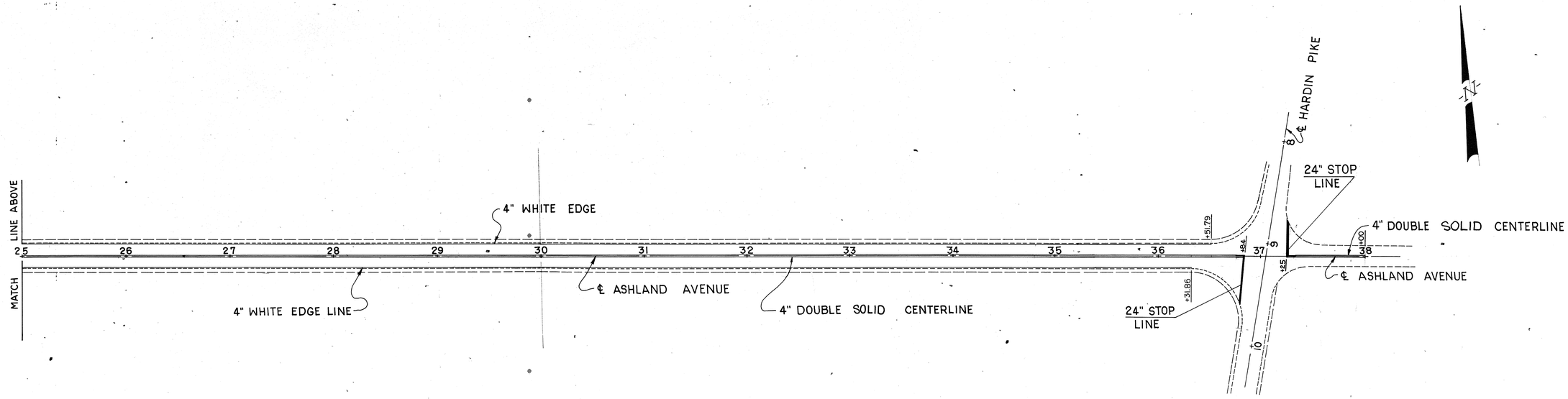
CANNING FACTORY ROAD PAVEMENT MARKING

AUGLAIZE COUNTY
AUG-33-13.44

FHWA REGION	STATE	PROJECT	
5	OHIO		

270/345





ASHLAND AVENUE PAVEMENT MARKING

FED.RD DIV.	STATE	PROJECT	
5	OHIO		

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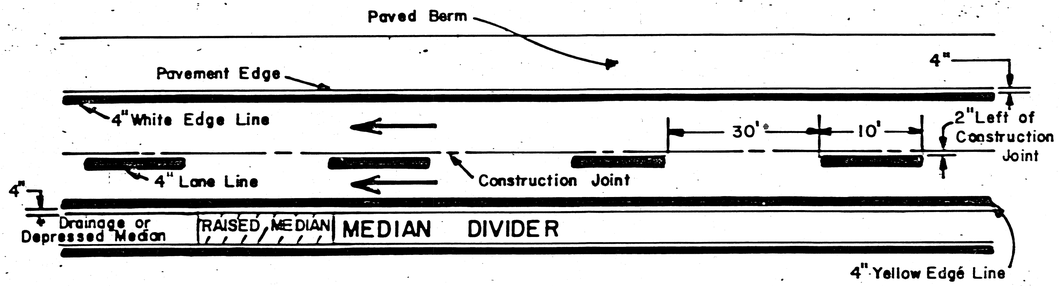
345

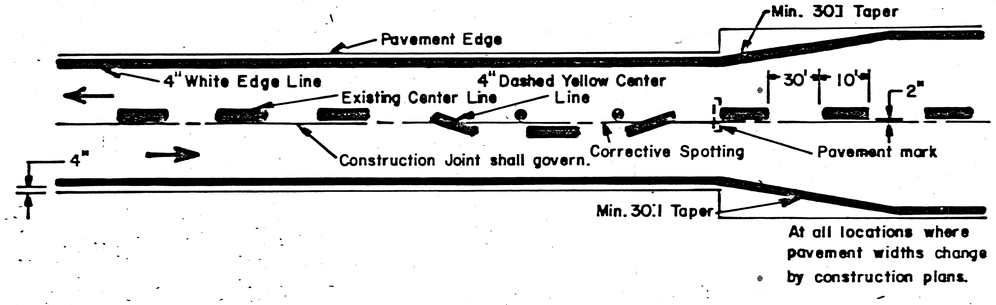
PLAN NO. AUG-33-13.44

PAVEMENT MARKING TYPICAL DETAILS

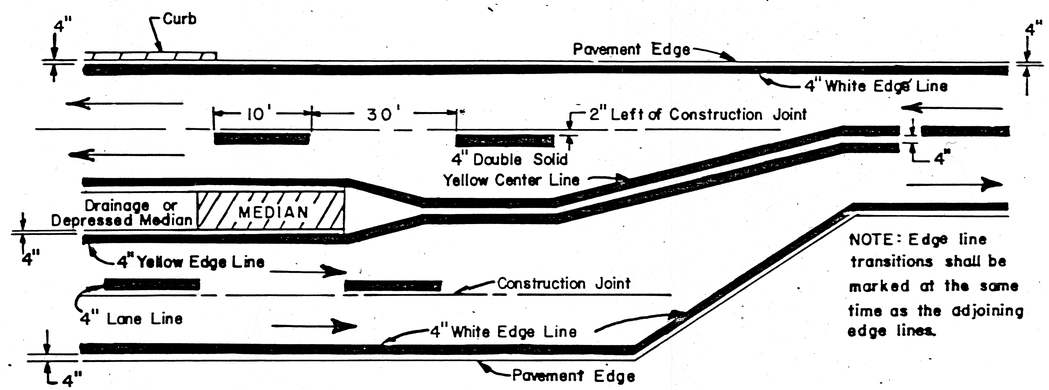
FREEWAY & EXPRESSWAY MAINLINE MARKINGS



TWO LANE MARKINGS



MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKINGS



NOTE: Edge line transitions shall be marked at the same time as the adjoining edge lines.

NOTES:

1. THE DISTANCE FROM THE PAVEMENT EDGE TO THE NEARSIDE EDGE OF THE EDGELINE MAY BE INCREASED WITH THE APPROVAL OF THE ENGINEER IN ORDER TO MAINTAIN UNIFORM LANE WIDTH.

2. SEE TC 72.20 FOR PAVEMENT ENTRANCE AND EXIT RAMP TERMINALS.

OHIO DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING TYPICAL DETAILS	DATE 11/80
J.D.L. CK C.D.R.	

12/81

FED RD DIVISION	STATE	PROJECT	
5	OHIO		

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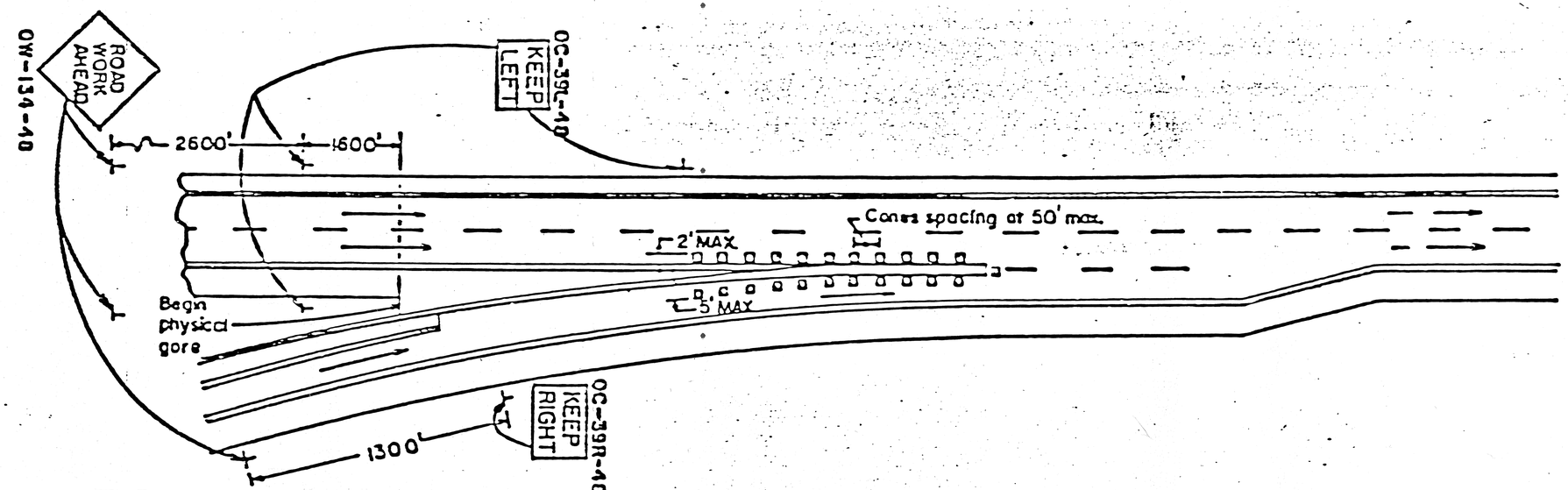
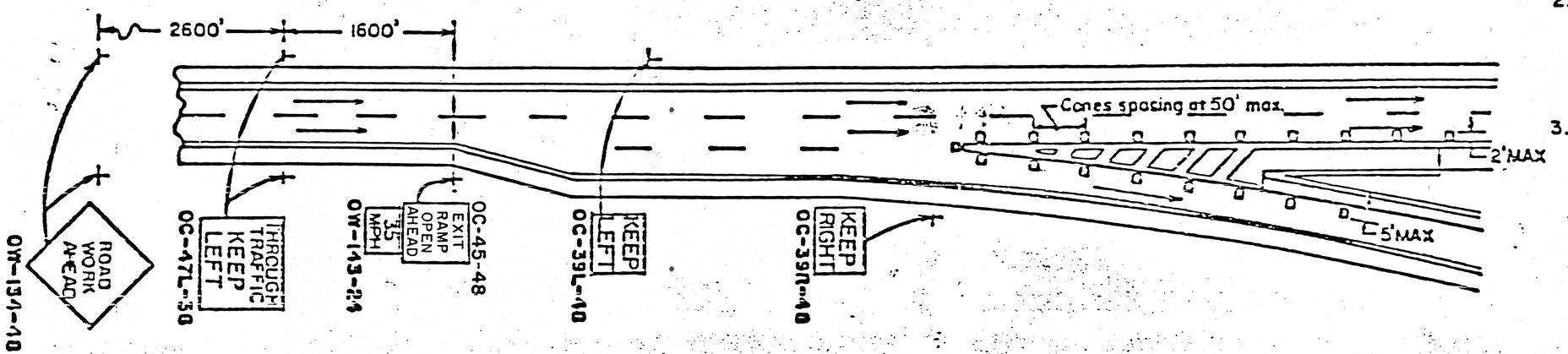
345

PLAN NO. AUG-33-13.44

ENTRANCE GORE TRAFFIC CONTROL



EXIT GORE TRAFFIC CONTROL



GENERAL NOTES

1. THE SPACING BETWEEN SIGNS SHOWN ON THIS DETAIL MAY BE ADJUSTED (INCREASED OR DECREASED) WITH THE APPROVAL OF THE ENGINEER TO POSITION THEM NO CLOSER THAN 200 FEET TO EXISTING SIGNS WHICH MUST REMAIN IN USE.
2. AT AN ISOLATED ENTRANCE GORE AREA, A FLASHING ARROW PANEL CONFORMING TO THE REQUIREMENTS OF TC 35.10 MAY BE SUBSTITUTED FOR THE ADVANCE OC-39-48 SIGNS.
3. AT AN INTERCHANGE WHERE BOTH EXITS AND ENTRANCES ARE MARKED WITH TRAFFIC CONTROL IN PLACE AT THE SAME TIME, THE OW-134-48 SIGN ON THE ENTRANCE RAMP IS NOT REQUIRED.

DAYLIGHT HOURS ONLY

OHIO DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL FOR WORK IN GORE AREAS

DATE

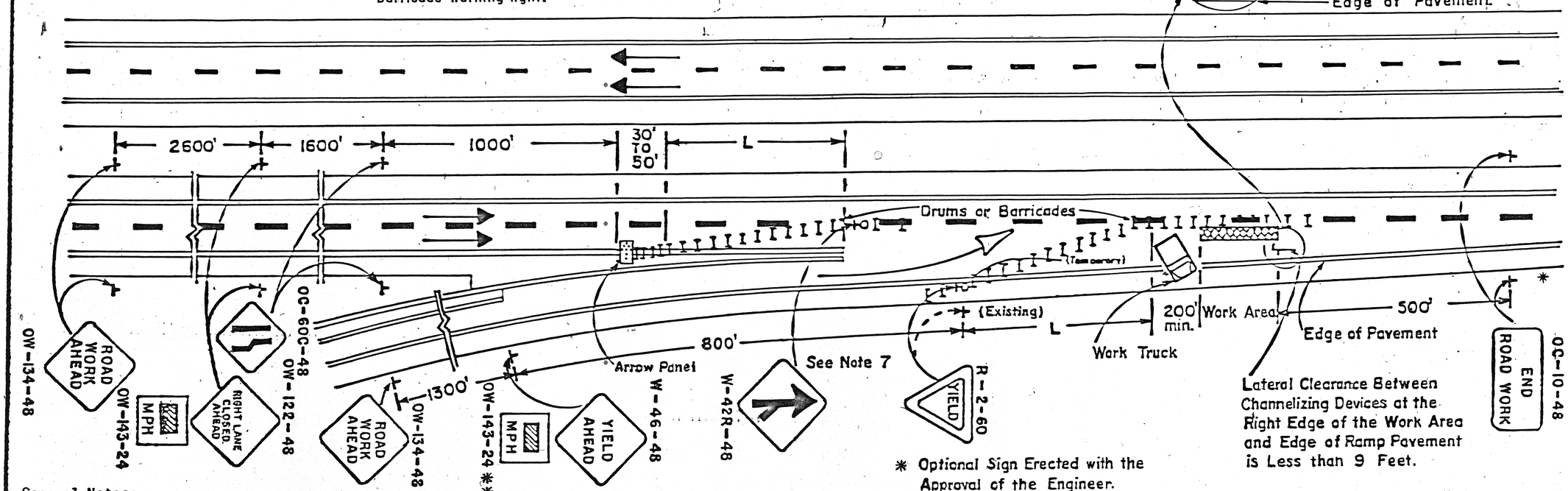
DR JDE CK CDR

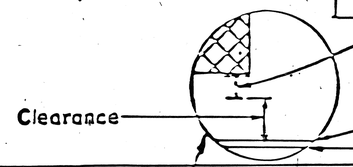
PLAN NO. AUG-33-13.44	FED. RD. DIVISION	STATE	PROJECT	
	5	OHIO		

~~10. Cones may be substituted for drums or barricades at night for short-term lane closures. Cones used at night shall be reflectorized or equipped with lighting devices for maximum visibility.~~

11. For night closures, each of the first two signs in the sequence (ROAD WORK AHEAD and RIGHT LANE CLOSED AHEAD) is required to be supplemented by a Type A flashing barricade warning light.

12. Work vehicles shall be equipped with a 360° rotating or flashing amber beacon clearly visible a minimum of 1/4 mile.





Lateral Clearance Between Channelizing Devices at the Right Edge of the Work Area and Edge of Ramp Pavement is Less than 9 Feet.

* Optional Sign Erected with the Approval of the Engineer.

General Notes

1. This work area traffic control application shall be employed when the lateral clearance between channelizing devices at the right edge of the work area and the edge of the ramp pavement is less than 9 feet. When the clearance is more than 9 feet, the traffic control on "Lane Closure at Entrance Ramp: Plan A" should be used, or the ramp should be closed. When the ramp is closed, appropriate detour signs shall be provided.

2. Thirteen (13) drums or barricades shall be used to form the lane transition taper in advance of the work area. Five (5) channelizing devices shall be used to form the taper on the shoulder. Drums or barricades shall be spaced at 50 foot centers. Cones may be substituted for barricades or drums for the lane closures during daylight hours.

3. Ramp signs shall be dual mounted on multi-lane ramps. When the ramp is not long enough to allow placement as specified above, the signs may be spaced proportionately within the space available as determined by the Engineer (a 200' minimum spacing must be maintained).

4. The flashing arrow panel shall be in accordance with TC-35.10.

5. The work truck shown at the beginning of the work area shall be in place and unoccupied whenever men are working within the work area. This truck shall be moved from the pavement whenever workmen are not in the work area. Other protective devices may be used in lieu of work truck shown when approved by the Engineer.

6. Type C steady burning barricade warning lights shall be erected on all drums or barricades for night lane closures. ~~Maximum spacing shall be 50' center to center in advance of the work area and 200' center to center within the limits of the work area.~~

7. It may be necessary to move the location of an existing Yield condition In these cases, the permanent R-2 sign installation shall be covered and the temporary installation shall be mounted upon a drive post which shall be banded to a drum with stainless steel strapping material or other techniques subject to the approval of the Engineer.

8. Taper Formulae:

   $L = S \times W$ for Speeds of 45 or more.
   $L = WS^2/60$ for Speeds 40 or less.

   Where:

   L = Minimum length of taper.
   S = Numerical value of posted speed limit prior to work or 85 percentile speed.
   W = Width of offset.

9. THE SPACINGS BETWEEN CONSTRUCTION AND MAINTENANCE SIGNS SHOWN ON THIS DETAIL MAY REQUIRE ADJUSTMENTS (INCREASES OR DECREASES) TO ASSURE THAT THEY ARE POSITIONED NO CLOSER THAN 200 FEET TO EXISTING SIGNS AS DETERMINED BY THE ENGINEER.

OHIO DEPARTMENT OF TRANSPORTATION

LANE CLOSURE AT ENTRANCE RAMP PLAN B	DATE 3-3-79

TC-9.11

7K-6

Rev. EEF 9/84

FHWA REGION	STATE	PROJECT	
5	OHIO		

275
345

AUGLAIZE COUNTY
AUG-33-13.44

PEK COMPANY
EX. L.A.
R/W MONUMENT
FITCHUE WEBB
EX. L.A.
R/W MONUMENT
EX. L.A.
℄ Ramp C
℄ SURVEY USR 33
To St. Marys
To I-75
To I-75
@ Sta. 757+15.07
℄ Survey US33, Sta. 757+11.73
℄ Survey US33 Sta. 756+15.07
61' Lt.
℄ Survey HARDIN PIKE (Tangent)
℄ Survey US33, Sta. 754+61.73
S 15°-05'-22" W
℄ Survey HARDIN PIKE
Reinforced Sod
Type 6 Curb
Type 2 Curb
End Parapet Sta. 753+13.33
End Parapet Sta. 753+04.71
End Parapet Sta. 754+81.43
End Parapet Sta. 754+69.82'
P.C. ℄ Ramp C, Sta. 753+20.00
℄ US33 Sta. 753+20.00, 61' Lt.
(Curve C-III) Dc=4°
8'-0" SHOULDER
4'-0" SHOULDER
4'-0" SHOULDER
8'-0" SHOULDER
VARIES
36'-0"
25'-0"
3'-0" Typ.
2:1
2:1
2:1
2:1
2:1
SHLDR
PAVEMENT
SHLDR
Pl. A Min Ver Cl.
1'-6" Typ.
52'-0" f/f Curb Bridge Roadway Width (Radial)
55'-0" o/o Deck (Radial)
25'-0" Appr. Slab (Typ.)
P.G. (W.B. Lanes)
PAVEMENT
36' Pvmt
8'
Shld Width Varies
10'
2.4' Pvmt
2.5'
Berm
Berm
Skew 10°-43'-40" Lt. Fwd. (Typ)
10' Min 11.02 Act. Horz. Clr. (Typ)
S85°-38'-18"E
40' c/c
50' c/c
40' c/c
Dc=1°-58'-28" (Curve C-I)
Ref. Line (Tangent to ℄ Survey US33 @ Sta. 753+83.52)
Measured Along Ref. Line
STA. 20+00.00 ℄ EXISTING HARDIN PIKE
STA. 753+83.52 ℄ SURVEY USR 33
BEGIN APPR. SLAB STA. 754+50.96
751
752
753
754
755
(S-2)
756
757
900
901
902
903
904
905
906
908
910
912
914

HORIZONTAL CURVE DATA

C-I CURVE DATA

P.I. = 750+27.52	Dc=1°-58'-28.1"
Δ =22°-22'-43"	R=2901.83
LC=879.99	Lc=883.40
T =445.14	

C-II CURVE DATA

P.I. =	EX = 13.54
Δ =15°-46'-07"	Dc=4°-00'-00"
LC= 392.97	R = 1432.39
T =198.36	Lc= 394.22

S-2 SPIRAL DATA

Ls= 250.00	xc=249.95
Lc=249.98	L.T.=166.68
D=1°-58'-28.1"	S.T.=83.35
yc=3.59'	θs=02°-28'-05"

BACK TANGENT
FORWARD TANGENT
69.04'
75.23'
100.63'
35.0'
35.0'
27.8'
1.7'
1.6'
1.0'
(** ALL REF. POINTS ARE IP'S WITH ODOT CAPS)
P.I. STA. 750+27.52

PLAN

T.S. 21+79.15

C.S.

124.61'
134.10'
97.00'
45°00'
175.35'
175.84'
1.5'
1.7'
2.4'
(** ALL REF. POINTS ARE IP'S WITH ODOT CAPS)
S.T. STA. 757+11.75

VERTICAL CURVE DATA

STA. 18+00
EL. 904.05
-0.11%
TANGENT
STA. 21+00
EL. 903.72
HARDIN PIKE

PVI.
STA. 755+00.00
El. 927.57
+0.69 %
+2.017 %
L=500'
VERTICAL CURVE U.S.33

CURRENT A.D.T. (1988) 6690
DESIGN YEAR A.D.T. (2008) 9360
DESIGN TRUCK TRAFFIC ..... 22 %

BM # 150 BOAT SPIKE IN 34" HICKORY
STA. 748+87.5 90.5' RT.
ELEV. 901.04

NOTE:
1) EARTHWORK LIMITS SHOWN ARE SCHEMATIC. ACTUAL SLOPES TO CONFORM TO ROADWAY PLAN CROSS SECTIONS.

N
To St. Marys
RAMP C
HARDIN PIKE
To I-75
RAMP D
U.S. 33
BR. AUG-33-1480 L(WB)
LOCATION SKETCH

12'-0" PAVED EDGE PAVT
4'-0" GRADED BERM
4'-0" SHOULDER
8'-0"
1/4"/FT.
3/4"/FT.
1"/FT.
4:1
2:1
1'-6"
2'-0"
8' ROUNDING
℄ Hardin Pike (SYM.)
TYPICAL SECTION HARDIN PIKE
EXIST. RT. EDGE W.B. PAVEMENT

PROPOSED PROFILE GRADE LINE (TYP.)
905.73 919.50 751
+50~ 905.82 920.51
906.02 921.52 752
+50~ 906.30 922.53
+75~ 923.03
906.81 923.51 753
+25~ 923.97
+50~ 907.69 924.41
+75~ 924.84
908.10 925.26 754
+25~ 925.65
+50~ 908.99 926.03
+75~ 926.40
910.07 926.74 755
+25~ 927.07
+50~ 911.22 927.38
+75~ 927.68
912.45 927.96 756
940
920
900
880
860

Sta. 753+16.37
Sta. 754+50.96
MEASURED ALONG REF. LINE
BRIDGE LIMITS = 134.59'
Measured along ℄ Survey
40'-0" C/C
50'-0" C/C BRGS
40'-0" C/C
℄ Bearing Rear Abutment
℄ Bearing Forward Abutment
END APPROACH SLAB
℄ PIER 1
℄ PIER 2
BEGIN APPROACH SLAB
PROFILE GRADE
W24 Beams
Exp.
Exp.
Fix
El. 917.0 T/S
El. 910.75
T/S El. 919.30
El. 913.25
2:1 MAX. (NORMAL)
2:1 MAX. (NORMAL)
Point "A"
15'-0" MIN. CL. 19' Act.
CRUSHED AGGREGATE SLOPE PROTECTION (TYP)
El. 897.25
P.G. El. 903.91 Sta. 19+25
El. 897.25
12" Ø C.I.P. Concrete Piles (Typ)
PROPOSED ℄ HARDIN PIKE
12" Ø C.I.P. Concrete Piles (Typ.)

ELEVATION - PROFILE GRADE LINE US 33

FOUNDATIONS:
ABUTMENTS: 12" ϕ C.I.P. REINFORCED PILES.
Estimated Pay Lengths: Rear Abutment ~ 35'
Forward Abutment ~ 50'
PIERS: 12" ϕ C.I.P. REINFORCED PILES.
ESTIMATED PAY LENGTH = 30'

PROPOSED STRUCTURE

TYPE: 3 SPAN CONTINUOUS COMPOSITE STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE UNITS.
SPAN: 40'-50'-40' C/C BRGS (MEASURED ALONG REF. LINE)
ROADWAY WIDTH: 52' F/F OF BARRIER PARAPET CURB (RADIAL)
LOAD CAPACITY: HS-20-44, CASE II & ALT. MILITARY LOADING.
SKEW: 10°-43'-40" LT. FWD. (FROM NORMAL TO REFERENCE LINE)
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: 1°-58'-28.1 CURVE LEFT
SUPERELEVATION: 0.052 FT/FT

PARSONS BRINCKERHOFF OHIO INC. 1/13
COLUMBUS, OHIO

SITE PLAN

BRIDGE NO: AUG-33-1480 L(W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY STA. 753+83.52

EXISTING TOPO		PROPOSED WORK P.B. OHIO, INC.			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Dist. 7	Dist. 7	JKS	DW/MS	DW/RF	JKO

SUBMITTED TO DIST. 7 7/14/89

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

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345

AUGLAIZE COUNTY
AUG-33-13.44

REFERENCES:

STANDARD DRAWINGS:

BRIDGE RAILING	BR-1	DATED 5-29-79
SUPERSTRUCTURE DETAILS	SD-1-69(SHTS.1,2,3)	DATED 6-12-69
FIXED BEARINGS	FB-1-82	DATED 5-10-82
ROCKERS & BOLSTERS	RB-1-55	DATED (REV.) 2-2-59
APPROACH SLAB	AS-1-81(SHTS.1,2,3)	DATED 11-27-81
EXPANSION JOINTS	EXJ-4-87	DATED 1-5-89

SUPPLEMENTAL SPECIFICATIONS:

NO. 802 DATED 5-4-88
NO. 836 DATED 11-12-85

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE 1984, 1985, 1986, 1987 INTERIM SPECIFICATIONS & THE 1982 OHIO "SUPPLEMENT" TO AASHTO SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING	HS 20-44 CASE II AND ALTERNATE MILITARY LOADING
CONCRETE CLASS S, SUPERSTRUCTURE	COMPRESSIVE STRENGTH f'c = 4500 P.S.I.
CONCRETE CLASS C, SUBSTRUCTURE	COMPRESSIVE STRENGTH f'c = 4000 P.S.I.
STRUCTURAL STEEL	ASTM A588 UNIT STRESS = 27,000 P.S.I. ASTM A36 UNIT STRESS = 20,000 P.S.I.
REINFORCING STEEL	ASTM A615, A616, OR A617, GRADE 60 MIN. YIELD STRENGTH = 60,000 P.S.I.
SPIRAL REIFORCEMENT MAY BE PLAIN BARS DECK PROTECTION METHOD	ASTM A82 OR A615 EPOXY COATED REINFORCING STEEL, TOP & BOTTOM MATS.
MONOLITHIC WEARING SURFACE	IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PILES:

PILE DESIGN LOADS: THE DESIGN LOAD FOR THE ABUTMENT PILES IS 49 TONS PER PILE AND THE DESIGN LOAD FOR THE PIER PILES IS 46 TONS PER PILE. ESTIMATED AVERAGE PAY LENGTHS OF 12" Ø CAST-IN-PLACE, REINFORCED CONCRETE PILES ARE: REAR ABUTMENT 35', FORWARD ABUTMENT 50' AND PIERS 30'.

12 INCH PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATIONS FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCE CONCRETE PILES PER 507.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATES ENERGY RATING OF NOT LESS THAN 14,500 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM CMS, ITEM 108.05, WHICH STATES THAT CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT'S MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

"CONSTRUCTION CONSTRAINTS: PRIOR TO DRIVING PILES AT THE REAR AND FORWARD ABUTMENTS, THE SPILL-THRU SLOPE EMBANKMENTS AT THE REAR AND FORWARD ABUTMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUB-GRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. THE EXCAVATION FOR THE ABUTMENT & PIER FOOTINGS & INSTATION OF THE PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND HAS UNDERGONE A WAITING PERIOD OF 15 DAYS."

"ITEM 507 12 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN: THE RESPONSIBILITY OF CHOOSING AND PROVIDING A SATISFACTORY PILE WALL THICKNESS FOR THIS PROJECT SHALL BE BORNE BY THE CONTRACTOR EXCEPT THAT THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.200 INCHES. IF A PILE WALL THICKNESS GREATER THAN 0.200 INCHES IS NECESSARY TO RESIST THE PILE INSTALLATION DRIVING STRESS, THE CONTRACTOR SHALL MAKE THIS DETERMINATION AND SHALL FURNISH A PILE WITH AN ACCEPTABLE WALL THICKNESS. MONOTUBE PILES ARE NOT REQUIRED TO COMPLY WITH THE ABOVE SPECIFIED MINIMUM PILE WALL THICKNESS. IF MONOTUBE PILES ARE USED, THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.150 INCHES AND THE PILES SHALL SATISFY ALL THE REQUIREMENTS OF 507."

MAINTENANCE OF TRAFFIC: FOR MAINTENCE OF TRAFFIC AND SCHEDULE OF OPERATIONS, SEE ROADWAY PLAN SHEETS NO. 22/345 THRU 29C/345

WATERPROOF MEMBRANE: CURING AS PER ITEM 511.14, METHOD B, SHALL BE APPLIED ON PARAPET, BACKWALLS AND ABUTMENT SEALS.

UTILITY LINES: ALL EXPENCE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES, SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNER ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM. UTILITY OWNERS ARE LISTED IN THE GENERAL NOTES ON SHEET NO.

ESTIMATED QUANTITIES

ESTIMATED BY: TDW
CHECKED BY JKS DATE: 10-6-88

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	GEN.
	503	319	CU. YD.	UNCLASSIFIED EXCAVATION			319	
	505	LUMP	SUM	PILE DRIVING EQUIPMENT MOBILIZATION				LUMP
	506	LUMP	SUM	STATIC LOAD TEST				LUMP
	507	2425	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN		1200	1225	
	509	20,467	LB.	REINFORCING STEEL, GRADE 60		12,666	7,801	
	509	79,522	LB.	EPOXY COATED REINFORCING STEEL, GRADE 60	54,858	6,285	18,379	
Δ	511	221	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE	221			
	511	76	CU. YD.	CLASS C CONCRETE, PIER CAP & COLUMNS			76	
	511	134	CU. YD.	CLASS C CONCRETE, ABUTMENTS ABOVE FOOTINGS		134		
	511	168	CU. YD.	CLASS C CONCRETE, FOOTINGS		96	72	
	513	96,456	LB.	STRUCTURAL STEEL (AISC CATEGORY I) (ASTM A588)	96,456			
	513	2,112	EACH	WELDED STUD SHEAR CONNECTORS	2,112			
†	514	LUMP	SUM	PARTIAL PAINTING OF A588 STEEL, SYSTEM (A)	LUMP			
✳	516	112	LIN. FT.	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEALS (3")	112			
	516	80	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER		80		
	518	117	LIN. FT.	6" PERFORATED HELICAL CORRUGATED STEEL PIPE, 707.01		117		
	518	80	LIN. FT.	6" NON-PERFORATED HELICAL CORRUGATED STEEL PIPE INCLUDING SPECIALS, 707.01		80		
	518	59	CU. YD.	POROUS BACKFILL, AS PER PLAN		59		
	518	4	EACH	SCUPPERS, INCLUDING SUPPORTS	4			
	523	3	HOURS	DYNAMIC LOAD TESTS				3
	601	518	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION		518		
	802							
Ø	SPECIAL	700	SQ. YD.	SEALING OF CONCRETE SURFACES, EPOXY, (SEE PROPOSAL NOTE)	283	130	287	

Ø ITEM SPECIAL: SEALING OF CONCRETE SURFACES

A CONCRETE SEALER, AN EPOXY TYPE SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES: PARAPETS AND CURBS, SEE SHEET 8/13; BRIDGE SEATS, BACKWALLS, FRONT FACES OF ABUTMENT BREASTWALLS ONE FOOT DOWN FROM THE LEVEL OF BRIDGE SEAT AT BRIDGE ABUTMENTS. TOTAL SURFACE OF PIERS ABOVE GROUND LINE TO BE COVERED WITH NON-EPOXY SEALER. SEE PROPOSAL NOTE FOR SURFACE PREPARATION REQUIREMENTS AND APPLICATION PROCEDURES. SUBSTRUCTURE UNITS SHALL BE SEALED PRIOR TO ERECTION STRUCTURAL STEEL.

† FOR PARTIAL PAINTING OF A588 STEEL SEE SHEET 9/13.

✳ FOR SPECIAL NOTES REGARDING ITEM 516, STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC STRIP SEALS, SEE SHEET 11/13.

Δ Item 511, Class S Concrete, Superstructure using shrinkage compensating cement. (See Proposal Note).

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 2 13

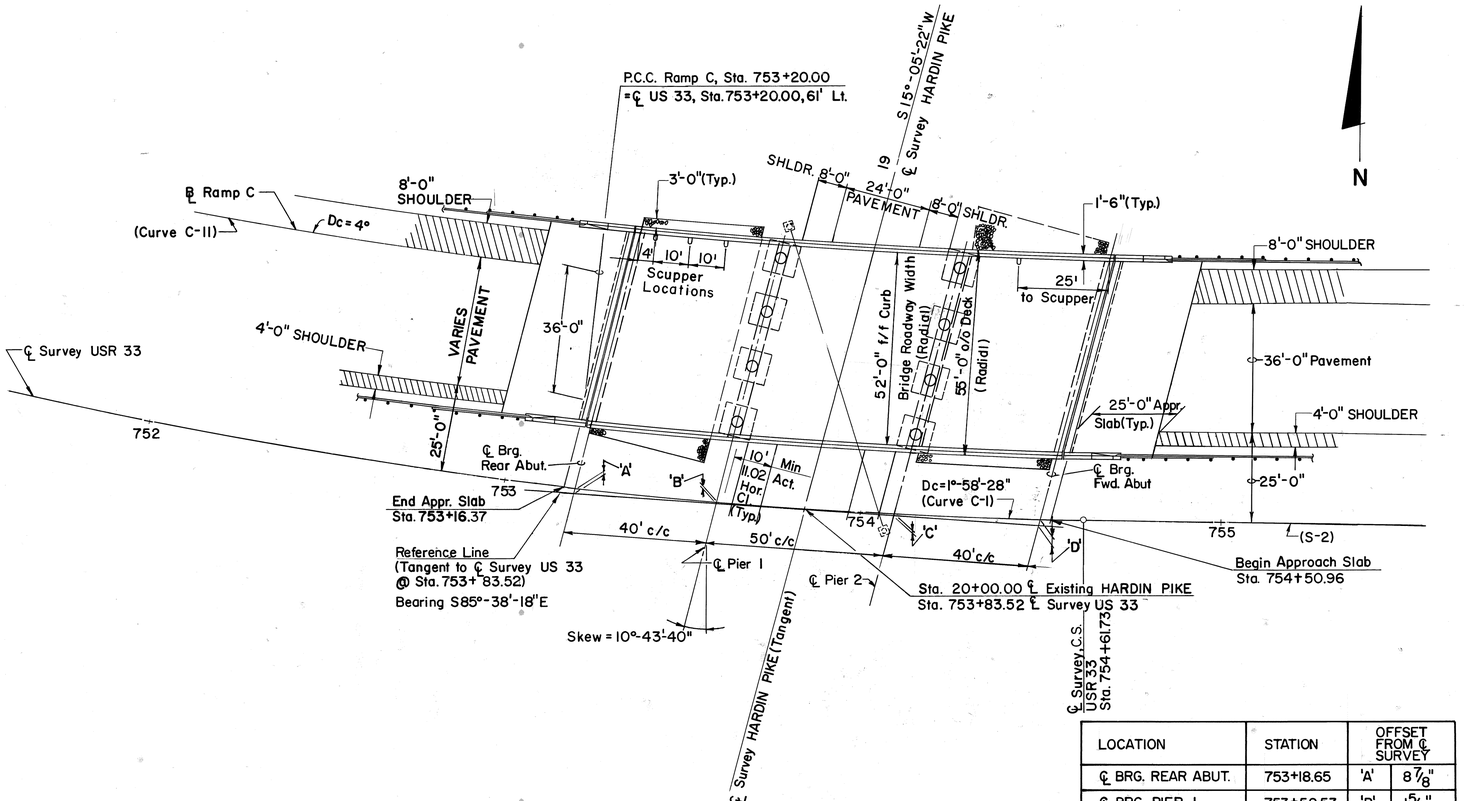
GENERAL NOTES AND ESTIMATED QUANTITIES
BRIDGE NO: AUG-33-1480L (W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

DESIGNED	DETAILED	CHECKED	QUANTITIES	REVIEWED
TW	MS		JKS	JKS

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

277
345

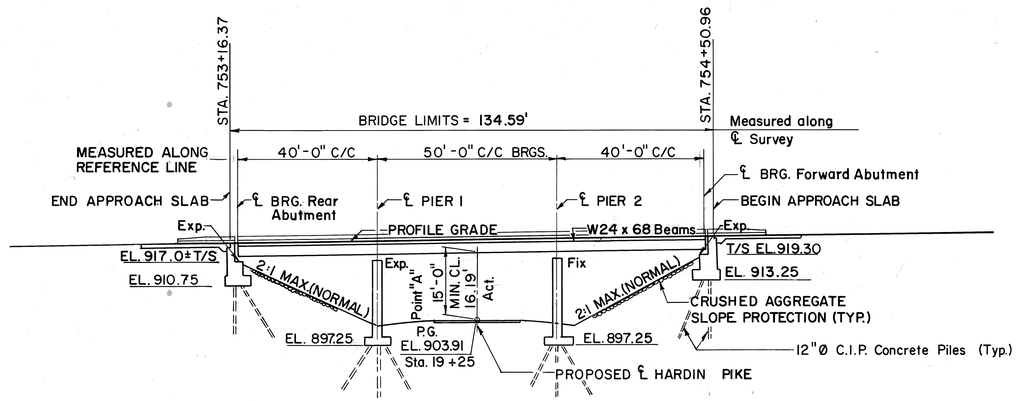
AUGLAIZE COUNTY
AUG-33-13.44



LOCATION	STATION	OFFSET FROM ℄ SURVEY	
℄ BRG. REAR ABUT.	753+18.65	'A'	8 7/8"
℄ BRG. PIER 1	753+58.53	'B'	15/16"
℄ BRG. PIER 2	754+08.55	'C'	15/16"
℄ BRG. FWD. ABUT.	754+48.67	'D'	8 15/16"

NOTE: ALL OFFSETS MEASURED ALONG SKEW

PLAN



ELEVATION

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
3/13

GENERAL PLAN & ELEVATION

BRIDGE NO. AUG-33-1480 L(W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

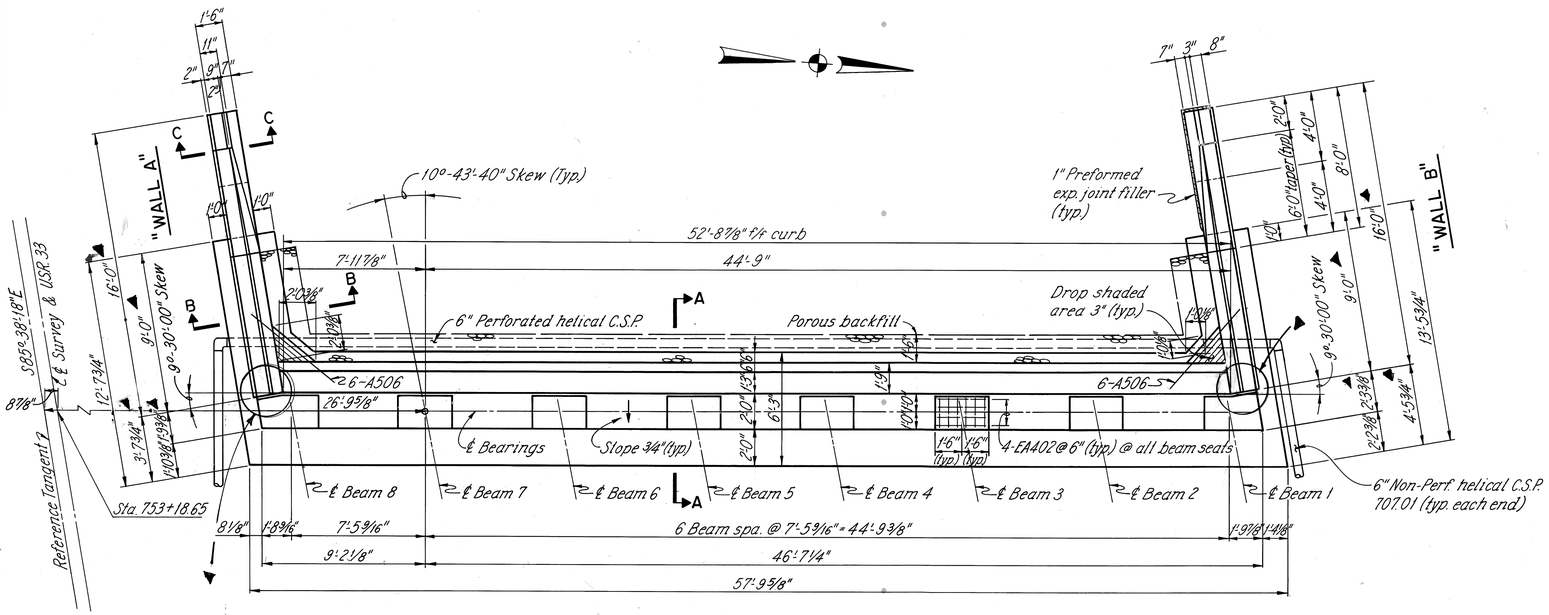
Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
JKS		MDS	MJM	JKS		

A420246

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

278 / 345

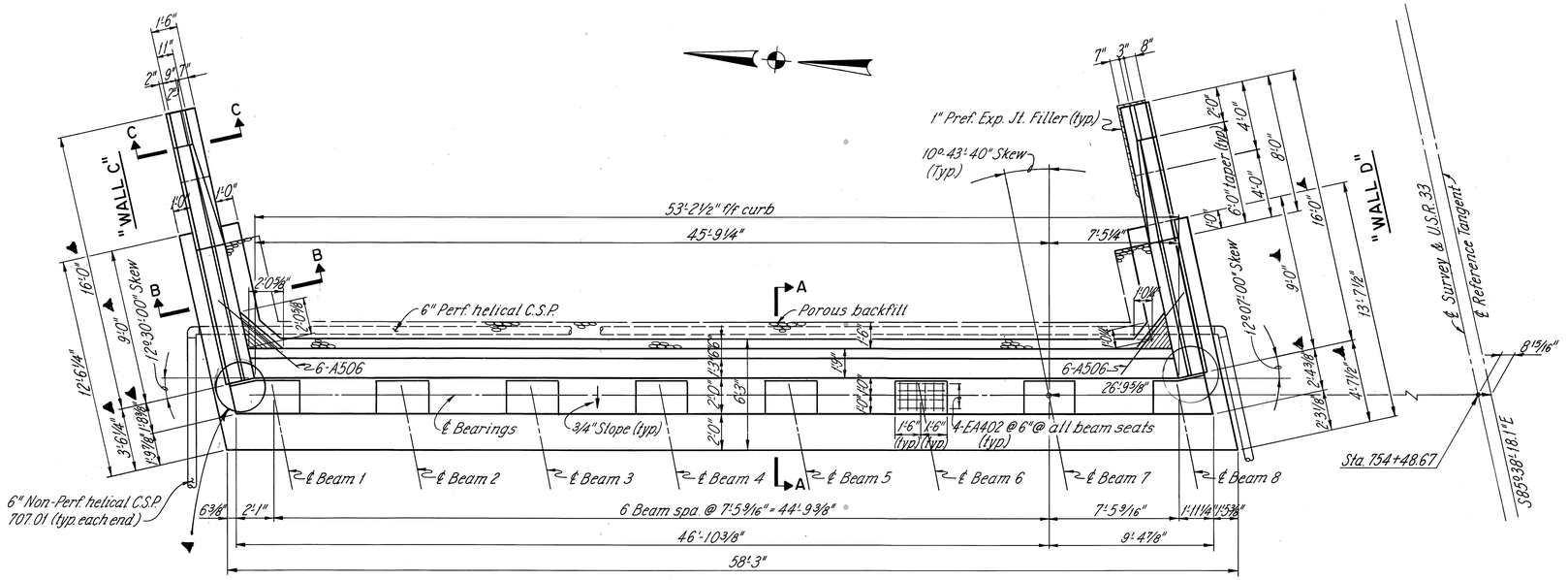
AUGLAIZE COUNTY
AUG-33-13.44


1'-6"
11"
9"
7"
2"
"WALL A"
"WALL B"
C
B
A
10°-43'-40" Skew (Typ)
52'-8 7/8" f/f curb
44'-9"
7'-11 7/8"
1" Preformed exp. joint filler (typ.)
Drop shaded area 3" (typ.)
6" Perforated helical C.S.P.
Porous backfill
6-A506
6-A506-S
26'-9 5/8"
℄ Bearings
Slope 3/4"(typ)
4-EA402@6" (typ.) @ all beam seals
1'-6" (typ.)
1'-6" (typ.)
6" Non-Perf. helical C.S.P. 707.01 (typ. each end)
℄ Beam 8
℄ Beam 7
℄ Beam 6
℄ Beam 5
℄ Beam 4
℄ Beam 3
℄ Beam 2
℄ Beam 1
6 Beam spa. @ 7'-5 5/16" = 44'-9 3/8"
46'-7 1/4"
57'-9 5/8"
1'-9 7/8" (14 1/8")
8 1/8"
1'-8 3/16"
7'-5 5/16"
9'-2 1/8"
S 85° 38' 18" E
℄ Survey & USR 33
Reference Tangent 12
Sta. 753+18.65
8 7/8"
16'-0"
9'-0"
9°-30'-00" Skew
3'-7 3/4"
12'-7 3/4"
2'-0 3/8"
2'-0 3/8"
2'-0"
4'-0"
8'-0"
16'-0"
9°-30'-00" Skew
9'-0"
4'-5 3/4"
13'-5 3/4"
2'-3 3/8"
2'-3 3/8"
1'-8"
1'-3"
1'-9"
1'-0"
1'-6"
1'-3"
2'-0"
1'-3"
1'-6"
1'-6"
1'-3"
1'-6"
1'-6"
1'-6

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

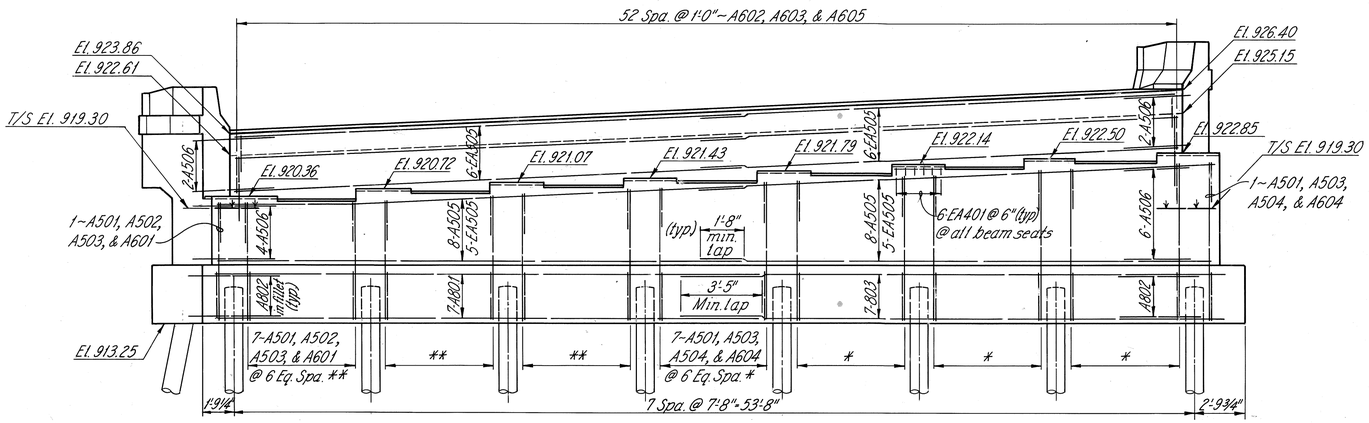
279
345

AUGLAIZE COUNTY
AUG-33-13.44

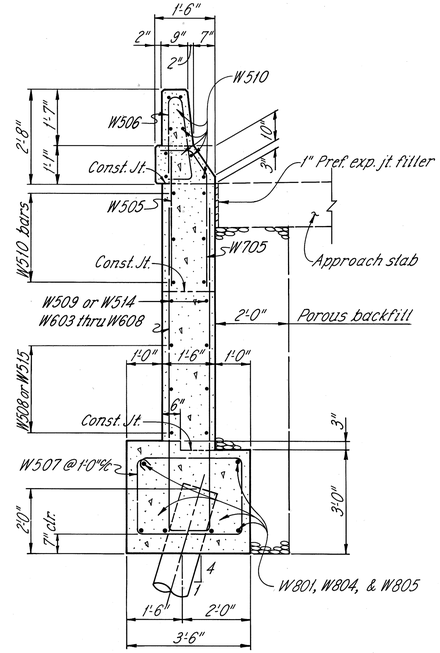


PLAN

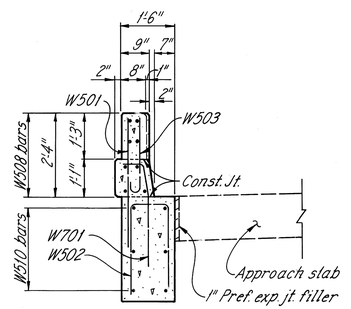
▲ See note 2 on sht. 285 of 345



ELEVATION



SECTION B-B



SECTION C-C

PARSONS BRICKERHOFF OHIO, INC.
COLUMBUS, OHIO
5 / 13

FORWARD ABUTMENT

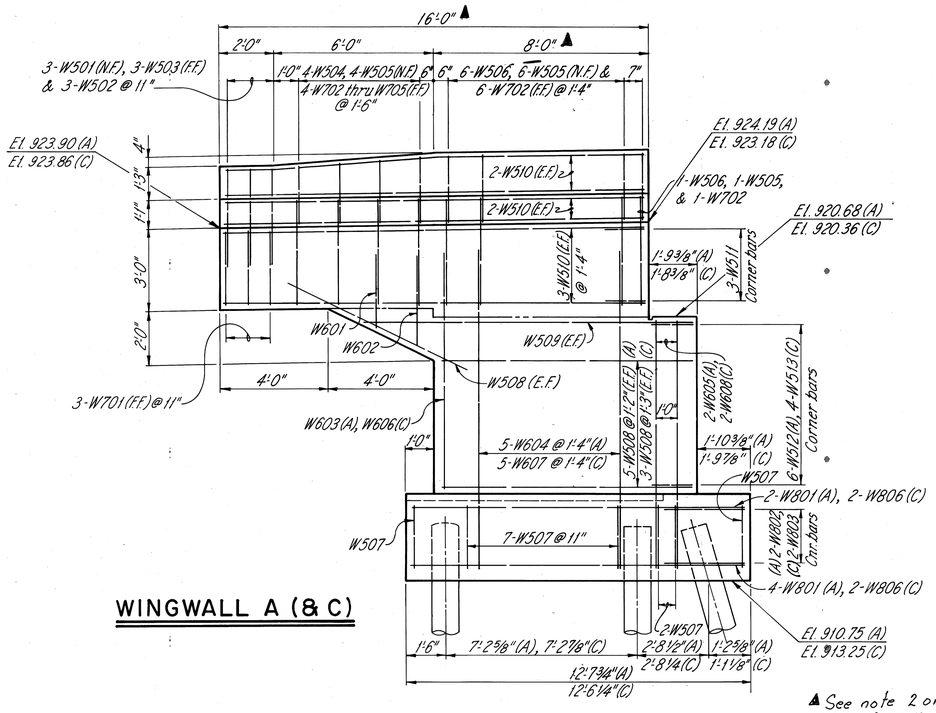
BRIDGE NO. AUG-33-1480L (W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

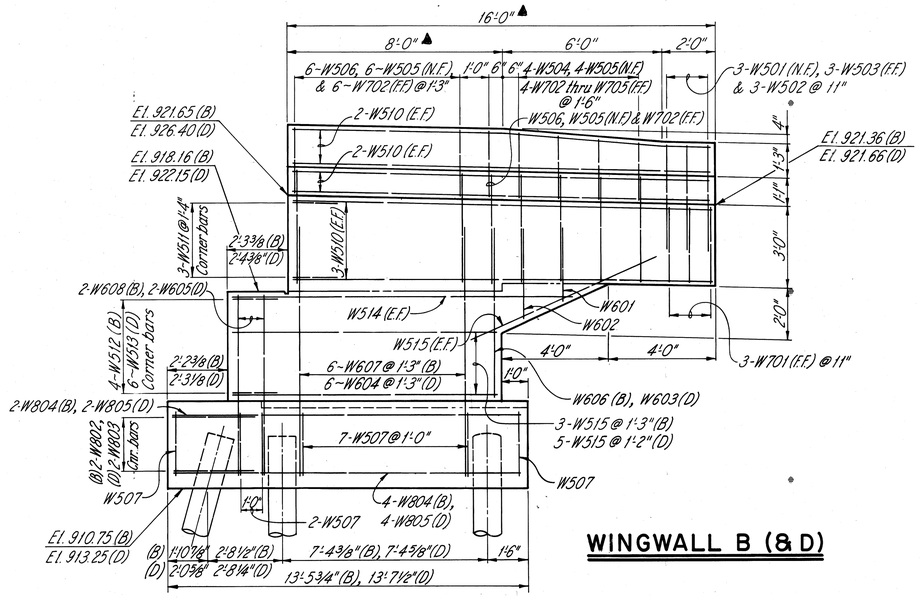
280
345

AUGLAIZE COUNTY
AUG-33-13.44

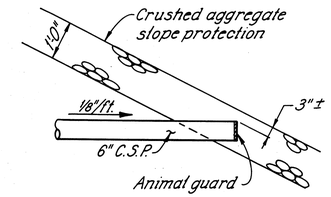


WINGWALL A (& C)

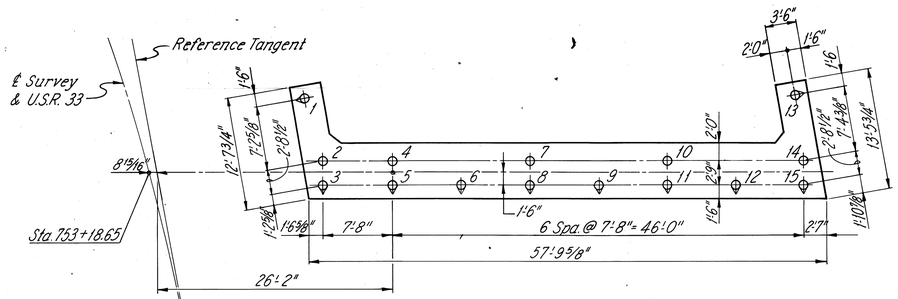
▲ See note 2 on sht. 285 of 345



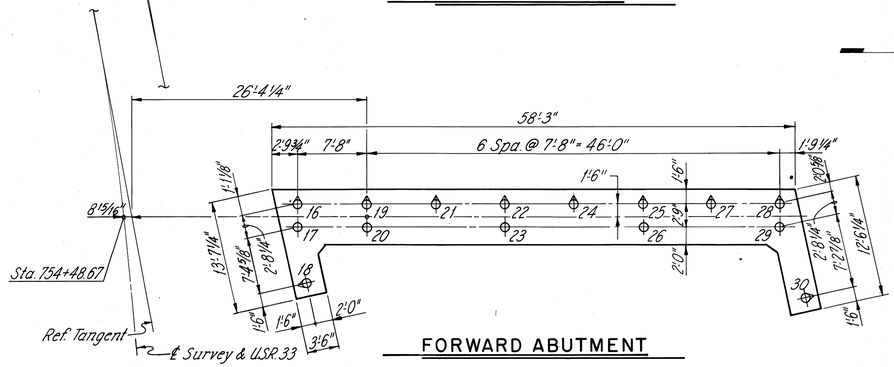
WINGWALL B (& D)



TERMINATION OF 6" NON-PERF. C.S.P.
(TYPICAL)



REAR ABUTMENT



FORWARD ABUTMENT

PILE LAY-OUT PLAN

LEGEND:

⊕ ~ Indicates 1:4 Battered Piles (in direction of the 'arrow').

E.F. ~ Each Face
F.F. ~ Far Face
N.F. ~ Near Face

NOTES:

CROSS REFERENCE SHEETS: For notes, see Sheet 4 / 13.
For Wingwall Sections, see Sheet 5 / 13.
For Wingwall locations & Abutment Details see Sheets 4 / 13 & 5 / 13.

PILES: All piles are to be 12" ∅ Cast-in-place reinforced concrete.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
6 / 13

ABUTMENT DETAILS

BRIDGE NO. AUG-33-1480L (W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

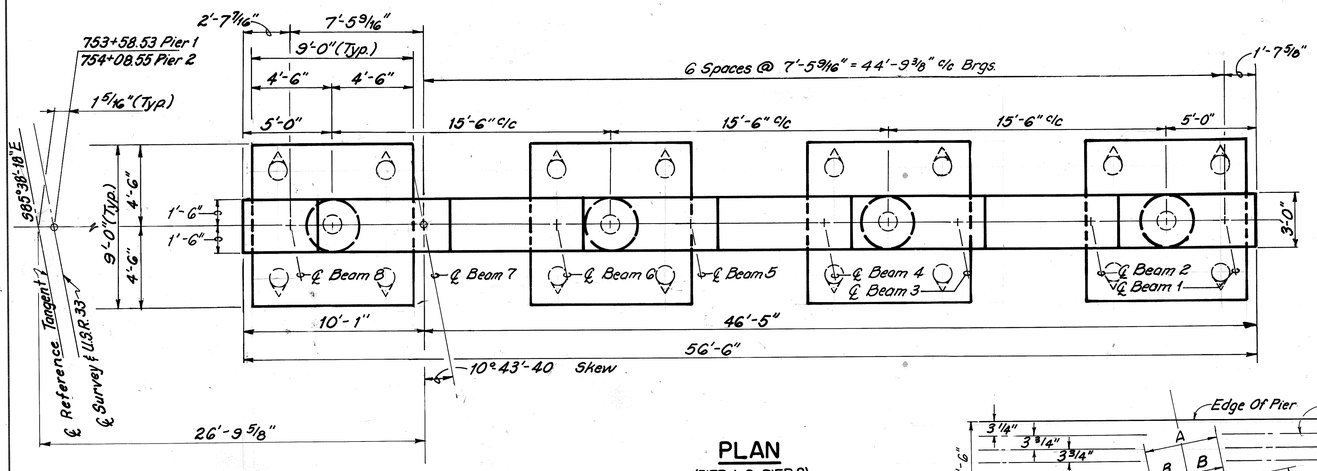
Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

359455

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

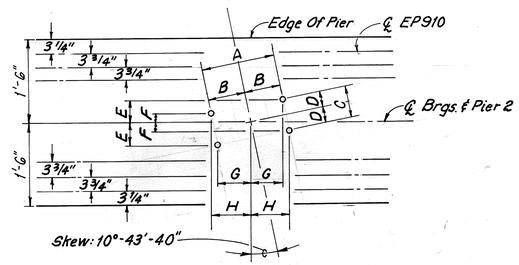
281
345

AUGLAIZE COUNTY
AUG-33-13.44



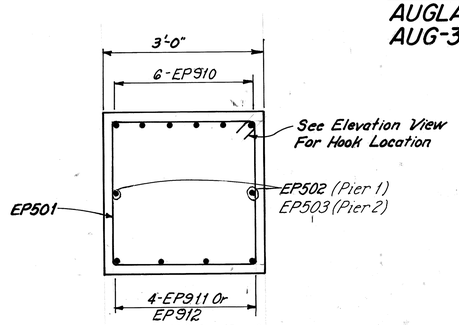
PLAN
(PIER 1 & PIER 2)

DIMENSIONS							
A	B	C	D	E	F	G	H
16"	8"	7"	3 1/2"	4 15/16"	1 15/16"	7 3/16"	8 1/2"

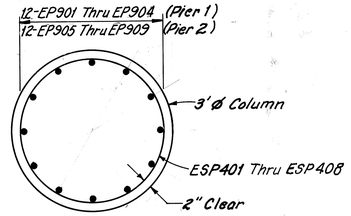


ANCHOR BOLT LAYOUT
(PIER 2)

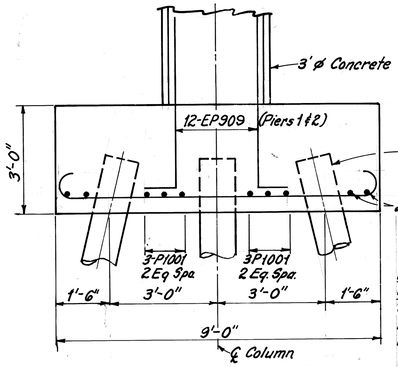
ELEVATION
(PIER 1 & PIER 2)
LOOKING DOWN STATION



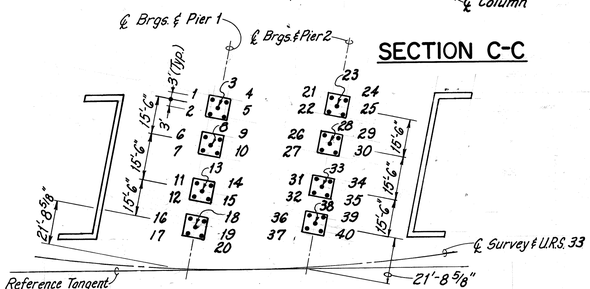
SECTION A-A



SECTION B-B



SECTION C-C



PILE LAYOUT

Location	Elev. 'A'	Elev. 'B'	Elev. 'C'	Elev. 'D'	Elev. 'E'	Elev. 'F'	Elev. 'G'	Elev. 'H'	Dim. 'a'	Dim. 'b'	Dim. 'c'	Dim. 'd'	Dim. 'e'	Dim. 'f'	Dim. 'g'	Dim. 'h'
Pier 1	921.13	920.77	920.41	920.05	919.69	919.33	918.98	918.62	15'-0"	15'-2 7/8"	15'-11 3/4"	16'-8 3/4"	17'-5 3/4"	17'-8 5/8"	23'-10 1/2"	21'-4 1/2"
Pier 2	922.39	922.04	921.68	921.37	920.96	920.61	920.25	919.89	16'-3 1/8"	16'-6 1/8"	17'-3"	18'-0"	18'-9"	18'-11 7/8"	25'-1 3/4"	22'-7 5/8"

NOTES:
Bridge Seat Reinforcing: Reinforcing Steel In The Vicinity Of The Bridge Seat Shall Be Accurately Placed To Avoid Interference With The Drilling Of Anchor Bar Holes.

For Additional Notes See Sheet 2/13

For Rienforcing Steel List See Sheet 13/13

LEGEND

P-1 — Pier 1
P-2 — Pier 2
○— Indicates Pile Battered In The Direction Of Arrow 1:4.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
7/13

PIER DETAILS

BRIDGE NO: AUG-33-1480L (WB.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		JKS	JKS		

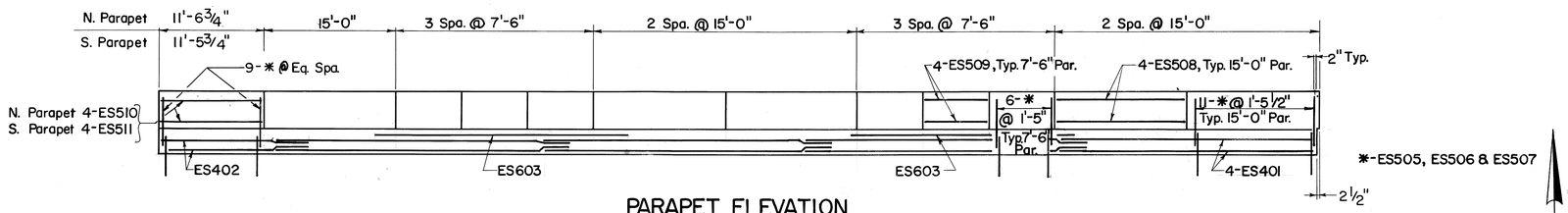
Rob Gibson

359405

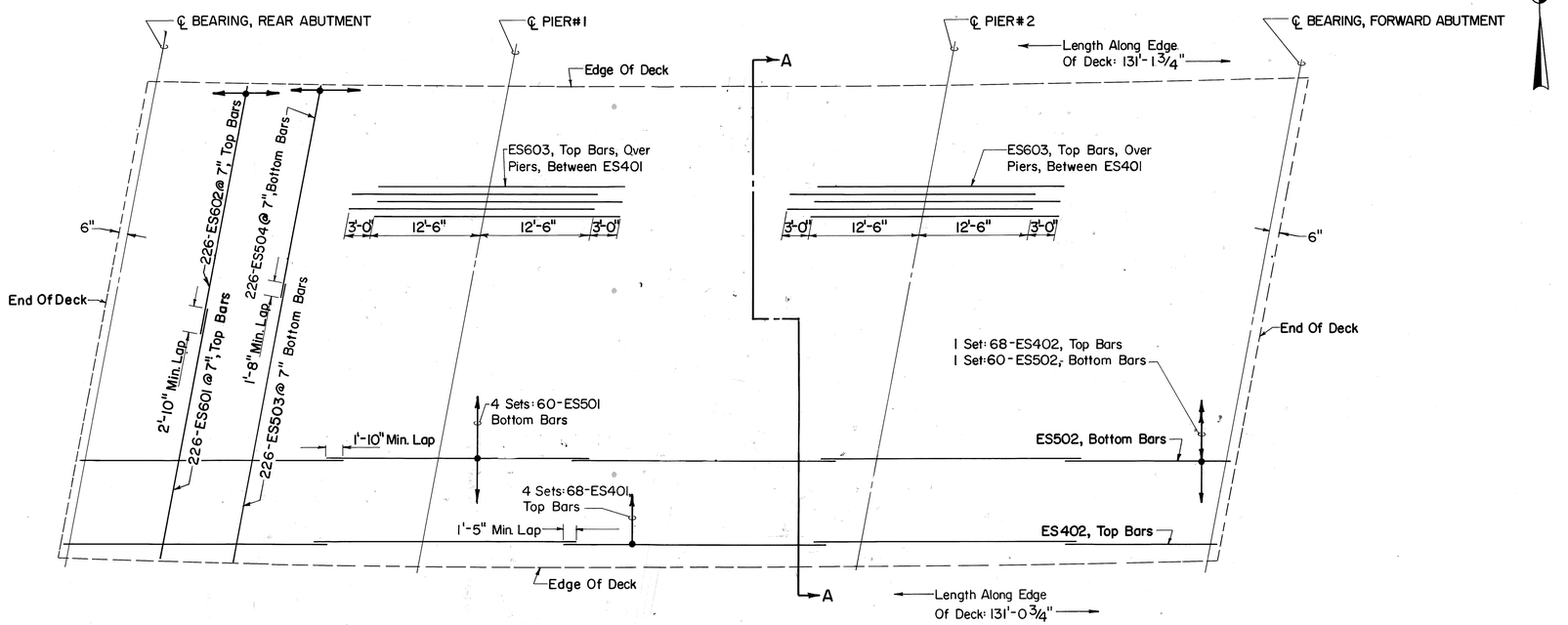
FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

282
345

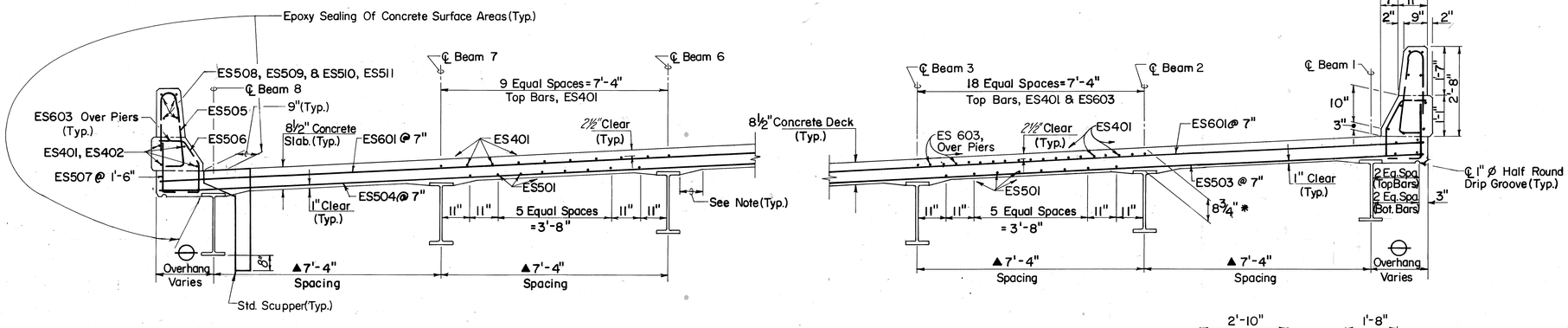
AUGLAIZE COUNTY
AUG-33-13.44



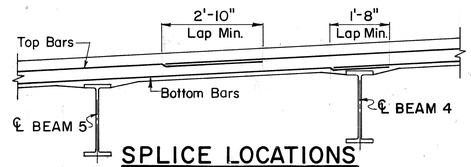
PARAPET ELEVATION



DECK SLAB PLAN



SECTION A-A



SPLICE LOCATIONS
TRANSVERSE DECK REINFORCING

NOTES

* DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" WIDTH).

FIELD BEND TRAVERSE BARS TO FIT CROWN. ALL TRANSVERSE BARS SHALL BE PARALLEL TO THE SUBSTRUCTURE UNITS. FIELD BENDING SHALL BE INCLUDED WITH ITEM 509 FOR PAYMENT.

LONGITUDINAL STEEL SHALL BE FIELD CUT AS NECESSARY TO AVOID INTERFERENCE WITH SCUPPERS.

FOR MORE RAILING AND PARAPET DETAILS SEE STANDARD DRAWING BR-1

EPOXY-COATED BARS THAT ARE FIELD CUT AND BARS WITH EPOXY COATING DAMAGED BY FIELD BENDING SHALL BE RECOATED AS PER APPROVED MANUFACTURER'S RECOMMENDATIONS AND ENGINEER'S APPROVAL.

FOR ADDITIONAL SUPERSTRUCTURE DETAILS SEE SHEETS 9/13 THRU 13/13

SEE SHEET 9/13 FOR INTERMEDIATE CROSS FRAME DETAILS.

⊖ OVERHANG DIMINSIONS, LEFT AND RIGHT, ARE GIVEN ALONG ℄ BRG. OR PARALLEL TO IT. SEE TABULAR VALUES SHEET 10/13

▲ NORMAL TO REFERENCE LINE UNLESS OTHERWISE SHOWN.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
8/13

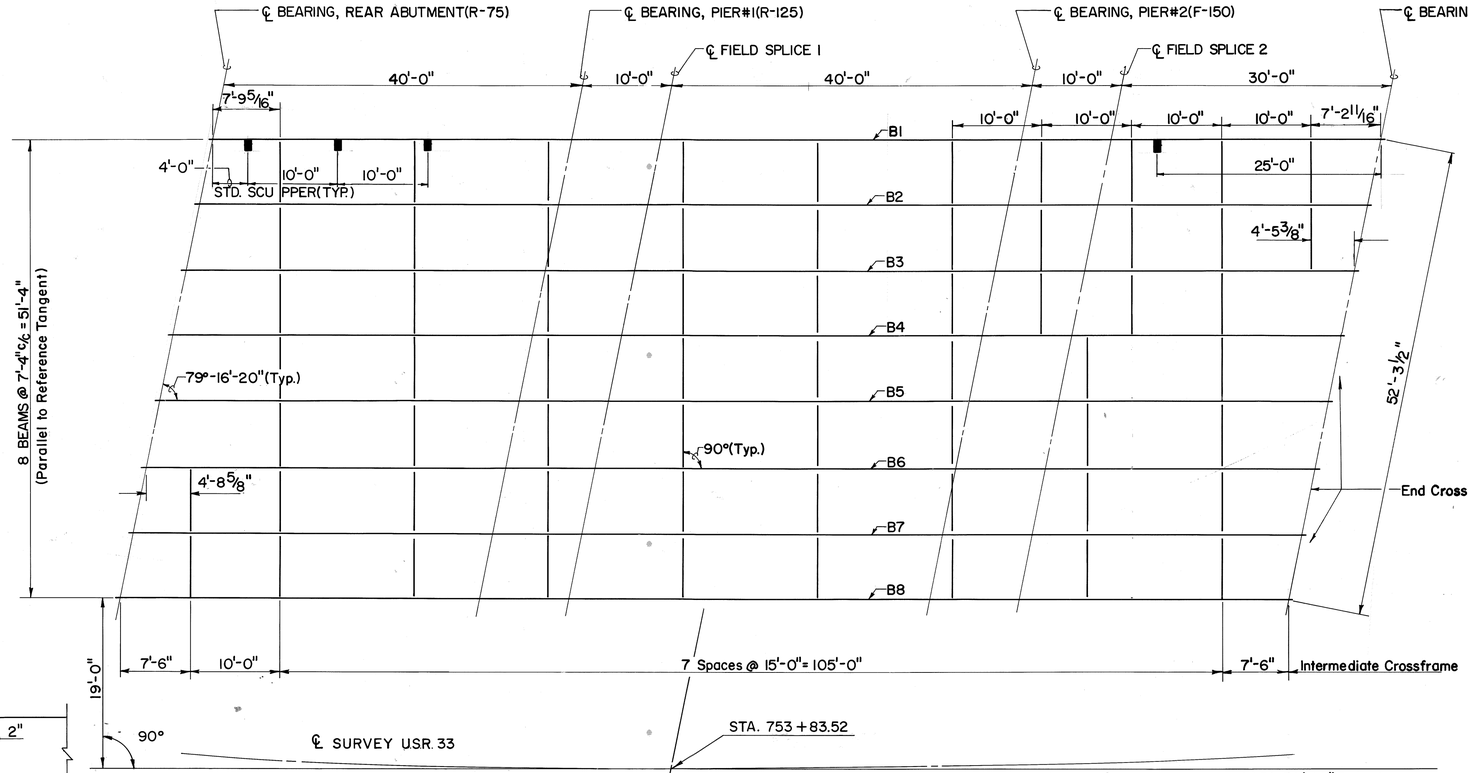
SUPERSTRUCTURE DETAILS
BRIDGE NO: AUG-33-1480L (W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

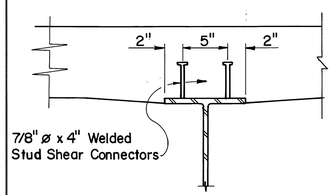
Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
MJM	MDS	MDS	TDW	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

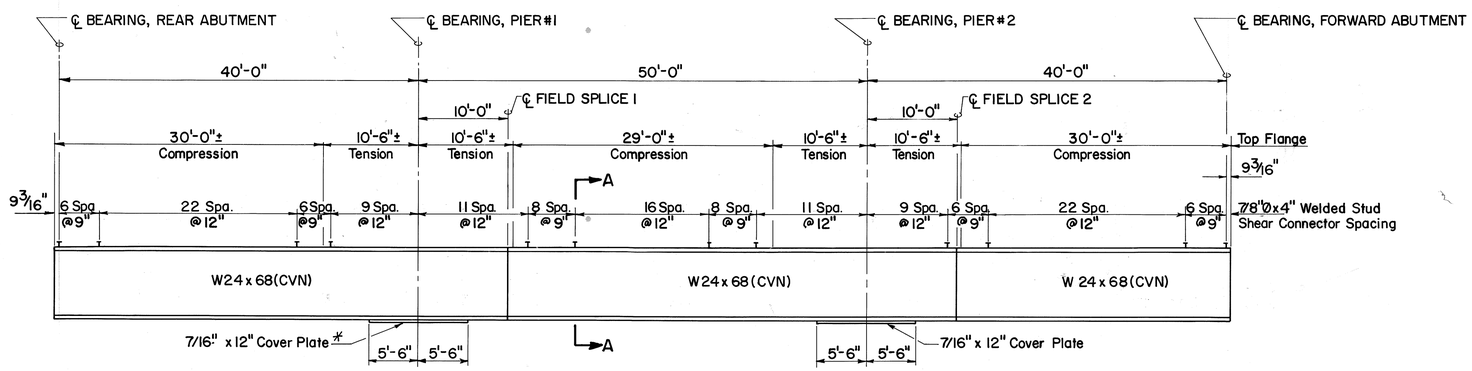
283
345

AUGLAIZE COUNTY
AUG-33-13.44





SECTION A-A



BEAM ELEVATION

NOTES

WHERE A SHAPE OR PLATE IS DESIGNATED(CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.

ALL BEAM LENGTH DIMENSIONS ARE AT 60° F.

SEE STD. DWG. SD-1-69 FOR FIELD SPLICE DETAILS.

WELDING ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION" ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE NOT CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG, AND BE NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO.

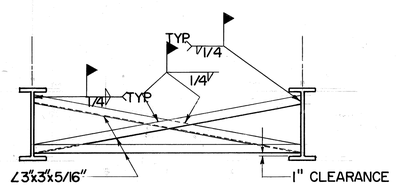
BEARING: IN LIEU OF A588 STEEL, A36 STEEL, GALVANIZED, MAY BE FURNISHED FOR BEARINGS, EXCEPT FOR UPPER PLATE ELEMENT OF BEARINGS, THIS A36 STEEL SHALL BE INCLUDED WITH THE A588 STEEL QUANTITY FOR PAYMENT.

FOR END CROSSFRAME DETAILS, SEE STD. DWG. SD-1-69 & EXJ-2-81 SHEET 1.

* FOR WELDING OF COVER PLATES, SEE STD. DWG. SD-1-69.

PARTIAL PAINTING OF A588 STEEL: A 8 FOOT LENGTH OF THE ENDS ADJACENT TO ABUTMENTS AND ON BOTH SIDES OF THE PIERS, AND ALL CROSSFRAMES AND OTHER A588 STEEL WITHIN THESE LIMITS SHALL BE PAINTED. PAINT SHALL 514, SYSTEM A. THE PRIME COAT SHALL BE 708.17. THE TOP COAT SHALL BE 708.18. EXCEPT THAT THE COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595A-20045 OR 20059. (Color of weathering steel)

REMAINING A588 IS TO BE LEFT UNPAINTED, SEE CMS 513.221 FOR CLEANING REQUIREMENTS.



INTERMEDIATE CROSSFRAME

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO

9/13

SUPERSTRUCTURE DETAILS

BRIDGE NO: AUG-33-1480L(W.B.)

OVER HARDIN PIKE

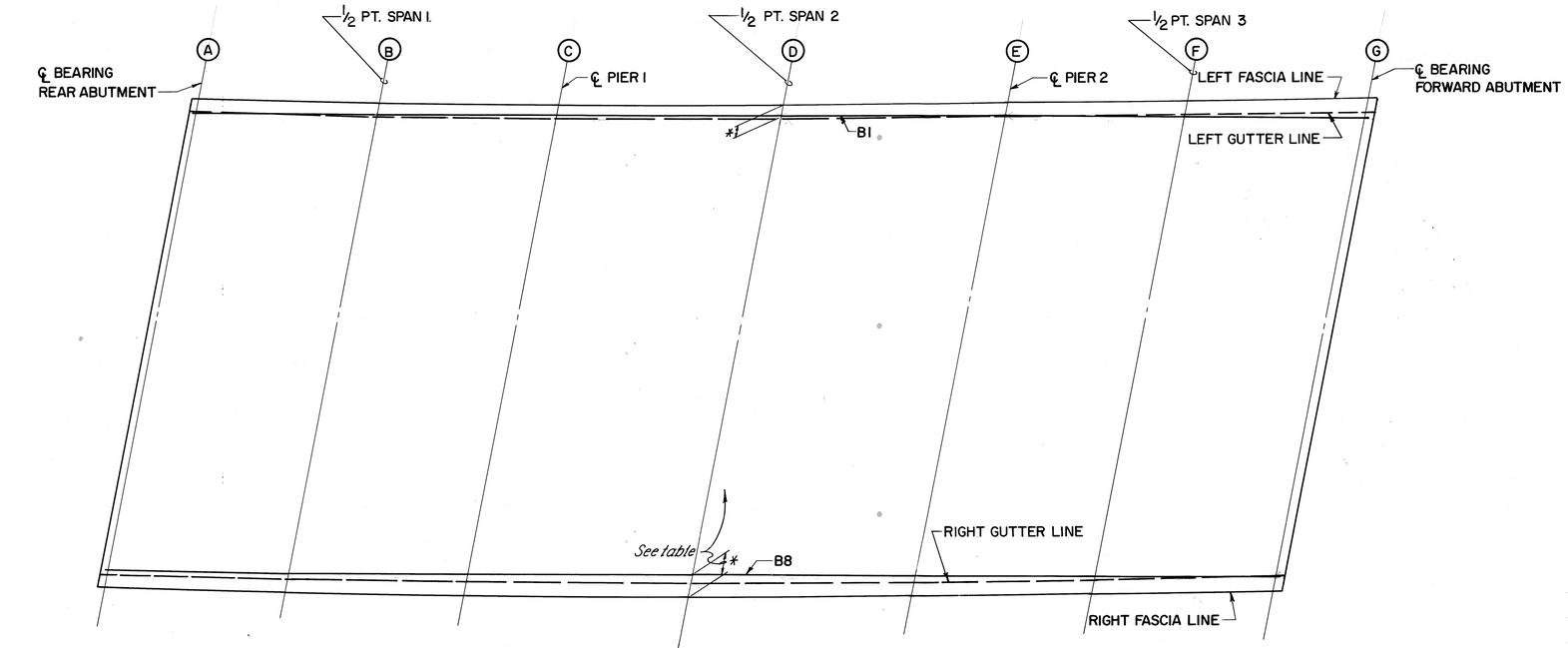
AUGLAIZE COUNTY OHIO

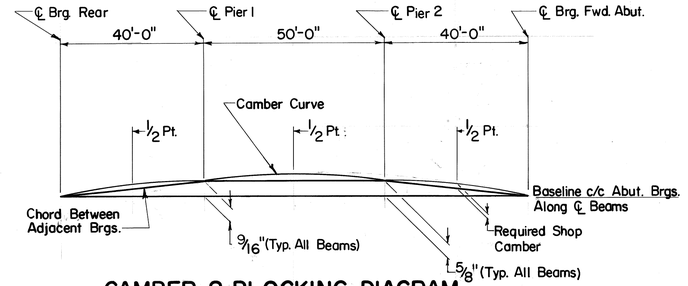
Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
MGM	MDS	MDS	TDW	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

284
345

AUGLAIZE COUNTY
AUG-33-13.44





CAMBER & BLOCKING DIAGRAM

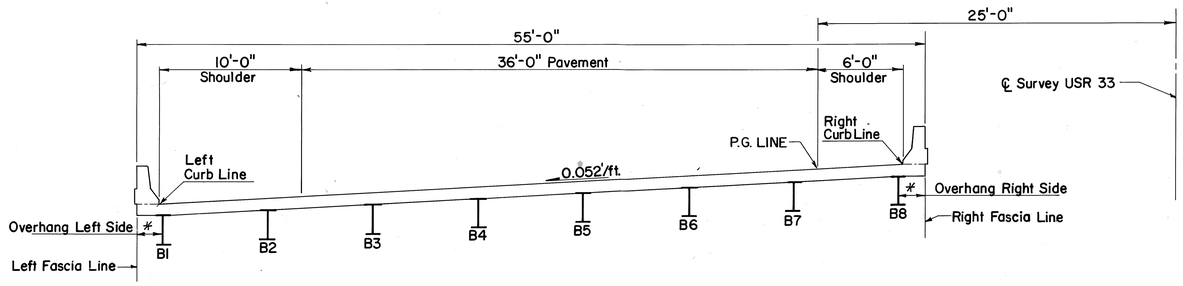
BEAMS 1 THRU 8	1/2 PT. SPAN 1	1/2 PT. SPAN 2	1/2 PT. SPAN 3
STEEL WEIGHT DEFLECTION	1/16"	1/16"	1/16"
REMAINING DEAD LOAD DEFLECTION	5/16"	3/8"	5/16"
VERT. AND HORIZ. CURVE CORRECTION	1/8"	3/16"	1/8"
REQUIRED SHOP CAMBER	1/2"	5/8"	1/2"

CAMBER AND DEFLECTION TABLE

	LINE	A	B	C	D	E	F	G
LEFT CURB LINE	STATION	753+30.77	753+51.58	753+71.69	753+97.77	754+22.99	754+43.93	754+64.10
	TOP OF SLAB ELEVATION	921.68	922.05	922.39	922.83	923.23	923.55	923.84
	DEFLECTION	0.00	0.03	0.00	0.03	0.00	0.03	0.00
	SCREED SETTING ELEVATION	921.68	922.08	922.39	922.86	923.23	923.58	923.84
RIGHT CURB LINE	STATION	753+21.83	753+42.26	753+61.99	753+87.59	754+12.34	754+32.88	754+52.73
	TOP OF SLAB ELEVATION	924.22	924.59	924.93	925.36	925.76	926.08	926.38
	DEFLECTION	0.00	0.03	0.00	0.03	0.00	0.03	0.00
	SCREED SETTING ELEVATION	924.22	924.62	924.93	925.39	925.76	926.11	926.38
*	OVERHANG LEFT SIDE	1'-7 7/8"	1'-4 3/8"	1'-2 1/2"	1'-2 3/4"	1'-5 1/2"	1'-9 3/4"	2'-3 3/4"
*	OVERHANG RIGHT SIDE	1'-10 5/8"	2'-2 7/8"	2'-5 1/2"	2'-6 1/2"	2'-4 3/4"	2'-1 5/8"	1'-8 5/8"

TABLE OF SCREED ELEVATIONS

NOTE: SLAB OVERHANG DIMENSIONS ARE ALL MEASURED ALONG SKEW



TYPICAL DECK SECTION

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
10/13

SUPERSTRUCTURE DETAILS

BRIDGE NO: AUG-33-1480L(W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MJM	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

285
345

AUG-33-13.44

ELASTOMERIC STRIP SEAL SYSTEM

SPECIAL NOTES:

1. Seal shall have a movement rating of 3"

2. IT IS NECESSARY TO MODIFY THE DESIGN DRAWING TO ACCOMMODATE THE EXPANSION JOINT DEVICE. The drawings shall be modified by the Contractor and approved by the Engineer. Copies of the modified drawings shall be forwarded to the Bureau of Bridges, Structural Steel Section for use in checking shop drawings.

DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, THE SEATING OF BEAMS ON BEARINS SHALL BE CAREFULLY OSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT/ARMOR OR THE BEAMS SHALL BE ACHIEVED BY POSTITION OF THE BEVEL FILL PLATES RATHER THAN BY CLAMPING FORCE.

4. SEE STANDARD DRAWING EXJ-4-87 FOR ALL REMAINING DETAILS AND NOTES.

5. The above shall be included in the unit price bid for item 516.

STRIP SEAL JOINT AT ABUTMENT		
JOINT SETTING TABLE		
TEMP. (F°)	Joint Opening – Dim. "A"	
	Rear Abutment	Forward Abutment
30°	1 3/4"	1 5/8"
40°	1 11/16"	1 5/8"
50°	1 5/8"	1 9/16"
60°	1 9/16"	1 9/16"
70°	1 1/2"	1 1/2"
80°	*	*
90°	*	*

* MINIMUM JOINT OPENING (DIMENSION "A") AT TIME OF SEAL GLAND INSTALLATION SHALL NOT BE LESS THAN 1–1/2". IF THE JOINT OENING IS LESS, THE INSTALLATION SHALL BE POSTPONED UNTIL THE TEMP–ATURE DROPS A SUFFICIENT AMOUNT TO ALLOW THE MIN–IMUM 1–1/2" OPENING.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO

11 / 13

STRUCTURAL EXPANSION JOINT DETAIL

BRIDGE NO. AUG-33-1480L

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

286
345

AUGLAIZE COUNTY
AUG-33-13.44

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	INCRE.
		REAR ABUTMENT *															
A501	51	8'–3"	439	2	1'–7"	5'–4"	1'–7"										
A502	22	8'–0"	176	3	1'–3"	6'–8"											
A504	29	9'–3"	280	3	1'–3"	7'–11"											
A505	16	28'–4"	473	STR													
A506	14	6'–0"	88	STR													
A601	22	14'–5"	477	2	6'–11"	5'–4"	2'–6"										
A604	29	15'–10"	690	2	8'–4"	5'–4"	2'–6"										
A801	14	30'–3"	1131	STR													
A802	4	7'–0"	75	STR													
		TOTAL = 3829 LB															
EA401	48	2'–5"	78	2	6"	1'–7"	6"										
EA402	32	2'–8"	57	STR													
EA503	51	8'–8"	462	2	2'–9"	3'–5"	2'–9"										
EA505	22	28'–4"	651	STR													
EA602	53	8'–9"	697	2	3'–10"	1'–5"	3'–10"										
EA603	53	4'–9"	379	2	1'–10"	1'–5"	1'–10"										
EA605	53	5'–0"	398	2	2'–3"	10"	2'–3"										
EA803	36	4'–5"	425	5			1'–5"	1'–9"	1'–5"			1'–0"		1'–0"			
		TOTAL, EPOXY COATED = 3147 LB															
		FORWARD ABUTMENT *															
A501	51	8'–3"	439	2	1'–7"	5'–4"	1'–7"										
A502	22	7'–8"	176	3	1'–3"	6;–6"											
A504	29	9'–1"	275	3	1'–3"	7'–11"											
A505	16	28'–7"	477	STR													
A506	14	6'–0"	88	STR													
A601	22	14'–3"	471	2	6'–9"	5'–4"	2'–6"										
A604	29	15'–8"	683	2	8'–2"	5'–4"	2'–6"										
A801	14	30'–8"	1146	STR													
A802	4	7'–0"	75	STR													
		TOTAL = 3830 LB															
EA401	48	2'–5"	78	2	6"	1'–7"	6"										
EA402	32	2'–8"	57	STR													
EA503	51	8'–8"	462	2	2'–9"	3'–5"	2'–9"										
EA505	22	28'–7"	656	STR													
EA602	53	8'–9"	697	2	3'–10"	1'–5"	3'–10"										
EA603	53	4'–7"	365	2	1'–9"	1'–5"	1'–9"										
EA605	53	5'–0"	398	2	2'–3"	10"	2'–3"										
EA803	36	4'–5"	425	5			1'–5"	1'–9"	1'–5"			1'–0"		1'–0"			
		TOTAL, EPOXY COATED = 3,138															
		WINGWALLS *															
W501	12	3'–9"	47	STR													
W502	12	6'–3"	79	2	2'–8"	1'–2"	2'–8"										
W503	12	2'–7"	33	7		2'–0"											
W504	12	2'–8"	34	7		2'–1"											
W505	40	4'–0"	167	STR													
W506	24	5'–3"	132	9													
W507	44	11'–1"	509	10		3'–0"	2'–1"	3'–0"	2'–1"								
W508	20	9'–4"	195	STR													
W509	4	12'–4"	52	STR													
W510	56	15'–7"	911	STR													
W511	12	4'–2"	53	4		1'–6"	1'–4"	1'–6"				1'–5½"		4"	4"		
W512	10	3'–3"	34	8		1'–6"	1'–6"	6"				1'–5¾"		3"	3"		
W513	10	3'–3"	34	8		1'–6"	1'–6"	6"				1'–5½"		4"	4"		
W514	4	12'–11"	54	STR													
W514	20	9'–11"	207	STR													
W601	4	5'–10"	35	2	2'–6"	1'–2"	2'–6"										
W602	4	7'–10"	47	2	3'–6"	1'–2"	3'–6"										
W603	2	18'–10"	57	2	9'–0"	1'–2"	9'–0"										

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	INCRE.
W604	11	24'–2"	400	2	11'–8"	1'–2"	11'–8"										
W605	4	18'–8"	113	2	8'–11"	1'–2"	8'–11"										
W606	2	13'–10"	42	2	6'–6"	1'–2"	6'–6"										
W607	11	19'–2"	317	2	9'–2"	1'–2"	9'–2"										
W608	4	13'–8"	83	2	6'–5"	1'–2"	6'–5"										
W701	12	3'–7"	88	6		8 1/2"	2'–5"	0	8 1/2"	7"		2"					
W702	4	3'–7"	30	6		8 1/2"	2'–5"	0	9"	7"		3"					
W703	4	3'–8"	30	6		8 1/2"	2'–5"	0	9 1/2"	8"		4"					
W704	4	3'–8"	30	6		8 1/2"	2'–5"	0	10"	8"		5"					
W705	32	3'–9"	246	6		8 1/2"	2'–5"	0	10 1/2"	9"		6"					
W801	6	12'–1"	194	STR													
W802	4	6'–7"	71	8		3'–0"	3'–0"	1'–0"				2'–11 1/2"		6"			
W803	4	6'–7"	71	8		3'–0"	3'–0"	1'–0"				2'–11 1/2"		8"			
W804	6	13'–0"	209	STR													
W805	6	13'–1"	210	STR													
W806	6	12'–0"	193	STR													
		TOTAL = 5007															
		PIERS 1 & 2 *															
EP401	96	3'–11"	252	STR													
EP402	144	3'–4"	321	2	6"	2'–6"	6"										
EP501	126	11'–3"	1479	10		2'–8"	2'–8"	2'–8"	2'–8"								
EP502	8	29'–0"	242	STR													
EP503	4	31'–9"	133	STR													
EP901	12	17'–9"	725	STR													
EP902	12	18'–6"	755	STR													
EP903	12	19'–3"	786	STR													
EP904	12	20'–0"	816	STR													
EP905	12	19'–1"	779	STR													
EP906	12	19'–10"	810	STR													
EP907	12	20'–7"	840	STR													
EP908	12	21'–4"	871	STR													
EP909	96	8'–2"	2666	3	1'–7"	6'–10"											
EP910	24	33'–1"	2700	3	2'–6"	30'–10"											
EP911	8	22'–3"	606	STR													
EP912	8	38'–0"	1034	STR													
ESP401	1	15'–2"	288	SP1		4 1/2"	15'–2"	44							2'–8"		
ESP402	1	15'–11"	302	SP1		4 1/2"	15'–11"	46							2'–8"		
ESP403	1	16'–8"	315	SP1		4 1/2"	16'–8"	48							2'–8"		
ESP404	1	17'–5"	329	SP1		4 1/2"	17'–5"	50							2'–8"		
ESP405	1	16'–6"	312	SP1		4 1/2"	16'–6"	47							2'–8"		
ESP406	1	17'–3"	326	SP1		4 1/2"	17'–3"	49							2'–8"		
ESP407	1	18'–0"	339	SP1		4 1/2"	18'–0"	51							2'–8"		
ESP408	1	18'–9"	353	SP1		4 1/2"	18'–9"	53							2'–8"		
		TOTAL,EPOXY COATED = 18,379															
P1001	160	11'–4"	7801	1		8'–6"											
		TOTAL = 7801															
											1'–5"		1'–1 1/4"				

*NOTE:

THE REAR ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "R"

THE FORWARD ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "F"

THE LETTER 'E' BEFORE A BAR MARK DENOTES AN EPOXY COATED REINFORCING BAR.

THE PREFIX IN THE BAR MARKS FOR THE PIERS SHALL BE AS FOLLOWS:
PIER–1: 1P OR 1EP
PIER–2: 2P OR 2EP

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
12/13

REINFORCING STEEL LIST
BRIDGE NO. AUG-33-1480L(W.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MDS	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

287
345

AUGLAIZE COUNTY
AUG-33-13.44

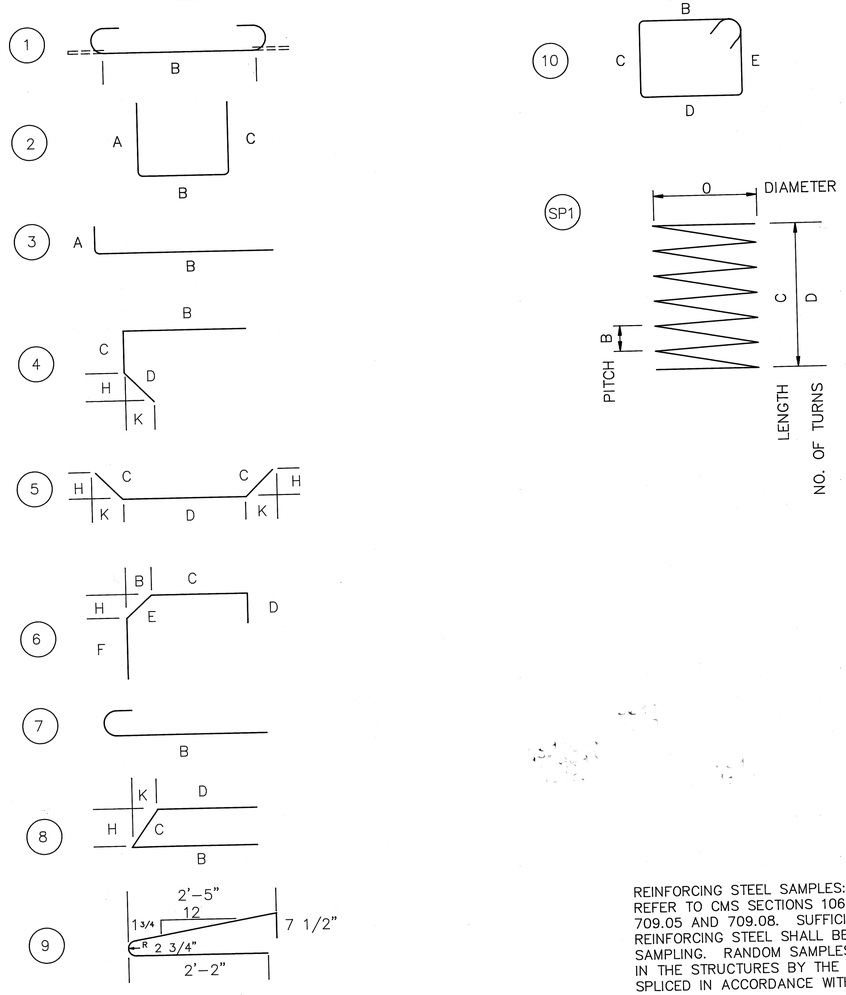
REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	INCRE.
	SUPERSTRUCTURE																
ES401	304	30'–0"	6093	STR													
ES402	76	16'–6"	838	STR													
ES501	240	30'–0"	7510	STR													
ES502	60	18'–2"	1137	STR													
ES503	226	32'–6"	7661	STR													
ES504	226	25'–0"	5893	STR													
ES505	200	5'–3"	1096	9													
ES506	200	3'–0"	626	6		8 1/2"	9"	10 1/2"	10 1/2"	9"	6"						
ES507	200	2'–2"	452	3	10 1/2"	1'–5"											
ES508	32	14'–8"	490	STR													
ES509	48	7'–2"	359	STR													
ES510	4	11'–6"	48	STR													
ES511	4	11'–4"	48	STR													
ES601	226	29'–2"	9901	STR													
ES602	226	29'–6"	10014	STR													
ES603	64	28'–0"	2692	STR													
TOTAL, EPOXY COATED = 54,838 LB																	

* ~ SERIES BAR

"E" IN THE PREFIX OF A BAR MARK INDICATES EPOXY COATED REBAR

BAR BENDING SCHEDULE



REINFORCING STEEL SAMPLES:
REFER TO CMS SECTIONS 106.03,700,709.01 THRU 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

FOR ADDITIONAL NOTES SEE 12/13

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
13/13

REINFORCING STEEL LIST

BRIDGE NO.: AUG-33-1480 (W.B.)
OVER HARDIN PIKE

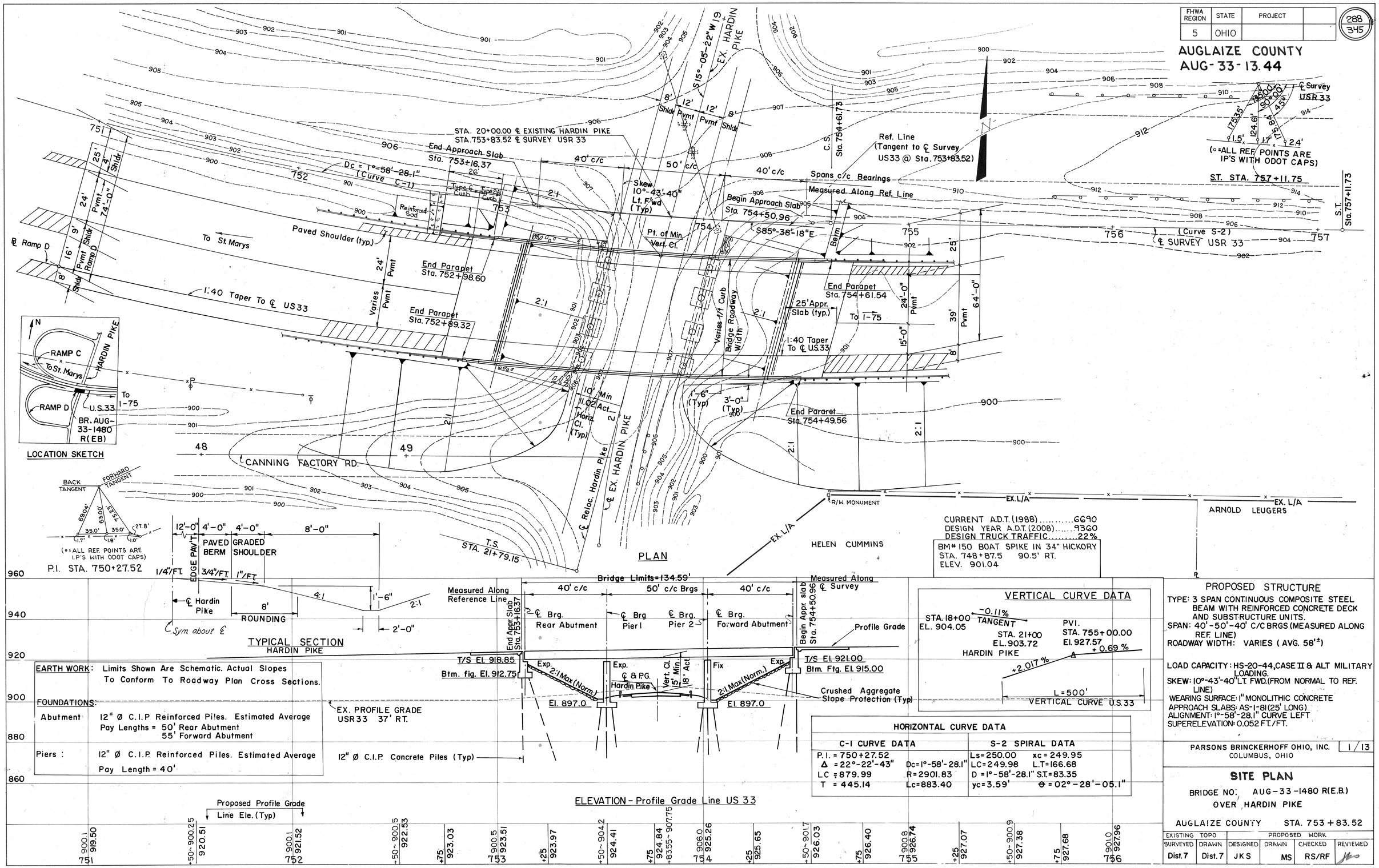
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MDS	JKS		

FHWA REGION	STATE	PROJECT	
5	OHIO		

288
345

AUGLAIZE COUNTY
AUG-33-13.44



LOCATION SKETCH

TYPICAL SECTION
HARDIN PIKE

ELEVATION - Profile Grade Line US 33

EARTH WORK:
Limits Shown Are Schematic. Actual Slopes To Conform To Roadway Plan Cross Sections.

FOUNDATIONS:
Abutment: 12" Ø C.I.P Reinforced Piles. Estimated Average Pay Lengths = 50' Rear Abutment, 55' Forward Abutment

Piers: 12" Ø C.I.P. Reinforced Piles. Estimated Average Pay Length = 40'

VERTICAL CURVE DATA

HORIZONTAL CURVE DATA

C-1 CURVE DATA		S-2 SPIRAL DATA	
P.I. = 750+27.52		Ls=250.00	xc = 249.95
Δ = 22°-22'-43"	Dc=1°-58'-28.1"	LC=249.98	L.T=166.68
LC = 879.99	R=2901.83	D = 1°-58'-28.1"	S.T=83.35
T = 445.14	Lc=883.40	yc=3.59'	θ = 02°-28'-05.1"

PROPOSED STRUCTURE
TYPE: 3 SPAN CONTINUOUS COMPOSITE STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE UNITS.
SPAN: 40'-50'-40' C/C BRGS (MEASURED ALONG REF. LINE)
ROADWAY WIDTH: VARIES (AVG. 58'±)

LOAD CAPACITY: HS-20-44, CASE II & ALT MILITARY LOADING.
SKEW: 10°-43'-40" LT. FWD. (FROM NORMAL TO REF. LINE)
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: 1°-58'-28.1" CURVE LEFT
SUPERELEVATION: 0.052 FT./FT.

PARSONS BRINCKERHOFF OHIO, INC. 1/13
COLUMBUS, OHIO

SITE PLAN
BRIDGE NO: AUG-33-1480 R(E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY STA. 753+83.52

EXISTING TOPO		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Dist.7	Dist.7	JKS	MS	RS/RF	

1480 R(E.B.)

SUBMITTED TO DIST. 7 7/14/89 REC'D 7/17

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

289/345

AUGLAIZE COUNTY
AUG-33-13.44

REFERENCES:

STANDARD DRAWINGS:

BRIDGE RAILING	BR-1	DATED 5-29-79
SUPERSTRUCTURE DETAILS	SD-1-69(SHTS.1,2,3)	DATED 6-12-69
FIXED BEARINGS	FB-1-82	DATED 5-10-82
ROCKERS & BOLSTERS	RB-1-55	DATED (REV.) 2-2-59
APPROACH SLAB	AS-1-81(SHTS.1,2,3)	DATED 11-27-81
EXPANSION JOINTS	EXJ-4-87	DATED 1-5-89

SUPPLEMENTAL SPECIFICATIONS:

NO. 802 DATED 5-4-88
NO. 836 DATED 11-12-85 AND NO. 834 DATED 10-18-85

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE 1984, 1985, 1986 AND 1987 INTERIM SPECIFICATIONS, AND THE 1982 OHIO "SUPPLEMENT" TO AASHTO SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING	HS 20-44 CASE II AND ALTERNATE MILITARY LOADING
CONCRETE CLASS S, SUPERSTRUCTURE	COMPRESSIVE STRENGTH f'c = 4500 P.S.I.
CONCRETE CLASS C, SUBSTRUCTURE	COMPRESSIVE STRENGTH f'c = 4000 P.S.I.
STRUCTURAL STEEL	ASTM A588 UNIT STRESS = 27,000 P.S.I. ASTM A36 UNIT STRESS = 20,000 P.S.I.
REINFORCING STEEL	ASTM A615, A615, OR A617, GRADE 60 MIN. YIELD STRENGTH = 60,000 P.S.I.
SPIRAL REIFORCEMENT MAY BE PLAIN BARS DECK PROTECTION METHOD	ASTM A82 OR A615 EPOXY COATED REINFORCING STEEL, TOP & BOTTOM MATS.
MONOLITHIC WEARING SURFACE	IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PILES:

PILE DESIGN LOADS: THE DESIGN LOAD FOR THE ABUTMENT PILES IS 49 TONS PER PILE AND THE DESIGN LOAD FOR THE PIER PILES IS 46 TONS PER PILE. ESTIMATED AVERAGE PAY LENGTHS OF 12" Ø CAST-IN-PLACE, REINFORCED CONCRETE PILES ARE: REAR ABUTMENT 50', FORWARD ABUTMENT 55', AND PIERS 40'.

12 INCH PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATIONS FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCE CONCRETE PILES PER 507.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATES ENERGY RATING OF NOT LESS THAN 14,500 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM CMS, ITEM 108.05, WHICH STATES THAT CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT'S MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

"CONSTRUCTION CONSTRAINTS: PRIOR TO DRIVING PILES AT THE REAR AND FORWARD ABUTMENTS, THE SPILL-THRU SLOPE EMBANKMENTS AT THE REAR AND FORWARD ABUTMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUB-GRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. THE EXCAVATION FOR THE ABUTMENT & PIER FOOTINGS AND INSTALLATION OF THE PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND HAS UNDERGONE A WAITING PERIOD OF 30 DAYS."

"ITEM 507 12 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN: THE RESPONSIBILITY OF CHOOSING AND PROVIDING A SATISFACTORY PILE WALL THICKNESS FOR THIS PROJECT SHALL BE BORNE BY THE CONTRACTOR EXCEPT THAT THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.200 INCHES. IF A PILE WALL THICKNESS GREATER THAN 0.200 INCHES IS NECESSARY TO RESIST THE PILE INSTALLATION DRIVING STRESS, THE CONTRACTOR SHALL MAKE THIS DETERMINATION AND SHALL FURNISH A PILE WITH AN ACCEPTABLE WALL THICKNESS. MONOTUBE PILES ARE NOT REQUIRED TO COMPLY WITH THE ABOVE SPECIFIED MINIMUM PILE WALL THICKNESS. IF MONOTUBE PILES ARE USED, THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.150 INCHES AND THE PILES SHALL SATISFY ALL THE REQUIREMENTS OF 507."

MAINTENANCE OF TRAFFIC: FOR MAINTENCE OF TRAFFIC AND SCHEDULE OF OPERATIONS, SEE ROADWAY PLAN SHEETS NO. 22/345 THRU 29C/345

WATERPROOF MEMBRANE: CURING AS PER ITEM 511.14, METHOD B, SHALL BE APPLIED ON PARAPET, BACKWALLS AND ABUTMENT SEALS.

UTILITY LINES: ALL EXPENCE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES, SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNER ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM. UTILITY OWNERS ARE LISTED IN THE GENERAL NOTES ON SHEET NO.

ESTIMATED QUANTITIES

ESTIMATED BY: TDW
CHECKED BY JKS DATE: 10-5-88

	ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	GEN.
	503	237	CU. YD.	UNCLASSIFIED EXCAVATION			237	
	505	LUMP	SUM	PILE DRIVING EQUIPMENT MOBILIZATION				LUMP
	506	LUMP	SUM	STATIC LOAD TEST				LUMP
	507	3280	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS		1680	1600	
				PER PLAN				
	509	21,140	LB.	REINFORCING STEEL, GRADE 60		13,339	7801	
	509	83797	LB.	EPOXY COATED REINFORCING STEEL, GRADE 60	55021	7050	21726	
Δ	511	255	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE	255			
	511	87	CU. YD.	CLASS C CONCRETE, PIER CAP & COLUMNS			87	
	511	142	CU. YD.	CLASS C CONCRETE, ABUTMENTS ABOVE FOOTINGS		142		
	511	177	CU. YD.	CLASS C CONCRETE, FOOTINGS		105	72	
	513	109044	LB.	STRUCTURAL STEEL (AISC CATEGORY I) (ASTM A588 .)	109044			
	513	2376	EACH	WELDED STUD SHEAR CONNECTORS	2376			
†	514	LUMP	SUM	PARTIAL PAINTING OF A588 STEEL, SYSTEM (A)	LUMP			
*	516	125	LIN. FT.	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC	125			
				STRIP SEALS (3")				
	516	80	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER		80		
	518	131	LIN. FT.	6" PERFORATED HELICAL CORRUGATED STEEL PIPE, 707.01		131		
	518	80	LIN. FT.	6" NON-PERFORATED HELICAL CORRUGATED STEEL PIPE		80		
				INCLUDING SPECIALS, 707.01				
	518	66	CU. YD.	POROUS BACKFILL, AS PER PLAN		66		
	518	5	EACH	SCUPPERS, INCLUDING SUPPORTS	5			
	523	3	HOURS	DYNAMIC LOAD TESTS				3
	601	630	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION		630		
Ø	SPECIAL	749	SQ. YD.	SEALING OF CONCRETE SURFACES, EPOXY, (SEE PROPOSAL NOTE)	283	141	325	

Ø ITEM SPECIAL: SEALING OF CONCRETE SURFACES

A CONCRETE SEALER, AN EPOXY TYPE SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES: PARAPETS AND CURBS, SEE SHEET 8/13; BRIDGE SEATS, BACKWALLS, FRONT FACES OF ABUTMENT BREASTWALLS ONE FOOT DOWN FROM THE LEVEL OF BRIDGE SEAT AT BRIDGE ABUTMENTS. TOTAL SURFACE OF PIERS ABOVE GROUND LINE TO BE COVERED WITH NON-EPOXY SEALER. SEE PROPOSAL NOTE FOR SURFACE PREPARATION REQUIREMENTS AND APPLICATION PROCEDURES. SUBSTRUCTURE UNITS SHALL BE SEALED PRIOR TO ERECTION STRUCTURAL STEEL.

† FOR PARTIAL PAINTING OF A588 STEEL SEE SHEET 9/13.

* FOR SPECIAL NOTES REGARDING ITEM 516, STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC STRIP SEALS, SEE SHEET 11/13.

Δ Item 511, Class S Concrete, Superstructure using shrinkage compensating cement (See Proposal Note)

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 2/13

GENERAL NOTES AND ESTIMATED QUANTITIES

BRIDGE NO: AUG-33-1480R(E.B.)
OVER HARDIN PIKE

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TW	MS		JKS	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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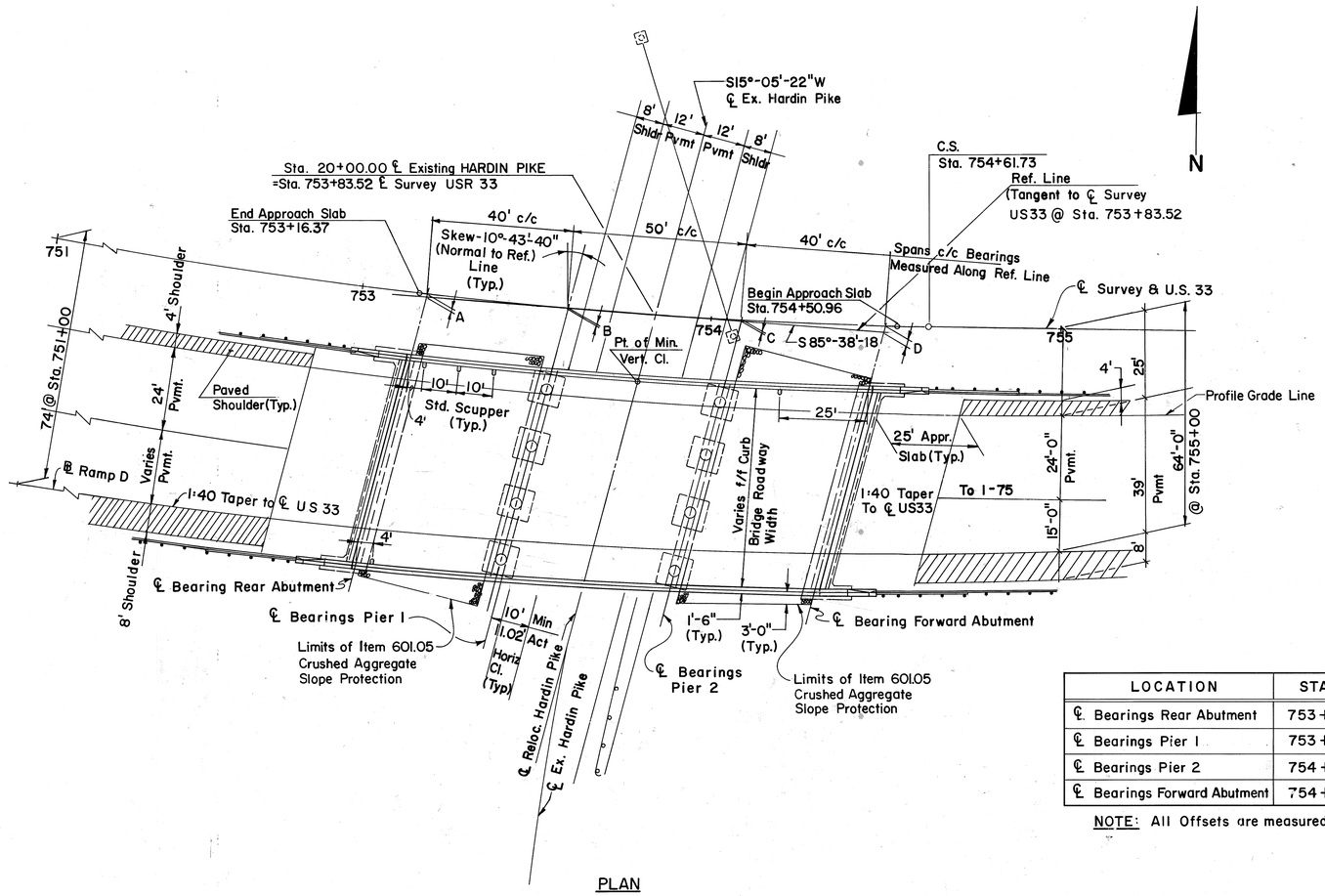
345

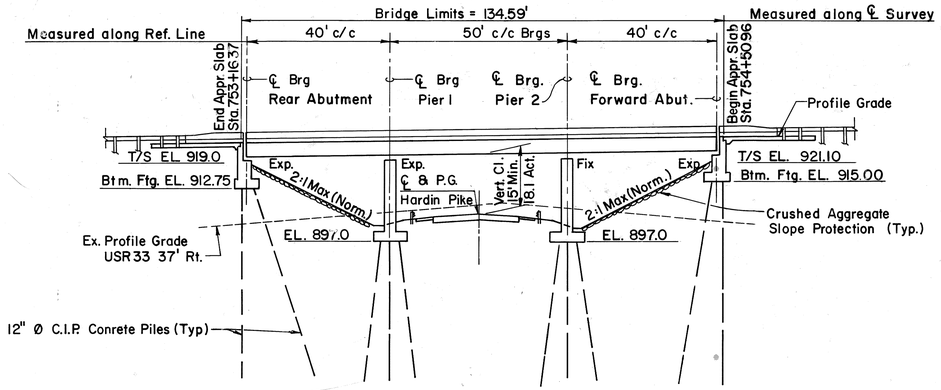
AUGLAIZE COUNTY
AUG-33-13.44



PLAN

LOCATION	STATION	Offset-℄ Survey
℄ Bearings Rear Abutment	753+18.65	87/8" (A)
℄ Bearings Pier 1	753+58.53	15/16" (B)
℄ Bearings Pier 2	754+08.55	15/16" (C)
℄ Bearings Forward Abutment	754+48.67	815/16" (D)

NOTE: All Offsets are measured along skew.



ELEVATION - Profile Grade Line US 33

PARSONS BRINCKERHOFF QUADE & DOUGLAS
COLUMBUS, OHIO
3/13

GENERAL PLAN & ELEVATION

BRIDGE NO. AUG-33-1480R (E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

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JKS		MDS	MJM	JKS		

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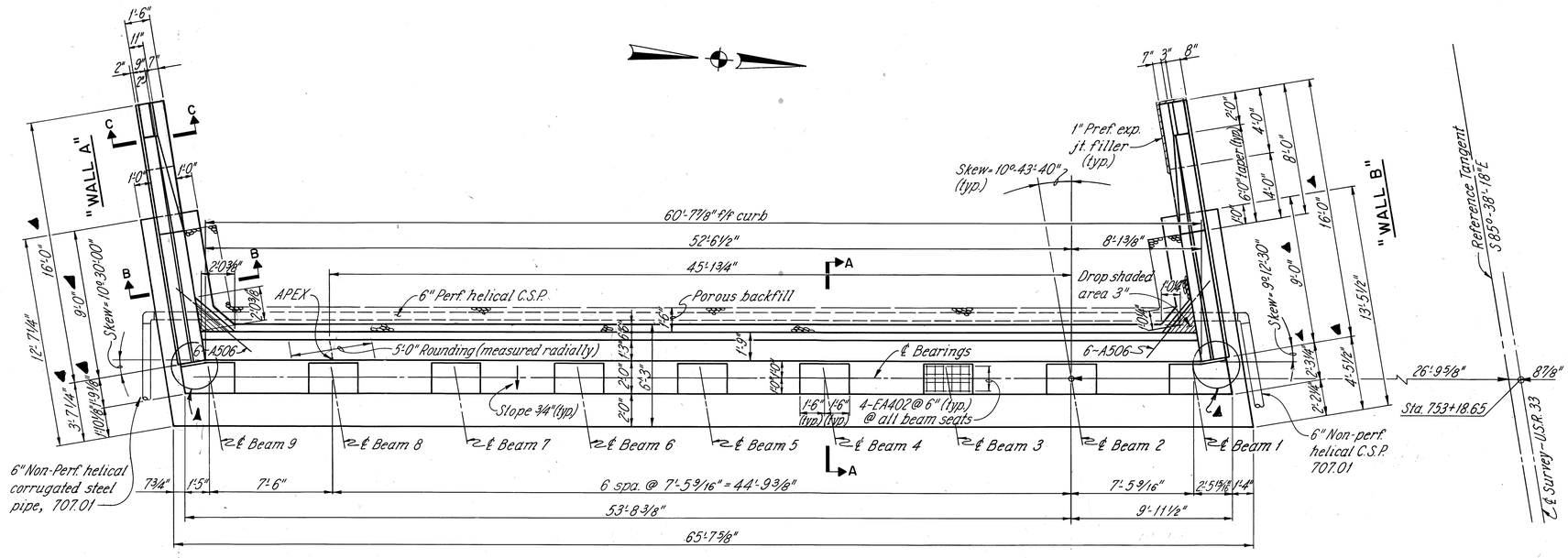
	OHIO		

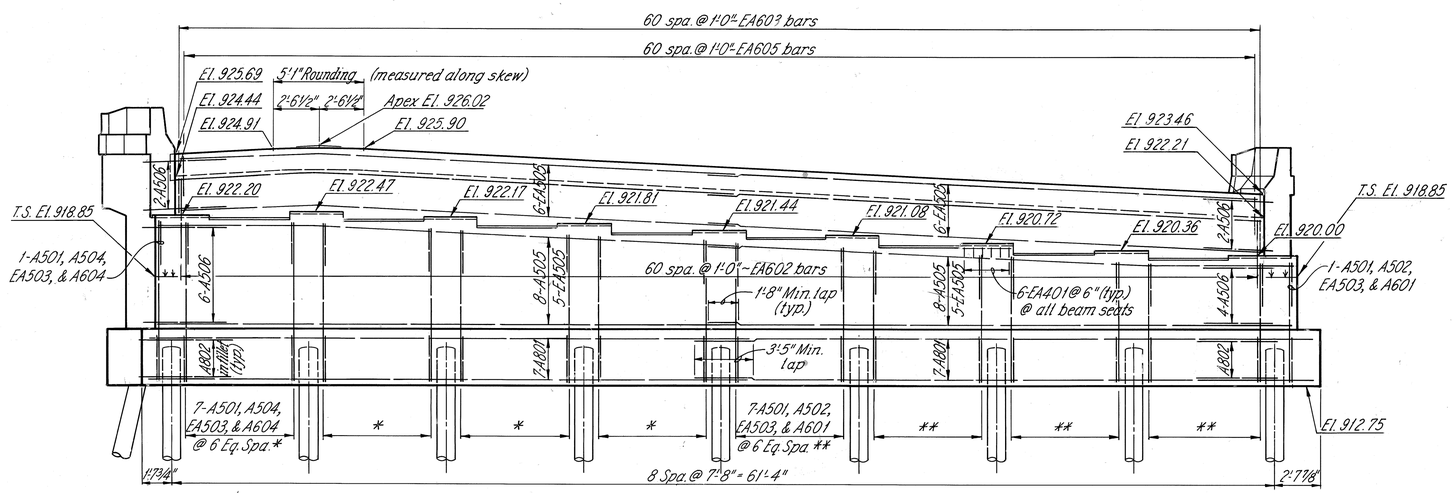
291 / 345

AUGLAIZE COUNTY
AUG-33-13.44

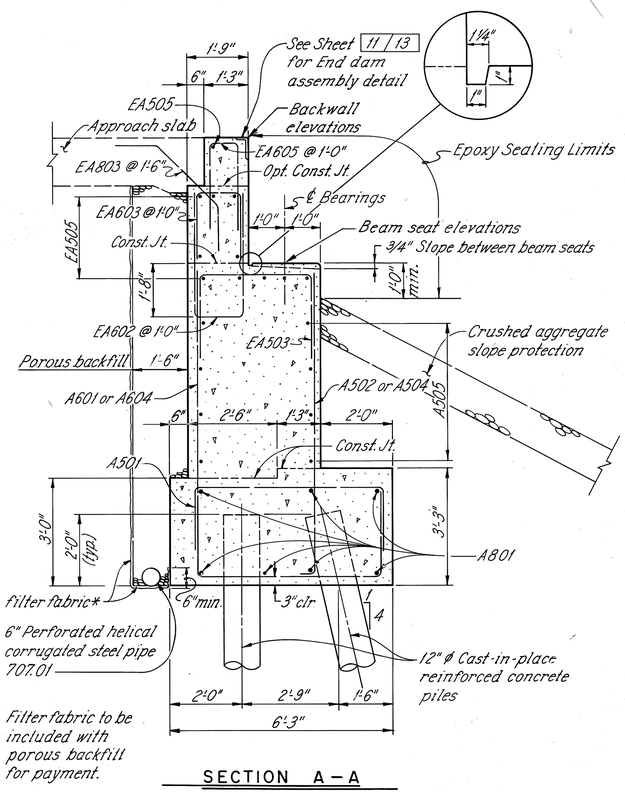


PLAN

◀ See note 2 on sht. 298 of 345



ELEVATION



SECTION A–A

NOTES:

CROSS REFERENCE SHEETS: For Wingwall Sections, see Sheet 5 / 13.
For Wingwall Details, see Sheet 6 / 13.
For General Notes, see Sheet 2 / 13.

POROUS BACKFILL: 1'-6" thick, shall extend from bottom of footing up to the plane of the subgrade, & laterally to the ends of the wingwalls.

CURB & PARAPET DETAILS ON WINGWALLS: See Standard Drawing BR-1.

BACKWALL CONCRETE: In addition to the provisions of 511.08, backwall concrete above the optional construction joint at the approach slab seat shall not be placed until the deck concrete in the span adjacent to the abutment has been placed.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO — 4 / 13

REAR ABUTMENT
BRIDGE NO. AUG-33-1480R (E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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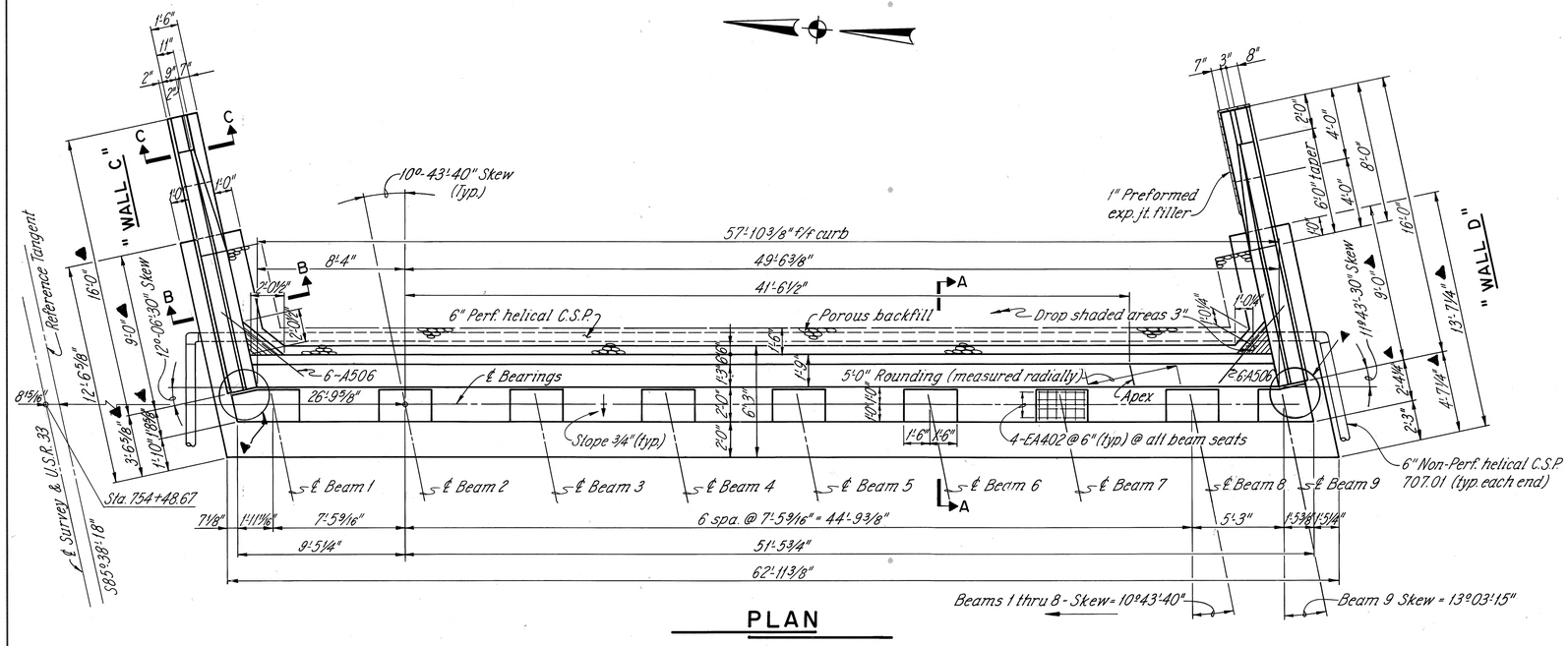
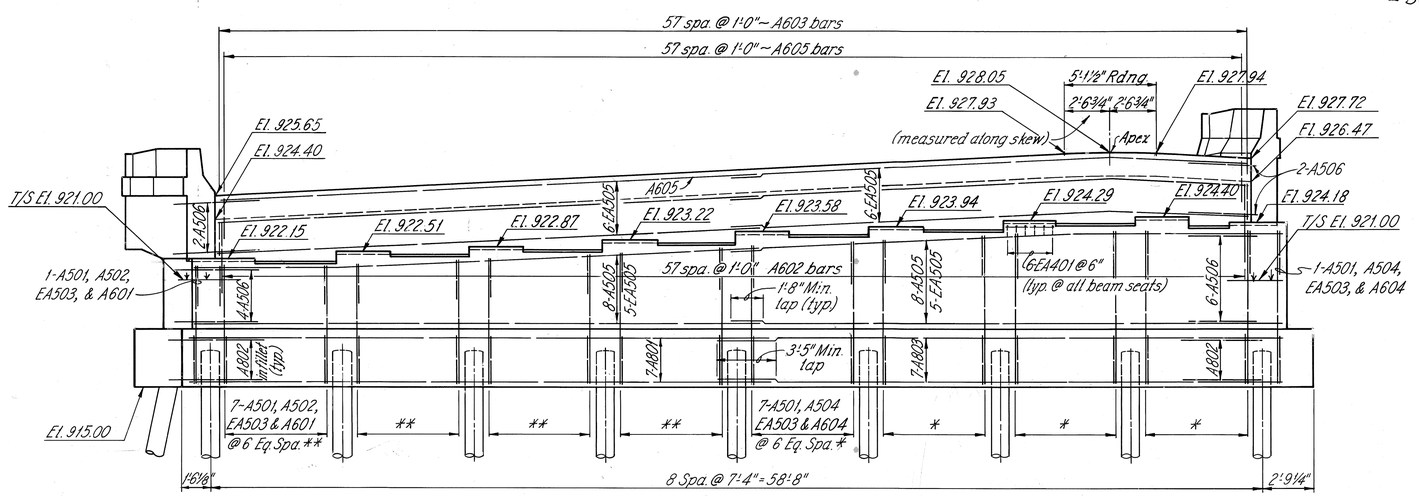
AUGLAIZE COUNTY
AUG-33-13.44

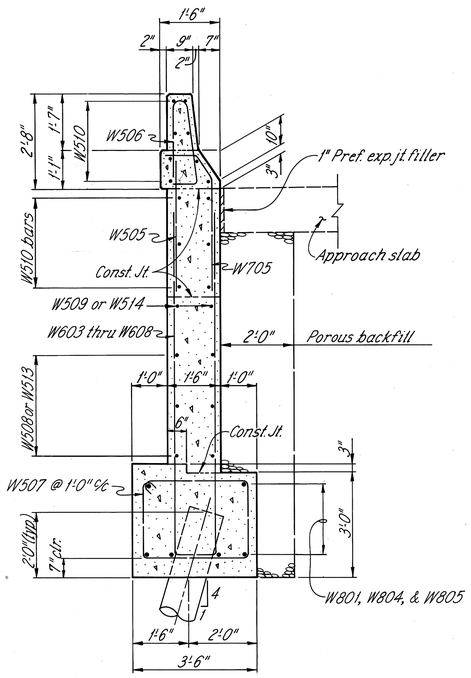


PLAN

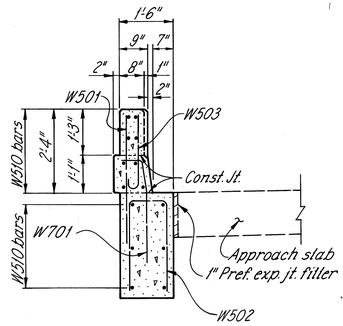
◀ See note 2 on sht. 298 of 345



ELEVATION



SECTION B-B



SECTION C-C

NOTE: For Section A-A (Abutment detail) & other notes, see Sheet 4 / 13.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
5 / 13

FORWARD ABUTMENT

BRIDGE NO. AUG-33-1480R (E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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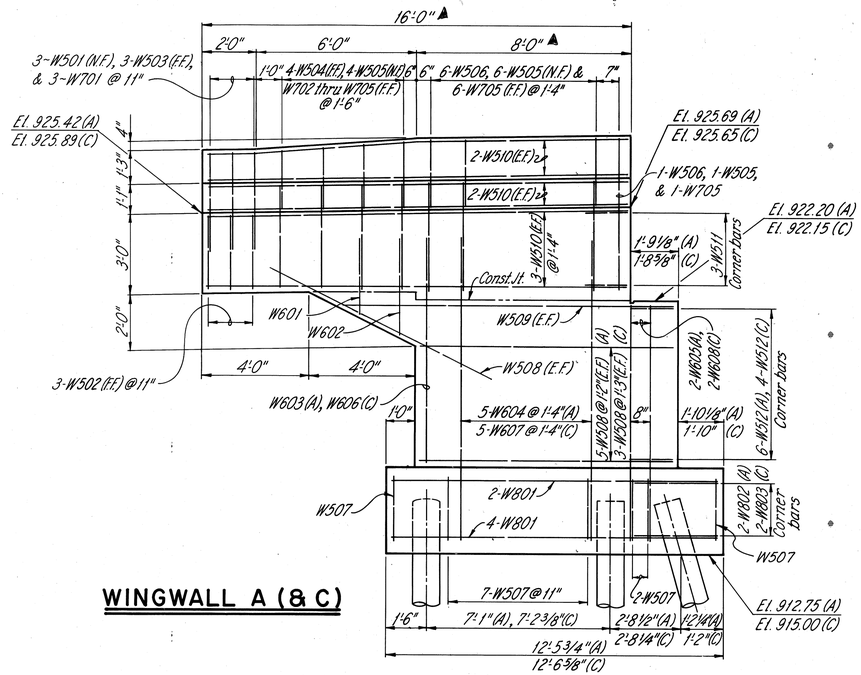
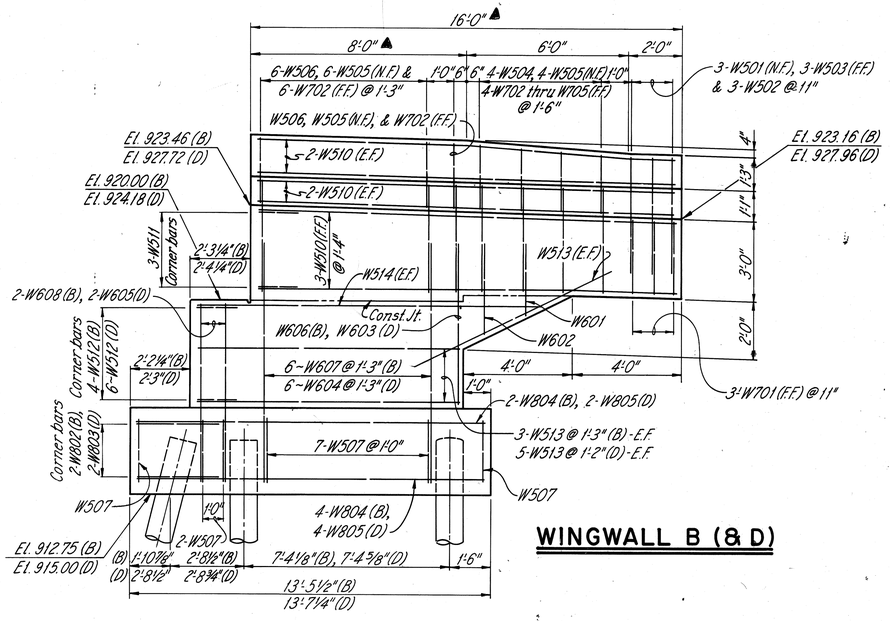
345

AUGLAIZE COUNTY
AUG-33-13.44

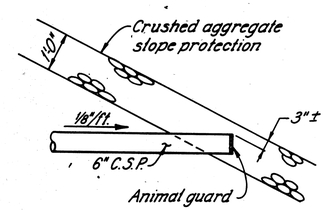


WINGWALL A (& C)

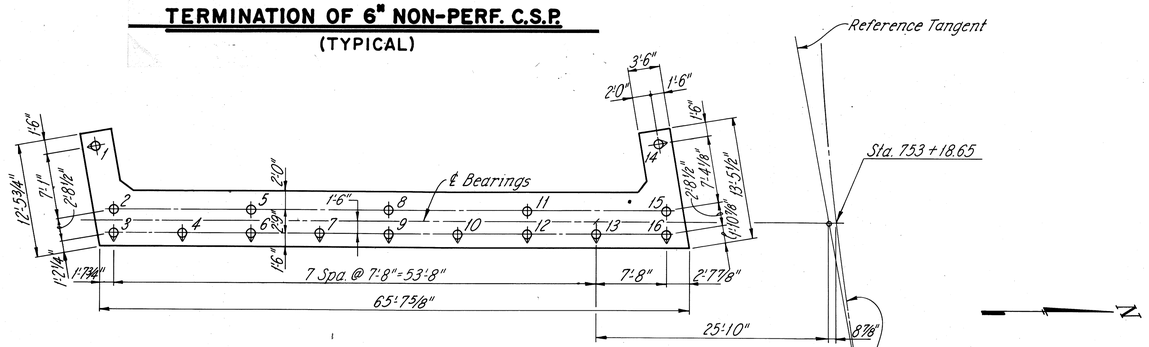
▲See note 2 on sht. 298 of 345



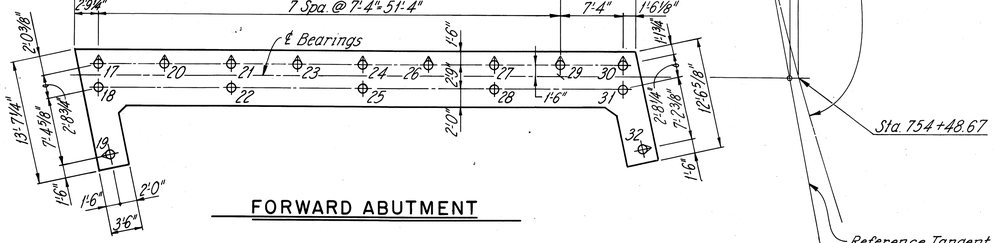
WINGWALL B (& D)



TERMINATION OF 6" NON-PERF. C.S.P. (TYPICAL)



REAR ABUTMENT



FORWARD ABUTMENT

PILE LAY-OUT PLAN

LEGEND:

⊕ ~ Indicates 1:4 Battered Piles (in direction of the 'arrow').

E.F. ~ Each Face.
F.F. ~ Far Face
N.F. ~ Near Face

NOTES:

CROSS REFERENCE SHEETS: For notes, see Sheet 4 / 13.
For Wingwall Sections, see Sheet 5 / 13.
For Wingwall locations & Abutment Details, see Sheets 4 / 13 & 5 / 13.

PILES: All piles are to be 12" ø Cast-in-place reinforced concrete.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 6 / 13

ABUTMENT DETAILS

BRIDGE NO. AUG-33-1480R (E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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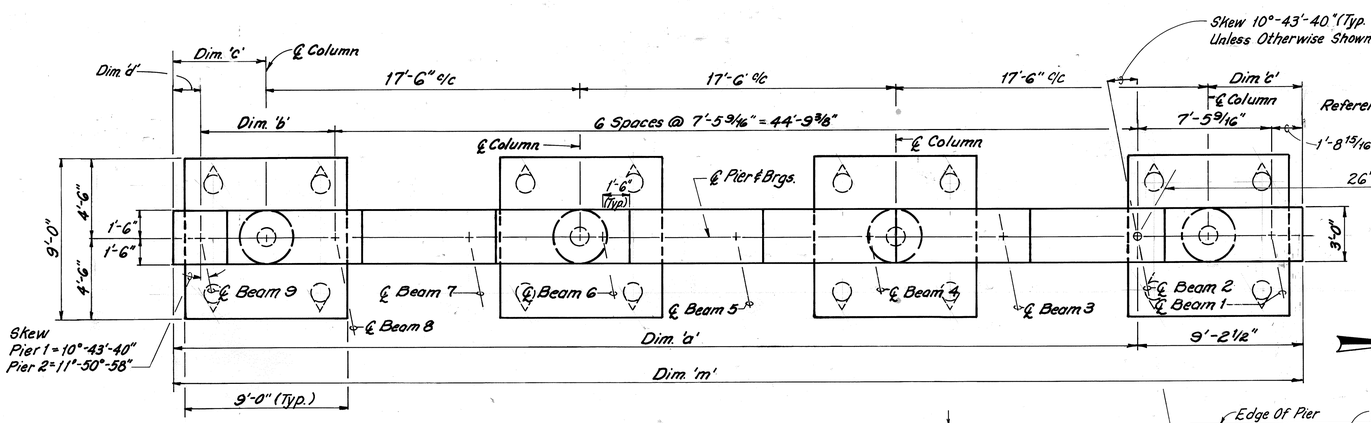
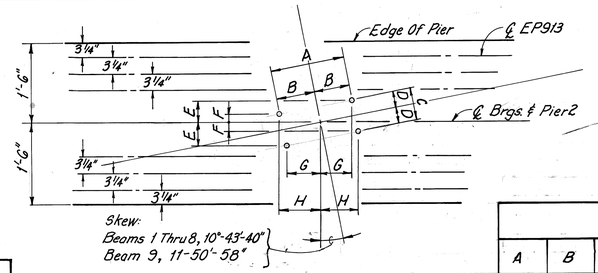
345

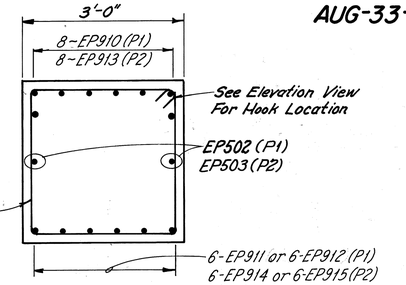
AUGLAIZE COUNTY
AUG-33-13.44



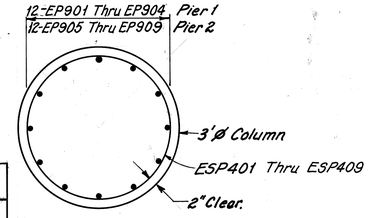
PLAN
(PIER 1 & PIER 2)



ANCHOR BOLT LAYOUT
(PIER 2)



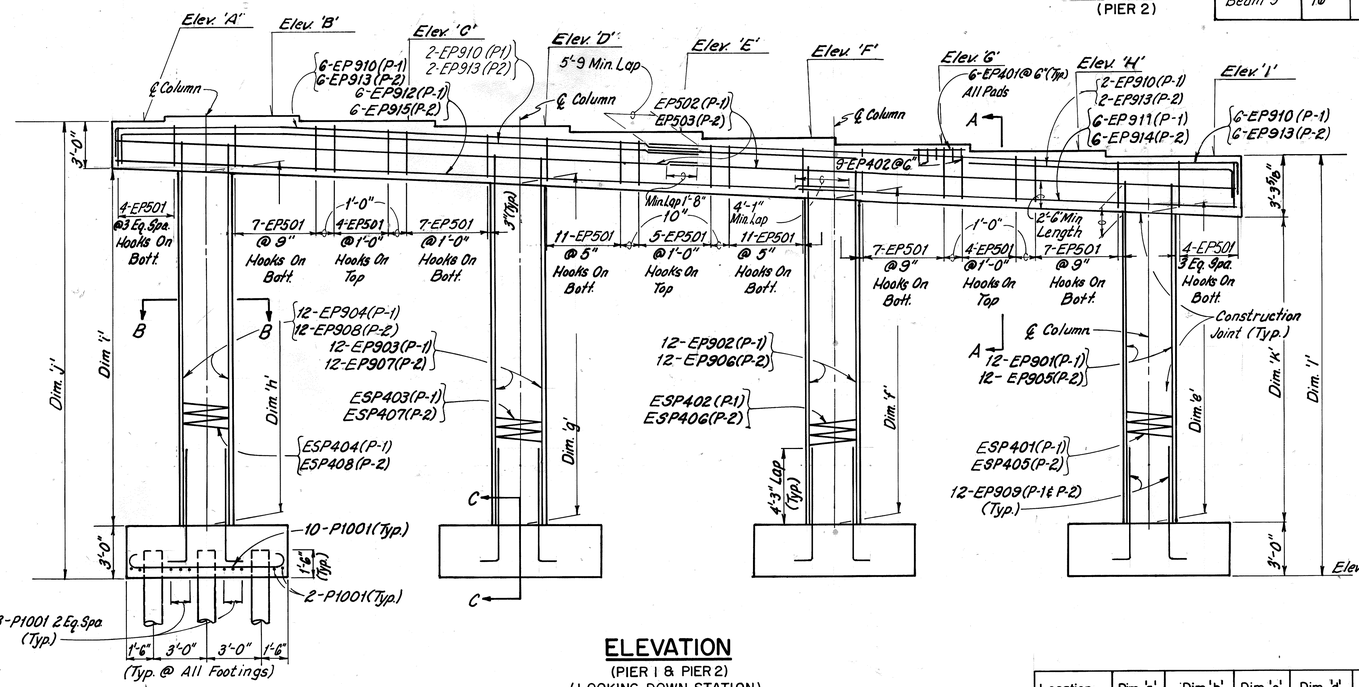
SECTION A-A



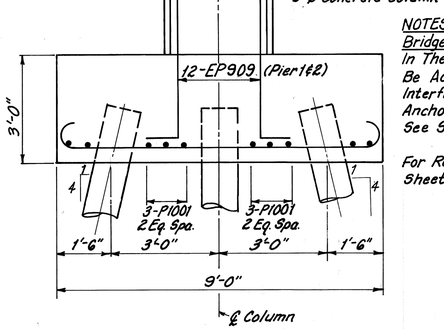
SECTION B-B

LOCATION	Elev. 'A'	Elev. 'B'	Elev. 'C'	Elev. 'D'	Elev. 'E'	Elev. 'F'	Elev. 'G'	Elev. 'H'	Elev. 'I'
PIER 1	922.60	922.88	922.59	922.23	921.87	921.51	921.15	920.79	920.43
PIER 2	923.80	924.07	923.85	923.49	923.13	922.77	922.41	922.06	921.70

	DIMENSIONS							
	A	B	C	D	E	F	G	H
Beams 1-8	16"	8"	7"	3 1/2"	4 15/16"	1 15/16"	7 3/16"	8 1/2"
Beam 9	16"	8"	7"	3 1/2"	5 1/16"	1 13/16"	7 1/8"	8 9/16"



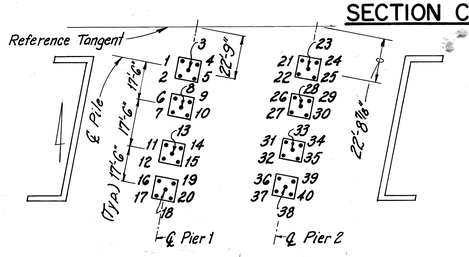
ELEVATION
(PIER 1 & PIER 2)
(LOOKING DOWN STATION)



SECTION C-C

NOTES:
Bridge Seat Reinforcing: Reinforcing Steel In The Vicinity Of The Bridge Seat Shall Be Accurately Placed To Avoid Interference With The Drilling Of Anchor Bar Holes. For Additional Notes See Sheet 2/13.

For Reinforcing Steel Lists, See Sheet 13/13.



PILE LAYOUT

LEGEND
Indicates Pile Battered In The Direction Of Arrow, 1:4.

Location	Dim. 'a'	Dim. 'b'	Dim. 'c'	Dim. 'd'	Dim. 'e'	Dim. 'f'	Dim. 'g'	Dim. 'h'	Dim. 'i'	Dim. 'j'	Dim. 'k'	Dim. 'l'	Dim. 'm'
Pier 1	53'-9 1/2"	7'-6"	5'-3"	1'-6 1/8"	17'-4"	18'-0 1/4"	18'-8 1/2"	19'-4 3/4"	19'-7 1/4"	25'-7 1/4"	17'-1 1/2"	23'-5 1/8"	63'-0"
Pier 2	52'-10 1/2"	6'-8 3/8"	4'-9 1/2"	1'-4 3/4"	18'-7"	19'-3 1/8"	19'-11 1/4"	20'-7 3/8"	20'-9 5/8"	26'-9 5/8"	18'-4 3/4"	24'-8 3/8"	62'-1"

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
7/13

PIER DETAILS

BRIDGE NO: AUG-33-1480R(E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY — OHIO

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TDW	MDS	MDS	JKS	JKS		

SSHEET

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	OHIO		

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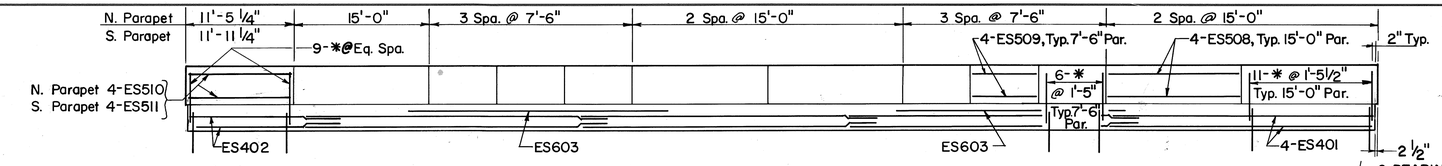
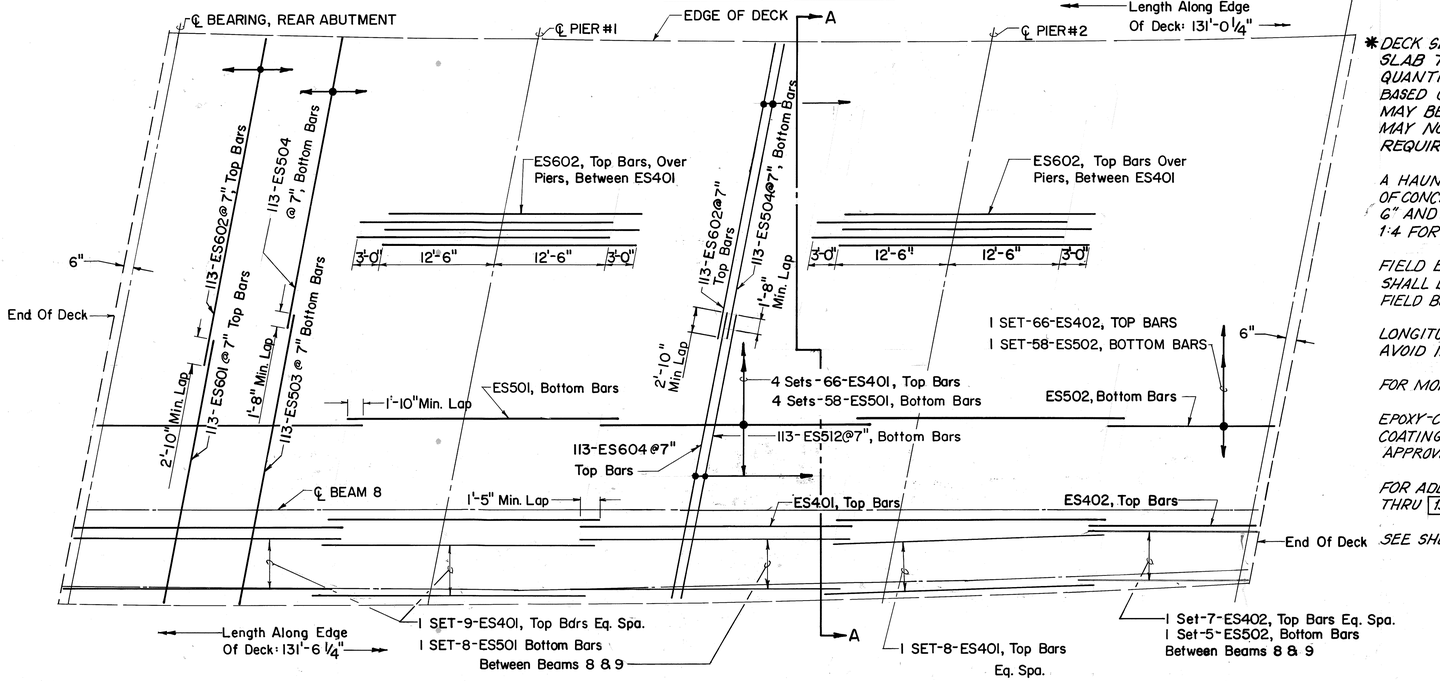
AUGLAIZE COUNTY
AUG-33-13.44



PARAPET ELEVATION



DECK SLAB PLAN

NOTES

*DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMESION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALELL TO THE FINISHED GRADE.

A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" WIDTH).

FIELD BEND TRAVERSE BARS TO FIT CROWN. ALL TRANSVERSE BARS SHALL BE PARALLEL TO THE SUBSTRUCTURE.
FIELD BENDING SHALL BE INCLUDED WITH ITEM 509 FOR PAYMENT.

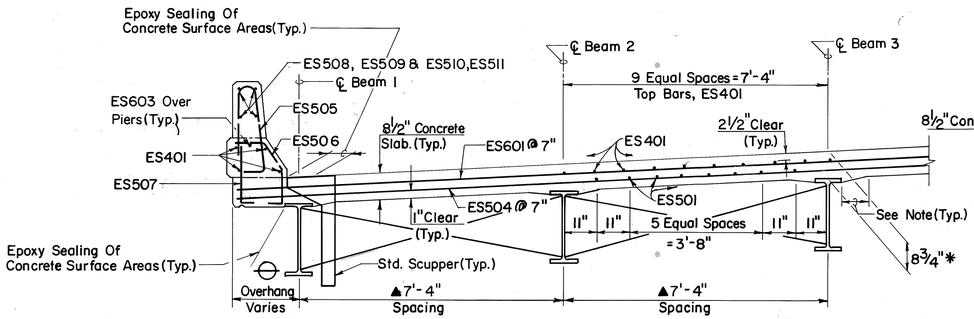
LONGITUDINAL STEEL SHALL BE FIELD CUT AS NECESSARY TO AVOID INTERFERENCE WITH SCUPPERS.

FOR MORE RAILING AND PARAPET DETAILS SEE STD. DWG. BR-1

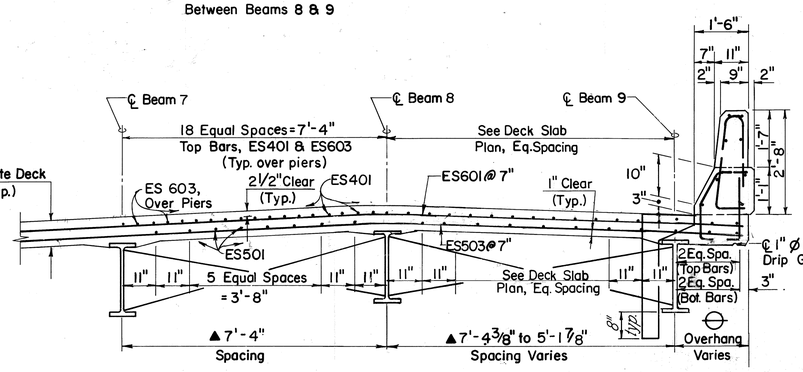
EPOXY-COATED BARS THAT ARE FIELD CUT AND BARS WITH EPOXY COATING DAMAGED BY FIELD BENDING SHALL BE RECOATED AS PER APPROVED MANUFACTURER'S RECOMMENDATIONS.

FOR ADDITIONAL SUPERSTRUCTURE DETAILS SEE SHEETS 9/13 THRU 13/13

SEE SHEET 9/13 FOR INTERMEDIATE CROSS FRAME DETAILS.

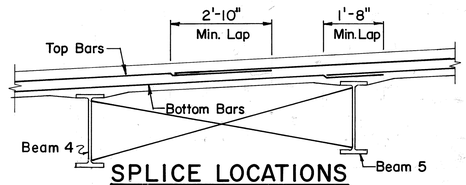


SECTION A-A



▲ NORMAL TO REFERENCE LINE UNLESS OTHERWISE SHOWN

⊕ OVERHANG DIMENSIONS, LEFT AND RIGHT, ARE GIVEN ALONG ℄ BRGS. OR PARALLEL TO IT. SEE TABULAR VALUES SHEET 10/13



SPLICE LOCATIONS
TRANSVERSE DECK REINFORCING

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
8/13

SUPERSTRUCTURE DETAILS
BRIDGE NO: AUG-33-1480 R(E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
MGM	MDS	MDS	TDW	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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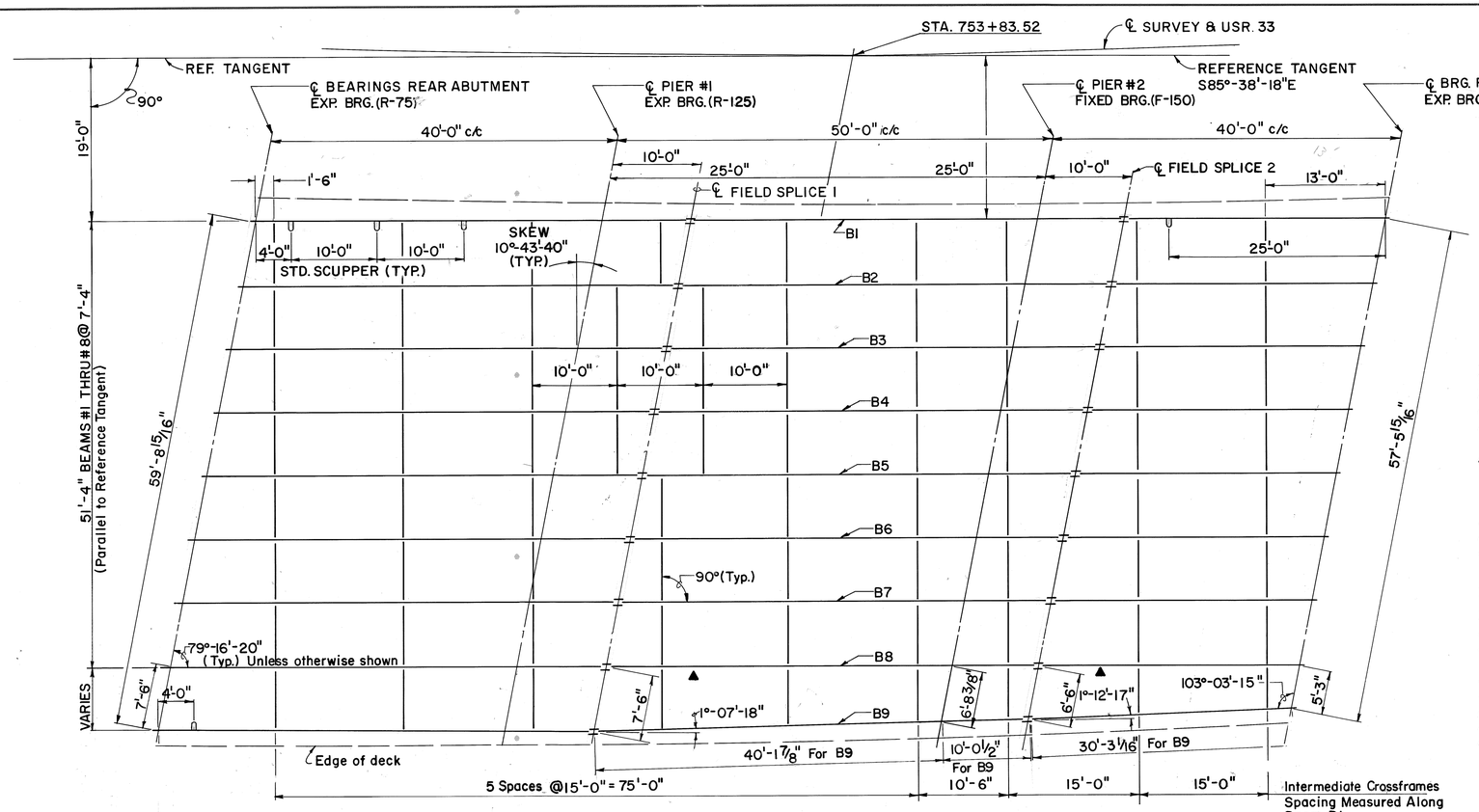
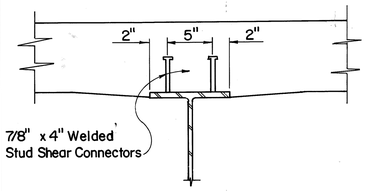
345

AUGLAIZE COUNTY
AUG-33-13.44

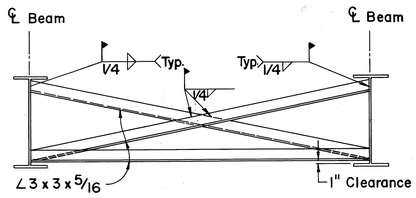


▲ Deflection Angles for Beam 9 @ Field Splice Location.

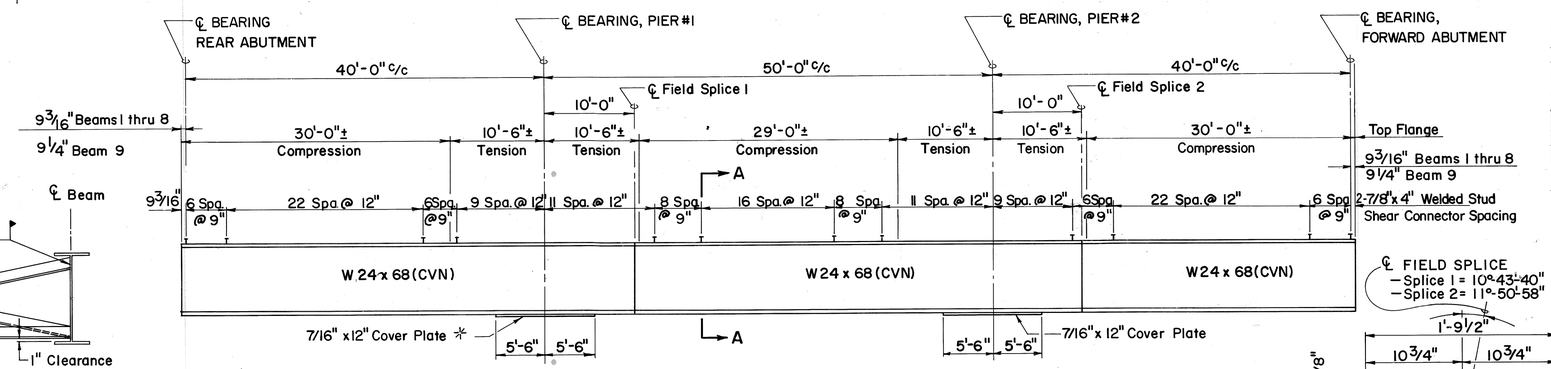
FRAMING PLAN



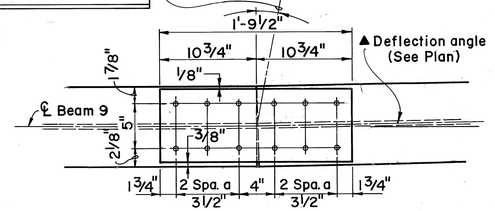
SECTION A-A



INTERMEDIATE CROSSFRAME



BEAM ELEVATION (TYP.)
BEAMS B1 THRU B9



SPLICE DETAILS

NOTES

WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.

ALL BEAM LENGTH DIMENSIONS ARE AT 60°F.

WELDING ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION." FILLET WELDS TO COMPRESSION FLANGES SHALL NOT BE CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG, AND BE NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO.

BEARINGS: IN LIEU OF A588 STEEL, A36 STEEL, GALVANIZED, MAY BE FURNISHED FOR BEARINGS, EXCEPT FOR UPPER PLATE ELEMENT OF BEARINGS, THIS A36 STEEL SHALL BE INCLUDED WITH THE A588 STEEL QUANTITY FOR PAYMENT.

FOR END CROSSFRAME DETAILS, SEE STD. DWG. SD-1-69 SHEET 1 OF 4.

* FOR WELDING OF COVER PLATES, SEE STD DWG. SD-1-69.

PARTIAL PAINTING OF A588 STEEL: AN 8 FOOT LENGTH OF THE BEAM ENDS ADJACENT TO ABUTMENTS, ALL CROSSFRAMES AND OTHER A588 STEEL WITHIN THESE LIMITS SHALL BE PAINTED. PAINT SHALL BE 514, SYSTEM A, THE PRIME COAT SHALL BE 708.17. THE TOP SHALL BE 708.18 EXCEPT THAT THE COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595A-20045 OR 20059. (RUSTY STEEL COLOR.
REMAINING A588 IS TO BE LEFT UNPAINTED, SEE CMS 513.221 FOR CLEANING REQUIREMENTS.

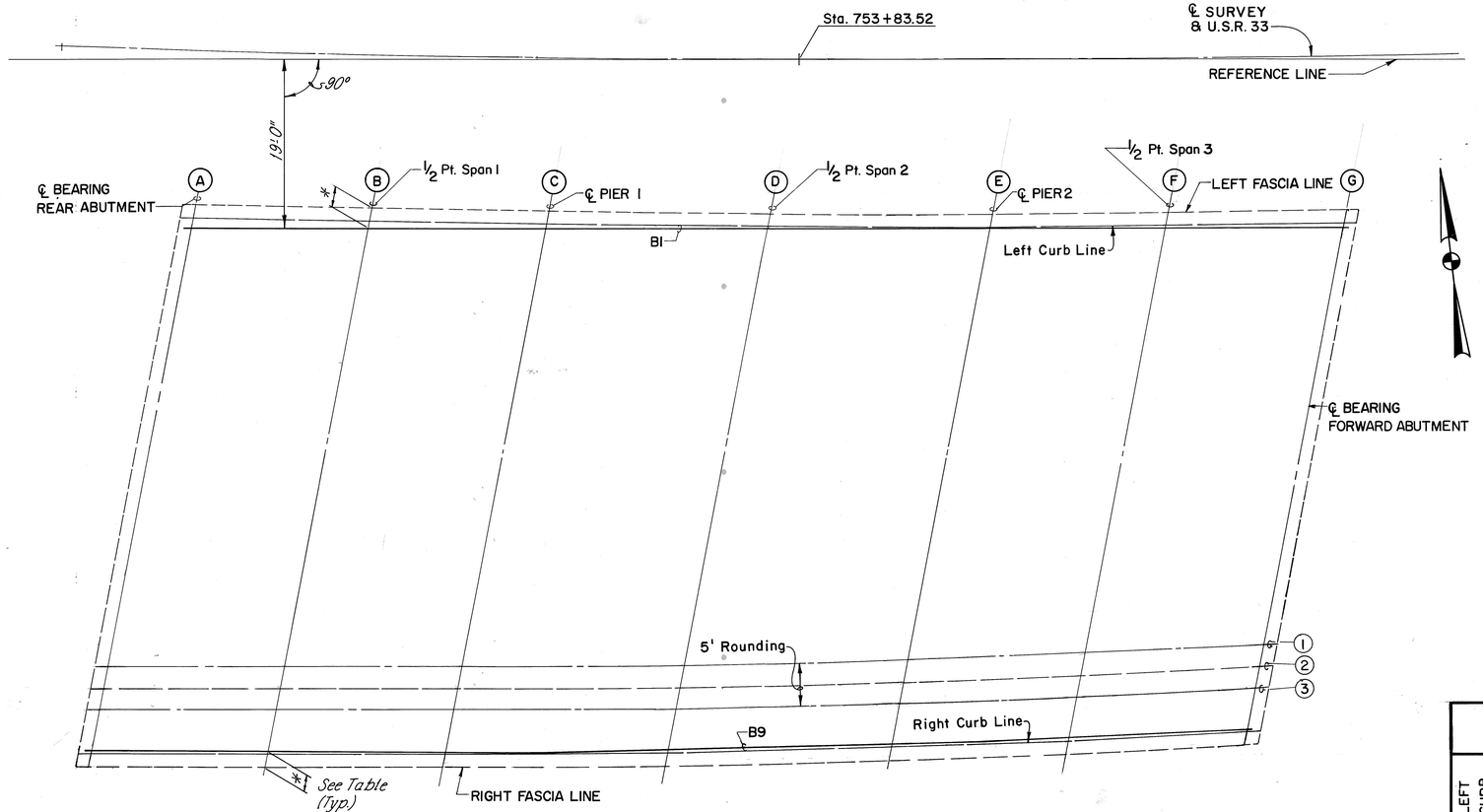
FOR BOLTED BEAM SPLICE DETAILS, SEE STD. DRWG. SD-1-69, SHEET 4 OF 4. HIGH STRENGTH BOLTS SHALL BE 1" DIA. A325 UNLESS OTHERWISE NOTED.

SCUPPERS SHALL BE IN ACCORDANCE WITH STD. DRWG. SD-1-69, EXCEPT THAT SCUPPER PIPES SHALL EXTEND 8" BELOW THE BOTTOM OF THE BEAM INSTEAD OF 2".

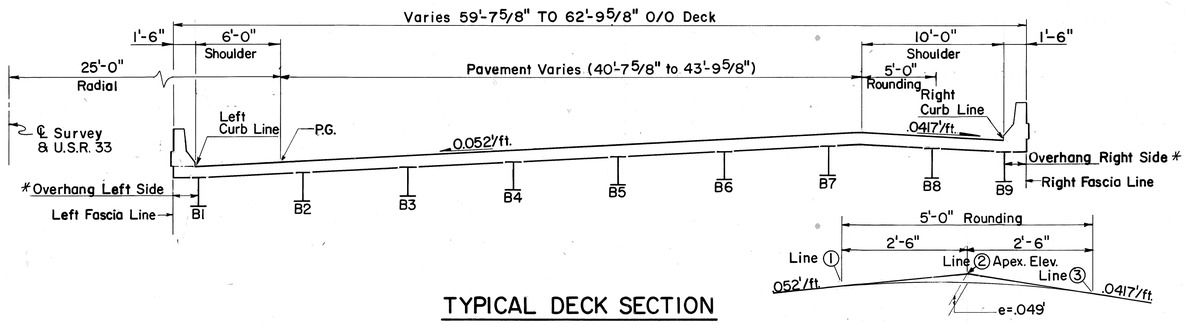
PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
9/13

SUPERSTRUCTURE DETAILS
BRIDGE NO: AUG-33-1480R(E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
MJM	MDS		TDW	JKS		



DECK PLAN



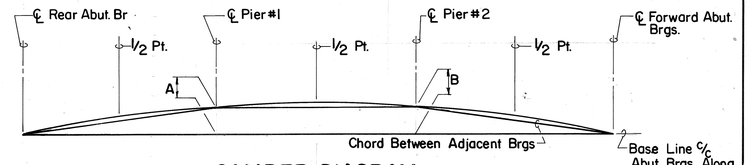
TYPICAL DECK SECTION

(Radial Dimensions shown)

ROUNDING DETAIL

BEAM NO.	DIM. A	DIM. B
1 THRU 7	1/8"	1/8"
8	3/4"	7/8"
9	1/2"	1/2"

BLOCKING DIAGRAM



CAMBER DIAGRAM

BEAMS 1 THRU 7	½ Pt. Span 1	½ Pt. Span 2	½ Pt. Span 3
Deflection Due to Remaining D.L.	5/16"	3/8"	5/16"
Deflection Due to Beam Wt.	1/16"	1/16"	1/16"
Correction for Vert. & Horz. Curve	0	0	0
Req'd Shop Camber	3/8"	7/16"	3/8"
BEAM 8			
Deflection Due to Remaining D.L.	5/16"	3/8"	5/16"
Deflection Due to Beam Wt.	1/16"	1/16"	1/16"
Correction for Vert. & Horz. Curve	0	1/8"	1/4"
Req'd Shop Camber	3/8"	9/16"	5/8"
BEAM 9			
Deflection Due to Remaining D.L.	5/16"	3/8"	5/16"
Deflection Due to Beam Wt.	1/16"	1/16"	1/16"
Correction for Vert. & Horz. Curve	0	1/8"	1/8"
Req'd Shop Chamber	3/8"	9/16"	1/2"

TABLE OF SCREED ELEVATIONS

	LINE	A	B	C	D	E	F	G
LEFT CURB LINE	Station	753+15.51	753+34.96	753+55.13	753+79.94	754+04.80	754+25.06	754+44.65
	Top of Slab Elev.	923.48	923.83	924.19	924.61	925.02	925.34	925.64
	Deflection	0	0.03	0	0.03	0	0.03	0
	Screed Elevation	923.48	923.86	924.19	924.64	925.02	925.37	925.64
LINE ①	Station	753+07.47	753+26.66	753+46.58	753+71.08	753+95.63	754+15.66	754+35.02
	Top of Slab Elev.	925.92	926.25	926.58	926.97	927.35	927.64	927.92
	Deflection	0	0.03	0	0.03	0	0.03	0
	Screed Elevation	925.92	926.28	926.58	927.00	927.35	927.67	927.92
LINE ②	Station	753+07.08	753+26.25	753+46.15	753+70.63	753+95.15	754+15.16	754+34.52
	Top of Slab Elev.	926.04	926.37	926.70	927.09	927.47	927.76	928.04
	Deflection	0	0.03	0	0.03	0	0.03	0
	Screed Elevation	926.04	926.40	926.70	927.12	927.47	927.79	928.04
LINE ③	Station	753+06.68	753+25.84	753+45.72	753+70.17	753+94.68	754+14.67	754+34.01
	Top of Slab Elev.	925.93	926.26	926.59	926.98	927.36	927.65	927.93
	Deflection	0	0.03	0	0.03	0	0.03	0
	Screed Elevation	925.93	926.27	926.59	927.01	927.36	927.68	927.93
RIGHT CURB LINE	Station	753+05.89	753+25.01	753+44.85	753+69.27	753+93.73	754+13.69	754+32.98
	Top of Slab Elev.	925.71	926.04	926.37	926.76	927.14	927.43	927.71
	Deflection	0	0.03	0	0.03	0	0.03	0
	Screed Elevation	925.71	926.07	926.37	926.79	927.14	927.46	927.71
*	Overhang Left Side	2'-4"	1'-11 1/4"	1'-8"	1'-6 1/4"	1'-7 1/4"	1'-10"	2'-2 3/8"
*	Overhang Right Side	1'-7 1/8"	1'-7"	1'-5 1/8"	1'-5 1/8"	1'-2 7/8"	1'-3 1/8"	1'-3 1/4"

NOTE: SLAB OVERHANG DIMENSIONS ARE ALL MEASURED ALONG SKEW

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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AUGLAIZE COUNTY
AUG-33-13.44

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
10/13

SUPERSTRUCTURE DETAILS

BRIDGE NO: AUG-33-1480R(E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW		MDS	JKS	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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AUG-33-13.44

ELASTOMERIC STRIP SEAL SYSTEM

SPECIAL NOTES:

Seal movement rating shall be 3"

IT IS NECESSARY TO MODIFY THE DESIGN DRAWING TO ACCOMMODATE THE EXPANSION JOINT DEVICE. The drawings shall be modified by the Contractor and approved by the Engineer. Copies of the modified drawings shall be forwarded to the Bureau of Bridges, Structural Steel Section, for use in checking shop drawings.

DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, THE SEATING OF BEAMS ON BEARINS SHALL BE CAREFULLY OSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT/ARMOR OR THE BEAMS SHALL BE ACHIEVED BY POSTITION OF THE BEVEL FILL PLATES RATHER THAN BY CLAMPING FORCE.

SEE STANDARD DRAWING EXJ-4-87 FOR ALL REMAINING DETAILS AND NOTES.

All of the above shall be included with item 516 for payment

STRIP SEAL JOINT AT ABUTMENT		
JOINT SETTING TABLE		
TEMP. (F°)	Joint Opening – Dim. "A"	
	Rear Abutment	Forward Abutment
30°	1 3/4"	1 5/8"
40°	1 11/16"	1 5/8"
50°	1 5/8"	1 9/16"
60°	1 9/16"	1 9/16"
70°	1 1/2"	1 1/2"
80°	*	*
90°	*	*

* MINIMUM JOINT OPENING (DIMENSION "A") AT TIME OF SEAL GLAND INSTALLATION SHALL NOT BE LESS THAN 1-1/2". IF THE JOINT OENING IS LESS, THE INSTALLATION SHALL BE POSTPONED UNTIL THE TEMP-ATURE DROPS A SUFFICIENT AMOUNT TO ALLOW THE MIN-IMUM 1-1/2" OPENING.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO

11/13

STRUCTURAL EXPANSION JOINT DETAIL

BRIDGE NO. AUG-33-1480R

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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AUGLAIZE COUNTY
AUG-33-13.44

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
	* REAR ABUTMENT																
A501	58	8'–3"	500	2	1'–7"	5'–4"	1'–7"										
A502	29	7'–10"	237	3	1'–3"	6'–8"											
A504	29	9'–1"	275	3	1'–3"	7'–11"											
A505	16	32'–4"	540	STR													
A506	14	6'–0"	88	STR													
A601	29	14'–3"	621	2	6'–9"	5'–4"	2'–6"										
A604	29	15'–8"	683	2	8'–2"	5'–4"	2'–6"										
A801	14	34'–2"	1278	STR													
A802	4	7'–0"	75	STR													
	TOTAL = 4,297 LB																
EA401	54	2'–5"	88	2	6"	1'–7"	6"										
EA402	36	2'–8"	65	STR													
EA503	58	8'–8"	525	2	2'–9"	3'–5"	2'–9"										
EA505	22	32'–4"	742	STR													
EA602	61	8'–9"	802	2	3'–10"	1'–5"	3'–10"										
EA603	61	4'–9"	436	2	1'–10"	1'–5"	1'–10"										
EA605	61	5'–0"	459	2	2'–3"	10"	2'–3"										
EA803	41	4'–5"	484	5			1'–5"	1'–9"	1'–5"			1'–0"		1'–0"			
	TOTAL,EPOXY COATED = 3,601 LB																
	*FORWARD ABUTMENT																
A501	58	8'–3"	500	2	1'–7"	5'–4"	1'–7"										
A502	29	7'–7"	230	3	1'–3"	6'–5"											
A504	29	9'–1"	275	3	1'–3"	7'–11"											
A505	16	31'–0"	518	STR													
A506	14	6'–0"	88	STR													
A601	29	14'–2"	618	2	6'–8"	5'–4"	2'–6"										
A604	29	15'–8"	683	2	8'–2"	5'–4"	2'–6"										
A801	14	32'–10"	1228	STR													
A802	4	7'–0"	75	STR													
	TOTAL = 4215 LB																
EA401	54	2'–5"	88	2	6"	1'–7"	6"										
EA402	36	2'–8"	65	STR													
EA503	58	8'–8"	525	2	2'–9"	3'–5"	2'–9"										
EA505	22	31'–0"	712	STR													
EA602	58	8'–9"	763	2	3'–10"	1'–5"	3'–10"										
EA603	58	4'–7"	400	2	1'–9"	1'–5"	1'–9"										
EA605	58	5'–0"	436	2	2'–3"	10"	2'–3"										
EA803	39	4'–5"	460	5			1'–5"	1'–9"	1'–5"			1'–0"		1'–0"			
	TOTAL,EPOXY COATED = 3,449 LB																
	*WINGWALLS																
W501	12	3'–9"	47	STR													
W502	12	6'–3"	79	2	2'–8"	1'–2"	2'–8"										
W503	12	2'–7"	33	7		2'–0"											
W504	16	2'–8"	45	7		2'–1"											
W505	40	4'–0"	167	STR													
W506	24	5'–3"	132	9													
W507	44	11'–1"	509	10		3'–0"	2'–1"	3'–0"	2'–1"								
W508	20	9'–4"	195	STR													
W509	4	12'–4"	52	STR													
W510	56	15'–7"	911	STR													
W511	12	4'–2"	53	4		1'–6"	1'–4"	1'–6"				1'–5 1/2"		4"			
W512	20	3'–9"	78	8		1'–6"	1'–6"	1'–0"				1'–5 1/2"		4"			
W513	20	9'–11"	207	STR													
W514	4	12'–11"	54	STR													
W601	4	5'–10"	35	2	2'–6"	1'–2"	2'–6"										
W602	4	7'–10"	47	2	3'–6"	1'–2"	3'–6"										
W603	2	18'–10"	57	2	9'–0"	1'–2"	9'–0"										

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
W604	11	24'–2"	400	2	11'–8"	1'–2"	11'–8"										
W605	4	17'–8"	107	2	8'–5"	1'–2"	8'–5"										
W606	2	13'–10"	42	2	6'–6"	1'–2"	6'–6"										
W607	11	19'–2"	317	2	9'–2"	1'–2"	9'–2"										
W608	4	13'–8"	83	2	6'–5"	1'–2"	6'–5"										
W701	12	3'–7"	88	6		8 1/2"	2'–5"	0	8 1/2"	7"		2"					
W702	4	3'–7"	30	6		8 1/2"	2'–5"	0	9"	7"		3"					
W703	4	3'–8"	30	6		8 1/2"	2'–5"	0	9 1/2"	8"		4"					
W704	4	3'–8"	30	6		8 1/2"	2'–5"	0	10"	8"		5"					
W705	32	3'–9"	246	6		8 1/2"	2'–5"	0	10 1/2"	9"		6"					
W801	6	12'–0"	193	STR													
W802	4	6'–7"	71	8		3'–0"	3'–0"	1'–0"				2'–11 1/2"		6"			
W803	4	6'–8"	72	8		1'–0"	3'–0"	3'–0"				2'–11 1/2"		6"			
W804	6	12'–11"	207	STR													
W805	6	13'–1"	210	STR													
	TOTAL = 4827																
	* PIERS 1& 2																
EP401	108	3'–11"	283	STR													
EP402	162	3'–4"	361	2	6"	2'–6"	6"										
EP501	142	11'–3"	1667	10		2'–8"	2'–8"	2'–8"	2'–8"								
EP502	4	32'–2"	135	STR													
EP503	4	31'–9"	133	STR													
EP901	12	19'–10"	810	STR													
EP902	12	20'–6"	835	STR													
EP903	12	21'–2"	864	STR													
EP904	12	21'–11"	895	STR													
EP905	12	21'–1"	861	STR													
EP906	12	21'–9"	888	STR													
EP907	12	22'–5"	915	STR													
EP908	12	23'–1"	942	STR													
EP909	96	8'–2"	2666	3	1'–7"	6'–10"											
EP910	16	36'–3"	1972	3	2'–4"	34'–2"											
EP911	6	24'–6"	500	STR													
EP912	6	42'–1"	859	STR													
EP913	16	35'–10"	1950	3	2'–4"	33'–9"											
EP914	6	24'–1"	492	STR													
EP915	6	41'–8"	850	STR													
ESP401	1	17'–4"	325	SP1		4 1/2"	17'–4"	50							2'–8"		
ESP402	1	18'–0"	339	SP1		4 1/2"	18'–0"	51							2'–8"		
ESP403	1	18'–8"	351	SP1		4 1/2"	18'–8"	53							2'–8"		
ESP404	1	19'–4"	363	SP1		4 1/2"	19'–4"	55							2'–8"		
ESP405	1	18'–7"	350	SP1		4 1/2"	18'–7"	53							2'–8"		
ESP406	1	19'–3"	362	SP1		4 1/2"	19'–3"	55							2'–8"		
ESP407	1	19'–11"	373	SP1		4 1/2"	19'–11"	57							2'–8"		
ESP408	1	20'–7"	385	SP1		4 1/2"	20'–7"	58							2'–8"		
	TOTAL,EPOXY COATED = 21,726 LB																
P1001	160	11'–4"	7801	1		8'–6"											
	TOTAL = 7801 LB																

*NOTE:

THE REAR ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "R"

THE FORWARD ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "F"

THE LETTER 'E' BEFORE A BAR MARK DENOTES AN EPOXY COATED REINFORCING BAR.

THE PREFIX IN THE BAR MARKS FOR THE PIERS SHALL BE AS FOLLOWS:
PIER–1: 1P OR 1EP
PIER–2: 2P OR 2EP

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 12/13

REINFORCING STEEL LIST

BRIDGE NO.: AUG-33-1480 R(E.B.)
OVER HARDIN PIKE
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

300
345

AUGLAIZE COUNTY
AUG-33-13.44

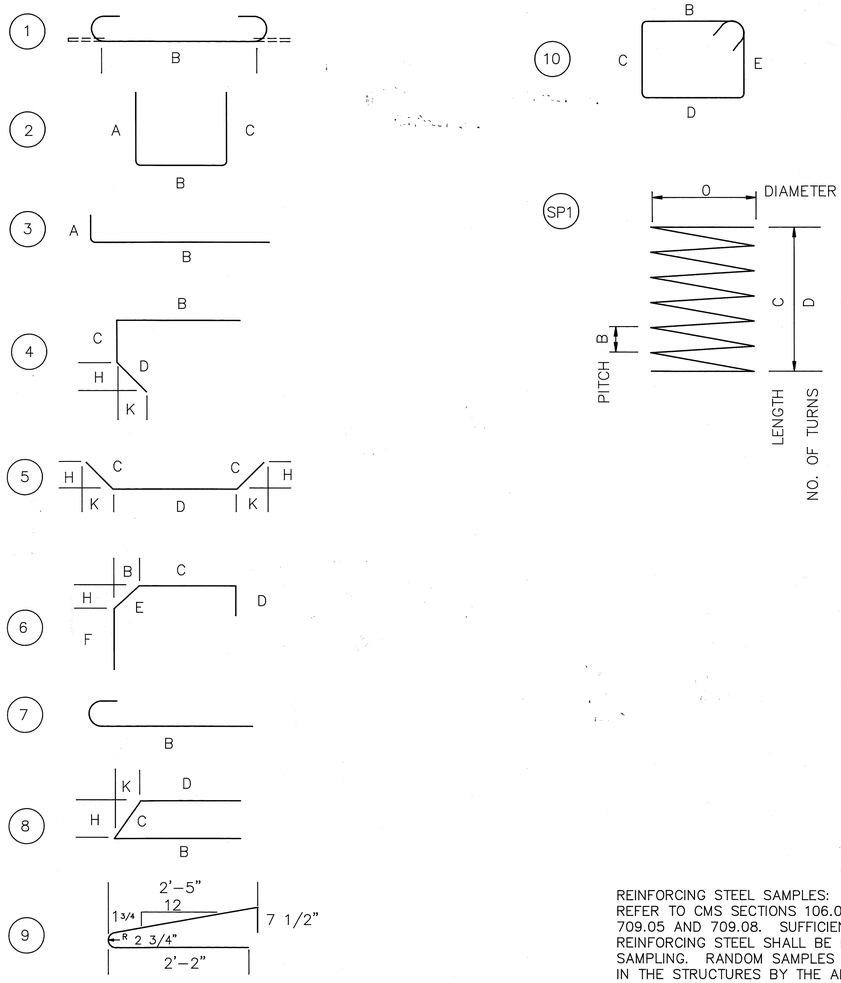
REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
	SUPERSTRUCTURE																
ES401	339	30'-0"	6794	STR													
ES402	83	16'-6"	915	STR													
ES501	271	30'-0"	8480	STR													
ES502	65	18'-2"	1232	STR													
ES503	113	32'-0"	3772	STR													
ES504	226	32'-4"	7622	STR													
ES505	200	5'-3"	1096	9													
ES506	200	3'-0"	626	6		8 1/2"	9"	10 1/2"	10 1/2"	9"	6"						
ES507	200	2'-2"	452	3	10 1/2"	1'-5"											
ES508	32	14'-8"	490	STR													
ES509	48	7'-2"	359	STR													
ES510	4	11'-7"	49	STR													
ES511	4	11'-1"	47	STR													
ES512	113	31'-0"	3654	STR													
ES601	113	36'-4"	6167	STR													
ES602	226	29'-2"	9901	STR													
ES603	80	28'-0"	3365	STR													
TOTAL, EPOXY COATED = 55,021 LB																	

* ~ SERIES BAR

"E" IN THE PREFIX OF A BAR MARK INDICATES EPOXY COATED REBAR

BAR BENDING SCHEDULE



REINFORCING STEEL SAMPLES:
REFER TO CMS SECTIONS 106.03,700,709.01 THRU 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

FOR ADDITIONAL NOTES SEE 12/13

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
13/13

REINFORCING STEEL LIST

BRIDGE NO.: AUG-33-1480 R(E.B.)
OVER HARDIN PIKE

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MDS	JKS		

FHWA REGION	STATE	PROJECT	
5	OHIO		

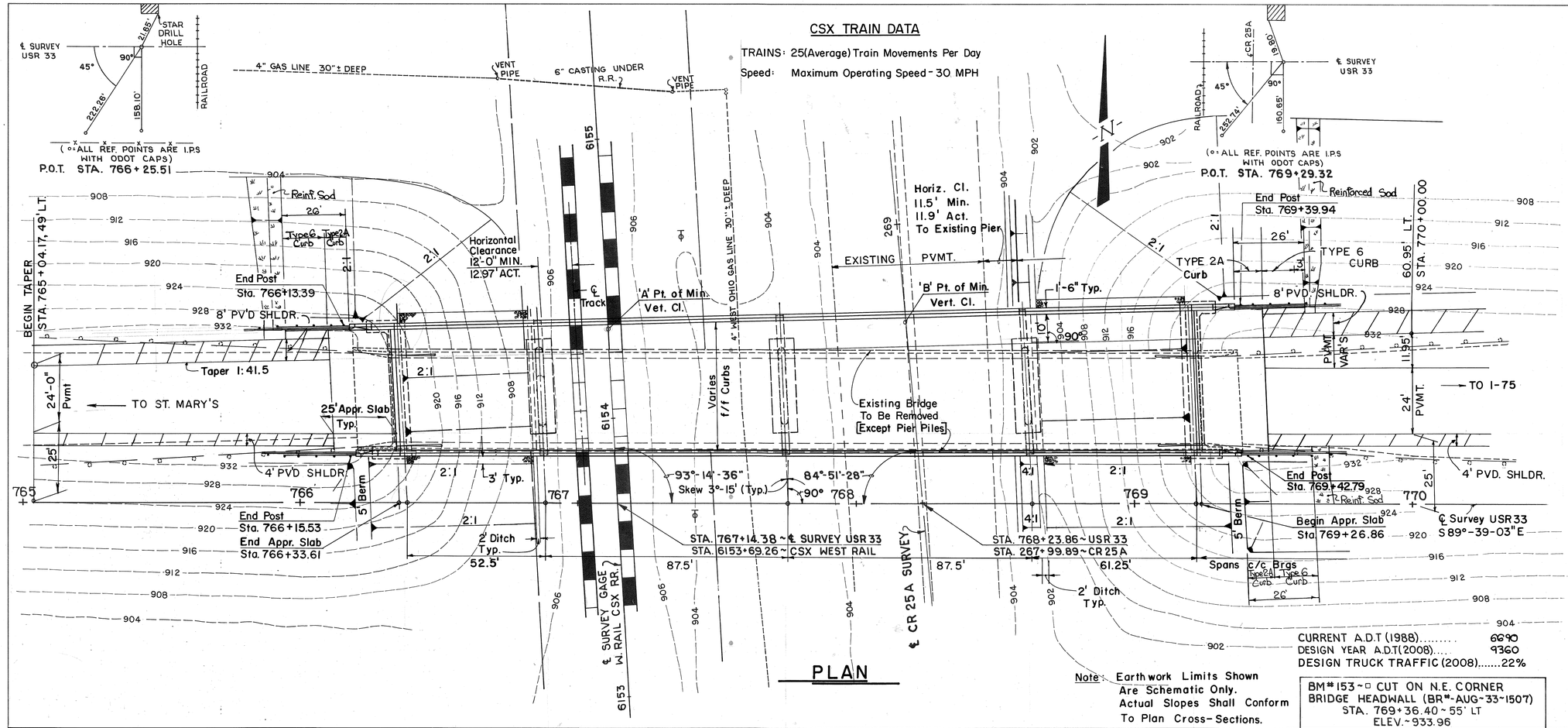
301
345

AUGLAIZE COUNTY
AUG-33-13.44

CSX TRAIN DATA

TRAINS: 25(Average) Train Movements Per Day

Speed: Maximum Operating Speed - 30 MPH



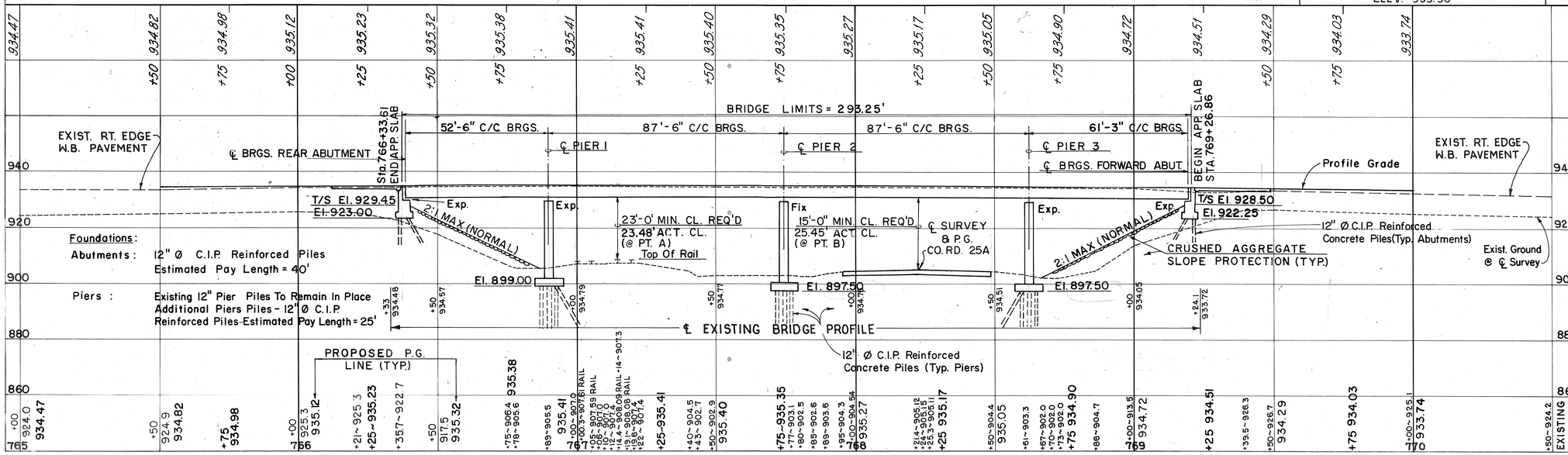
PLAN

CURRENT A.D.T (1988)..... 6690
DESIGN YEAR A.D.T(2008).... 9360
DESIGN TRUCK TRAFFIC(2008).....22%

Note: Earthwork Limits Shown Are Schematic Only. Actual Slopes Shall Conform To Plan Cross-Sections.

BM#153~□ CUT ON N.E. CORNER BRIDGE HEADWALL (BR#-AUG-33-1507) STA. 769+36.40 ~ 55' LT ELEV.~933.96

CURVE DATA		
ROAD	HORIZONTAL	VERTICAL
℄ SURVEY U.S. 33	TANGENT	-0.69 % ∨ -3.0 %, L=875', PVI STA.= 769+92.5, ELEV= 937.87
COUNTY RD. 25A	TANGENT	EXISTING



Foundations:

Abutments: 12" Ø C.I.P. Reinforced Piles
Estimated Pay Length = 40'

Piers: Existing 12" Pier Piles To Remain In Place
Additional Piers Piles - 12" Ø C.I.P.
Reinforced Piles-Estimated Pay Length = 25'

ELEVATION - PROFILE GRADE LINE U.S. 33

PROPOSED STRUCTURE

TYPE: 4 SPAN CONTINUOUS COMP. STEEL BEAM WITH REINF CONC. DECK AND SUBSTR. UNITS.
SPAN: 52.5'-87.5' - 87.5'-61.25' C/C BRGS.
ROADWAY WIDTH: VARIES (AVG. 46.67' f/f CURB)
LOAD CAPACITY: HS20-44, CASE II, & ALT. MILITARY LOADING.
SKEW: 3°-15' RT. FWD.
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: TANGENT
SUPERELEVATION: N/A

EXISTING STRUCTURE

TYPE: 4 SPAN CONT. STEEL BEAM WITH REINF. DECK AND SUBSTRUCTURE.
SPAN: 52.5', 87.5', 87.5', 61.25' C/C BRIDGES.
ROADWAY: 30'-0" F/F 2'-0" SAFETY CURBS.
SKEW: 3°-15'-00"
ALIGNMENT: TANGENT
WEARING COURSE: 1" MONOLITHIC CONCRETE.
LOADING: CF = 2000 (SI), *
APPROACH SLABS: (SPECIAL) 25' LONG

*ADEQUATE FOR AASHTO ALT. LOADING

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO

1/13

SITE PLAN

BRIDGE NO.: AUG-1507L (W.B.)
Over C.R. 25A & C.S.X. Railroad
STA. 766+33.61 TO STA. 769+26.86
AUGLAIZE COUNTY U.S.R. 33

EXISTING TOPO		PROPOSED WORK PB. Ohio, Inc.			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
ODOT Dist.7	ODOT Dist.7	JKS	RS/MS	RS	

SITE PLAN STRUCTURE AUG-33-1507

SUBMITTED TO DIST. 7 2/14/97

Rec'd 9/2/97

GENERAL NOTES

REFERENCES:

STANDARD DRAWINGS:

SUPERSTRUCTURE DETAILS	SD-1-69 (SHT. 1,2&3)	DATED 6-12-89
ROCKERS & BOLSTERS	RB-1-55	DATED 2-2-59(REV)
APPROACH SLAB	AS-1-81 (SHT 1,2&3)	DATED 11-27-81
EXPANSION JOINTS	EXJ-4-87	DATED 1-5-89

SUPPLEMENTAL SPECIFICATIONS:
NO. 802 DATED 5-4-88
NO. 836 DATED 11-12-85

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO 'STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES' ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983 SPECIFICATIONS, 1984 THRU 1988 INTERIM SPECIFICATIONS, AND THE OHIO 'SUPPLEMENT' TO THEM, DATED 1982.

DESIGN DATA:

DESIGN LOADING	HS20-44 CASE II AND ALTERNATE MILITARY LOADING
CONCRETE CLASS S, SUPERSTRUCTURE	COMPRESSIVE STRENGTH F'c = 4500 PSI
CONCRETE CLASS C, SUBSTRUCTURE	COMPRESSIVE STRENGTH F'c = 4000 PSI
STRUCTURAL STEEL	ASTM A588, UNIT STRESS = 27000 PSI ASTM A36, UNIT STRESS = 20000 PSI
REINFORCING STEEL	ASTM A615, A616, OR A617, GRADE 60 MINIMUM YIELD STRENGTH = 60000 PSI
SPIRAL REINFORCEMENT MAY BE PLAIN BARS	ASTM A802 OR A615
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL, TOP & BOTTOM MATS
MONOLITHIC WEARING SURFACE	IS ASSUMED, FOR DESIGN PURPOSES TO BE 1 INCH THICK

PILES

PILE DESIGN LOADS: THE DESIGN LOAD FOR THE 12" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES AS THE ABUTMENTS IS 44 TONS PER PILE. THE DESIGN LOAD FOR THE 12" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES AT THE PIERS IS 34 TONS PER PILE. THE ESTIMATED PAY LENGTH FOR THE ABUTMENT PILES IS 40' AND THE ESTIMATED PAY LENGTH FOR THE PIER PILES IS 25'.

12 INCH PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATIONS FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATIVE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER ITEM 507.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATE'S ENERGY RATING OF NOT LESS THAN 16.500 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM CMS, ITEM 108.05, WHICH STATES THAT THE CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK, REFER TO ODOT'S MANUAL OF PROCEDURES FOR STRUCTURES' TO OBTAIN THE STATE'S ENERGY RATING.

EXISTING PILES: THE EXISTING PILES AT PIERS 1,2 & 3 SHALL BE INCORPORATED INTO THE PROPOSED PIERS. THE EXISTING PILES ARE 12" DIA. REINFORCED CONCRETE WITH A DESIGN LOADING OF 35 TONS PER PILE. THE CONTRACTOR SHALL EXERCISE CARE WHILE DEMOLISHING THE EXISTING PIER FOOTINGS SO AS NOT TO DAMAGE THE EXISTING PILES. DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING PILES HAVE BEEN OBTAINED FROM THE PLANS OF THE EXISTING STRUCTURE. CONSEQUENTLY, THEY INDICATE THE LOCATION AND PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02 THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE EXISTING PILES IN THE FIELD AFTER REMOVAL OF THE EXISTING PIER FOOTINGS. IF ANY OF THE EXISTING PILES ARE DAMAGED DURING THE REMOVAL OF THE EXISTING FOOTINGS THEY MAY BE REQUIRED TO BE REPLACED BY EQUIVALENT NEW PILES AT THE DISCRETION OF AND AS APPROVED BY THE ENGINEER. FOR MORE NOTES REGARDING THE EXISTING PILES SEE SHEET 7/13 .

"ITEM 507 12 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN", THE RESPONSIBILITY OF CHOOSING AND PROVIDING A SATISFACTORY PILE WALL THICKNESS FOR THIS PROJECT SHALL BE BORNE BY THE CONTRACTOR EXCEPT THAT THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.250 INCHES IS NECESSARY TO RESIST THE PILE INSTALLATION DRIVING STRESS, THE CONTRACTOR SHALL MAKE THIS DETERMINATION AND SHALL FURNISH A PILE WITH AN ACCEPTABLE WALL THICKNESS. MONOTUBE PILES ARE NOT REQUIRED TO COMPLY WITH THE ABOVE SPECIFIED MINIMUM PILE WALL THICKNESS. IF MONOTUBE PILES ARE USED, THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.200 INCHES AND THE PILES SHALL SATISFY ALL THE REQUIREMENTS OF ITEM 507.

REMOVAL OF EXISTING STRUCTURE: WHEN NO LONGER NEEDED TO MAINTAINING TRAFFIC THE EXISTING STRUCTURE SHALL BE REMOVED EXCEPT FOR THE PILES AT PIERS 1, 2 & 3 PAYMENT FOR THE ABOVE MENTIONED WORK INCLUDING THE SAVING OF THE PIER PILES SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 202 - STRUCTURE REMOVED, AS PER PLAN. THE CONTRACTOR SHALL PREPARE AND SUBMIT DETAILED PLANS TO HE STATE FOR REVIEW AND APPROVAL PRIOR TO THE START OF REMOVAL.

SPECIAL RAILROAD REQUIREMENTS

GENERAL: THE CONTRACTOR SHALL COOPERATE AT ALL TIMES WITH THE OFFICIALS OF THE RAILROAD COMPANY. HE SHALL USE ALL REASONABLE CARE AND DILIGENCE IN THE WORK IN ORDER TO AVOID ACCIDENTS, DAMAGE OR INTERFERENCE WITH THE TRAINS OR THE PROPERTY OF THE RAILROAD. THE CONTRACTOR SHALL NOTIFY THE RAILROAD PRIOR TO STARTING WORK THAT MAY AFFECT RAILROAD PROPERTY AND FACILITIES AND SHALL PAY THE RAILROAD COMPANY THE COST OF FLAGMAN FURNISHED BY THE RAILROAD COMPANY AND MADE NECESSARY BECAUSE OF ANY OF THE CONTRACTOR'S OPERATIONS OVER OR ADJACENT TO THE TRACKS.

NO SCAFFOLD, PLANKS OR OTHER EQUIPMENT SHALL BE SUSPENDED OR ERECTED ABOVE OR WITHIN 10 FEET HORIZONTALLY OF A RAIL OVER WHICH TRAINS ARE OPERATING WITHOUT PRIOR WRITTEN APPROVAL OF THE CHIEF ENGINEER, OR HIS AUTHORIZED REPRESENTATIVE, OF THE RAILROAD COMPANY.

CONSTRUCTION CLEARANCE: A CONSTRUCTION CLEARANCE OF 8 FEET, MEASURED HORIZONTALLY FROM THE CENTER OF TRACKS, AND 21 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL AND 6 FEET FROM THE CENTER OF TRACKS, SHALL BE MAINTAINED AT ALL TIMES.

THE CONTRACTOR SHALL SUBMIT TO THE RAILROAD COMPANY FOR THEIR REVIEW DETAILED PLANS OF THE PROPOSED SHORING FOR THE EXCAVATION OF THE FOOTING AT PIER-1, AND OF PROTECTIVE SHIELD FOR CONSTRUCTION AND DEMOLITION ABOVE TRACKS, INCLUDING ERECTION PROCEDURE OF THE SPAN OVER THE TRACKS.

FAILURE TO COMPLY WITH THE RAILROAD COMPANY AS NOTED ABOVE SHALL BE CAUSE FOR THE STOPPING OF WORK UNTIL ALL PROVISIONS FOR PROTECTION OF THE RAILROAD PROPERTY HAVE BEEN UNDERTAKEN. BLASTING SHALL NOT BE USED OVER OR NEAR THE TRACKS.

RAILROAD AERIAL LINES: WILL BE RELOCATED BY THE RAILROAD. THE CONTRACTOR SHALL USE ALL PRECAUTIONS NECESSARY TO SEE THAT THE LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE AND SHALL COOPERATE WITH THE RAILROAD IN THE RELOCATION OF THESE LINES. THE COST OF THE RELOCATION SHALL BE INCLUDED IN THE RAILROAD FORCE ACCOUNT WORK.

MAINTENANCE OF TRAFFIC: FOR MAINTENANCE OF TRAFFIC AND SCHEDULE OF OPERATIONS, SEE PLAN SHEETS NO. 23/345

WATERPROOF MEMBRANE: CURING AS PER 511.14, METHOD B, SHALL BE APPLIED ON PARAPET, BACKWALLS AND ABUTMENT SEATS.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED

UTILITY LINES, SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAN INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM. UTILITY OWNERS ARE LISTED IN THE GENERAL NOTES ON SHEET NO. 20/345

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN:

THIS ITEM SHALL CONFORM TO CMS 503, EXCEPT THAT ONLY GRANULAR MATERIALS AS DEFINED IN CMS 203.02 SHALL BE USED FOR THE BACKFILL BEHIND THE ABUTMENTS.

ITEM 503 - COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN:

ALL BACKFILL BEHIND THE ABUTMENTS NECESSITATED BY THE PERFORMANCE OF THIS ITEM SHALL CONSIST OF GRANULAR MATERIALS AS DEFINED IN CMS 203.02, EXCEPT THAT BACKFILL IN AREAS MORE THAN 30 FEET BEHIND ABUTMENTS MAY BE ANY MATERIAL MEETING THE REQUIREMENTS OF CMS 203.08.

ITEM 518 - POROUS BACKFILL, AS PER PLAN

TO ENSURE THAT THE FINE SOIL PARTICLES INCLUDED WITHIN THE EMBANKMENT BEHIND THE REAR ABUTMENT DO NOT MIGRATE INTO AND THROUGH THE VOIDS OF THE POROUS BACKFILL MATERIAL AT THE REAR ABUTMENT, FILTER FABRIC, 712.09 TYPE A, SHALL BE PLACED BETWEEN THE 518 POROUS BACKFILL MATERIAL AND THE 203 EMBANKMENT MATERIAL TO THE LIMITS AS SHOWN IN THE PLANS. PAYMENT FOR THE FILTER FABRIC SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD FOR THE ITEM 518 POROUS BACKFILL, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK.

* ITEM SPECIAL: SEALING OF CONCRETE SURFACES

A CONCRETE SEALER, AN EPOXY TYPE, SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES: PARAPETS AND CURBS, SEE SHEET 8/13, BRIDGE SEATS BACKWALLS, AND FRONT FACES OF ABUTMENT BREASTWALLS ONE FOOT DOWN FROM THE LEVEL OF THE BRIDGE SEAT. TOTAL SURFACE OF PIERS ABOVE GROUND LINE TO BE COVERED WITH NON-EPOXY SEALER. SEE PROPOSAL NOTE FOR SURFACE PREPARATION REQUIREMENTS AND APPLICATION PROCEDURES. SUBSTRUCTURE UNITS SHALL BE SEALED PRIOR TO ERECTION OF STRUCTURAL STEEL.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS NEEDED TO PERFORM THIS ITEM SHALL BE INCLUDED IN THE SQUARE YARD UNIT PRICE BID FOR ITEM SPECIAL, SEALING OF CONCRETE SURFACES.

** FOR PARTIAL PAINTING OF A588 STEEL NOTE, SEE SHEET 9/13 .

*** FOR SPECIAL NOTES REGARDING ITEM 516, STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC STRIP SEALS, SEE SHEET 11/13 .

Δ *Item 511, Class S Concrete superstructure using shrinkage compensating cement (See Proposal Note).*

CALCULATED BY: TDW 12-20-88 — CHECKED BY: JKS 1-31-89

ESTIMATED QUANTITIES

	ITEM	ITEM EXT	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIERS	GEN.
	202		LUMP	SUM	STRUCTURE REMOVED, AS PER PLAN				LUMP
	503		LUMP	SUM	COFFERDAMS, CRIBS AND SHEETING				LUMP
	503		LUMP	SUM	COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN		LUMP		
	503 *		510	CU. YD.	UNCLASSIFIED EXCAVATION		260	250	
	503		LUMP	SUM	UNCLASSIFIED EXCAVATION AS PER PLAN		LUMP		
	505		LUMP	SUM	PILE DRIVING EQUIPMENT MOBILIZATION				LUMP
	507		2020	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN		1120	900	
	509		12,880	LBS.	REINFORCING STEEL, GRADE 60		8743	4137	
	509		149,077	LBS.	EPOXY COATED REINFORCING STEEL, GRADE 60	(16,828	6384	25865	
Δ	511		457	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE	457			
	511		265	CU. YD.	CLASS C CONCRETE, PIERS ABOVE FOOTINGS			265	
	511		101	CU. YD.	CLASS C CONCRETE, ABUTMENTS ABOVE FOOTINGS		101		
	511		292	CU. YD.	CLASS C CONCRETE, FOOTINGS		190	102	
	513		352860	LBS.	STRUCTURAL STEEL (AISC CATEGORY I) (ASTM A588)	352860			
	513		4102	EACH	WELDED STUD SHEAR CONNECTORS	4102			
**	514		LUMP	SUM	PARTIAL PAINTING OF A588 STEEL, SYSTEM (A)	LUMP			
***	516		100	LIN. FT.	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEALS (3")	100			
	516 *		80	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER		80		
	518		85	LIN. FT.	6" PERFORATED HELICAL CORRUGATED STEEL PIPE, 707.01		85		
	518		90	LIN. FT.	6" NON-PERFORATED HELICAL CORRUGATED STEEL PIPE, INCLUDING SPECIALS, 707.01		90		
	518		52	CU. YD.	POROUS BACKFILL, AS PER PLAN		52		
	518		6	EACH	SCUPPERS, INCLUDING SUPPORTS	6			
	523		3	HOURS	DYNAMIC LOAD TEST				3
	601		705	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION		705		
*	SPECIAL		1071	SQ. YD.	SEALING OF CONCRETE SURFACES	663	137	271	

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 2/13

GENERAL NOTES & ESTIMATED QUANTITIES

BRIDGE NO. AUG-33-1507L (W.B.)
OVER C.R.25A & C.S.X.R.R.

AUGLAIZE COUNTY — U.S.R.33

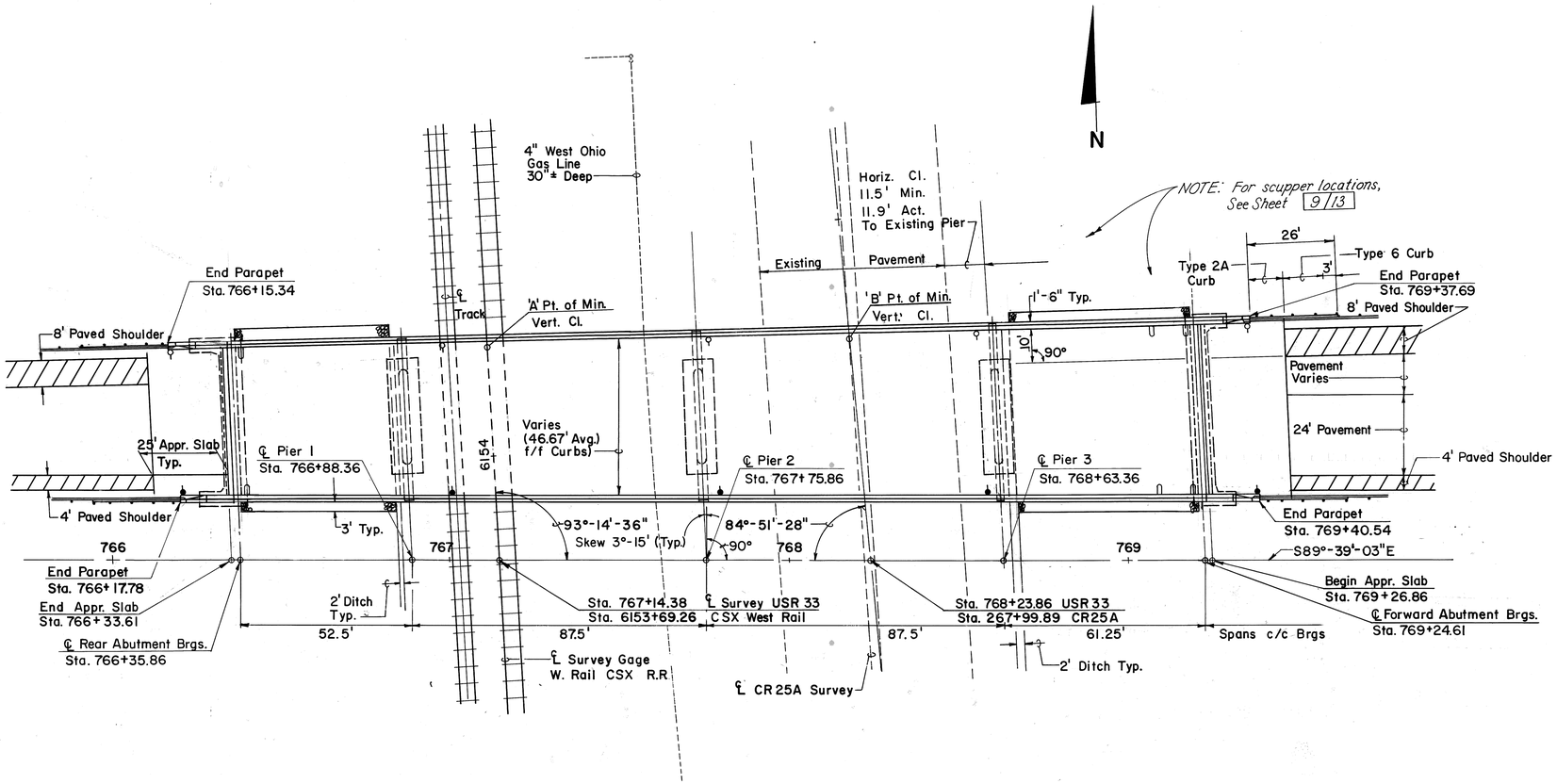
Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	TDW	CAD	BKU	JKS		

1507LGN.DGN JULY 13, 1989

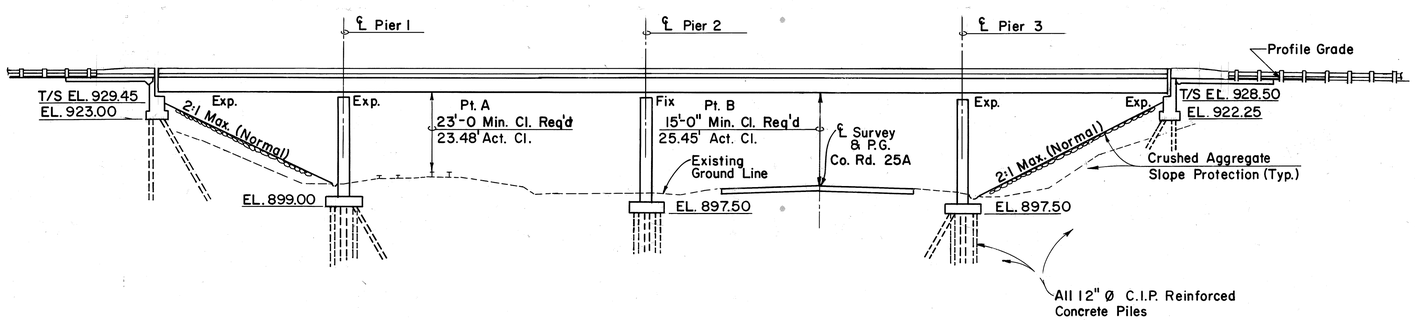
FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

303
345

AUGLAIZE COUNTY
AUG-33-13.44



PLAN



ELEVATION-PROFILE GRADE LINE U.S. 33

PARSONS & BRINCKERHOFF OHIO INC.
COLUMBUS, OHIO
3/13

GENERAL PLAN

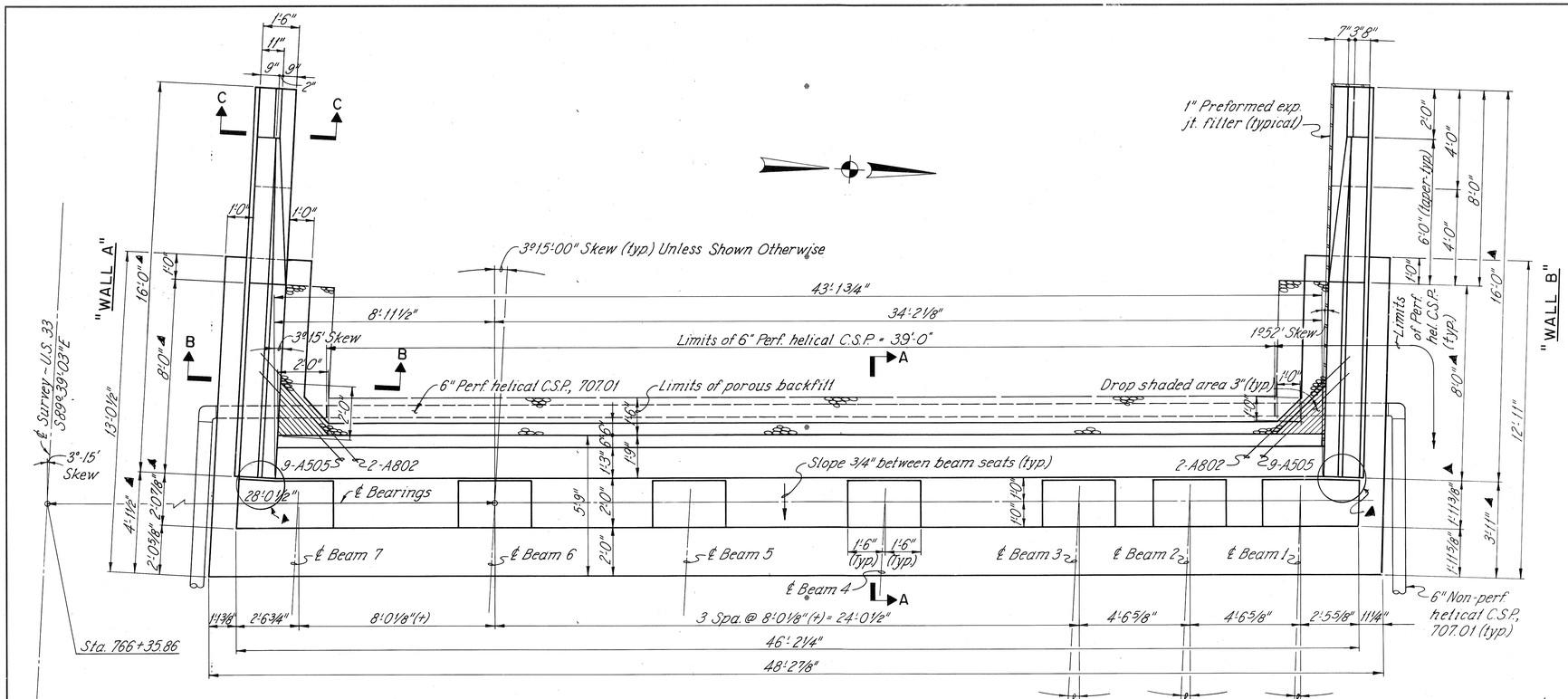
BRIDGE NO. AUG-33-1507 L (W.B.)
OVER C.R. 25A & C.S.X. R.R.
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
JKS		MDS	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

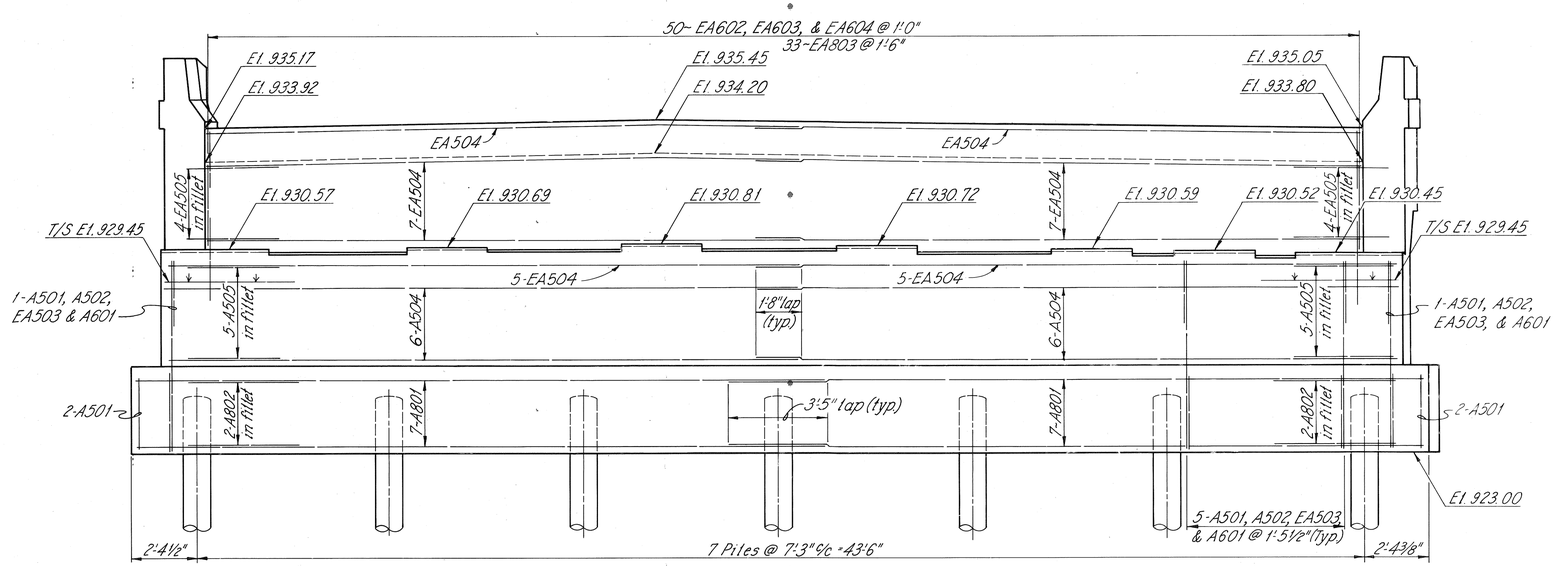
304 / 345

AUGLAIZE COUNTY
AUG-33-13.44

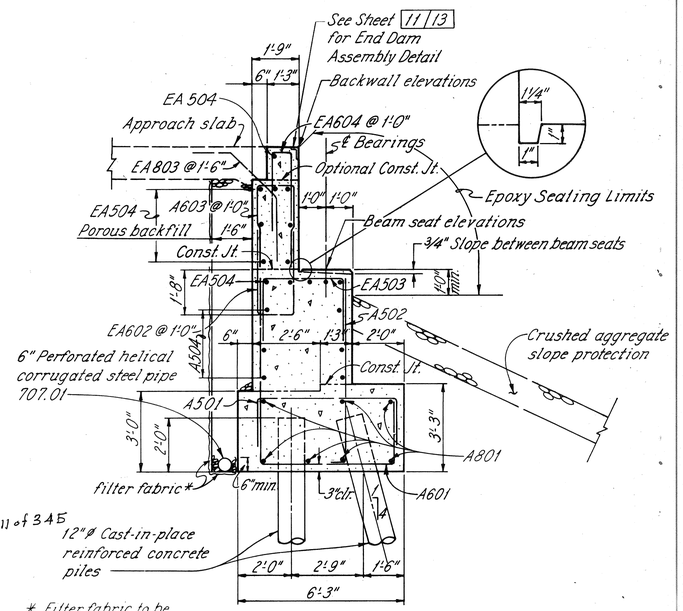


▲ See note 2 on sht. 311 of 345

PLAN



ELEVATION



* Filter fabric to be included with porous backfill for payment.

SECTION A – A

NOTES:

CROSS REFERENCE SHEETS: For Wingwall Sections, see Sheet 5 / 13.
For Wingwall Details, see Sheet 6 / 13.
For General Notes, see Sheet 2 / 13.

POROUS BACKFILL: 1'-6" thick, shall extend from bottom of footing up to the plane of the subgrade, & laterally to the ends of the wingwalls.

CURB & PARAPET DETAILS ON WINGWALLS: See Standard Drawing BR-1.

BACKWALL CONCRETE: In addition to the provisions of 511.08, backwall concrete above the optional construction joint at the approach slab seat shall not be placed until the deck concrete in the span adjacent to the abutment has been placed.

EPOXY COATED BARS are denoted on the plan sheets with the prefix of the letter 'E'.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 4 / 13

REAR ABUTMENT
BRIDGE NO. AUG-33-1507L (W.B.) OVER C.R. 25A & C.S.X. R.R.

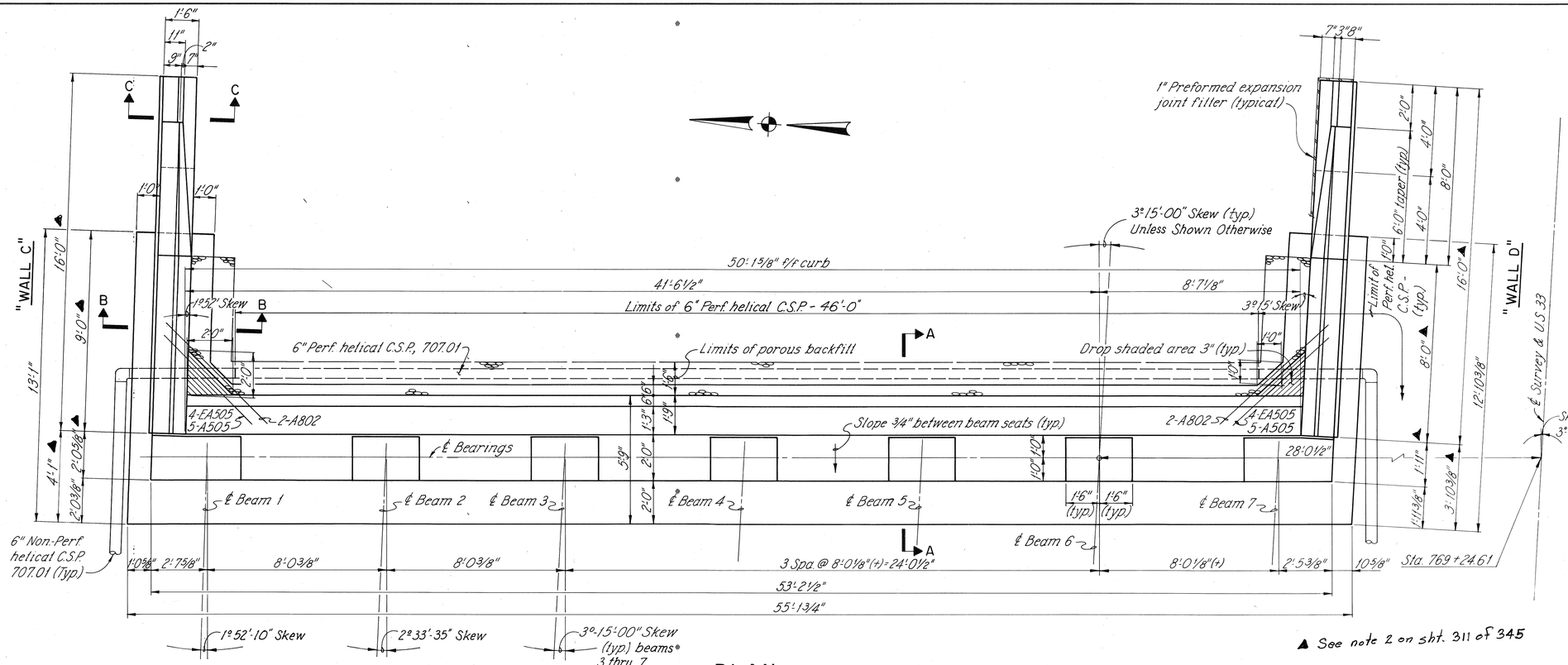
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

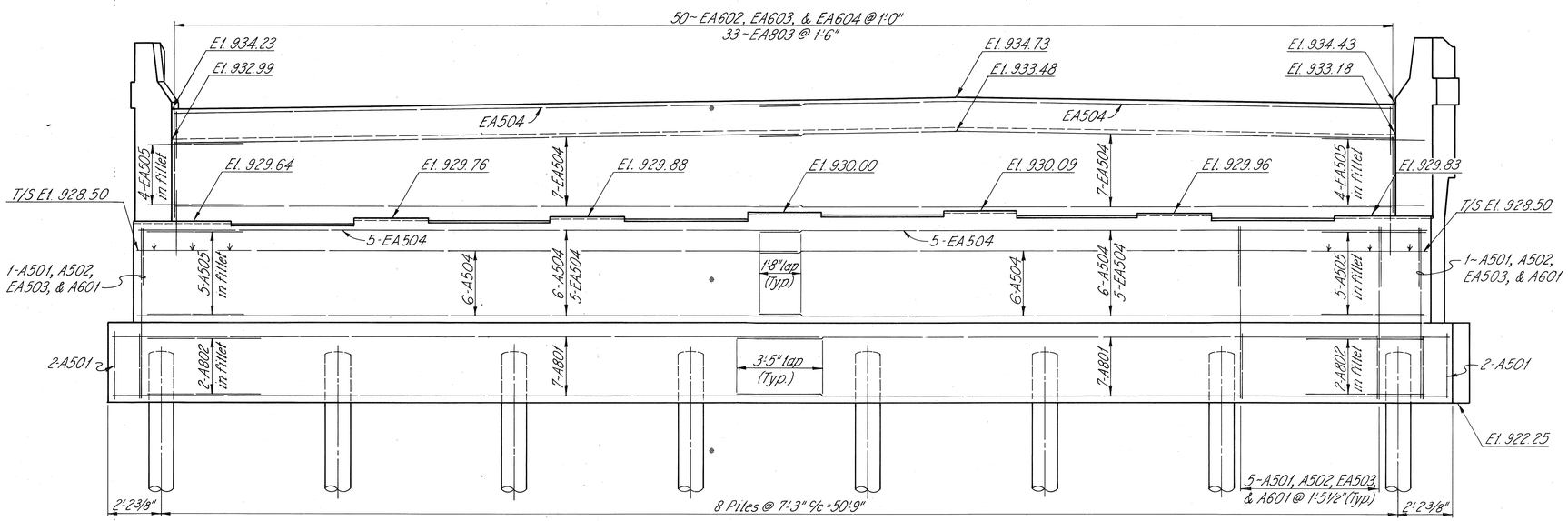
305
345

AUGLAIZE COUNTY
AUG-33-13.44



▲ See note 2 on sht. 311 of 345

PLAN



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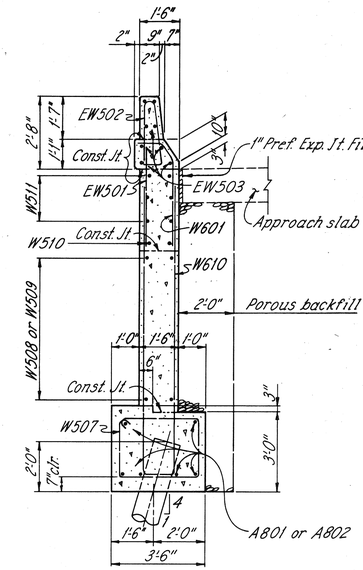
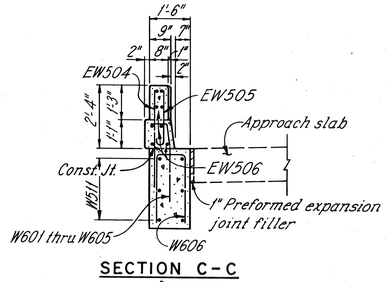


SECTION B-B



SECTION C-C

NOTE: For Section A-A (Abutment detail) & other notes, see Sheet 4 / 13.

PARSONS BRINCKERHOFF QUADE & DOUGLAS
COLUMBUS, OHIO
5 / 13

FORWARD ABUTMENT
BRIDGE NO. AUG-33-1507L (W.B.) OVER C.R. 25A & C.S.X. R.R.

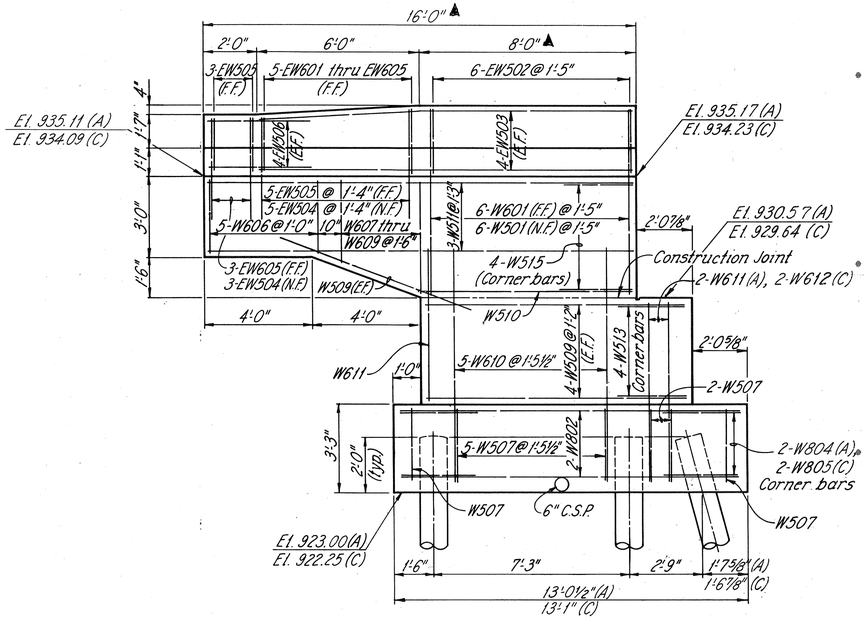
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

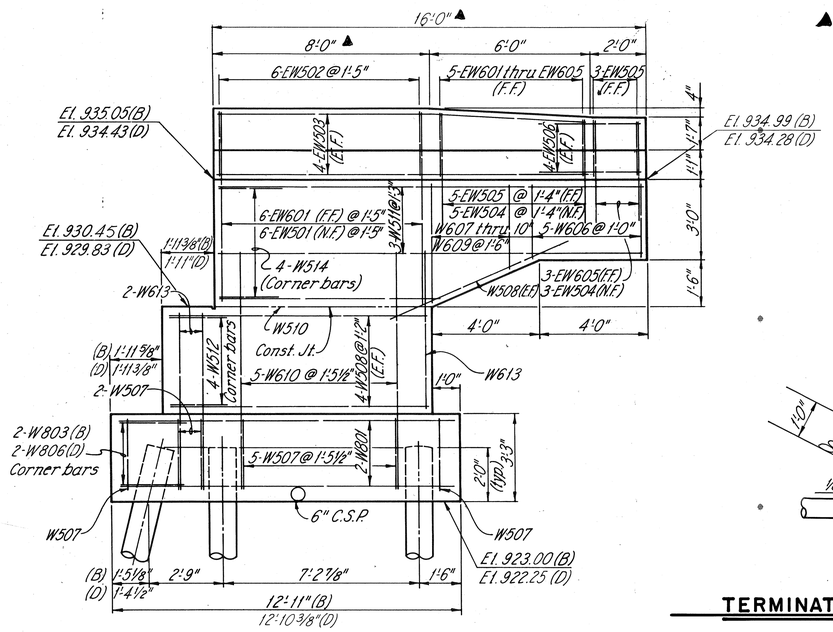
FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

306
345

AUGLAIZE COUNTY
AUG-33-13.44

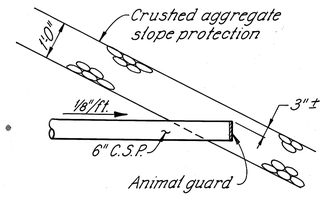


WINGWALL A (& C)

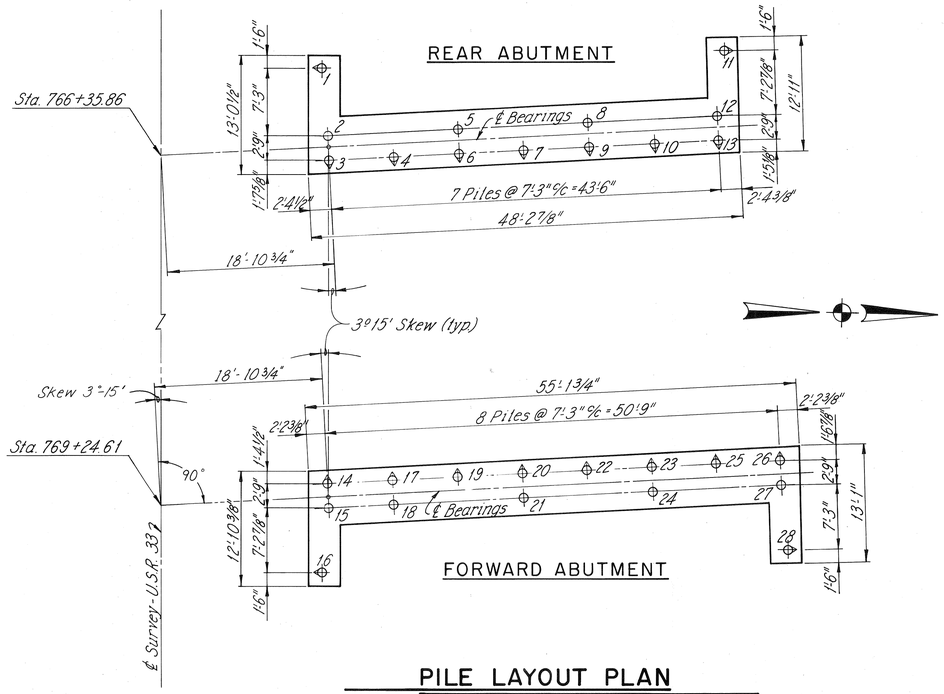


WINGWALL B (& D)

▲See note 2 on sht. 311 of 345



TERMINATION OF 6" NON-PERF. C.S.P.
(TYPICAL)



PILE LAYOUT PLAN

LEGEND:

⊕ ~ Indicates 1:4 Battered Piles (in direction of the arrow).

E.F. ~ Each Face.
F.F. ~ Far Face
N.F. ~ Near Face

NOTES:

CROSS REFERENCE SHEETS: For notes, see Sheet 4 / 13.
For Wingwall Sections, see Sheet 5 / 13.
For Wingwall locations & Abutment Details, see Sheets 4 / 13 & 5 / 13.

PILES: All piles are to be 12"ø Cast-in-place reinforced concrete.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 6 / 13

ABUTMENT DETAILS

BRIDGE NO. AUG-33-1507L (W.B.)
OVER C.R. 25A & C.S.X. R.R.
AUGLAIZE COUNTY U.S.R. 33

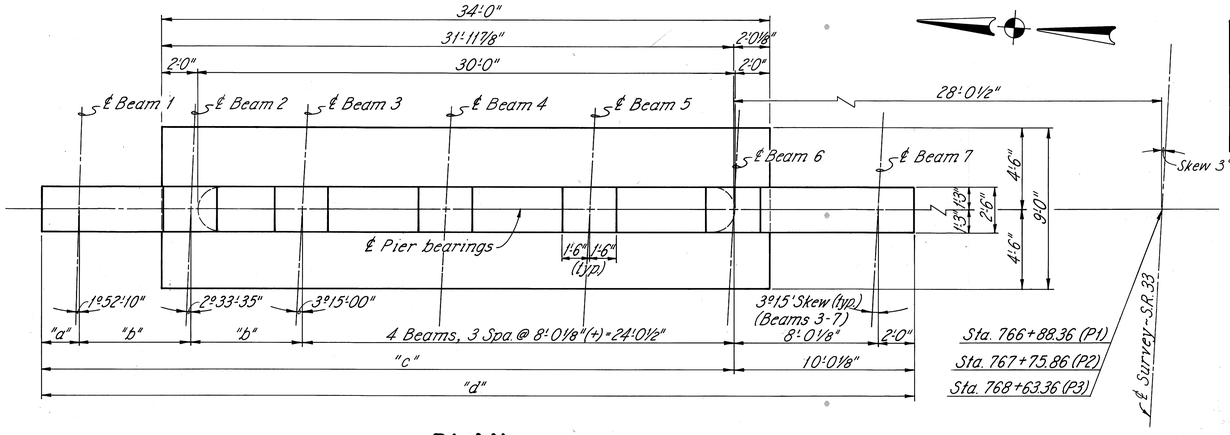
Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

559455

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

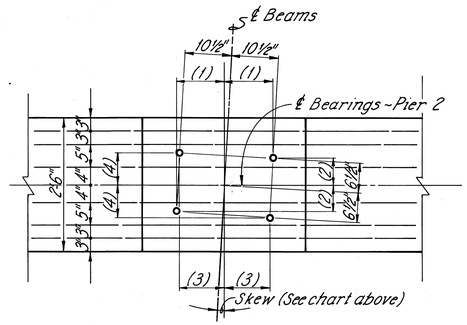
307
345

AUGLAIZE COUNTY
AUG-33-13.44

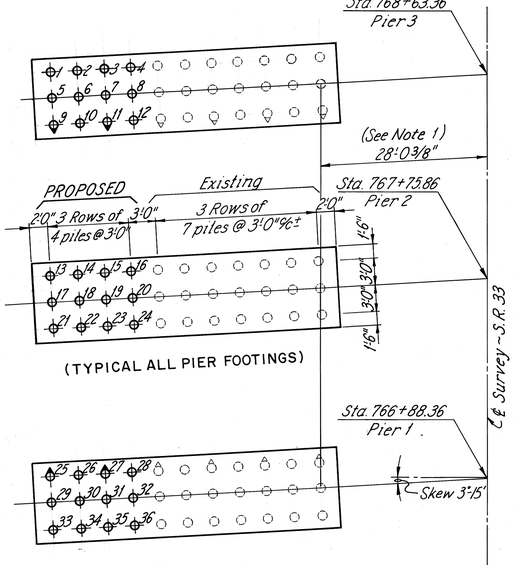


PLAN
(PIER 2 SHOWN)

TABLE OF DIMENSIONS					
LOCATION	SKEW	(1)	(2)	(3)	(4)
BEAMS 3 - 7	3°15'-00"	10 7/8"	5 15/16"	10 1/8"	7 1/8"
BEAM 2	2°33'-35"	10 3/4"	6"	10 3/16"	6 13/16"
BEAM 1	1°52'-10"	10 11/16"	6 1/8"	10 1/4"	6 13/16"

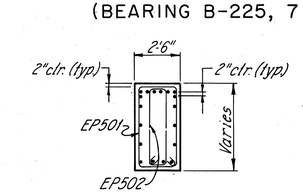


ANCHOR BOLT LAYOUT PLAN @ PIER 2
(BEARING B-225, 7 REQUIRED)



Indicates piles battered @ 1:4

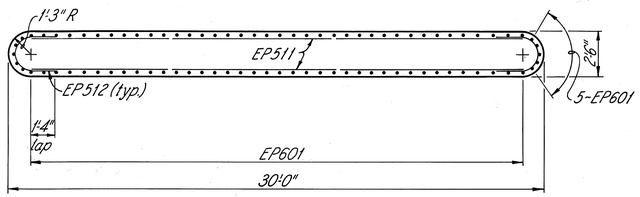
PILE LAYOUT PLAN



SECTION C - C

TABLE OF ELEVATIONS & DIMENSIONS								
LOCATION	EL. "A"	EL. "B"	EL. "C"	EL. "D"	EL. "E"	EL. "F"	EL. "G"	EL. "H"
PIER 1	930.04	930.12	930.20	930.33	930.42	930.30	930.17	899.00
PIER 2	929.90	930.00	930.10	930.22	930.31	930.19	930.06	897.50
PIER 3	929.58	929.69	929.80	929.92	930.02	929.89	929.76	897.50

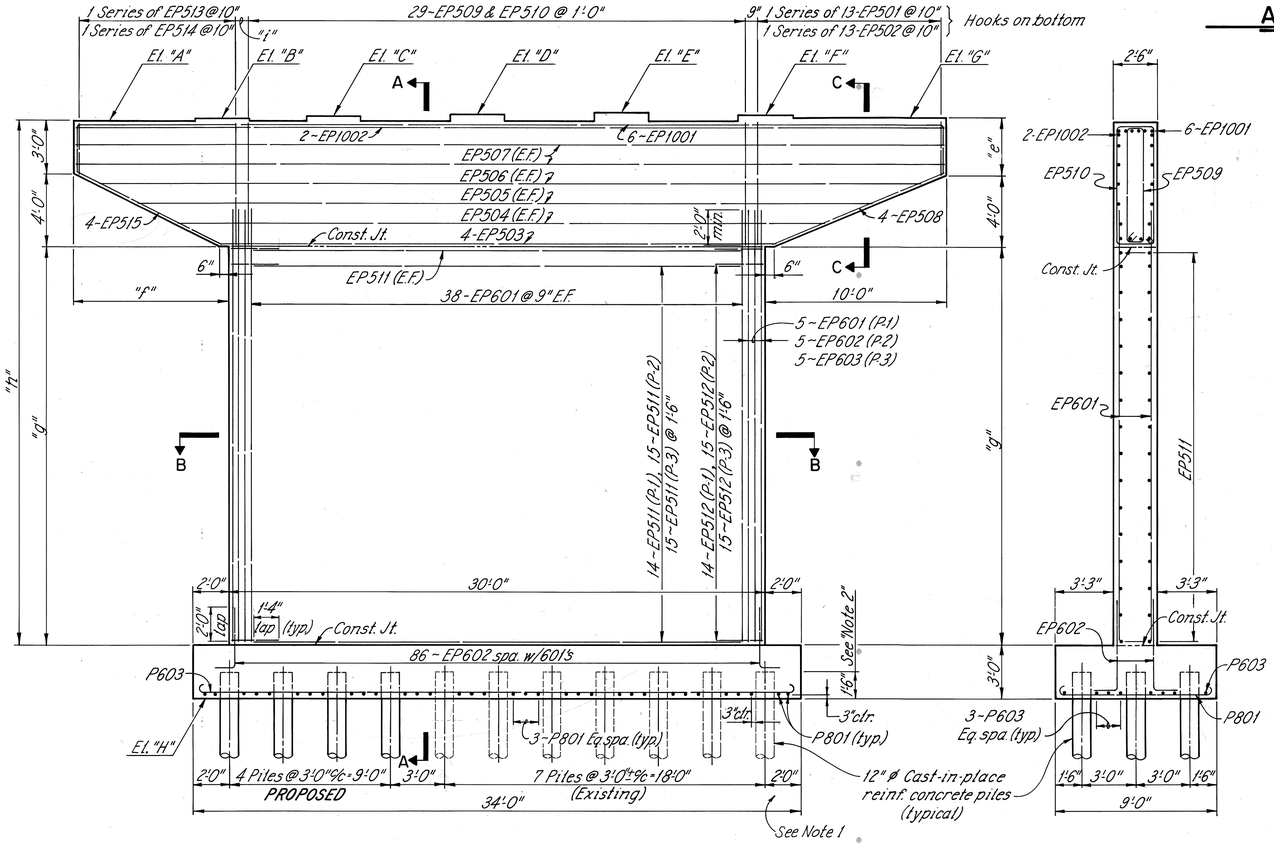
LOCATION	DIM. "a"	DIM. "b"	DIM. "c"	DIM. "d"	DIM. "e"	DIM. "f"	DIM. "g"	DIM. "h"	DIM. "i"
PIER 1	2'-0 7/8"	5'-2 1/4"	36'-5 7/8"	46'-6"	3'-1 5/8"	6'-6"	21'-0 1/2"	28'-0 1/8"	7"
PIER 2	2'-2 5/8"	6'-2 7/8"	38'-8 7/8"	48'-9"	3'-1 7/8"	8'-9"	22'-4 3/4"	29'-4 3/4"	4"
PIER 3	2'-1 1/4"	7'-3 9/16"	40'-8 7/8"	50'-9"	3'-2 1/8"	10'-9"	22'-1"	29'-1"	8"



SECTION B - B

NOTE 1: *This dimension may vary depending on the actual location of the existing piles. The contractor shall verify this dimension once the demolition of the exist. piers has been completed and the exist. piles are exposed. The footing dimensions shall be increased if necessary to accomodate the 2'-0" dimension from the edge of the 9'-0" side of the footing & the ℄ of the exist. pile & or the 1'-6" dimension from the edge of the 34'-0" side of the footing & the ℄ of the exist. pile. In no case shall the footing dimensions be decreased.*

NOTE 2: *The elevation at the bottom of the pier footings is approximate. The actual elevation shall be determined by the 1'-6" min. dimension from the top of the exist. piles to the bottom of the footing. The footing depth of 3'-0" shall be increased if necessary to accomodate this 1'-6" dim. & in no case shall the pier stem height be changed.*



ELEVATION
PIER 2 SHOWN
(PIER 1 & PIER 3 SIMILAR)

SECTION A - A

EPOXY COATED BARS are denoted on the plan sheets with the prefix of the letter "E."

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
7/13

PIER DETAILS
BRIDGE NO. AUG-33-1507L (W.B.)
OVER C.R. 25A & C.S.X. R.R.
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

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FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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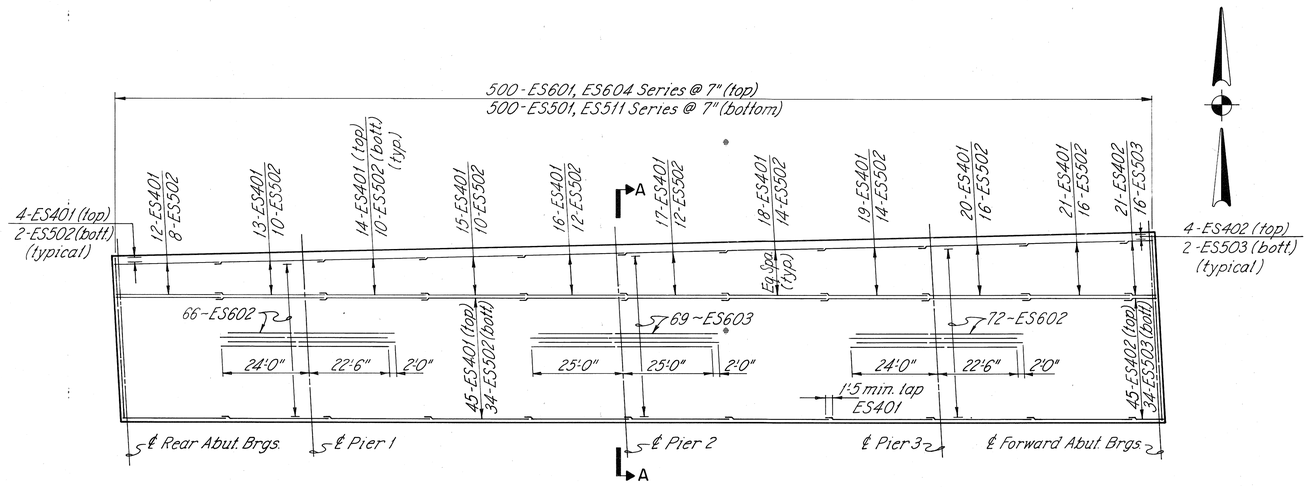
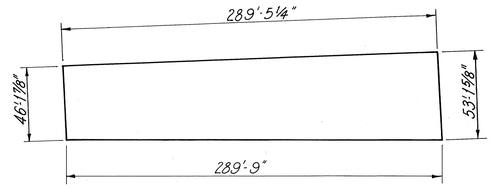
345

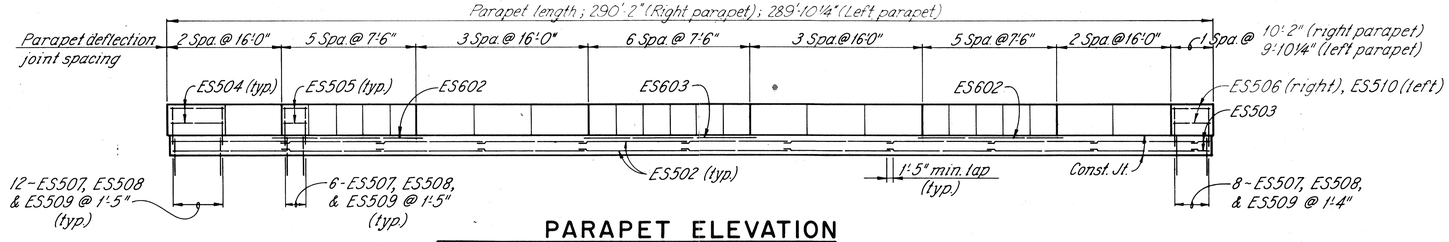
AUGLAIZE COUNTY
AUG-33-13.44



DECK SLAB PLAN

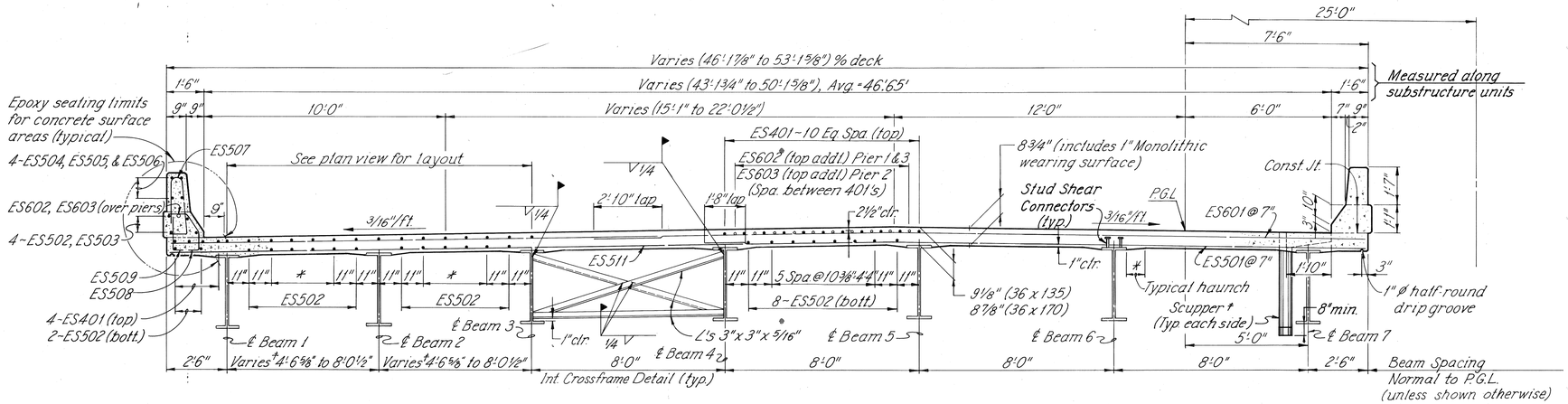


DECK SLAB DIAGRAM



PARAPET ELEVATION

(TYPICAL)



SECTION A–A

Note: † Dimensions parallel to substructure units

NOTES

DECK SLAB DEPTH: THE DISTANCE SHOWN FROM THE DECK SLAB TO THE TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH).

FIELD BEND TRANSVERSE BARS TO FIT CROWN. ALL TRANSVERSE BARS SHALL BE PARALLEL TO THE SUBSTRUCTURE. FIELD BENDING SHALL BE INCLUDED IN ITEM 509 FOR PAYMENT.

LONGITUDINAL STEEL SHALL BE FIELD CUT AS NECESSARY TO AVOID INTERFERENCE WITH SCUPPERS.

FOR MORE RAILING AND PARAPET DETAILS SEE STD. DWG. BR–1.

EPOXY–COATED BARS THAT ARE FIELD CUT AND BARS WITH THE EPOXY–COATING DAMAGED BY FIELD BENDING SHALL BE RECOATED AS PER APPROVED MANUFACTURER'S RECOMMENDATIONS.

FOR ADDITIONAL SUPERSTRUCTURE DETAILS SEE SHEETS 9/13 & 10/13.

STAGGER REINFORCING BARS – ES602– OVER PIERS 1 & 3 AND ES603– OVER PIER 2

SCUPPERS SHALL BE IN ACCORDANCE WITH STD. DWG. SD–1–69 SHEET 3, EXCEPT THAT SCUPPER PIPES SHALL EXTEND 8" BELOW THE BOTTOM OF THE BEAMS INSTEAD OF 2". FOR SCUPPER LOCATIONS SEE SHEET 9/13.

"E"– IN THE PREFIX OF A BAR MARK INDICATES EPOXY COATED REINFORCING STEEL.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 8/13

SUPERSTRUCTURE DETAILS-1

BRIDGE NO. AUG-33-1507L (W.B.)
OVER C.R. 25A & C.S.X. R.R.
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

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FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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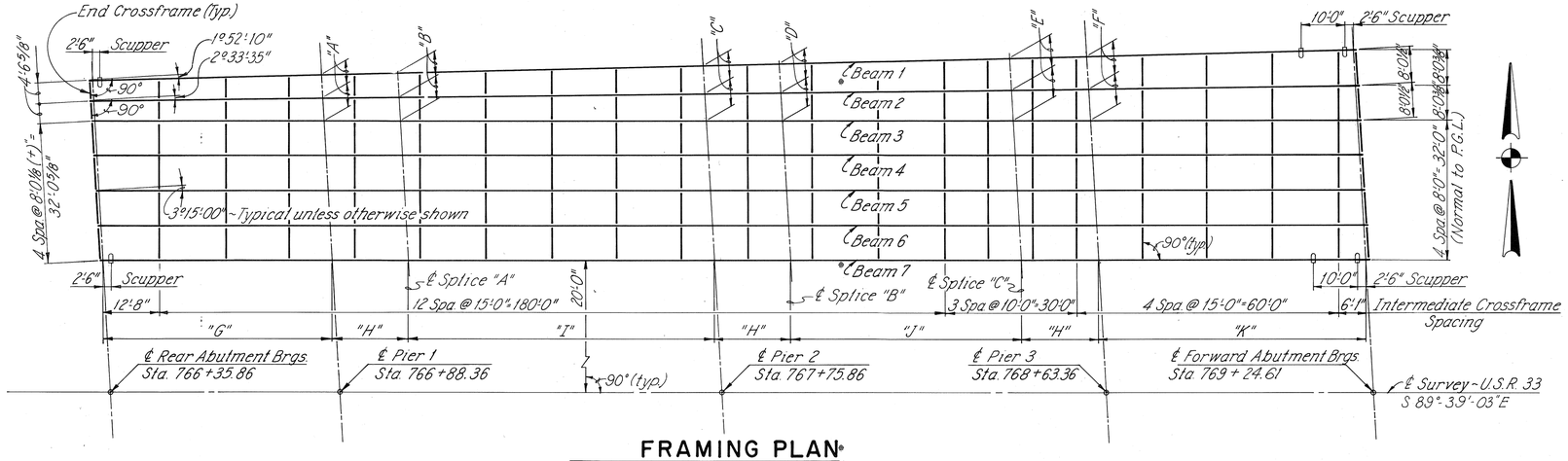
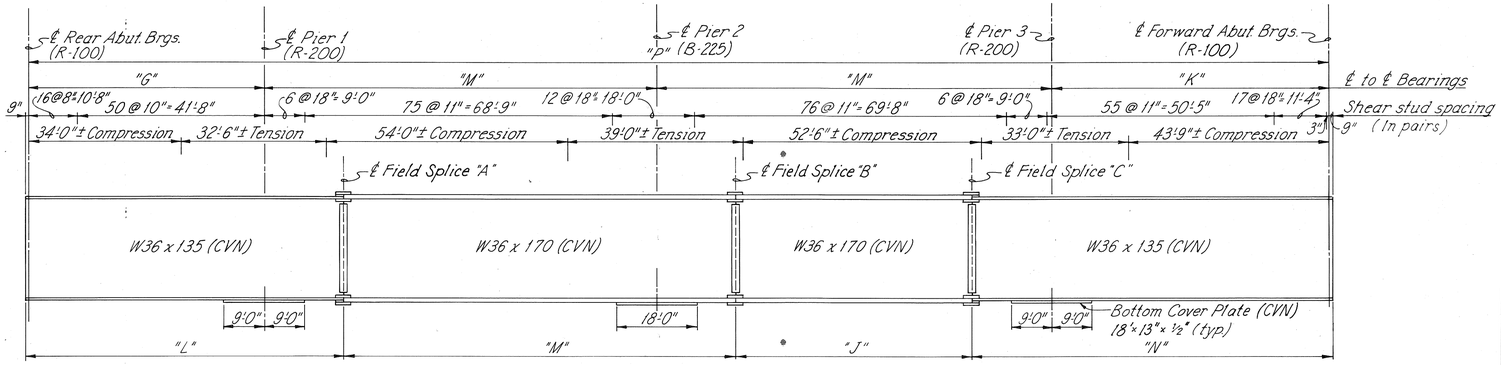
AUGLAIZE COUNTY
AUG-33-13.44



FRAMING PLAN



BEAM ELEVATION

BEAMS 1 THRU 7

TABLE OF DIMENSIONS

LOCATION	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"	"M"	"N"	"P"	LOCATION
BEAM 1-2	5'-2 1/4"	5'-4 3/4"	6'-2 7/8"	6'-5 7/16"	7'-1"	7'-3 9/16"	52'-5 5/8"	17'-5 3/4"	69'-11 1/8"	52'-5 5/16"	61'-2 1/4"	69'-11 1/8"	87'-4 7/8"	78'-8"	288'-5 3/8"	BEAM 1
BEAM 2-3	5'-2 1/4"	5'-4 3/4"	6'-2 7/8"	6'-5 7/16"	7'-1"	7'-3 9/16"	52'-5 5/8"	17'-5 7/8"	69'-11 1/2"	52'-5 5/8"	61'-2 9/16"	69'-11 1/2"	87'-5 3/8"	78'-8 7/16"	288'-6 15/16"	BEAM 2
							52'-6"	17'-6"	70'-0"	52'-6"	61'-3"	70'-0"	87'-6"	78'-9"	288'-9"	BEAM 3-7

Dimensions Between Adjacent Beams 1, 2 & 3 | Dimensions Along ℄ Beams

BEAM SPLICE DETAIL

FIELD SPLICE "A" SHOWN
(FIELD SPLICE C - OPPOSITE HAND)
(FIELD SPLICE B - SIMILAR, EXCEPT AS NOTED)

PARTIAL PAINTING OF A588 STEEL: PARTIAL PAINTING OF A588 STEEL SHALL INCLUDE, AN 8' LENGTH OF THE BEAM ENDS ADJACENT TO THE ABUTMENTS, ALL CROSSFRAMES AND OTHER A588 STEEL WITHIN THESE LIMITS. PAINT SHALL BE 514, SYSTEM A, THE PRIME COAT SHALL BE 708.17. THE TOP COAT SHALL BE 708.18 EXCEPT THAT THE COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595A-20045 OR 20059 (RUSTY STEEL COLOR). THE REMAINING A588 STEEL IS TO BE LEFT UNPAINTED. SEE CMS 513.221 FOR CLEANING REQUIREMENTS.

SCUPPERS SHALL BE IN ACCORDANCE WITH STD. DWG. SD-1-69 SHEET 3 OF 4, EXCEPT THAT SCUPPER PIPES SHALL EXTEND 8" BELOW THE BOTTOM OF THE BEAM INSTEAD OF 2".

WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.

ALL BEAM LENGTH DIMENSIONS ARE AT 60 DEG. F.

WELDING ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED 'COMPRESSION'. ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED 'TENSION'. FILLET WELDS TO COMPRESSION FLANGES SHALL NOT BE CLOSER THAN 1" FROM EDGE OF FLANGE, NOT MORE THAN 2" LONG, AND NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO.

BEARINGS: IN LIEU OF A588 STEEL, A36 STEEL, GALVANIZED, MAY BE FURNISHED FOR THE BEARINGS, EXCEPTING THE UPPER PLATE ELEMENT OF THE BEARING. THIS A36 STEEL SHALL BE INCLUDED WITH THE A588 STEEL QUANTITY FOR PAYMENT.

FOR END CROSSFRAME DETAILS, SEE STD. DWG. SD-1-69 SHEET 1 OF 4.

FOR WELDING OF COVER PLATES, SEE STD. DWG. SD-1-69 SHEET 3 OF 4.

FOR BOLTED BEAM SPLICE DETAILS, SEE STD. DWG. SD-1-69 SHEET 4 OF 4. HIGH STRENGTH BOLTS SHALL BE 1" DIA. A325 UNLESS OTHERWISE NOTED.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
9/13

SUPERSTRUCTURE DETAILS-2

BRIDGE NO. AUG-33-1507L (W.B.)
OVER C.R. 25A & C.S.X. R.R.
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

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FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

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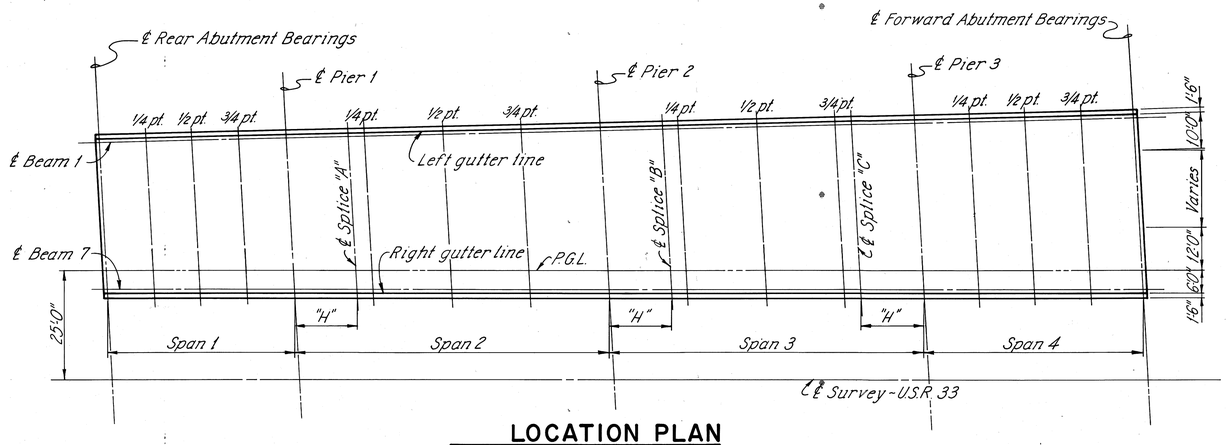
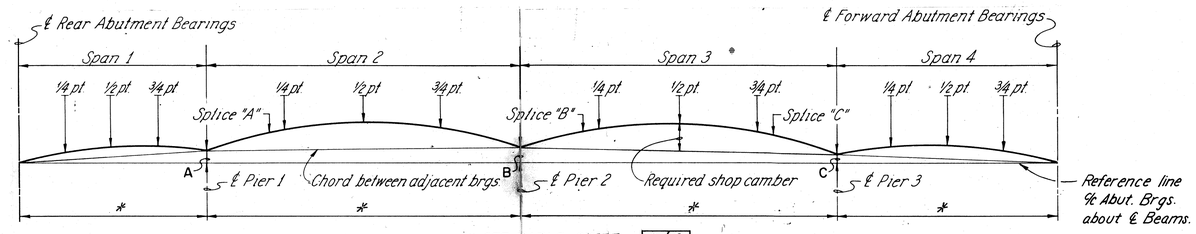
AUGLAIZE COUNTY
AUG-33-13.44



LOCATION PLAN



* SEE TABLE, SHEET 9/13

BLOCKING & CAMBER DIAGRAM

(TYPICAL BEAMS 1 THRU 7)

DEFLECTION & CAMBER TABLE															
SPAN NO. →	1			2				3					4		
LOCATION POINT →	1/4	1/2	3/4	SPLICE "A"	1/4	1/2	3/4	SPLICE "B"	1/4	1/2	3/4	SPLICE "C"	1/4	1/2	3/4
Deflection due to weight of steel	0	0	0	1/8"	1/8"	3/16"	1/8"	1/16"	1/16"	3/16"	1/8"	1/16"	0	1/16"	1/16"
Deflection due to remaining D.L.	1/8"	1/8"	0	5/8"	13/16"	13/16"	5/8"	3/8"	9/16"	1 1/16"	11/16"	1/2"	3/16"	1/2"	7/16"
Correction for vertical curve	1/8"	3/16"	1/8"	5/16"	3/8"	1/2"	3/8"	5/16"	3/8"	1/2"	3/8"	5/16"	3/16"	1/4"	3/16"
Required shop camber	1/4"	5/16"	1/8"	1 1/16"	1 3/16"	1 7/8"	1 1/8"	3/4"	1"	1 3/4"	1 1/8"	7/8"	3/8"	13/16"	11/16"

BLOCKING TABLE		
A	B	C
3 1/8"	5 1/4"	3 1/2"

SCREED ELEVATIONS AT TOP OF SLAB					
LOCATIONS		LEFT GUTTER LINE		RIGHT GUTTER LINE	
		STATION	ELEV	STATION	ELEV
SPAN 1	℄ BRG. REAR ABUTMENT	766+32.34	935.05	766+34.78	935.17
	1/4 POINT	766+45.44	935.10	766+47.91	935.23
	1/2 POINT	766+58.55	935.14	766+61.04	935.26
	3/4 POINT	766+71.66	935.15	766+74.16	935.28
SPAN 2	℄ BRG. PIER 1	766+84.77	935.17	766+87.28	935.30
	1/4 POINT	767+06.61	935.25	767+09.16	935.39
	1/2 POINT	767+28.46	935.27	767+31.04	935.42
	3/4 POINT	767+50.30	935.20	767+52.91	935.35
SPAN 3	℄ BRG. PIER 2	767+72.15	935.10	767+74.78	935.26
	1/4 POINT	767+93.99	935.08	767+96.66	935.24
	1/2 POINT	768+15.84	935.03	768+18.54	935.20
	3/4 POINT	768+37.68	934.89	768+40.41	935.06
SPAN 4	℄ BRG. PIER 3	768+59.53	934.71	768+62.28	934.89
	1/4 POINT	768+74.82	934.62	768+77.60	934.80
	1/2 POINT	768+90.11	935.54	768+92.91	934.72
	3/4 POINT	769+05.40	934.41	769+08.22	934.60
	℄ BRG. FORWARD ABUT.	769+20.69	934.24	769+23.54	934.44

NOTE: THE CONSTRUCTION ELEVATIONS SHOWN ARE THOSE ON TOP OF THE CONCRETE, BEFORE THE DECK IS PLACED. PROPER ALLOWANCE FOR THE DEAD LOAD DEFLECTION OF THE WEIGHT OF THE CONCRETE DECK HAS BEEN MADE.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
10/13

SUPERSTRUCTURE DETAILS-3

BRIDGE NO. AUG-33-1507L (W.B.)
OVER C.R. 25A & C.S.X. R.R.

AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

DSN455

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AUG-33-13.44

311
315

ELASTOMERIC STRIP SEAL SYSTEM

SPECIAL NOTES:

1. Seal shall have a movement rating of 3".

2. IT IS NECESSARY TO MODIFY THE DESIGN DRAWING TO ACCOMMODATE THE EXPANSION JOINT DEVICE. The drawings shall be modified by the Contractor and approved by the Engineer. Modified drawings shall be forwarded to the Bureau of Bridges, Structural Steel Section for use in checking shop drawings.

3. DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, THE SEATING OF BEAMS ON BEARINS SHALL BE CAREFULLY OSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT/ARMOR OR THE BEAMS SHALL BE ACHIEVED BY POSTITION OF THE BEVEL FILL PLATES RATHER THAN BY CLAMPING FORCE.

4. SEE STANDARD DRAWING EXJ–4–87 FOR ALL REMAINING DETAILS AND NOTES.

5. The above shall be included with item 516 for payment.

STRIP SEAL JOINT AT ABUTMENT		
JOINT SETTING TABLE		
TEMP. (F°)	Joint Opening – Dim. "A"	
	Rear Abutment	Forward Abutment
30°	1 7/8"	1 7/8"
40°	1 3/4"	1 3/4"
50°	1 3/4"	1 3/4"
60°	1 5/8"	1 5/8"
70°	1 1/2"	1 1/2"
80°	*	*
90°	*	*

* MINIMUM JOINT OPENING (DIMENSION "A") AT TIME OF SEAL GLAND INSTALLATION SHALL NOT BE LESS THAN 1–1/2". IF THE JOINT OENING IS LESS, THE INSTALLATION SHALL BE POSTPONED UNTIL THE TEMP–ATURE DROPS A SUFFICIENT AMOUNT TO ALLOW THE MIN–IMUM 1–1/2" OPENING.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
11/13

STRUCTURAL EXPANSION JOINT DETAIL

BRIDGE NO. AUG-33-1507 L (W.B.) OVER C.R. 25A AND C.S.X. R.R.

AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised

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	OHIO		

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AUGLAIZE COUNTY
AUG-33-13.44

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
		REAR ABUTMENT *															
A501	36	8'–3"	310	2	1'–7"	5'–4"	1'–7"										
A502	32	8'–0"	267	8	1'–3"	6'–8"											
A504	12	23'–9"	298	STR													
A505	10	5'–0"	52	STR													
A601	32	14'–3"	685	2	6'–9"	5'–4"	2'–6"										
A801	14	25'–7"	957	STR													
A802	4	6'–0"	64	STR													
		TOTAL = 2633 LB															
EA503	32	7'–2"	240	2	2'–0"	3'–5"	2'–0"										
EA504	16	23'–9"	397	STR													
EA505	8	5'–0"	42	STR													
EA602	43	8'–9"	566	2	3'–10"	1'–5"	3'–10"										
EA603	43	7'–1"	458	2	3'–0"	1'–5"	3'–0"										
EA604	43	5'–0"	323	2	2'–3"	10"	2'–3"										
EA803	28	4'–5"	331	5		0	1'–5"	1'–9"	1'–5"	0		1'–0"		1'–0"			
		TOTAL, EPOXY COATED = 2357 LB															
		FORWARD ABUTMENT *															
A501	41	8'–3"	353	2	1'–7"	5'–4"	1'–7"										
A502	37	8'–0"	309	8	1'–3"	6'–8"											
A504	12	27'–2"	340	STR													
A505	10	5'–0"	52	STR													
A601	37	14'–3"	792	2	6'–9"	5'–4"	2'–6"										
A801	14	29'–0"	1084	STR													
A802	4	6'–0"	64	STR													
		TOTAL = 2994 LB															
EA503	37	7'–2"	277	2	2'–0"	3'–5"	2'–0"										
EA504	16	27'–2"	454	STR													
EA505	8	5'–0"	42	STR													
EA602	50	8'–9"	658	2	3'–10"	1'–5"	3'–10"										
EA603	50	7'–1"	532	2	3'–0"	1'–5"	3'–0"										
EA604	50	5'–0"	376	2	2'–3"	10"	2'–3"										
EA803	33	4'–5"	390	5		0	1'–5"	1'–9"	1'–5"	0		1'–0"		1'–0"			
		TOTAL COATED = 2729 LB															
		WINGWALLS *															
EW501	24	3'–0"	76	STR													
EW502	24	5'–3"	132	9													
EW503	32	13'–8"	457	STR													
EW504	32	4'–7"	153	STR													
EW505	32	2'–8"	89	7	7"	2'–1"								5" ×			
EW506	32	4'–4"	145	STR													
W507	36	11'–5"	429	10	5 1/2"	3'–0"	2'–3"	3'–0"	2'–3"	5 1/2"							
W508	20	9'–5"	197	STR													
W509	20	9'–7"	200	STR													
W510	8	7'–6"	63	STR													
W511	24	15'–7"	391	STR													
W512	8	3'–5"	30	8		1'–0"	1'–2"	1'–6"				1'–2"		1"			
W513	8	3'–5"	30	8		1'–6"	1'–2"	1'–0"				1'–2"		1"			
W514	8	3'–5"	30	8		1'–0"	1'–2"	1'–6"				1'–2"		1"			
W515	8	3'–5"	30	8		1'–6"	1'–2"	1'–0"				1'–2"		1"			
EW601	28	3'–9"	158	6		8 1/2"	2'–5"	0	10 1/2"	9"		6"					
EW602	4	3'–8"	22	6		8 1/2"	2'–5"	0	10"	8"		5"					
EW603	4	3'–8"	22	6		8 1/2"	2'–5"	0	9 1/2"	8"		4"					
EW604	4	3'–7"	22	6		8 1/2"	2'–5"	0	9"	7"		3"					
EW605	4	3'–7"	22	6		8 1/2"	2'–5"	0	8 1/2"	7"		2"					
W606	20	5'–10"	176	2	2'–6"	1'–2"	2'–6"										
W607	4	6'–6"	40	2	2'–10"	1'–2"	2'–10"										
W608	4	7'–8"	47	2	3'–5"	1'–2"	3'–5"										
W609	4	8'–10"	54	2	4'–0"	1'–2"	4'–0"										
W610	20	20'–2"	606	2	9'–8"	1'–2"	9'–8"										
W611	12	13'–10"	250	2	6'–6"	1'–2"	6'–6"										

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
W801	6	12'–4"	198	STR													
W802	6	12'–6"	201	STR													
W803	2	6'–7"	36	8		1'–0"	3'–0"	3'–0"				3'–0"		2"			
W804	2	6'–7"	36	8		3'–0"	3'–0"	1'–0"				3'–0"		2"			
W805	2	6'–7"	36	8		1'–0"	3'–0"	3'–0"				3'–0"		1"			
W806	2	6'–7"	36	8		3'–0"	3'–0"	1'–0"				3'–0"		1"			
		TOTAL COATED = 1298 LB															
		PIER #1 *															
EP501	1–SER. OF 13	10'–3" TO 18'–3"	194	10		2'–2"	2'–8" TO 6'–8"	2'–2"	2'–8" TO 6'–8"								
EP502	1–SER. OF 13	7'–7" TO 15'–7"	157	10		10"	2'–8" TO 6'–8"	10"	2'–8" TO 6'–8"								
EP503	4	31'–0"	130	STR													
EP504	2	35'–8"	75	STR													
EP505	2	40'–0"	84	STR													
EP506	2	44'–0"	92	STR													
EP507	4	46'–0"	192	STR													
EP508	4	10'–6"	44	STR													
EP509	29	18'–3"	552	10		2'–2"	6'–8"	2'–2"	6'–8"	5 1/2" ×							
EP510	29	15'–7"	472	10		10"	6'–8"	10"	6'–8"	5 1/2" ×							
EP511	30	27'–6"	861	STR													
EP512	30	5'–9"	180	11		1'–4"	3'–3"	1'–4"							2'–0"	1'–0"	
EP513	1–SER. OF 9	10'–3" TO 18'–3"	134	10		2'–2"	2'–8" TO 6'–8"	2'–2"	2'–8" TO 6'–8"	5 1/2"							
EP514	1–SER. OF 9	7'–7" TO 15'–7"	109	10		10"	2'–8" TO 6'–8"	10"	2'–8" TO 6'–8"	5 1/2"							
EP515	4	7'–0"	30	STR													
EP601	76	23'–0"	2626	STR													
EP602	86	6'–6"	840	3	2'–0"	4'–8"											
EP1001	6	48'–2"	1243	3	2'–6"	46'–0"											
EP1002	2	46'–0"	313	STR													
P603	10	34'–10"	524	1	8" ×	33'–6"											
P801	34	9'–5"	855	1	11" ×	8'–6"											
		PIER #2 *															
EP501	1–SER. OF 13	10'–3" TO 18'–3"	194	10		2'–2"	2'–8" TO 6'–8"	2'–2"	2'–8" TO 6'–8"								
EP502	1–SER. OF 13	7'–7" TO 15'–7"	157	10		10"	2'–8" TO 6'–8"	10"	2'–8" TO 6'–8"								
EP503	4	31'–0"	130	STR													
EP504	2	35'–9"	75	STR													
EP505	2	40'–6"	85	STR													
EP506	2	45'–6"	95	STR													
EP507	4	48'–3"	202	STR													
EP508	4	10'–6"	44	STR													
EP509	29	18'–3"	552	10		2'–2"	6'–8"	2'–2"	6'–8"								
EP510	29	15'–7"	472	10		10"	6'–8"	10"	6'–8"								
EP511	30	27'–6"	861	STR													
EP512	30	5'–9"	180	11		1'–4"	3'–3"	1'–4"							2'–0"	1'–0"	
EP513	1–SER. OF 12	10'–3" TO 18'–3"	179	10		2'–2"	2'–8" TO 6'–8"	2'–2"	2'–8" TO 6'–8"								
EP514	1–SER. OF 12	7'–7" TO 15'–7"	145	10		10"	2'–8" TO 6'–8"	10"	2'–8" TO 6'–8"								
EP515	4	9'–0"	38	STR													
EP601	76	24'–4"	2778	STR													
EP602	86	6'–6"	840	3	2'–0"	4'–8"											

*NOTE:

THE REAR ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "R"

THE FORWARD ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "F"

THE LETTER 'E' BEFORE A BAR MARK DENOTES AN EPOXY COATED REINFORCING BAR.

THE PREFIX IN THE BAR MARKS FOR THE PIERS SHALL BE AS FOLLOWS:
PIER–1: 1P OR 1EP
PIER–2: 2P OR 2EP
PIER–3: 3P OR 3EP

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO

12/13

REINFORCING STEEL LIST

BRIDGE NO. AUG-33-1507L
OVER HARDIN PIKE

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MDS	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

313
345

AUGLAIZE COUNTY
AUG-33-13.44

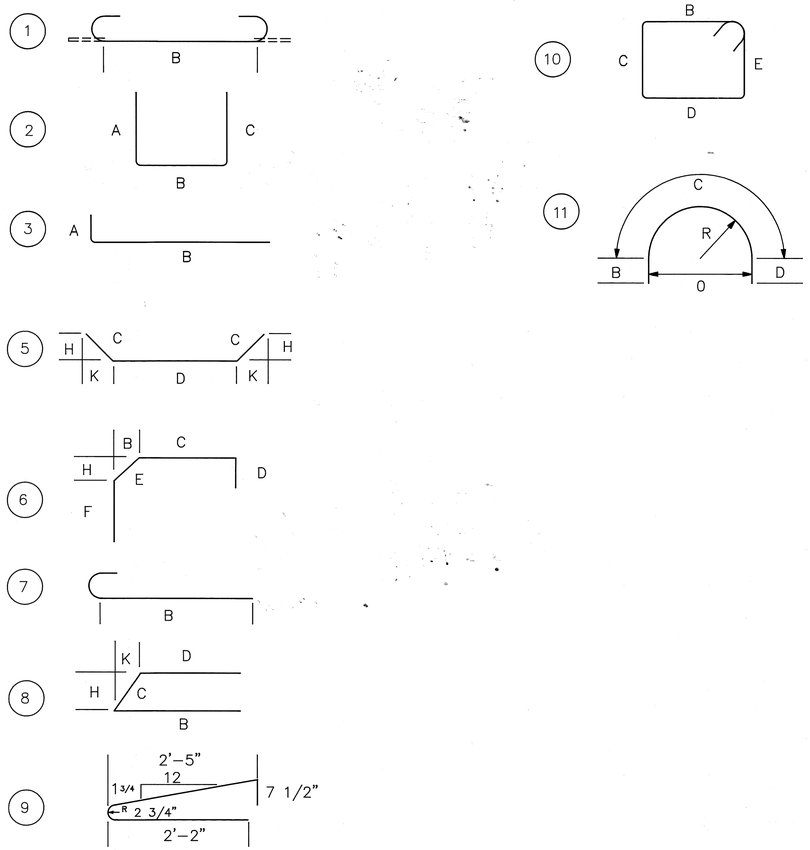
REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
	PIER #2 *																
EP1001	6	50'-5"	1301	3	2'-6"	46'-0"											
EP1002	2	48'-3"	415	STR													
P603	10	34'-10"	524	1		33'-6"											
P801	34	9'-5"	855	1		8'-6"											
	PIER #3 *																
EP501	1-SER. OF 13	10'-3" TO 18'-3"	194	10	5 1/2"	2'-2"	2'-8" 6'-8"	2'-2"	2'-8" 6'-8"	5 1/2"						4"	
EP502	1-SER. OF 13	7'-7" TO 15'-7"	157	10	5 1/2"	10"	2'-8" 6'-8"	10"	2'-8" 6'-8"	5 1/2"						6"	
EP503	4	31'-0"	130	STR													
EP504	2	36'-4"	76	STR													
EP505	2	41'-8"	85	STR													
EP506	2	45'-6"	95	STR													
EP507	4	48'-3"	202	STR													
EP508	4	10'-6"	44	STR													
EP509	29	18'-3"	552	10	5 1/2"↙	2'-2"	6'-8"	2'-2"	6'-8"	5 1/2"↗							
EP510	29	15'-7"	472	10	5 1/2"↘	10"	6'-8"	10"	6'-8"	5 1/2"↙							
EP511	30	27'-6"	861	STR													
EP512	30	5'-9"	180	11		1'-4"	3'-3"	1'-4"							2'-0"	1'-0"	
EP513	1-SER. OF14	10'-3" TO 18'-3"	179	10	5 1/2"↘	2'-2"	2'-8" 6'-8"	2'-2"	2'-8" 6'-8"	5 1/2"↙						4"	
EP514	1-SER. OF 14	7'-7" TO 15'-7"	145	10	5 1/2"↘	10"	2'-8" 6'-8"	10"	2'-8" 6'-8"	5 1/2"↗						4"	
EP515	4	11'-0"	46	STR													
EP601	76	24'-1"	2750	STR													
EP602	86	6'-6"	840	3	2'-0"	4'-8"											
EP1001	6	52'-5"	1353	3	2'-6"	50'-3"											
EP1002	2	50'-3"	433	STR													
P603	10	34'-10"	524	1		33'-6"											
P801	34	9'-5"	855	1		8'-6"											
TOTAL, EPOXY COATED = 25,865																	
TOTAL, NON-EPOXY COATED = 4137 LB																	
	SUPERSTRUCTURE																
ES401	655	30'-0"	13134	STR													
ES402	70	3'-5"	160	STR													
ES501	500.	27'-4"	14255	STR													
ES502	562	30'-0"	17585	STR													
ES503	60	6'-0"	376	STR													
ES504	80	15'-6"	1294	STR													
ES505	128	7'-0"	935	STR													
ES506	4	9'-8"	41	STR													
ES507	240	5'-3"	1315	9													
ES508	240	3'-0"	751	6		8 1/2"	9"	10 1/2"	10 1/2"	9"		6"					
ES509	240	2'-2"	543	3	10 1/2"	1'-5"											
ES510	4	9'-4"	39	STR													
ES511	1 SER 10 SETS OF 50 BARS	20'-0" TO 27'-6"	12386	STR													
ES601	500	31'-4"	23531	STR													
ES602	142	44'-6"	9492	STR													
ES603	67	50'-0"	5032	STR													
ES604	1 SER 10 SETS OF 50 BARS	17'-7" TO 24'-11"	15959	STR													
TOTAL, EPOXY COATED = 116,828 LB																	

* ~ SERIES BAR

"E" IN THE PREFIX OF A BAR MARK INDICATES EPOXY COATED REBAR

BAR BENDING SCHEDULE



REINFORCING STEEL SAMPLES:
REFER TO CMS SECTIONS 106.03,700,709.01 THRU 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

FOR ADDITIONAL NOTES SEE 12/13

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO

13/13

REINFORCING STEEL LIST

BRIDGE NO. AUG-33-1507L
OVER HARDIN PIKE

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MDS	JKS		

FHWA REGION	STATE	PROJECT	
5	OHIO		

314/345

AUGLAIZE COUNTY
AUG~33~13.44

STAR DRILL HOLE
℄ SURVEY USR 33
RAILROAD
21.85'
90°
45°
222.28'
159.10'
(o= ALL REF. PTS. ARE I.P'S WITH ODOT CAP)
P.O.T. 766+25.51

CR 25A
19.98'
℄ SURVEY USR 33
45°
90°
RAILROAD
252.74'
160.65'
(o= ALL REF. POINTS ARE I.P'S WITH ODOT CAPS)
P.O.T STA. 769+29.32

N

765 + 766 + 767 + 768 + 769 + 770 + 771 +

℄ SURVEY USR 33
S89°-39'-03"E

STA. 767+14.38 ~ ℄ SURVEY USR 33
STA. 6153+69.26 ~ CSX WEST RAIL

STA. 768+23.86 ~ ℄ SURVEY USR 33
STA. 267+99.89 ~ ℄ SURVEY CR 25A

52.5'
87.5'
87.5'
61.25'
N2°-53'-39"W
93°-14'-36"
84°-51'-28"
SKEW 3°-15' (TYP)

END APPROACH SLAB
STA. 766+33.61

BEGIN APPROACH SLAB
STA. 769+26.86

End Post Sta. 766+17.69
End Post Sta. 766+20.07
End Post Sta. 769+44.94
End Post Sta. 769+47.32

5' Berm
2:1
2' Ditch Typ.
8' Shldr
4'
2' Ditch Typ.
26'
Type 2-A Curb
Type 6 Curb
Reinf. Sod
25'-0"
24'-0" PVMT.
4' PVD. SHLDR.
4' PAVED SHLDR.
10' PVD. SHLDR.
10' PAVED SHOULDER
25 APP SLAB TYP.
P.G. Line (E.B.)
TO ST. MARYS
TO I-75
12.0' Min
42'-0" f/f Curb
1'-6" Typ.
3'-0" Typ.
15" CONC.
6" CONC.

℄ SURVEY CSX W. RAIL R.R.
6153
Pt. 'A' Min. Vert. CL.
Pt. 'B' Min. Vert. CL.
WEST OHIO GAS LINE 30"± DEEP
℄ SURVEY CR 25A N4°-47'-35"W
267
11.5' MIN. HORIZ. CL.
11.90' Act. (from plans)

Horizontal Clearance 12.97' Actual Field Survey (At W.B. Bridge Existing Pier) 12.89' From Existing Plans

Existing 24'± PVMT.
Existing 24'± PVMT.
8' Shldr
EDGE PAVEMENT CR25A
CONCRETE MEDIAN
EDGE PAVEMENT CR25A

EX. R/W
EX R/W

CURVE DATA		
ROAD	HORIZONTAL	VERTICAL
℄ SURVEY U.S. 33	TANGENT	+0.69% ▽ -3.0% L=875' PVI STA.=769+92.5 ELEV=937.87
COUNTY RD. 25A	TANGENT	EXISTING

CSX TRAIN DATA

TRAINS: 25(Average) Train Movements Per Day
SPEED: Maximum Operating Speed - 30 MPH

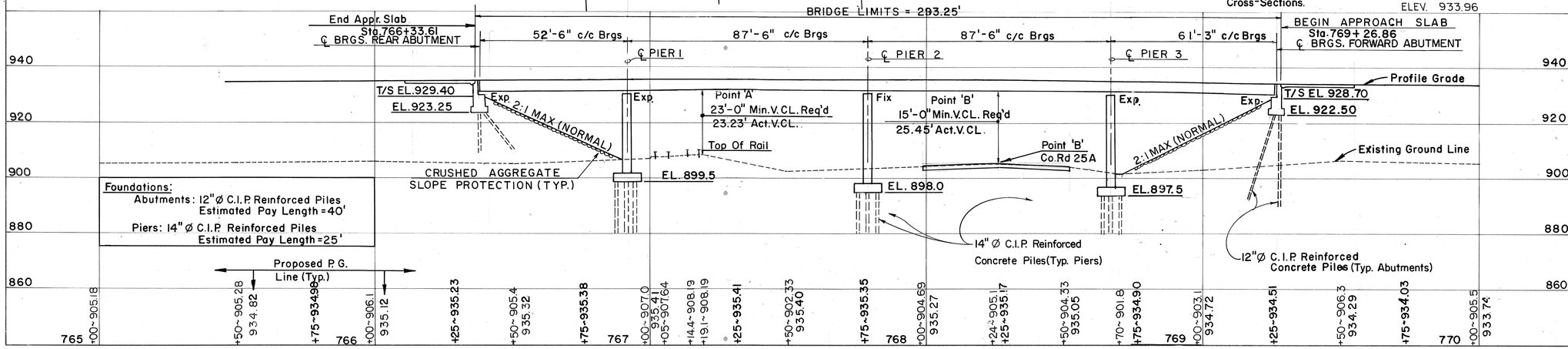
PLAN

Note: Earthwork Limits Shown are Schematic Only. Actual Slopes Shall Conform To Cross-Sections.

BM # 153~a CUT ON N.E. CORNER BRIDGE HEADWALL (BR# AUG-33-15.01) STA. 769+36.4 ~ 55' LT. ELEV. 933.96

CURRENT A.D.T. (1988)..... 6690
DESIGN YEAR A.D.T. (2008).. 9360
DESIGN TRUCK TRAFFIC (2008).... 22%

PROPOSED STRUCTURE
TYPE: 4 SPAN CONTINUOUS COMPOSITE STEEL BEAM WITH REINF. CONC. DECK AND SUBST. UNITS.
SPAN: 52.5'-87.5'-87.5'-61.25' C/C BRGS.
ROADWAY WIDTH: 42' F/F OF BARRIER PARAPET CURB.
LOAD CAPACITY: HS20-44, CASE II, ALT. MILITARY LOADING
SKEW: 3°-15' RT. FWD. (WITH NORMAL TO ℄ BASE LINE OF B&O R.R.
WEARING SURFACE: 1" MONOLITHIC WEARING SURFACE.
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: TANGENT
SUPERELEVATION: N/A



ELEVATION - PROFILE GRADE LINE U.S. 33

SITE PLAN STRUCTURE

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
1/13

SITE PLAN
BRIDGE NO: AUG-1507R(E.B.)
Over CR. 25A & C.S.X. Railroad
STA. 766+33.61 TO STA. 769+26.86
AUGLAIZE COUNTY U.S.R. 33

EXISTING TOPO		PROPOSED WORK- PB. Ohio, Inc.			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
ODOT DIST 7	ODOT DIST. 7	JKS	RS	RS	

SUBMITTED TO DIST. 7 7/14/87

Recd 9/2/87

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

315/345

AUGLAIZE COUNTY
AUG-33-13.44

REFERENCES

STANDARD DRAWINGS:

BRIDGE RAILING	BR-1	DATED 5-29-79
SUPERSTRUCTURE DETAILS	SD-1-69(SHT 1,2&3)	DATED 6-12-69
ROCKERS & BOLSTERS	RB-1-55	DATED(REV) 2-2-59
APPROACH SLAB	AS-1-81(SHT 1,2&3)	DATED 11-27-81
EXPANSION JOINTS	EXJ-4-87	DATED 1-5-89

SUPPLEMENTAL SPECIFICATIONS:
NO. 802 DATED 5-4-88
NO. 836 DATED 11-12-85

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983 SPECIFICATIONS, 1984 THRU 1988 INTERIM SPECIFICATIONS, AND THE OHIO "SUPPLEMENT" TO THEM, DATED 1982.

DESIGN DATA:

DESIGN LOADING	HS20-44 CASE II AND ALTERNATE MILITARY LOADING
CONCRETE CLASS S, SUPERSTRUCTURE	COMPRESSIVE STRENGTH F'c = 4500 PSI
CONCRETE CLASS C, SUBSTRUCTURE	COMPRESSIVE STRENGTH F'c = 4000 PSI
STRUCTURAL STEEL	ASTM A588, UNIT STRESS = 27000 PSI ASTM A36, UNIT STRESS = 20000 PSI
REINFORCING STEEL	ASTM A615, A616, OR A617, GRADE 60 MIN. YIELD STRENGTH = 60000 PSI
DECK PROTECTION METHOD	EPOXY COATED REINFORCING STEEL, TOP & BOTTOM MATS
MONOLITHIC WEARING SURFACE	IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK

DESIGN METHODS: SUPERSTRUCTURE BEAMS — SERVICE LOAD DESIGN
DECK SLAB, PIER, & ABUTMENTS — LOAD FACTOR DESIGN

PILES:

PILE DESIGN LOADS: THE DESIGN LOAD FOR THE 12" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES AT THE ABUTMENTS IS 44 TONS PER PILE. THE DESIGN LOAD FOR THE 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES AT THE PIERS IS 58 TONS PER PILE. THE ESTIMATED PAY LENGTH FOR THE ABUTMENT PILES IS 40' AND THE ESTIMATED PAY LENGTH FOR THE PIER PILES IS 25'.

12 INCH PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATIONS FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATIVE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER ITEM 507.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE REINFORCED CONCRETE PILES SHALL HAVE A STATE'S ENERGY RATING OF NOT LESS THAN 16,500 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM CMS, ITEM 108.05, WHICH STATES THAT THE CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT'S MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

"CONSTRUCTION CONSTRAINTS, REAR ABUTMENT AND PIER-1"
PRIOR TO DRIVING PILES AT THE REAR ABUTMENT AND PIER-1, THE SPILL-THRU SLOPE EMBANKMENTS AT THE REAR ABUTMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. THE EXCAVATION FOR THE ABUTMENT AND PIER-1 FOOTINGS AND INSTALLATION OF THE PILES SHALL NOT BEGIN UNTIL AFTER THE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND HAS UNDERGONE A WAITING PERIOD OF 15 DAYS.

"CONSTRUCTION CONSTRAINTS, FORWARD ABUTMENT AND PIER-3"
PRIOR TO DRIVING PILES AT THE FORWARD ABUTMENT AND PIER-3, THE SPILL-THRU SLOPE EMBANKMENTS AT THE FORWARD ABUTMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT THE EXCAVATION FOR THE ABUTMENT AND PIER-3 FOOTINGS AND INSTALLATION OF THE PILES SHALL NOT BEGIN UNTIL AFTER THE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED AND HAS UNDERGONE A WAITING PERIOD OF 15 DAYS.

"ITEM 507 12 INCH AND 14 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN": THE RESPONSIBILITY OF CHOOSING AND PROVIDING A SATISFACTORY PILE WALL THICKNESS FOR THIS PROJECT SHALL BE BORNE BY THE CONTRACTOR EXCEPT THAT THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.250 INCHES. IF A PILE WALL THICKNESS OF GREATER THAN 0.250 INCHES IS NECESSARY TO RESIST THE PILE INSTALLATION DRIVING STRESS, THE CONTRACTOR SHALL MAKE THIS DETERMINATION AND SHALL FURNISH A PILE WITH AN ACCEPTABLE WALL THICKNESS. MONOTUBE PILES ARE NOT REQUIRED TO COMPLY WITH THE ABOVE SPECIFIED MINIMUM PILE WALL THICKNESS. IF MONOTUBE PILES ARE USED, THE PILE WALL THICKNESS SHALL NOT BE LESS THAN 0.200 INCHES AND THE PILES SHALL SATISFY ALL THE REQUIREMENTS OF ITEM 507.

MAINTENANCE OF TRAFFIC: FOR MAINTENANCE OF TRAFFIC AND SCHEDULE OF OPERATIONS, SEE ROADWAY PLAN SHEETS NO. 23/345

WATERPROOF MEMBRANE: CURING AS PER 511.14, METHOD B, SHALL BE APPLIED ON PARAPET, BACKWALLS AND ABUTMENTS SEATS.

ITEM SPECIAL: SEALING OF CONCRETE SURFACES
A CONCRETE SEALER, AN EPOXY TYPE, SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES: PARAPETS AND CURBS, SEE SHEET 8/13 ;BRIDGE SEATS BACKWALLS, AND FRONT FACES OF ABUTMENT BREASTWALLS ONE FOOT DOWN FROM THE LEVEL OF THE BRIDGE SEAT. TOTAL SURFACE OF PIERS ABOVE GROUND LINE TO BE COVERED WITH NON-EPOXY SEALER. SEE PROPOSAL NOTE FOR SURFACE PREPARATION REQUIREMENTS AND APPLICATION PROCEDURES. SUBSTRUCTURE UNITS SHALL BE SEALED PRIOR TO ERECTION OF STRUCTURAL STEEL.

FOR PARTIAL PAINTING OF A588 STEEL SEE SHEET 9/13.

FOR SPECIAL NOTES REGARDING ITEM 516, STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC STRIP SEALS, SEE SHEET 11/13 . STEEL EXTRUSIONS, ANCHOR STUDS, PERFORATED ANCHOR PLATES AND PLATES ATTACHED TO THE A-2 EXTRUSIONS IN THE CURB AREA ARE INCLUDED IN THE STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEALS, ITEM 516, FOR PAYMENT.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES, SHALL BE BORNE BY THE OWNERS BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM. UTILITY OWNERS ARE LISTED IN THE GENERAL NOTES ON SHEET NO. 20/345.

SPECIAL RAILROAD REQUIREMENTS

GENERAL: THE CONTRACTOR SHALL COOPERATE AT ALL TIMES WITH THE OFFICIALS OF THE RAILROAD COMPANY. HE SHALL USE ALL REASONABLE CARE AND DILIGENCE IN THE WORK IN ORDER TO AVOID ACCIDENTS, DAMAGE OR INTERFERENCE WITH THE TRAINS OR THE PROPERTY OF THE RAILROAD. THE CONTRACTOR SHALL NOTIFY THE RAILROAD PRIOR TO STARTING WORK THAT MAY AFFECT RAILROAD PROPERTY AND FACILITIES AND SHALL PAY THE RAILROAD COMPANY THE COST OF FLAGMAN FURNISHED BY THE RAILROAD COMPANY AND MADE NECESSARY BECAUSE OF ANY OF THE CONTRACTOR'S OPERATIONS OVER OR ADJACENT TO THE TRACKS.

NO SCAFFOLD, PLANKS OR OTHER EQUIPMENT SHALL BE SUSPENDED OR ERECTED ABOVE OR WITHIN 10 FEET HORIZONTALLY OF A RAIL OVER WHICH TRAINS ARE OPERATING WITHOUT PRIOR WRITTEN APPROVAL OF THE CHIEF ENGINEER, OR HIS AUTHORIZED REPRESENTATIVE, OF THE RAILROAD COMPANY.

CONSTRUCTION CLEARANCE: A CONSTRUCTION CLEARANCE OF 8 FEET, MEASURED HORIZONTALLY FROM THE CENTER OF TRACKS, AND 21 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL AND 6 FEET FROM THE CENTER OF TRACKS, SHALL BE MAINTAINED AT ALL TIMES.

THE CONTRACTOR SHALL SUBMIT TO THE RAILROAD COMPANY FOR THEIR REVIEW DETAILED PLANS OF THE PROPOSED SHORING FOR THE EXCAVATION OF THE FOOTING AT PIER-1, AND OF PROTECTIVE SHIELD FOR CONSTRUCTION ABOVE TRACKS.

FAILURE TO COMPLY WITH THE RAILROAD COMPANY AS NOTED ABOVE SHALL BE CAUSE FOR THE STOPPING OF WORK UNTIL ALL PROVISIONS FOR PROTECTION OF THE RAILROAD PROPERTY HAVE BEEN UNDERTAKEN. BLASTING SHALL NOT BE USED OVER OR NEAR THE TRACKS.

RAILROAD AERIAL LINES: WILL BE RELOCATED BY THE RAILROAD. THE CONTRACTOR SHALL USE ALL PRECAUTIONS NECESSARY TO SEE THAT THE LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE AND SHALL COOPERATE WITH THE RAILROAD IN THE RELOCATION OF THESE LINES. THE COST OF THE RELOCATION SHALL BE INCLUDED IN THE RAILROAD FORCE ACCOUNT WORK.

Δ Item 511, Class S Concrete superstructure using shrinkage compensating cement (See Proposal Note).

ESTIMATED QUANTITIES

ESTIMATED: TDW
CHECKED: JKS
DATE: 12-1-88

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIERS	GEN.
503	LUMP	SUM	COFFERDAMS, CRIBS AND SHEETING				LUMP
503	520	CU.YD.	UNCLASSIFIED EXCAVATION		230	290	
505	LUMP	SUM	PILE DRIVING EQUIPMENT MOBILIZATION				LUMP
506	LUMP	SUM	STATIC LOAD TEST				LUMP
507	1040	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN		1040		
507	1125	LIN. FT.	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN			1125	
509	14,746	LBS.	REINFORCING STEEL, GRADE 60		9748	4998	
509	129,880	LBS.	EPOXY COATED REINFORCING STEEL, GRADE 60	102,854	4610	22416	
Δ 511	421	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE	421			
511	217	CU. YD.	CLASS C CONCRETE, PIERS ABOVE FOOTINGS (SEE PROP NOTE)			217	
511	92	CU. YD.	CLASS C CONCRETE, ABUTMENTS ABOVE FOOTINGS		92		
511	196	CU. YD.	CLASS C CONCRETE, FOOTINGS		80	116	
513	311161	LBS.	STRUCTURAL STEEL (AISC CATEGORY I) (ASTM A588)	311161			
513	3760	EACH	WELDED STUD SHEAR CONNECTORS	3760			
514	LUMP	SUM	PARTIAL PAINTING OF A588 STEEL, SYSTEM (A), AS PER PLAN	LUMP			
516	90	LIN. FT.	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEALS (3")	90			
516	80	SQ. FT.	1" PERFORMED EXPANSION JOINT FILLER		80		
518	76	LIN. FT.	6" PERFORATED HELICAL CORRUGATED STEEL PIPE, 707.01		76		
518	90	LIN. FT.	6" NON-PERFORATED HELICAL CORRUGATED STEEL PIPE, INCLUDING SPECIALS, 707.01		90		
518	46	CU. YD.	POROUS BACKFILL, AS PER PLAN		46		
518	6	EACH	SCUPPERS, INCLUDING SUPPORTS	6			
523	3	HOURS	DYNAMIC LOAD TESTS				3
601	703	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION		703		
SPECIAL	792	SQ. YD.	SEALING OF CONCRETE SURFACES, EPOXY, (SEE PROP. NOTE)	663	129		
SPECIAL	613	SQ. YD.	SEALING OF CONCRETE SURFACES, NON-EPOXY (SEE PROP NOTE)			613	

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
2/13

ESTIMATED QUANTITIES & GENERAL NOTES
BRIDGE NO. AUG-33-1507R (E.B.)
OVER C.R. 25A & C.S.X. RAILROAD
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	TDW	MDS	BKU	JKS		

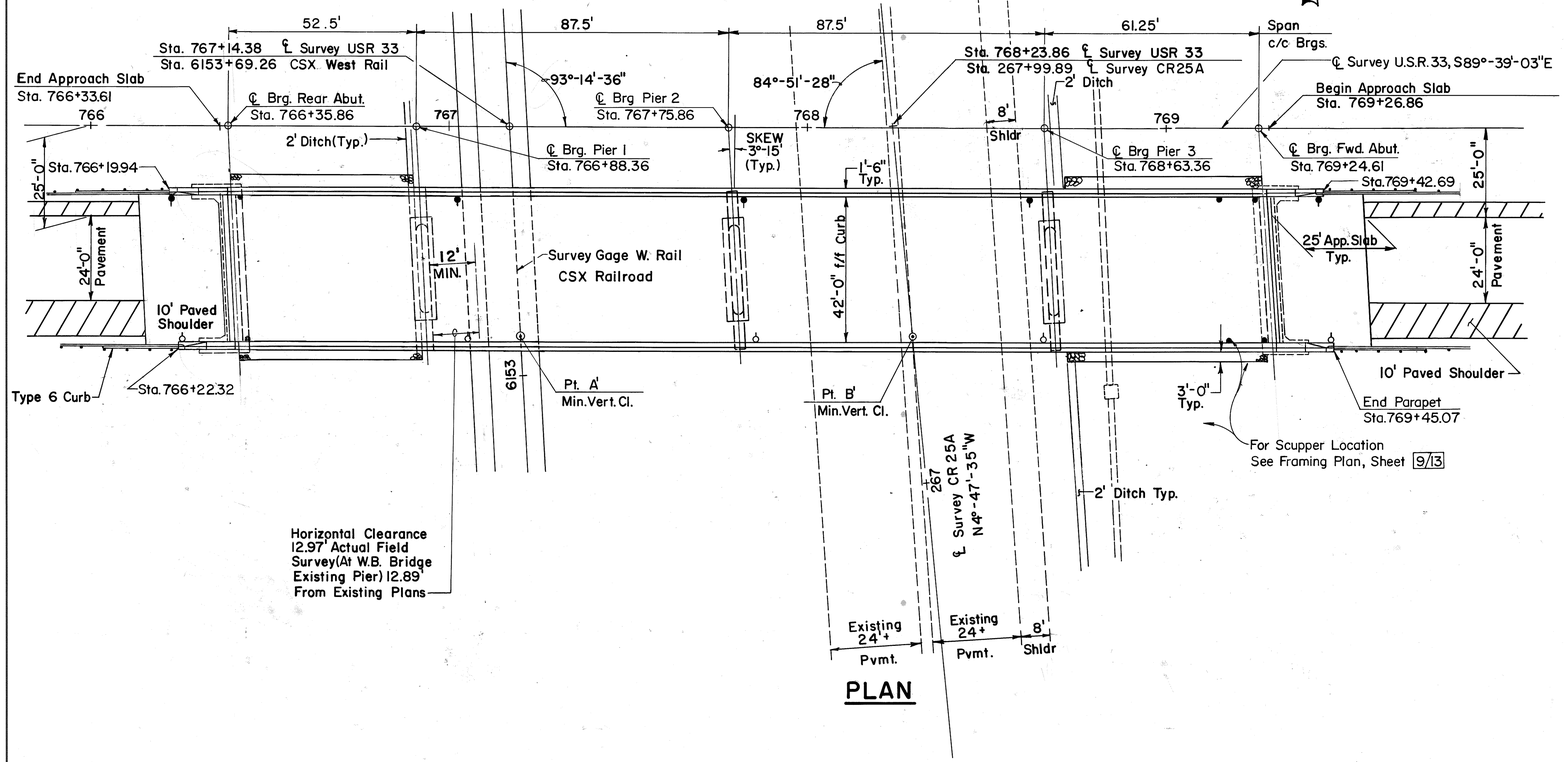
FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		-

316
345

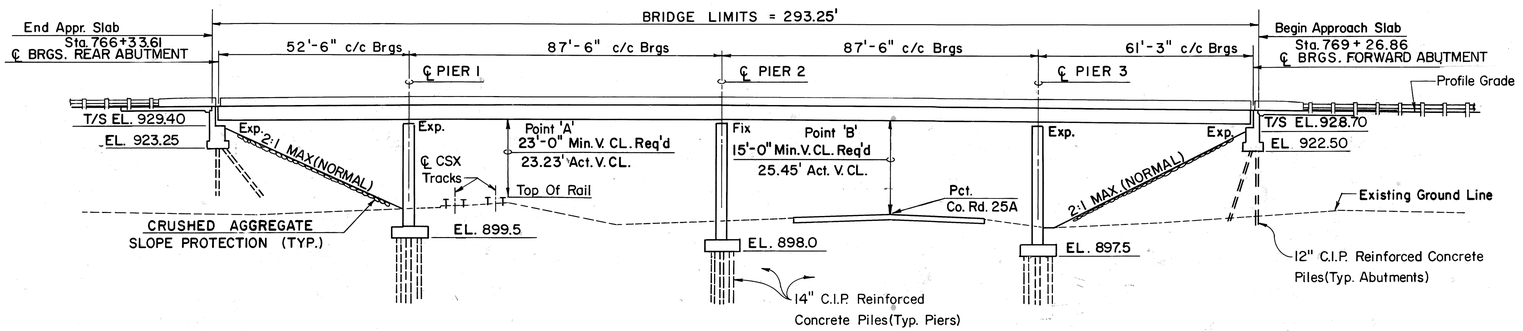
AUGLAIZE COUNTY
AUG-33-13.44

LEGEND

- One Way Reflector (Yellow), Type 'B'
- One Way Reflector (White), Type 'B'



PLAN



ELEVATION

PARSONS & BRINCKERHOFF OHIO INC.
COLUMBUS, OHIO
3 / 13

GENERAL PLAN

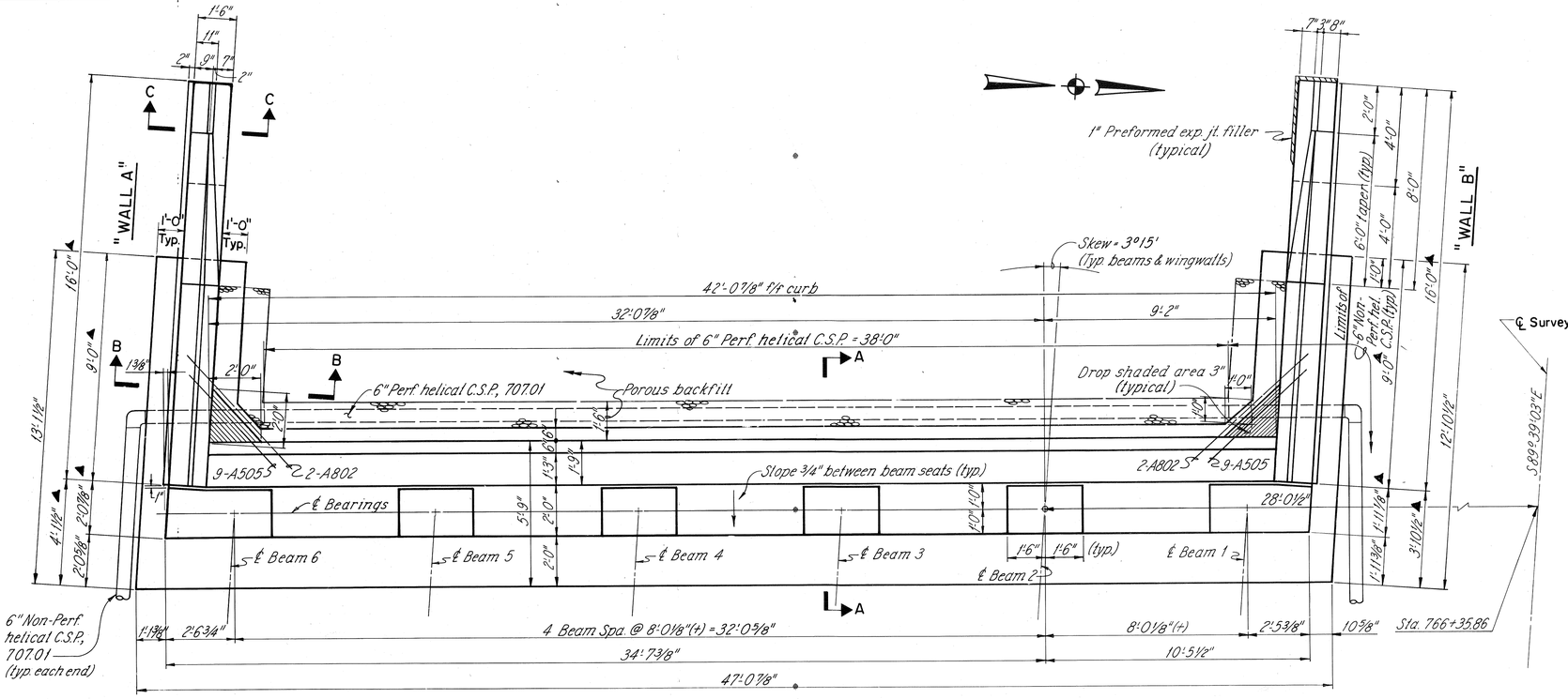
BRIDGE NO. AUG-33-1507R(E.B.)
OVER CR 25A & CSX RAILROAD
AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
JKS		MDS	TDW	JKS		

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

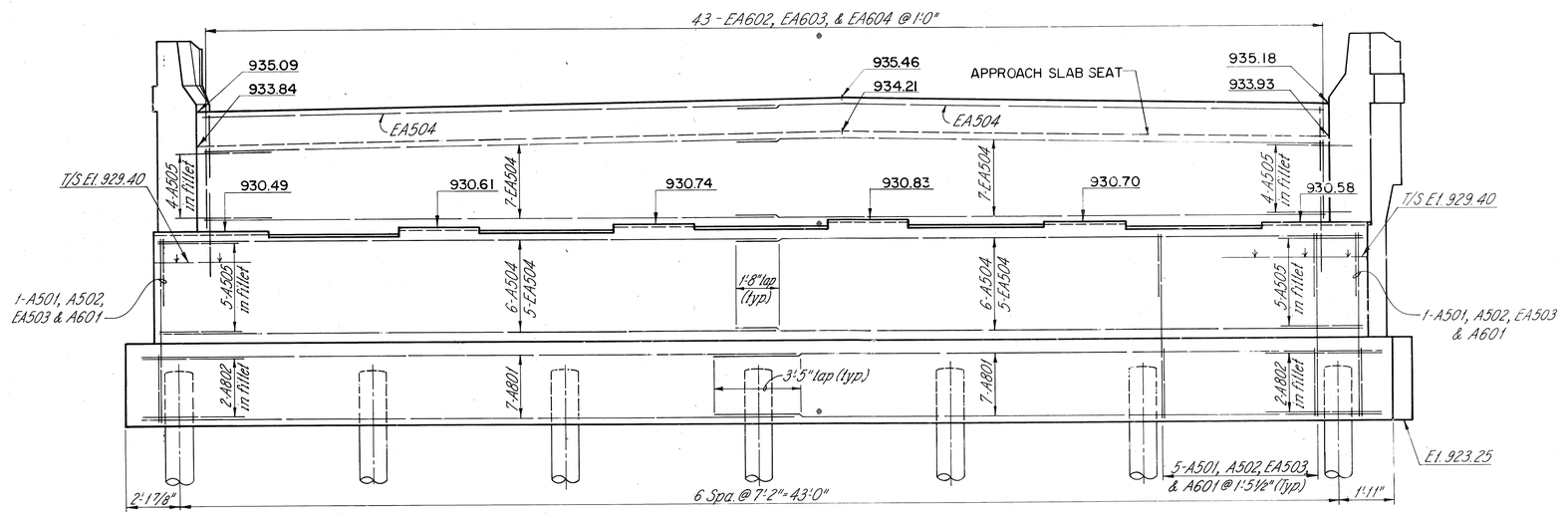
317
345

AUGLAIZE COUNTY
AUG-33-13.44

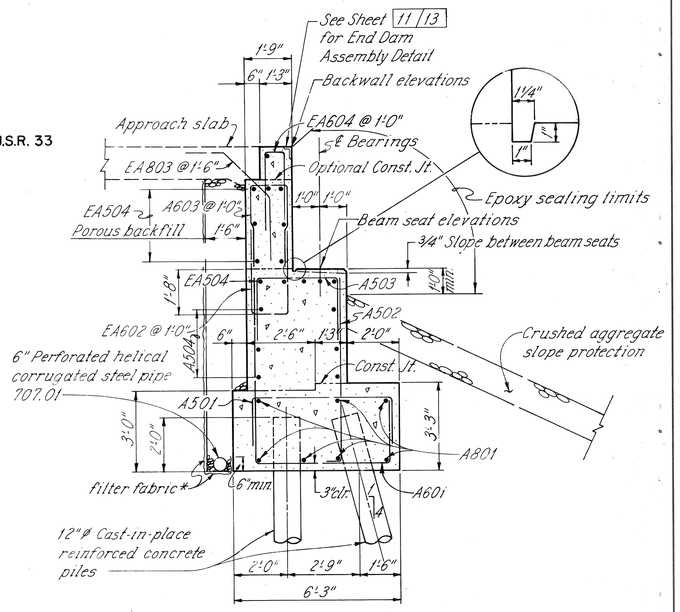


▲ See note 2 on sht. 324 of 345

PLAN



ELEVATION



* Filter fabric to be included with porous backfill for payment.

SECTION A-A

NOTES:

CROSS REFERENCE SHEETS: For Wingwall Sections, see Sheet 5 / 13. For Wingwall Details, & Pile Layout Plan, see Sheet 6 / 13. For General Notes, see Sheet 2 / 13.

POROUS BACKFILL: 1'-6" thick, shall extend from bottom of footing up to the plane of the subgrade, & laterally to the ends of the wingwalls.

CURB & PARAPET DETAILS ON WINGWALLS: See Standard Drawing BR-1.

BACKWALL CONCRETE: In addition to the provisions of 511.08, backwall concrete above the optional construction joint at the approach slab seat shall not be placed until the deck concrete in the span adjacent to the abutment has been placed.

EPOXY COATED BARS are denoted on the plan sheets with the prefix of the letter "E".

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 4 / 13

REAR ABUTMENT

BRIDGE NO. AUG-33-1507 R (E.B.)
OVER C.R. 25A & C.S.X. R.R.

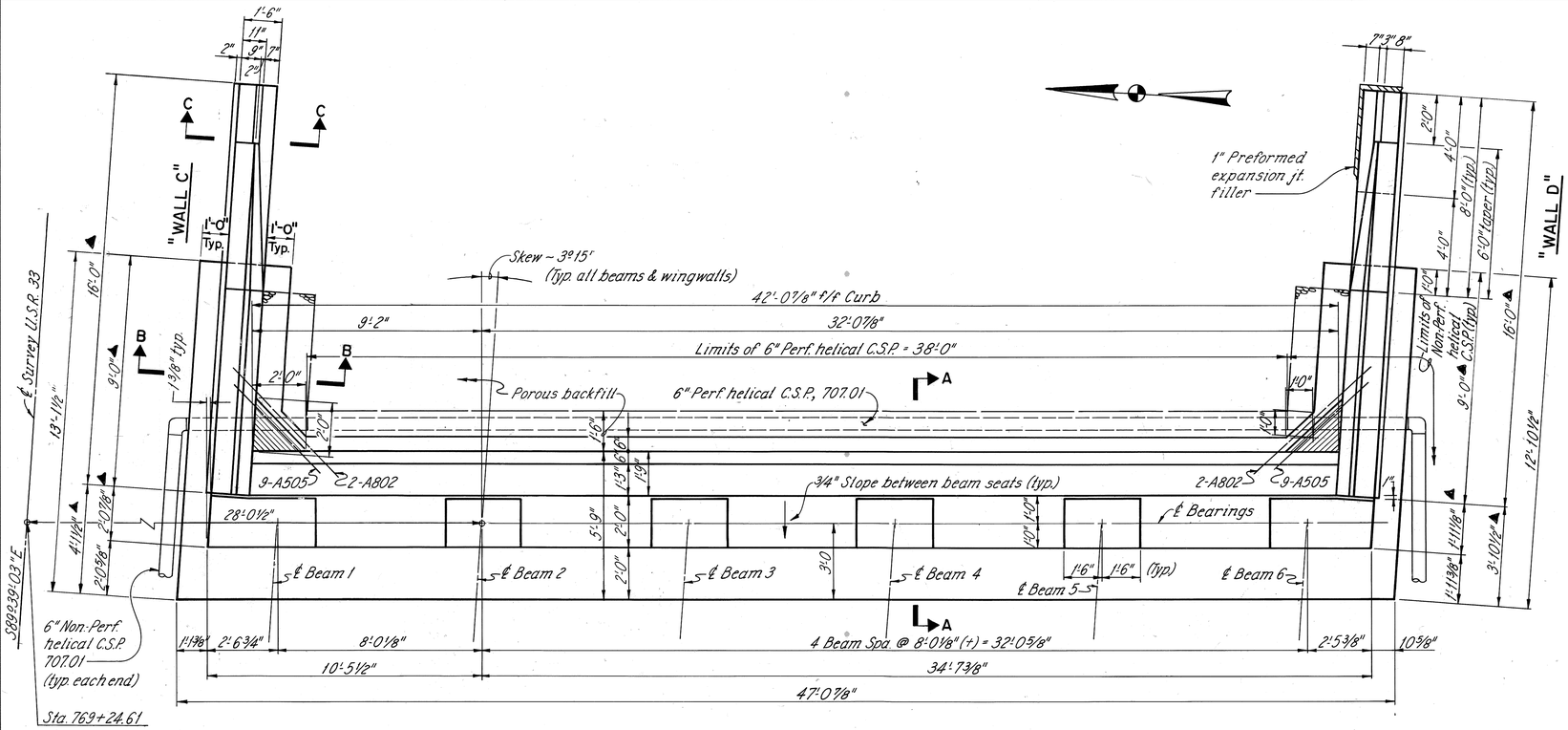
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

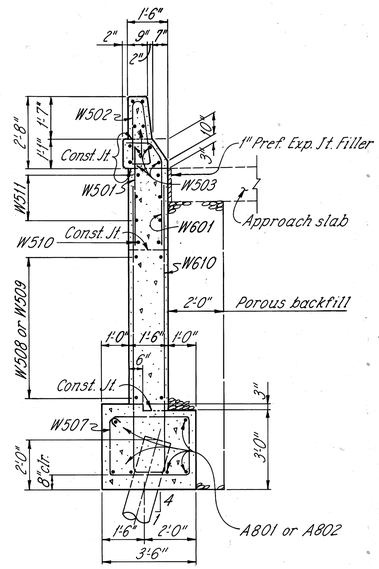
FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

318/345

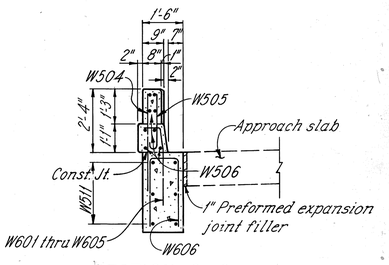
AUGLAIZE COUNTY
AUG-33-13.44



▲ See note 2 on sht. 324 of 345.

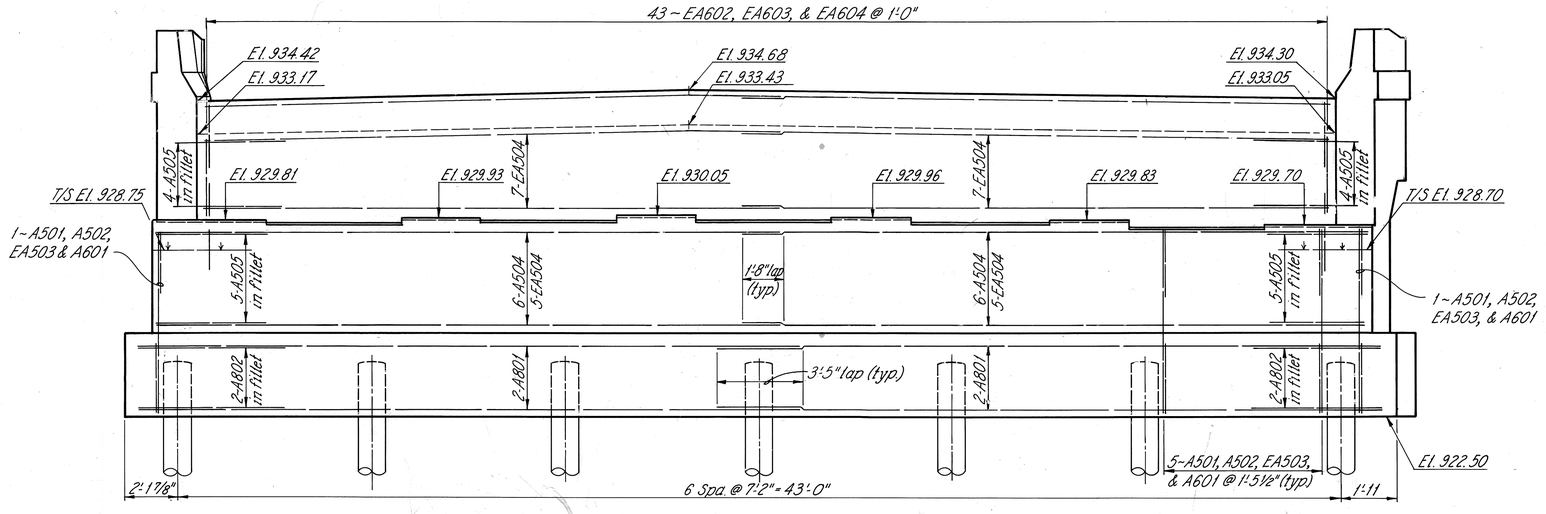


SECTION B-B



SECTION C-C

PLAN



ELEVATION

NOTE: For Section A-A (Abutment detail) & other notes, see Sheet 4 /13.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 5 /13

FORWARD ABUTMENT
BRIDGE NO. AUG-33-1507 R (E.B.)
OVER C.R. 25A & C.S.X.R.R.
AUGLAIZE COUNTY **U.S.R. 33**

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

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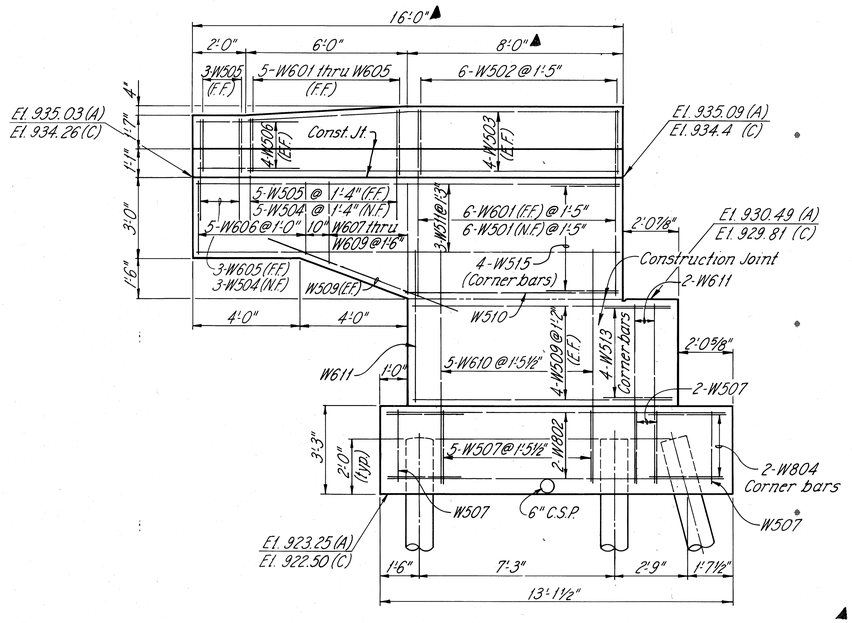
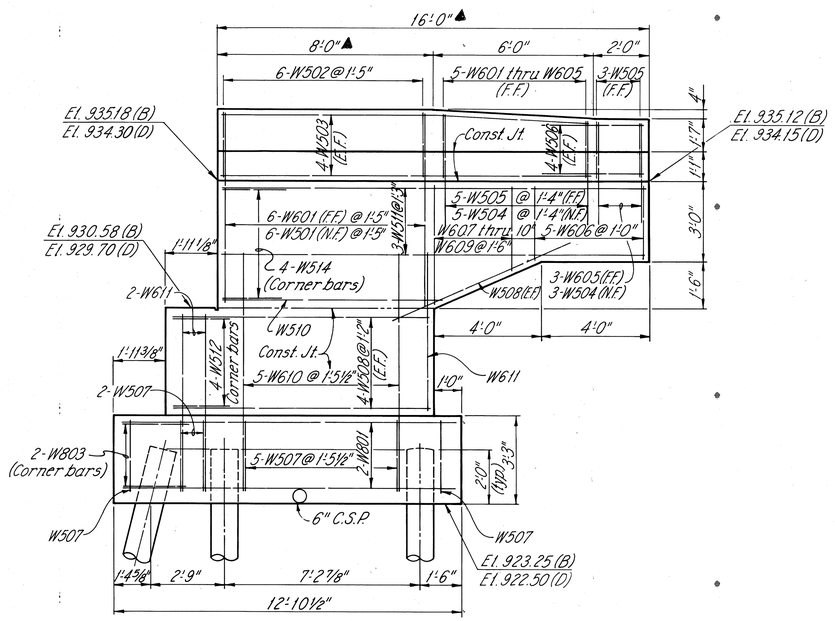
345

AUGLAIZE COUNTY
AUG-33-13.44

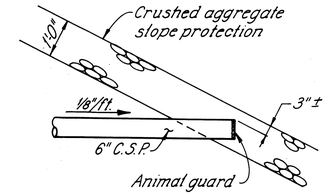


▲ See note 2 on sht. 324 of 345

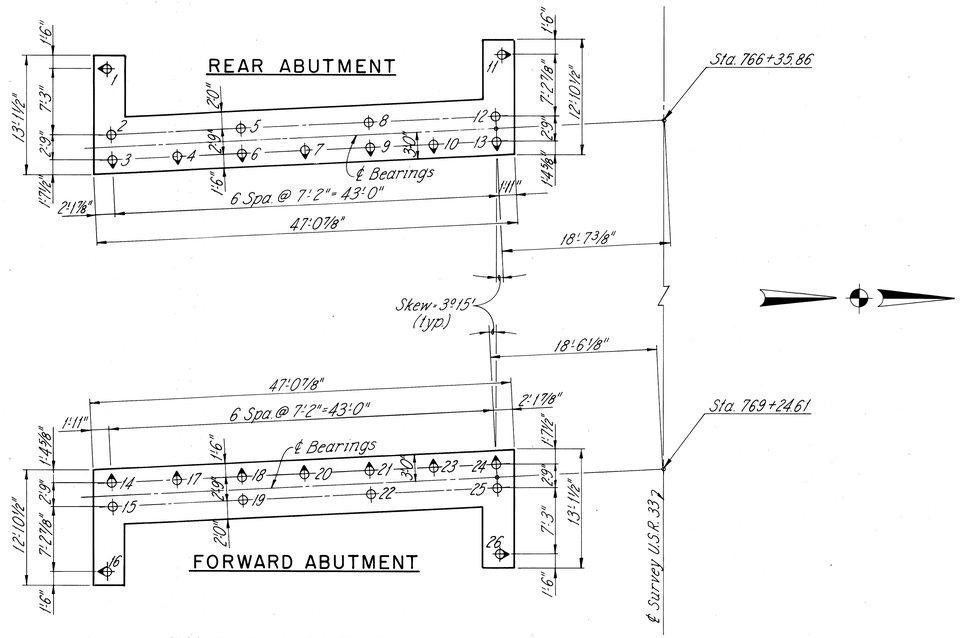
WINGWALL A (& C)



WINGWALL B (& D)



TERMINATION OF 6" NON-PERF. C.S.P.
(TYPICAL)



PILE LAYOUT PLAN

LEGEND:

⊕ ~ Indicates 1:4 Battered Piles (in direction of the 'arrow').

E.F. ~ Each Face.
F.F. ~ Far Face
N.F. ~ Near Face

NOTES:

CROSS REFERENCE SHEETS: For notes, see Sheet 4 / 13.
For Wingwall Sections, see Sheet 5 / 13.
For Wingwall locations & Abutment Details, see Sheets 4 / 13 & 5 / 13.

PILES: All piles are to be 12" ø Cast-in-place reinforced concrete.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
6 / 13

ABUTMENT DETAILS

BRIDGE NO. AUG-33-1507R (E.B.)
OVER C.R. 25A & C.S.X. R.R.

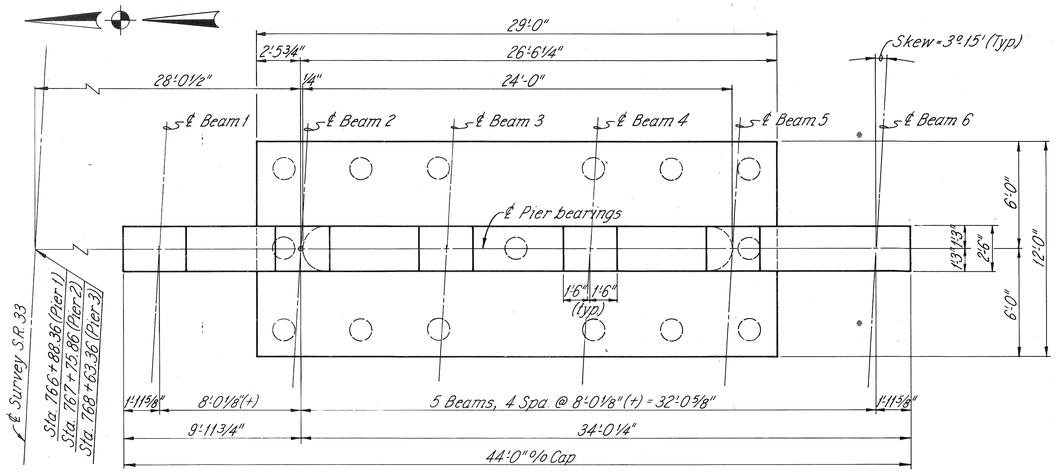
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

320
345

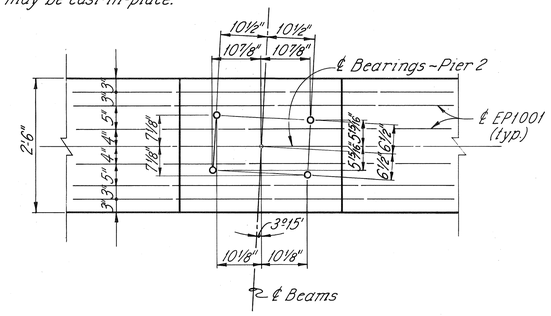
AUGLAIZE COUNTY
AUG-33-13.44



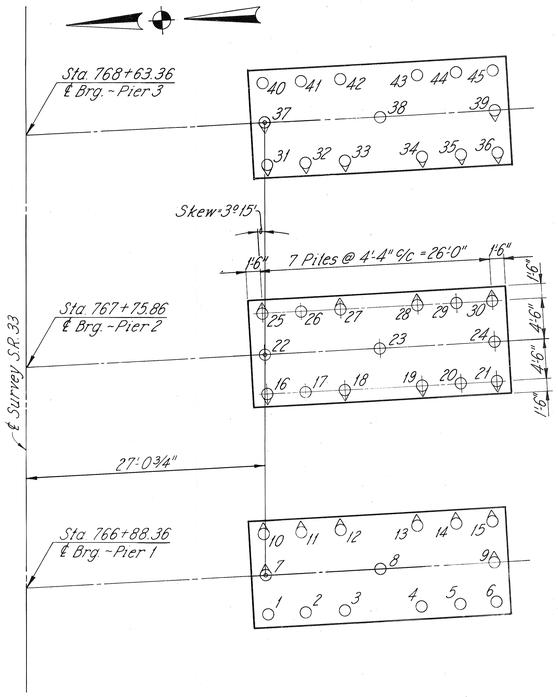
PLAN
(FOR PILE DETAILS, SEE PILE LAYOUT PLAN)

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

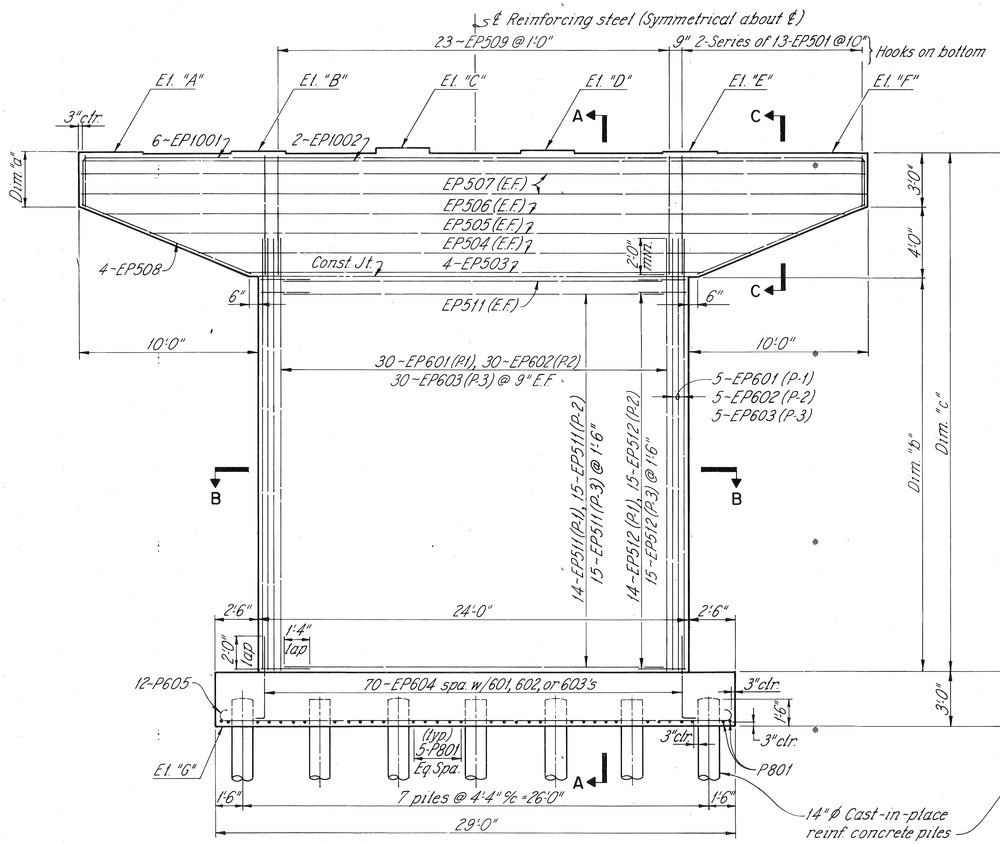
BEARING ANCHORS: *At the option of the contractor, bearing anchors (or formed holes) located and supported by templates, may be cast-in-place.*



ANCHOR BOLT LAYOUT PLAN @ PIER 2
(BEARING B-225)
"6 REQUIRED"

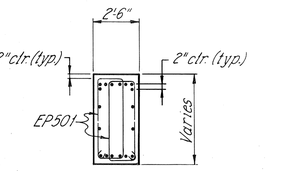


PILE LAYOUT PLAN

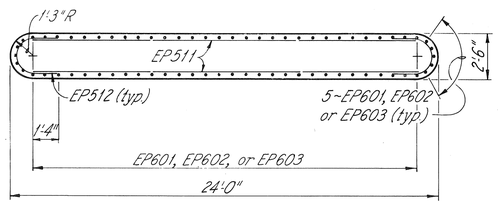


ELEVATION

SECTION A-A



SECTION C-C



SECTION B-B

TABLE OF ELEVATIONS & DIMENSIONS

LOCATION	EL. "A"	EL. "B"	EL. "C"	EL. "D"	EL. "E"	EL. "F"	EL. "G"	DIM. "a"	DIM. "b"	DIM. "c"
PIER 1	930.18	930.30	930.43	930.34	930.21	930.09	899.50	3'-1⅛"	20'-7"	27'-7"
PIER 2	930.06	930.18	930.30	930.21	930.08	929.96	898.00	3'-1⅛"	21'-11½"	28'-11½"
PIER 3	929.75	929.87	929.99	929.90	929.77	929.64	897.50	3'-1¼"	22'-1⅝"	29'-1⅝"

LEGEND:

℄ ~ *Indicates 1:4 Battered Piles (in direction of the arrow).*

N.F. ~ Near Face, F.F. ~ Far face, E.F. ~ Each Face

"E" Prefix on rebar callout = Epoxy coated bars.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
7/13

PIER DETAILS
BRIDGE NO. AUG-33-1507R (E.B.)
OVER C.R. 25A & C.S.X. R.R.

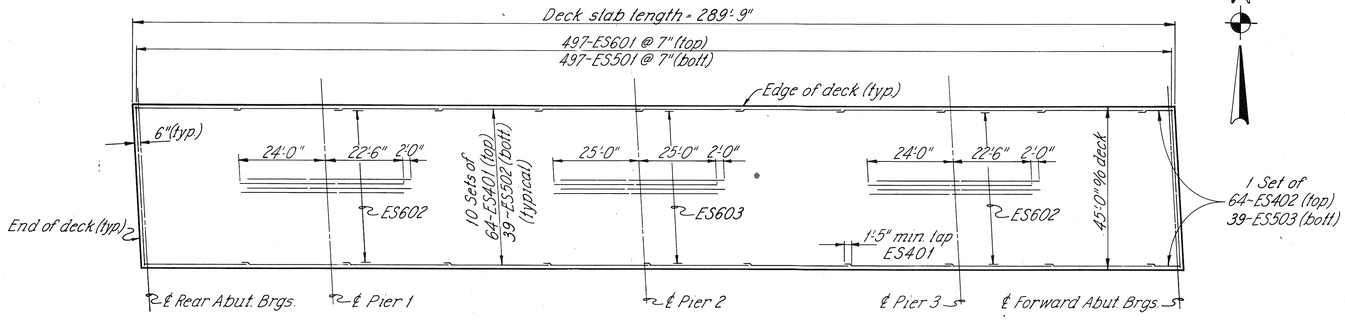
AUGLAIZE COUNTY — U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

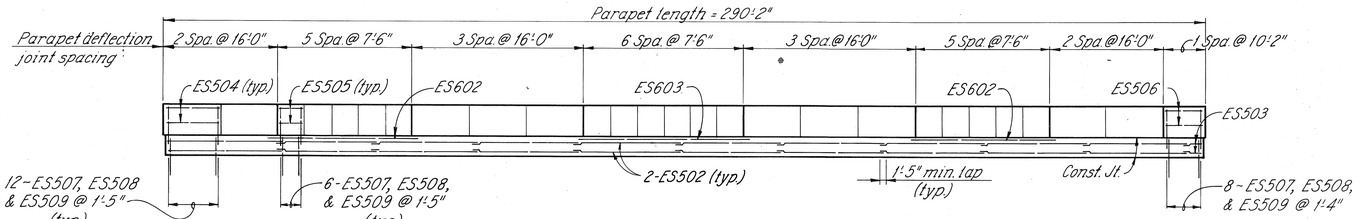
FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

321
345

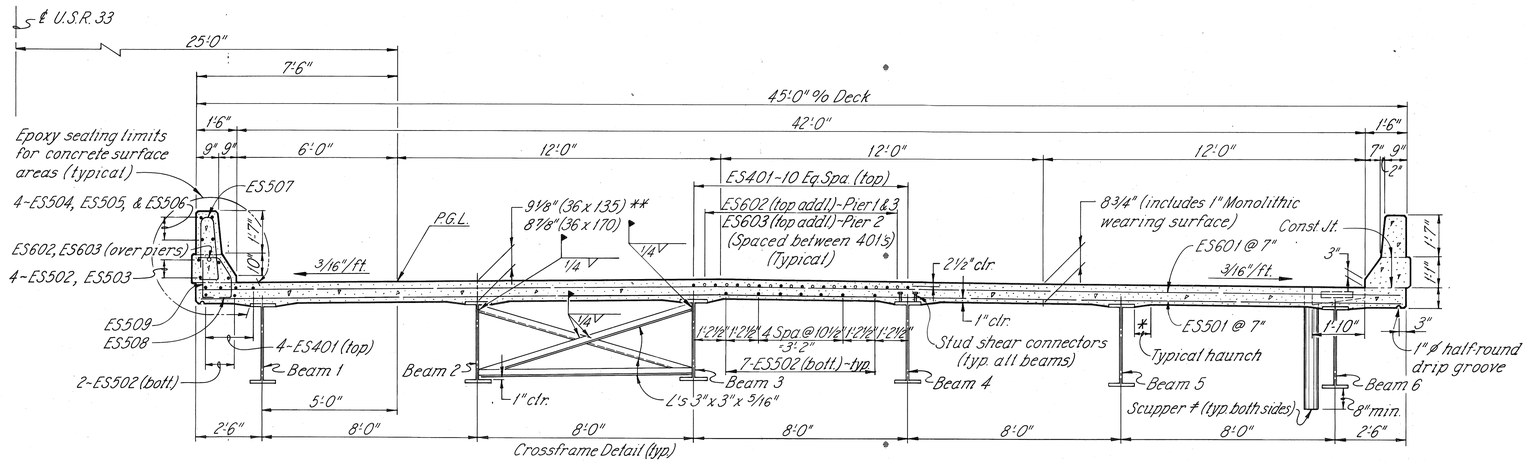
AUGLAIZE COUNTY
AUG-33-13.44



DECK SLAB PLAN



PARAPET ELEVATION
(TYPICAL)



TRANSVERSE SECTION

NOTES:

** DECK SLAB DEPTH: THE DISTANCE SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

* A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH).

FIELD BEND TRANSVERSE BARS TO FIT CROWN. ALL TRANSVERSE BARS SHALL BE PARALLEL TO THE SUBSTRUCTURE. FIELD BENDING SHALL BE INCLUDED IN ITEM 509 FOR PAYMENT.

LONGITUDINAL STEEL SHALL BE FIELD CUT AS NECESSARY TO AVOID INTERFERENCE WITH SCUPPERS.

FOR MORE RAILING AND PARAPET DETAILS SEE STD. DWG. BR-1.

EPOXY-COATED BARS THAT ARE FIELD CUT AND BARS WITH THE EPOXY-COATING DAMAGED BY FIELD BENDING SHALL BE RECOATED AS PER APPROVED MANUFACTURE'S RECOMMENDATIONS.

FOR ADDITIONAL SUPERSTRUCTURE DETAILS SEE SHEETS 9 13 & 10 13.

STAGGER REINFORCING BARS - ES602- OVER PIERS 1 & 3 AND
ES603- OVER PIER 2

≠ SCUPPERS SHALL BE IN ACCORDANCE WITH STD. DWG. SD-1-69 SHEET 3, EXCEPT THAT SCUPPER PIPES SHALL EXTEND 8" BELOW THE BOTTOM OF THE BEAMS INSTEAD OF 2". FOR SUPPER LOCATIONS SEE SHEET 9 13.

"E"- IN THE PREFIX OF A BAR MARK INDICATES EPOXY COATED REINFORCING STEEL.

TRANSVERSE REINFORCING STEEL ES501 & ES601 SHALL BE PLACED TO AVOID SHEAR STUD CONNECTOR LOCATIONS ON TOP OF BEAMS.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO 8 13

SUPERSTRUCTURE DETAILS

BRIDGE NO. AUG-33-1507R (E.B.)
OVER C.R. 25A & C.S.X. R.R.

AUGLAIZE COUNTY U.S.R. 33

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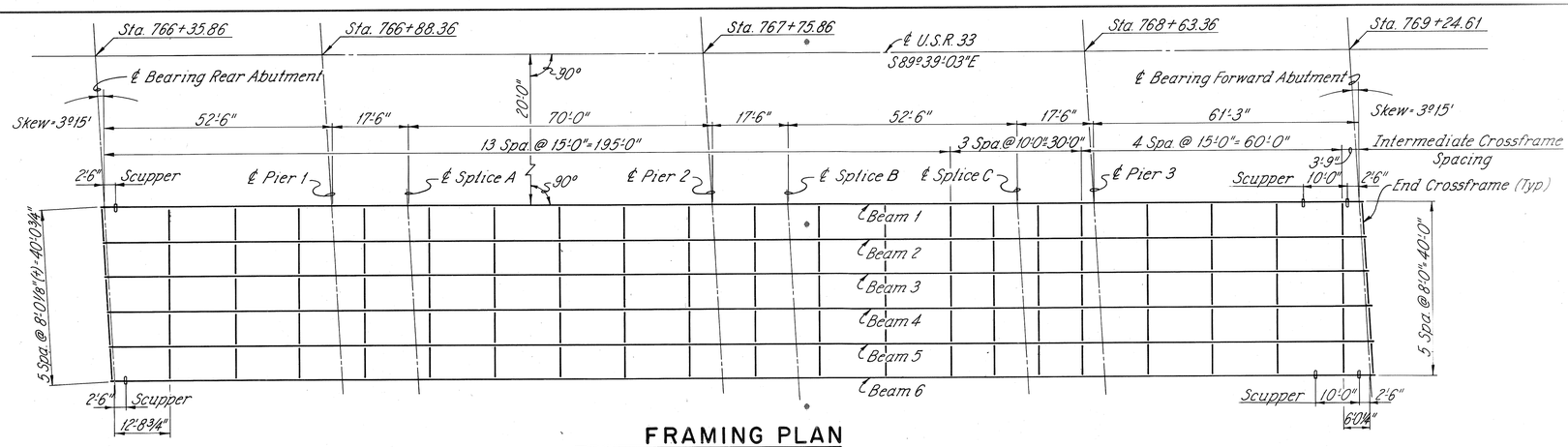
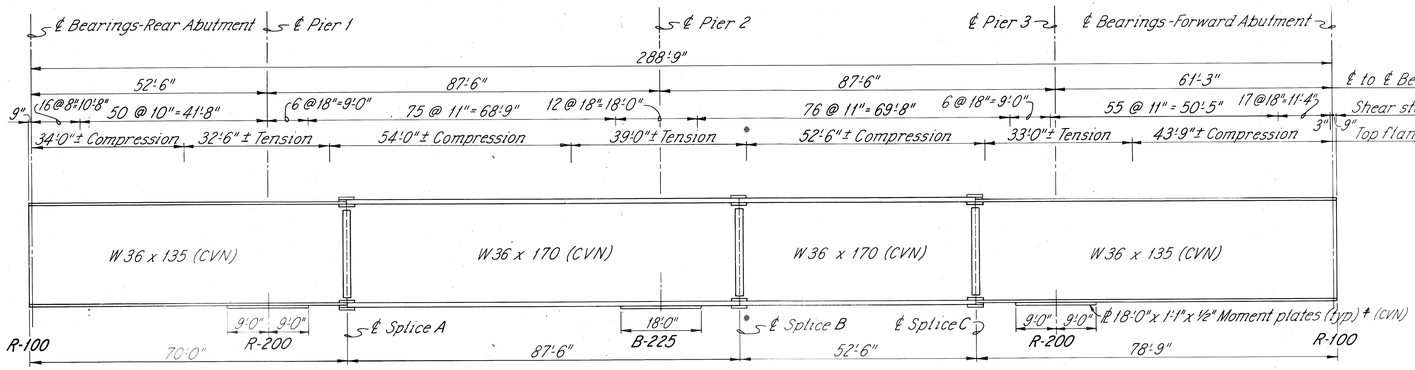
TDW	BKU	BKU	BKU	JKS		

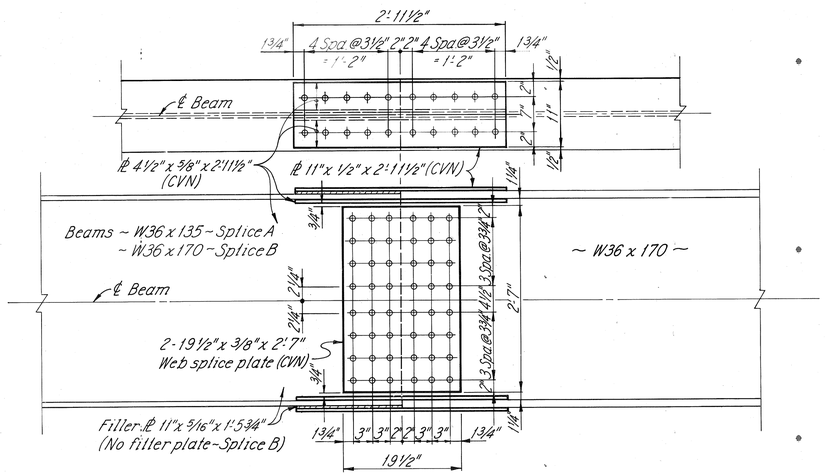


FRAMING PLAN



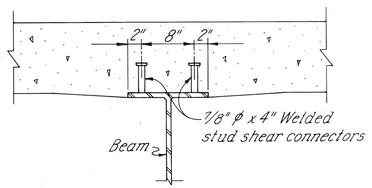
BEAM ELEVATION

BEAMS 1 THRU 6

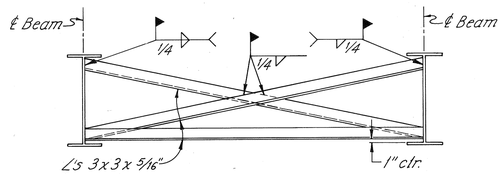


BEAM SPLICE DETAIL

FIELD SPLICE A SHOWN
(FIELD SPLICE C - OPPOSITE HAND)
(FIELD SPLICE B - SIMILAR, EXCEPT AS NOTED)



SHEAR STUD DETAIL



INTERMEDIATE CROSSFRAME

FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

SHEET 322 345

AUGLAIZE COUNTY
AUG-33-13.44

NOTES

WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.

ALL BEAM LENGTH DIMENSIONS ARE AT 70 DEG. F.

WELDING ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED 'COMPRESSION'. ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED 'TENSION'. FILLET WELDS TO COMPRESSION FLANGES SHALL NOT BE CLOSER THAN 1" FROM EDGE OF FLANGE, NOT MORE THAN 2" LONG, AND NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO.

BEARINGS: IN LIEU OF A588 STEEL, A36 STEEL, GALVANIZED, MAY BE FURNISHED FOR THE BEARINGS, EXCEPTING THE UPPER PLATE ELEMENT OF THE BEARING. THIS A36 STEEL SHALL BE INCLUDED WITH THE A588 STEEL QUANTITY FOR PAYMENT.

* FOR END CROSSFRAME DETAILS, SEE STD. DWG. SD-1-69 SHEET 1 OF 4.

≠ FOR WELDING OF COVER PLATES, SEE STD. DWG. SD-1-69 SHEET 3 OF 4.

PARTIAL PAINTING OF A588 STEEL: PARTIAL PAINTING OF A588 STEEL SHALL INCLUDE, AN 8' LENGTH OF THE BEAM ENDS ADJACENT TO THE ABUTMENTS, ALL CROSSFRAMES AND OTHER A588 STEEL WITHIN THESE LIMITS. PAINT SHALL BE 514, SYSTEM A, THE PRIME COAT SHALL BE 708.17. THE TOP COAT SHALL BE 708.18 EXCEPT THAT THE COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595A-20045 OR 20059 (RUSTY STEEL COLOR). THE REMAINING A588 STEEL IS TO BE LEFT UNPAINTED. SEE CMS 513.221 FOR CLEANING REQUIREMENTS.

FOR BOLTED BEAM SPLICE DETAILS, SEE STD. DWG. SD-1-69 SHEET 4 OF 4. HIGH STRENGTH BOLTS SHALL BE 1" DIA. A325 UNLESS OTHERWISE NOTED.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
9/13

SUPERSTRUCTURE DETAILS

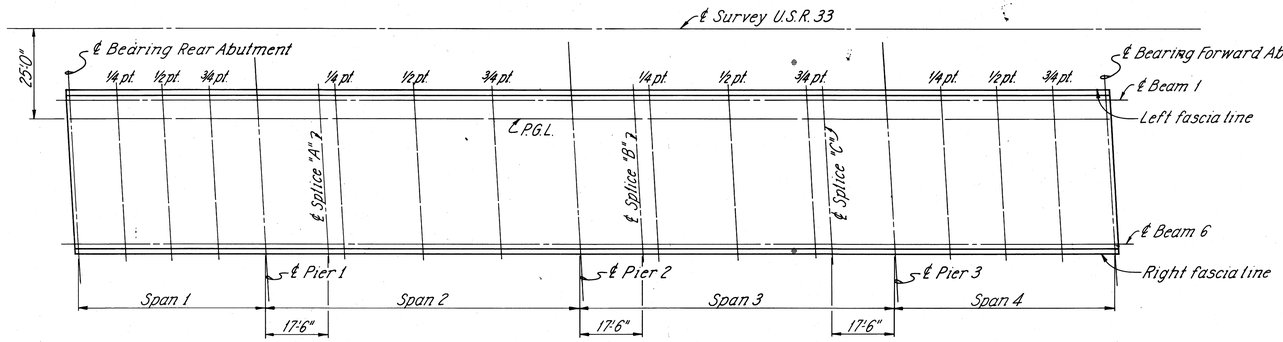
BRIDGE NO. AUG-33-1507R (E.B.)
OVER C.R. 25A & C.S.X. R.R.
AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

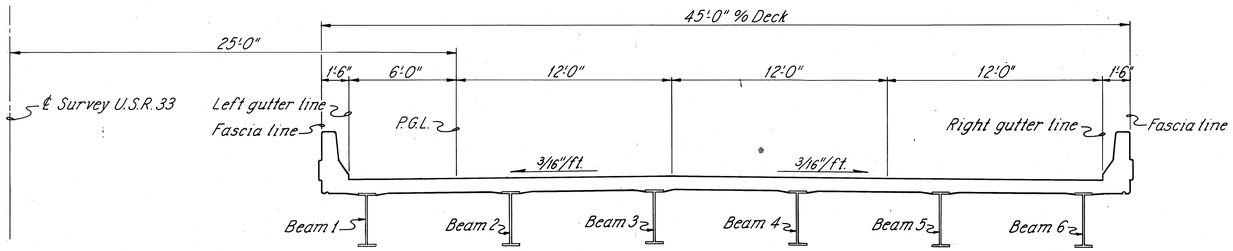
FED. RD. DIVISION	STATE	PROJECT	
5	OHIO		

323
345

AUGLAIZE COUNTY
AUG-33-13.44



LOCATION PLAN

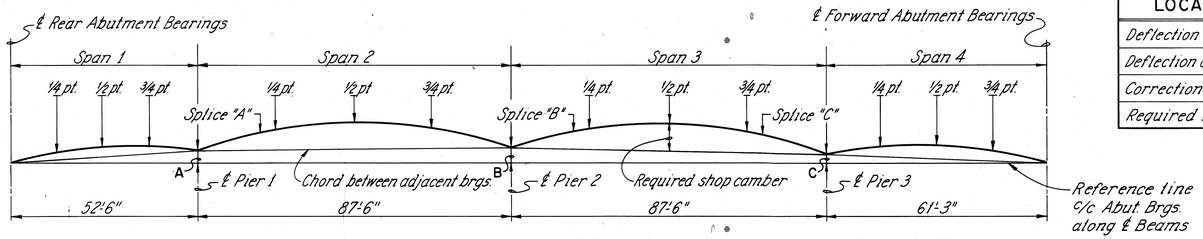


TYPICAL DECK SECTION

NOTE: THE ELEVATIONS SHOWN ARE THE TOP OF CONCRETE AND THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE.

SCREED ELEVATIONS AT TOP OF SLAB

LOCATIONS		LEFT GUTTER LINE		RIGHT GUTTER LINE	
		STATION	ELEV.	STATION	ELEV.
SPAN 1	℄ BRG. R. ABUT.	766+36.94	935.18	766+39.33	935.10
	1/4 POINT	766+50.07	935.24	766+52.45	935.15
	1/2 POINT	766+63.19	935.27	766+65.58	935.18
	3/4 POINT	766+76.32	935.28	766+78.70	935.19
SPAN 2	℄ BRG. PIER 1	766+89.44	935.30	766+91.83	935.21
	1/4 POINT	767+11.32	935.39	767+13.70	935.29
	1/2 POINT	767+33.19	935.42	767+35.58	935.32
	3/4 POINT	767+55.07	935.35	767+57.45	935.25
SPAN 3	℄ BRG. PIER 2	767+76.94	935.25	767+79.33	935.15
	1/4 POINT	767+98.82	935.23	768+01.20	935.13
	1/2 POINT	768+20.69	935.19	768+23.08	935.09
	3/4 POINT	768+42.62	935.05	768+44.95	934.95
SPAN 4	℄ BRG. PIER 3	768+64.44	934.87	768+66.83	934.76
	1/4 POINT	768+79.75	934.79	768+82.14	934.68
	1/2 POINT	768+95.07	934.71	768+97.45	934.59
	3/4 POINT	769+10.38	934.58	769+12.76	934.47
	℄ BRG. F. ABUT.	769+25.69	734.42	769+28.08	934.30



BLOCKING & CAMBER DIAGRAM

(TYPICAL BEAMS 1 THRU 6)

DEFLECTION & CAMBER TABLE

SPAN NO. →	1			2				3					4		
LOCATION POINT →	1/4	1/2	3/4	SPLICE "A"	1/4	1/2	3/4	SPLICE "B"	1/4	1/2	3/4	SPLICE "C"	1/4	1/2	3/4
Deflection due to weight of steel	0	0	0	1/8"	1/8"	3/16"	1/8"	1/16"	1/16"	3/16"	1/8"	1/16"	0	1/16"	1/16"
Deflection due to remaining D.L.	1/8"	1/8"	0	5/8"	13/16"	13/16"	5/8"	3/8"	9/16"	11/16"	11/16"	1/2"	3/16"	1/2"	7/16"
Correction for vertical curve	1/8"	3/16"	1/8"	5/16"	3/8"	1/2"	3/8"	5/16"	3/8"	1/2"	3/8"	5/16"	3/16"	1/4"	3/16"
Required shop camber	1/4"	5/16"	1/8"	1 1/16"	1 5/16"	1 7/8"	1 1/8"	3/4"	1"	1 3/4"	1 1/8"	7/8"	3/8"	13/16"	11/16"

BLOCKING TABLE

A	B	C
3 1/8"	5 3/16"	3 3/8"

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
10/13

SUPERSTRUCTURE DETAILS

BRIDGE NO. AUG-33-1507R (E.B.)
OVER C.R. 25A & C.S.X. R.R.

AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	BKU	BKU	BKU	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

AUG-33-13.44

ELASTOMERIC STRIP SEAL SYSTEM

SPECIAL NOTES:

1. Seal shall have a movement rating of 3"

2. IT IS NECESSARY TO MODIFY THE DESIGN DRAWING TO ACCOMMODATE THE EXPANSION JOINT DEVICE. The drawings shall be modified by the Contractor and approved by the Engineer. Copies of the modified drawings shall be forwarded to the Bridge Bureau, Structural Steel Section for use in checking shop drawings.

3. DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, THE SEATING OF BEAMS ON BEARINS SHALL BE CAREFULLY OSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT/ARMOR OR THE BEAMS SHALL BE ACHIEVED BY POSTITION OF THE BEVEL FILL PLATES RATHER THAN BY CLAMPING FORCE.

4. SEE STANDARD DRAWING EXJ-4-87 FOR ALL REMAINING DETAILS AND NOTES.

5. The above shall be included with item 516 for payment.

STRIP SEAL JOINT AT ABUTMENT		
JOINT SETTING TABLE		
TEMP. (F°)	Joint Opening – Dim. "A"	
	Rear Abutment	Forward Abutment
30°	1 7/8"	1 7/8"
40°	1 3/4"	1 3/4"
50°	1 3/4"	1 3/4"
60°	1 5/8"	1 5/8"
70°	1 1/2"	1 1/2"
80°	*	*
90°	*	*

* MINIMUM JOINT OPENING (DIMENSION "A") AT TIME OF SEAL GLAND INSTALLATION SHALL NOT BE LESS THAN 1-1/2". IF THE JOINT OENING IS LESS, THE INSTALLATION SHALL BE POSTPONED UNTIL THE TEMP-ATURE DROPS A SUFFICIENT AMOUNT TO ALLOW THE MIN-IMUM 1-1/2" OPENING.

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO

11/13

STRUCTURAL EXPANSION JOINT DETAIL

BRIDGE NO. AUG-33-1507R
OVER C.R. 25A AND C.S.X. R.R.

AUGLAIZE COUNTY U.S.R. 33

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

325
345

AUGLAIZE COUNTY
AUG-33-13.44

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
	REAR ABUTMENT *																
A501	34	8'–3"	293	2	1'–7"	5'–4"	1'–7"										
A502	32	8'–0"	267	3	1'–3"	6'–8"											
A504	12	23'–2"	290	STR													
A505	18	5'–0"	94	STR													
A601	32	14'–3"	685	2	6'–9"	5'–4"	2'–6"										
A801	14	25'–2"	941	STR													
A802	4	6'–0"	64	STR													
		TOTAL = 2634 LB															
EA503	32	7'–2"	240	2	2'–0"	3'–5"	2'–0"										
EA504	16	23'–2"	387	STR													
EA602	43	8'–9"	566	2	3'–10"	1'–5"	3'–10"										
EA603	43	7'–1"	458	2	3'–0"	1'–5"	3'–0"										
EA604	43	5'–0"	323	2	2'–3"	10"	2'–3"										
EA803	28	4'–5"	331	5			1'–5"	1'–9"	1'–5"			1'–0"		1'–0"			
	TOTAL, EPOXY COATED = 2305 LB																
	FORWARD ABUTMENT *																
A501	34	8'–3"	293	2	1'–7"	5'–4"	1'–7"										
A502	32	8'–0"	267	3	1'–3"	6'–8"											
A504	12	23'–2"	290	STR													
A505	18	5'–0"	94	STR													
A601	32	14'–3"	685	2	6'–9"	5'–4"	2'–6"										
A801	14	25'–2"	941	STR													
A802	4	6'–0"	64	STR													
		TOTAL = 2634 LB															
EA503	32	7'–2"	240	2	2'–0"	3'–5"	2'–0"										
EA504	16	23'–2"	387	STR													
EA602	43	8'–9"	566	2	3'–10"	1'–5"	3'–10"										
EA603	43	7'–1"	458	2	3'–0"	1'–5"	3'–0"										
EA604	43	5'–0"	323	2	2'–3"	10"	2'–3"										
EA803	28	4'–5"	331	5			1'–5"	1'–9"	1'–5"			1'–0"		1'–0"			
	TOTAL, EPOXY COATED = 2305 LB																
	WINGWALLS *																
W501	24	3'–0"	76	STR													
W502	24	5'–3"	132	9													
W503	32	13'–8"	457	STR													
W504	32	4'–7"	153	STR													
W505	32	2'–8"	89	7		2'–1"											
W506	32	4'–4"	145	STR													
W507	36	11'–5"	429	10		3'–0"	2'–3"	3'–0"	2'–3"								
W508	20	9'–5"	197	STR													
W509	20	9'–7"	200	STR													
W510	8	7'–6"	63	STR													
W511	24	15'–7"	391	STR													
W512	8	3'–5"	30	8		1'–0"	1'–2"	1'–6"				1'–2"			1"		
W513	8	3'–5"	30	8		1'–6"	1'–2"	1'–0"				1'–2"			1"		
W514	8	3'–5"	30	8		1'–0"	1'–2"	1'–6"				1'–2"			1"		
W515	8	3'–5"	30	8		1'–6"	1'–2"	1'–0"				1'–2"			1"		
W601	28	3'–9"	158	6		8 1/2"	2'–5"	0	10 1/2"	9"		6"					
W602	4	3'–8"	22	6		8 1/2"	2'–5"	0	10"	8"		5"					
W603	4	3'–8"	22	6		8 1/2"	2'–5"	0	9 1/2"	8"		4"					
W604	4	3'–7"	22	6		8 1/2"	2'–5"	0	9"	7"		3"					
W605	4	3'–7"	22	6		8 1/2"	2'–5"	0	8 1/2"	7"		2"					
W606	20	5'–10"	176	2	2'–6"	1'–2"	2'–6"										
W607	4	6'–6"	40	2	2'–10"	1'–2"	2'–10"										
W608	4	7'–8"	47	2	3'–5"	1'–2"	3'–5"										
W609	4	8'–10"	54	2	4'–0"	1'–2"	4'–0"										
W610	20	20'–2"	606	2	9'–8"	1'–2"	9'–8"										
W611	12	13'–10"	250	2	6'–6"	1'–2"	6'–6"										

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
W801	12	12'–4"	396	STR													
W802	4	6'–7"	71	STR													
W803	4	6'–7"	71	8		1'–0"	3'–0"	3'–0"				3'–0"		2"			
W804	4	6'–7"	71	8		3'–0"	3'–0"	1'–0"				3'–0"		2"			
		TOTAL = 4480 LB															
		PIER #1 *															
EP501	4–SER OF 13	9'–0" TO 17'–0"	705	10		1'–7"	2'–8" TO 6'–8"	1'–7"	2'–8" TO 6'–8"								2"
EP503	4	25'–0"	105	STR													
EP504	2	30'–5"	64	STR													
EP505	2	35'–7"	75	STR													
EP506	2	40'–9"	85	STR													
EP507	4	43'–6"	182	STR													
EP508	8	10'–6"	88	STR													
EP509	23	15'–3"	366	2	6'–8"	2'–2"	6'–8"										
EP511	30	21'–6"	673	STR													
EP512	30	5'–9"	180	11		1'–4"	3'–3"	1'–4"							2'–0"	1'–0"	
EP601	70	22'–7"	2375	STR													
EP604	70	6'–6"	684	3	2'–0"	4'–8"											
EP1001	6	48'–1"	1242	2	2'–6"	43'–8"	2'–6"										
EP1002	2	43'–8"	376	STR													
		TOTAL, EPOXY COATED = 7200 LB															
P605	12	29'–10"	538	1		28'–6"											
P801	34	12'–5"	1128	1		11'–6"											
		TOTAL = 1666 LB															
		PIER #2 *															
EP501	4-SER.	9'0" TO 17'0"	705	10		1'–7"		1'–7"									
EP501	2–SER. OF 13	10'–3" TO 18'–3"	387	10	5 1/2"	2'–2"	2'–8" 6'–8"	2'–2"	2'–8" 6'–8"	5 1/2"							2"
EP503	4	25'–0"	105	STR													
EP504	2	30'–5"	64	STR													
EP505	2	35'–7"	75	STR													
EP506	2	40'–9"	85	STR													
EP507	4	43'–6"	182	STR													
EP508	8	10'–6"	88	STR													
EP509	23	15'–3"	366	2	6'–8"	2'–2"	6'–8"										
EP511	32	21'–6"	718	STR													
EP512	32	5'–9"	192	11		1'–4"	3'–3"	1'–4"							2'–0"	1'–0"	
EP602	70	24'–0"	2524	STR													
EP604	70	6'–6"	684	3	2'–0"	4'–8"											
EP1001	6	48'–1"	1242	2	2'–6"	43'–8"	2'–6"										
EP1002	2	43'–8"	376	STR													
		TOTAL, EPOXY COATED = 7793 LB															
P605	12	29'–10"	538	1		28'–6"											
P801	34	12'–5"	1128	1		11'–6"											
		TOTAL = 1666 LB															

*NOTE:

THE REAR ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "R"

THE FORWARD ABUTMENT BAR MARKS SHALL HAVE THE PREFIX "F"

THE LETTER 'E' BEFORE A BAR MARK DENOTES AN EPOXY COATED REINFORCING BAR.

THE PREFIX IN THE BAR MARKS FOR THE PIERS SHALL BE AS FOLLOWS:
PIER–1: 1P OR 1EP
PIER–2: 2P OR 2EP
PIER–3: 3P OR 3EP

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
12/13

REINFORCING STEEL LIST

BRIDGE NO. AUG-33-1507R
OVER HARDIN PIKE

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MDS	JKS		

FED. RD. DIVISION	STATE	PROJECT	
	OHIO		

326
315

AUGLAIZE COUNTY
AUG-33-13.44

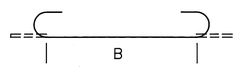
REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G	H	J	K	O	RAD	INCRE.
		PIER #3*															
EP501	4–SER. OF 13	9'–0" TO 17'–0"	705	10		1'–7"	2'–8" TO 6'–8"	1'–7"	2'–8" TO 6'–8"								2"
EP503	4	25'–0"	105	STR													
EP504	2	30'–5"	64	STR													
EP505	2	35'–7"	75	STR													
EP506	2	40'–9"	85	STR													
EP507	4	43'–6"	182	STR													
EP508	8	10'–6"	88	STR													
EP509	23	15'–3"	366	2	6'–8"	2'–2"	6'–8"										
EP511	32	21'–6"	718	STR													
EP512	32	5'–9"	192	11		1'–4"	3'–3"	1'–4"							2'–0"	1'–0"	
EP603	70	24'–2"	2541	STR													
EP604	70	6'–6"	684	3	2'–0"	4'–8"											
EP1001	6	48'–1"	1242	2	2'–6"	43'–8"	2'–6"										
EP1002	2	43'–8"	376	STR													
TOTAL, EPOXY COATED = 7423 LB																	
P605	12	29'–10"	538	1		28'–6"											
P801	34	12'–5"	1128	1		11'–6"											
TOTAL = 1666 LB																	
		SUPERSTRUCTURE															
ES401	640	30'–0"	12826	STR													
ES402	64	3'–5"	146	STR													
ES501	497	44'–7"	23111	STR													
ES502	470	30'–0"	14706	STR													
ES503	47	6'–0"	294	STR													
ES504	80	15'–6"	1294	STR													
ES505	128	7'–0"	935	STR													
ES506	8	9'–8"	81	STR													
ES507	240	5'–3"	1315	9													
ES508	240	3'–0"	751	6		8 1/2"	9"	10 1/2"	10 1/2"	9"		6"					
ES509	240	2'–2"	543	3	10 1/2"	1'–5"											
ES601	497	44'–7"	33281	STR													
ES602	130	44'–6"	8689	STR													
ES603	65	50'–0"	4882	STR													
TOTAL, EPOXY COATED = 102,854 LB																	

* ~ SERIES BAR

"E" IN THE PREFIX OF A BAR MARK INDICATES EPOXY COATED REBAR

BAR BENDING SCHEDULE

1


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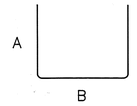

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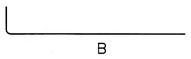

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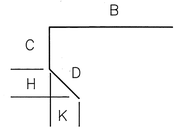
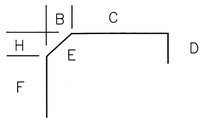


5


6


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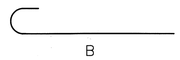

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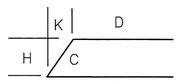

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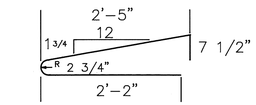

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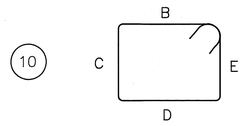

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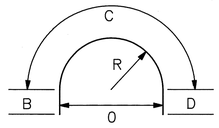

REINFORCING STEEL SAMPLES:
REFER TO CMS SECTIONS 106.03,700,709.01 THRU 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

FOR ADDITIONAL NOTES SEE 12/13

PARSONS BRINCKERHOFF OHIO, INC.
COLUMBUS, OHIO
13/13

REINFORCING STEEL LIST

BRIDGE NO. AUG-33-1507R
OVER HARDIN PIKE

AUGLAIZE COUNTY OHIO

Designed	Drawn	Traced	Checked	Reviewed	Date	Revised
TDW	MDS		MDS	JKS		