U. S. PUBLIC WORKS PROJECT NO.

U. S. PUBLIC WORKS PROJECT NO.

NRH-591-B PROP. NO. 1

NRM-591-C PROP. NO. 2

FED. ROD. DIST. NO.	STATE	U.S.P.W. PROJ. NO.	FISCAL YEAR
10	OHIO	NRH 591-B NRM 591-C	1934

1/24

S.H. 434 Sec. A(Pt.) & B VAN WERT (PT.)

VAN WERT COUNTY

Net Length of Project

Proposal No. 1 NRH 591-B 14,870.91 Ft. or 2.816 Mi.
Proposal No. 2 NRM 591-C 1,013.55 Ft. or 0.192 Mi.

STATE OF OHIO

DEPARTMENT OF HIGHWAYS

VAN WERT – DECATUR ROAD

S.H. NO. 434 SEC. A, b, VAN WERT (PT).

VAN WERT COUNTY

PLEASANT TOWNSHIP

BUREAU OF CONSTRUCTION

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, TOGETHER WITH THE SUPPLEMENTAL SPECIFICATIONS FOR "NATIONAL RECOVERY HIGHWAY (FUNDS) PROJECTS" IN FORCE ON DATE OF CONTRACT WILL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT A TEMPORARY ROAD WILL BE PROVIDED AS SHOWN ON THE PLANS AND ESTIMATES.

APPROVED: W. J. Neidhardt
DATE: 9/11/33 RESIDENT DISTRICT DEPUTY DIRECTOR

APPROVED: S. A. Downing
DATE: 7-26-33 RESIDENT DIVISION DEPUTY DIRECTOR

APPROVED: Elmer Hilty
DATE: 10/13/33 CHIEF ENG'R. BUREAU OF CONSTRUCTION

APPROVED: _____
DATE: _____ CHIEF ENG'R. BUREAU OF MAINTENANCE

APPROVED: _____
DATE: _____ CHIEF ENG'R. BUREAU OF BRIDGES

APPROVED: H. H. Chatterton
DATE: 1-30-34 FIRST ASS'T. DIRECTOR & CHIEF ENG'R.

APPROVED: _____
DATE: 1-30-34 DIRECTOR OF HIGHWAYS

RECOMMENDED FOR APPROVAL: _____
DATE: _____ DISTRICT ENG'R. U.S. BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL: _____
DATE: _____ CHIEF ENG'R. U.S. BUREAU OF PUBLIC ROADS

APPROVED: _____
DATE: _____ CHIEF OF BUREAU

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
RAILROAD (DOUBLE TRACK)
RAILROAD (SINGLE TRACK)
RAILROAD (ELECTRIC)
CENTER LINE
FENCE LINE

INDEX TO SHEETS

	Page
Title Sheet	1
Typical Section	2
Plan & Profile	3-8
Superelevation of Curves	9
Cross Sections	10-19
Structures	20-23
Summary of Quantities	24

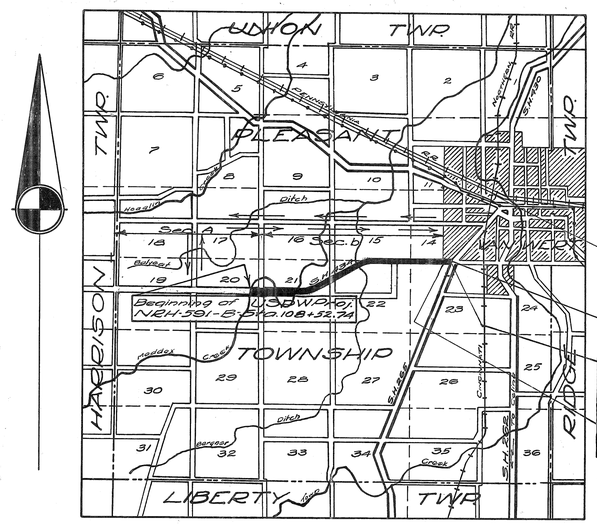
SCALES

Plan	1" = 100'
Profile-Vertical	1" = 10'
Profile-Horizontal	1" = 100'
Cross Sections	1" = 5'

SUPPLEMENTAL PRINTS OF STANDARD DRAWINGS Nos. T-70-J (S-27-P.C. 1 & 2) (I-8 M.H.* 1 (G-7.01) (I-8 C.B. 1 – 2 & 2 – 2) (I-8 I No. 1)

Right-of-Way is 60'

Scale: 1"=3000'



LOCATION MAP

SCALE OF MILES

0 ¼ ½ ¾ 1 2 3 4 5

PORTION TO BE IMPROVED

DETOURS SHOWN THUS

CHECKING RECORD		
OFFICE	BY	DATE
Resident		
Division	S.R.H.	9-10-33
Central-Const.	C.M.J.	11-15-33
Central-Bridges		
Bur. of Public Roads		

12-2-33

OHIO - CLERK OF BOARDS - RECEIVED FEB 1 - 1934 BY Mdl. DEPARTMENT OF HIGHWAYS

CONSTRUCTION BUREAU JUN 14 1955 GROUND PHOTO LAB

Van Wert – 434 A-B – Van Wert (pt)

183 - 1933

U.S. PUBLIC WORKS
PROJECT NO.

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJ. NO.	FISCAL YEAR
10	OHIO	NRH-591-B NRH-591-C	1934

2/24

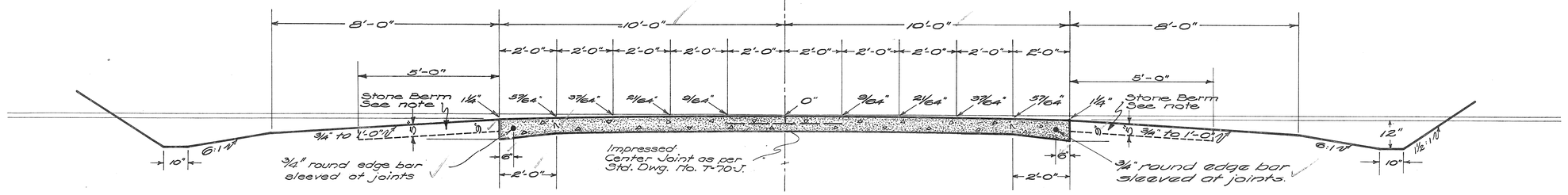
S.H. 434 SEC. "A" (Pt.) & "b" & Van Wert
VAN WERT COUNTY

Regarding the clause in the specifications for this project which reads as follows :-
"The work covered by this contract shall be conducted in such a manner that maximum employment of labor is afforded as far as practicable during the life of the contract."
NOTE :- The contractor shall commence construction operations immediately upon execution of the contract and will prosecute during the winter months the work pertaining side drainage and structures and to perform such work of grading, paving, and finishing of berms as may be permitted or requested by the Director.

TYPICAL SECTION
FOR
9-7-7-9 CONCRETE PAVEMENT
TYPE
T-70

Note: Waste excavation to be disposed of at the direction of the engineer. Average haul-3 Miles. Included in bid price per cubic yard for excavation.

IN CUT

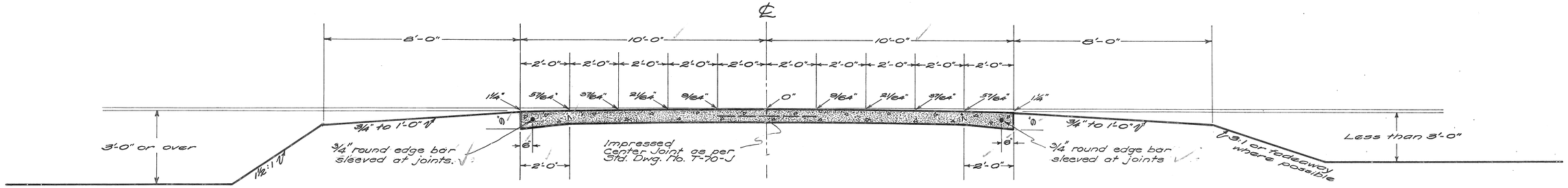


Joints as per Sheets 2-A, B, & C.

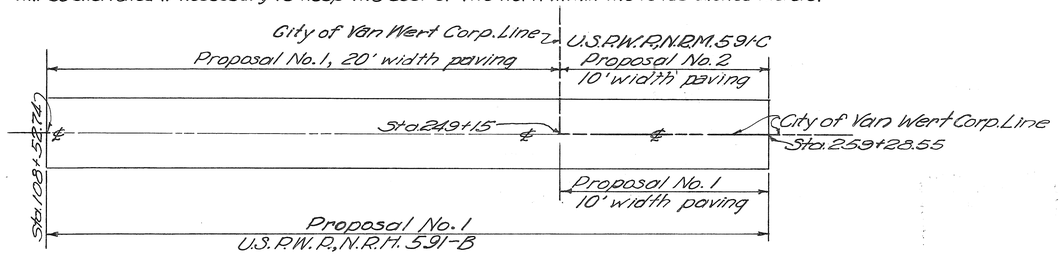
All slopes of berms and ditches to be as shown on cross section sheets.

Note: Grading operations to be so handled that present stone in roadway shall be used in berms, uniformly distributed over 5 Ft width of berm-5" Minimum in depth. Stone from portions of existing roadway outside of limits of excavation shown on cross sections shall be removed and used in carrying out the provisions of this item. Payment for same included in price of roadway excavation per cubic yard and bid price per lin. Ft. for finishing shoulders, slopes and ditches.

IN FILL



"Funds have been programmed for the construction of this project in the amount of:
N.R.M. 591-C $30,000.00
N.R.H. 591-B 90,000.00
In the event contract unit prices indicate a total cost of the project as planned in excess of the amount of funds programmed for the project the length of the project will be shortened if necessary to keep the cost of the work within the funds allotted thereto.



APPROVED
1-24-34

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJECT	FISCAL YEAR
10	OHIO	NEH 591-B	1934

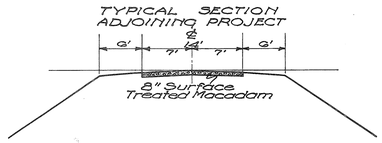
3/24

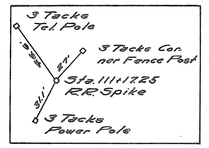
VAN WERT
S.H. 434

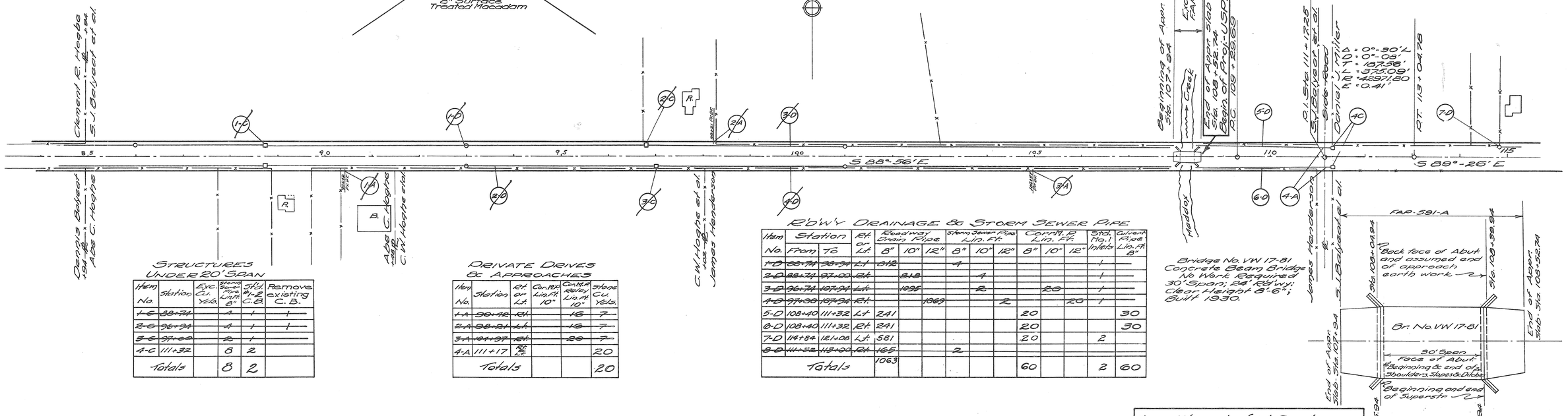
COUNTY
SEC. A (Pt) & b

FED. AID WORK PROJECT NO.

TYPICAL SECTION ADJOINING PROJECT







STRUCTURES UNDER 20' SPAN

Item No.	Station	Exc. Cu. Yds.	Storm Sewer Pipe Lin. Ft. 8"	Std. No. 2 C.B.	Remove existing C.B.
~~1-C~~	~~88+74~~		~~4~~	~~1~~	~~1~~
~~2-C~~	~~96+74~~		~~4~~	~~1~~	~~1~~
~~3-C~~	~~97+00~~		~~8~~	~~1~~	
4-C	111+32		8	2	
Totals			8	2	

DRIVATE DRIVES & APPROACHES

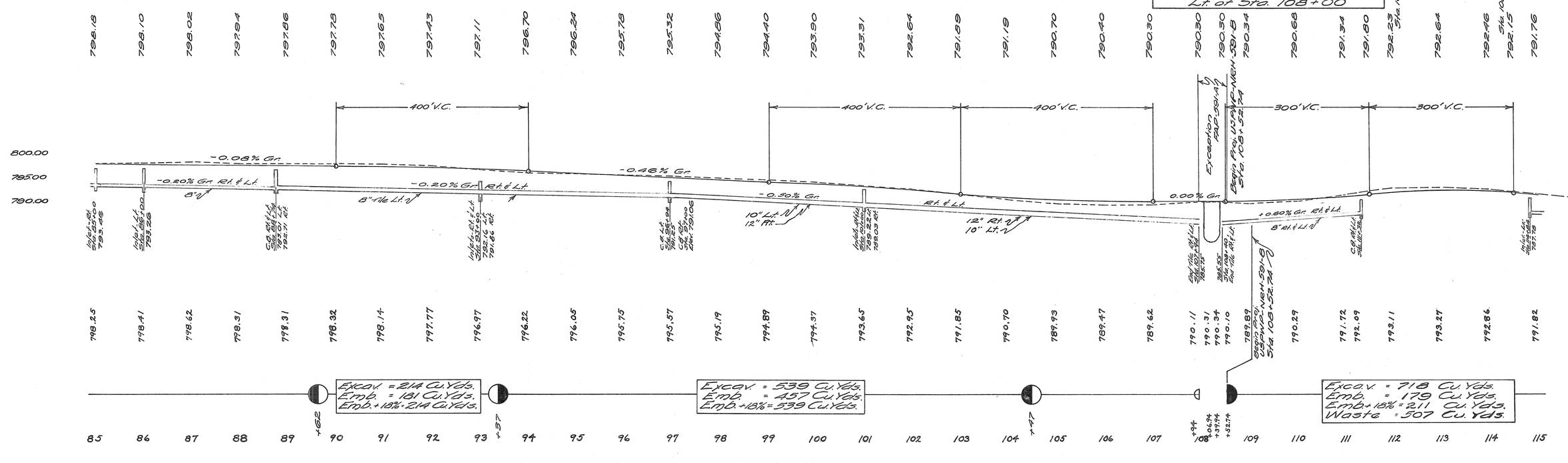
Item No.	Station	Rt. or Lt.	Cor. N.P. Lin. Ft. 10"	Cor. N.P. Asph. Lin. Ft. 10"	Stone Cu. Yds.
~~1-A~~	~~90+72~~	~~Rt.~~		~~16~~	~~7~~
~~2-A~~	~~98+21~~	~~Lt.~~		~~16~~	~~7~~
~~3-A~~	~~104+97~~	~~Rt.~~		~~20~~	~~7~~
4-A	111+17	Rt. & Lt.			20
Totals					20

R'BW'Y DRAINAGE & STORM SEWER PIPE

Item No.	Station From	Station To	Rt. or Lt.	Roadway Drain Pipe 8"	10"	12"	Storm Sewer Pipe Lin. Ft. 8"	10"	12"	Corr. M.P. Lin. Ft. 8"	10"	12"	Std. No. 1 Inlets	Culvert Pipe Lin. Ft. 8"
~~1-D~~	~~88+74~~	~~98+74~~	~~Lt.~~	~~0.12~~			~~4~~						~~1~~	
2-D	88+74	97+00	Rt.		8.18			4					1	
3-D	~~96+74~~	~~107+94~~	~~Lt.~~		~~10.95~~			~~2~~			~~20~~		~~1~~	
~~4-D~~	~~97+00~~	~~107+94~~	~~Rt.~~			~~10.89~~			~~2~~			~~20~~	~~1~~	
5-D	108+40	111+32	Lt.	2.41						20				30
6-D	108+40	111+32	Rt.	2.41						20				30
7-D	111+84	121+08	Lt.	5.81						20			2	
8-D	111+32	113+00	Rt.	1.65			2							
Totals				10.63						60			2	60

Bridge No. VW 17-81
Concrete Beam Bridge
No Work Required
30' Span; 24' R'B'way;
Clear Height 8'-6";
Built 1930.

X on W. end of N. Curb on Conc. Bridge No. VW 17-81
B.M. Elev. 790.92
Lt. of Sta. 108+00



Structures Under 20' Span

Item No.	Station	Storm Sewer Pipe Lin. Ft. 8"	10"	Exc. Cu. Yds.	Culvert Pipe Lin. Ft.	Sld El-R Inlets CB	
1-C	118+30	4				1	
2-C	128+00	4				1	
3-C	130+88						Remove C.B.
4-C	132+60	4				1	
5-C	143+66	8		17	48	2	
6-C	144+20	4	4	22	48	2	
7-C	128+92						Remove C.B.
Totals		24	4	39	96	7	2

Private Drives & Approaches

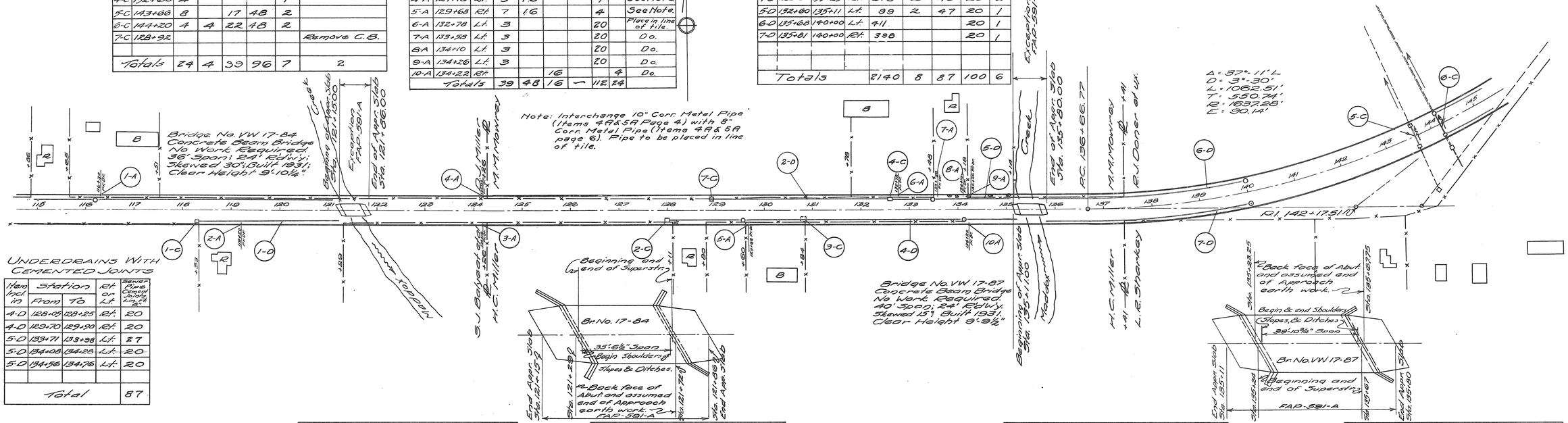
Item No.	Station	Rt. or Lt.	Stone Cu. Yds.	Relay Corr'd M. P. Lin. Ft. 8"	10"	12"	Corr'd M. P. Lin. Ft. 8"	10"	Remarks
1-A	116+30	Lt.	7				20		To be placed in tile line.
2-A	119+20	Rt.	7	16			4		Do.
3-A	124+18	Rt.	3					20	
4-A	124+18	Lt.	3	16			4		See Note.
5-A	129+68	Rt.	7	16			4		See Note.
6-A	132+78	Lt.	3				20		Place in line of tile.
7-A	133+38	Lt.	3				20		Do.
8-A	134+10	Lt.	3				20		Do.
9-A	134+26	Lt.	3				20		Do.
10-A	134+22	Rt.			16			4	Do.
Totals			39	48	16	—	112	24	

R/W'y Drainage & Storm Sewer Pipe

Item No.	Station From	Station To	Rt. or Lt.	El'wy Drain Pipe 8" Lin. Ft.	Storm Sewer Pipe 8" Lin. Ft.	Storm Sewer Pipe Extra Depth 100 Lin. Ft.	Cor. M. P. Lin. Ft. 8"	Sld No. Inlets
1-D	118+30	121+22	Rt.	249	2		20	
2-D	128+91	132+60	Lt.	365	2			1
3-D	129+90	128+99	Rt.	587	2		20	
4-D	128+00	135+25	Rt.	618	2	40	20	2
5-D	132+60	135+11	Lt.	99	2	47	20	1
6-D	135+68	140+00	Lt.	411			20	1
7-D	135+81	140+00	Rt.	398			20	1
Totals				2140	8	87	100	6

Underdrains With Cemented Joints

Item Incl in	Station From	Station To	Rt. or Lt.	Sewer Pipe Cement Joints Lin. Ft. 8"
4-D	128+05	128+25	Rt.	20
4-D	129+70	129+90	Rt.	20
5-D	133+71	133+98	Lt.	27
5-D	134+08	134+28	Lt.	20
5-D	134+56	134+76	Lt.	20
Total				87

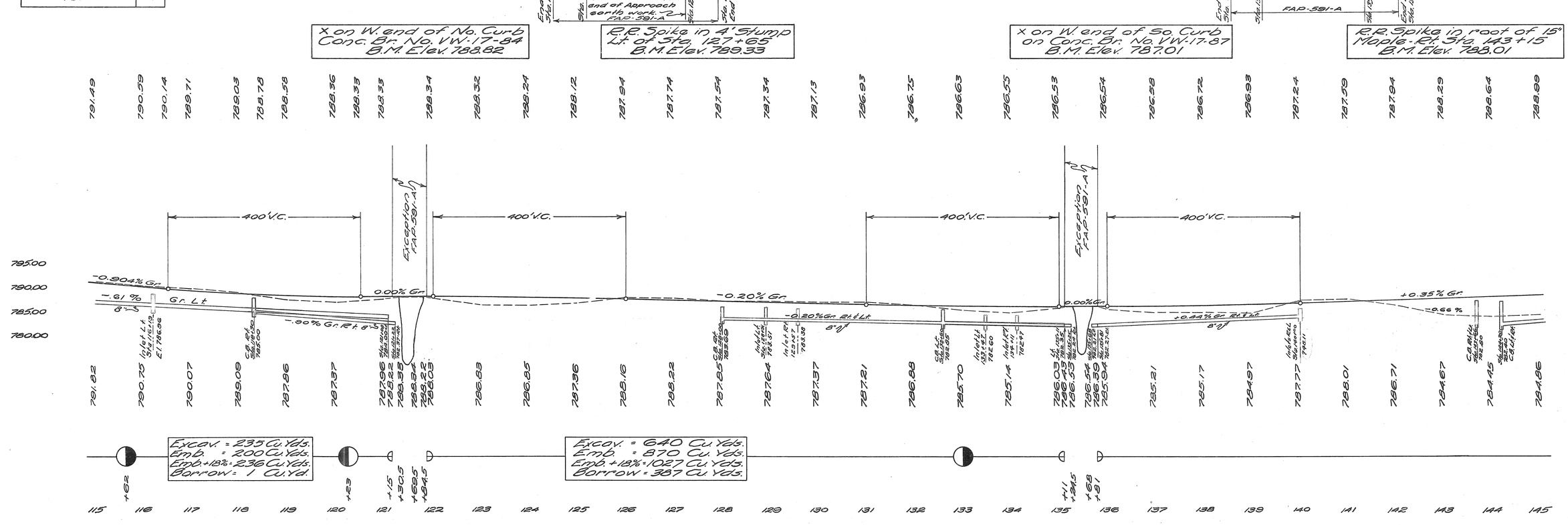


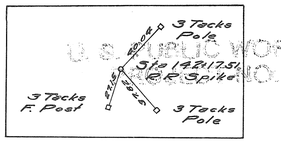
X on W. end of No. Curb Conc. Br. No. VW-17-84 B.M. Elev. 788.82

R.R. Spike in 4" Stump Lt. of Sta. 127+65 B.M. Elev. 789.33

X on W. end of So. Curb on Conc. Br. No. VW-17-87 B.M. Elev. 787.01

R.R. Spike in root of 15" Maple - Rt. Sta. 143+15 B.M. Elev. 788.01





U.S. PUBLIC WORKS RECORDS

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJ. NO.	FISCAL YEAR
10	OHIO	NRH 591-B	1934

4. 24

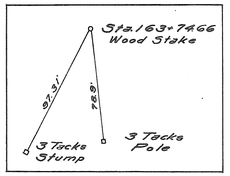
VAN WERT COUNTY
SH. 434 SEC. b

Storm Sewer Pipe Cemented Joints

Item Incl. in	Station From	Station To	Rt. or Lt.	Storm Sewer Pipe Cemented Joints @
3-D	161+96	162+16	Rt.	20
3-D	163+11	163+31	Rt.	20
3-D	164+75	164+95	Rt.	20
3-D	165+50	165+70	Rt.	20
Totals				80

Private Drives & Approaches

Item No.	Station	Rt. or Lt.	Conc. M.P. Lin. Ft. 8"	Stone Cu. Yds.	Remarks
1-A	151+25	Lt.	20	7	
2-A	166+40	Lt.	20	7	Place in line of tile.
3-A	167+60	Lt. & Rt.		50	
Totals			40	64	

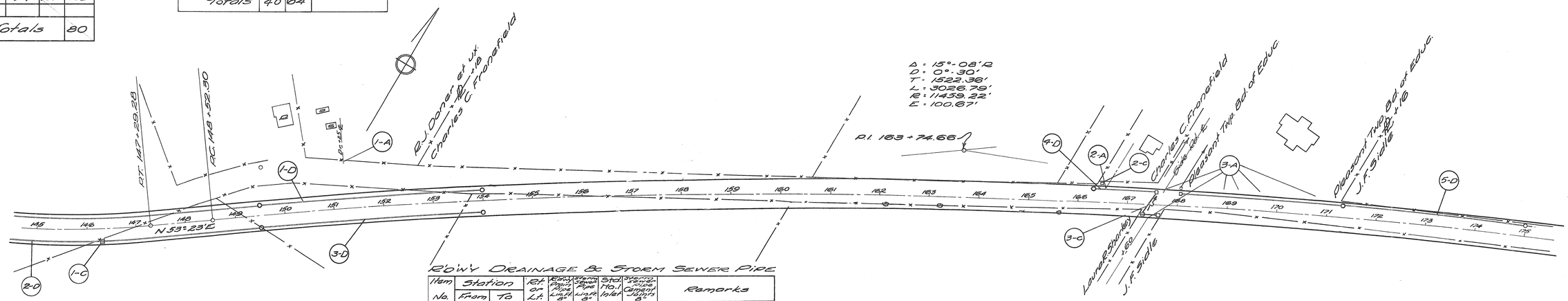


U.S. PUBLIC ROADS
PROJECT (6)

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJ. NO.	FISCAL YEAR
10	OHIO	N.H.H. 331-B	1934

5/24

VAN WERT COUNTY
S.H. 434 SEC. b

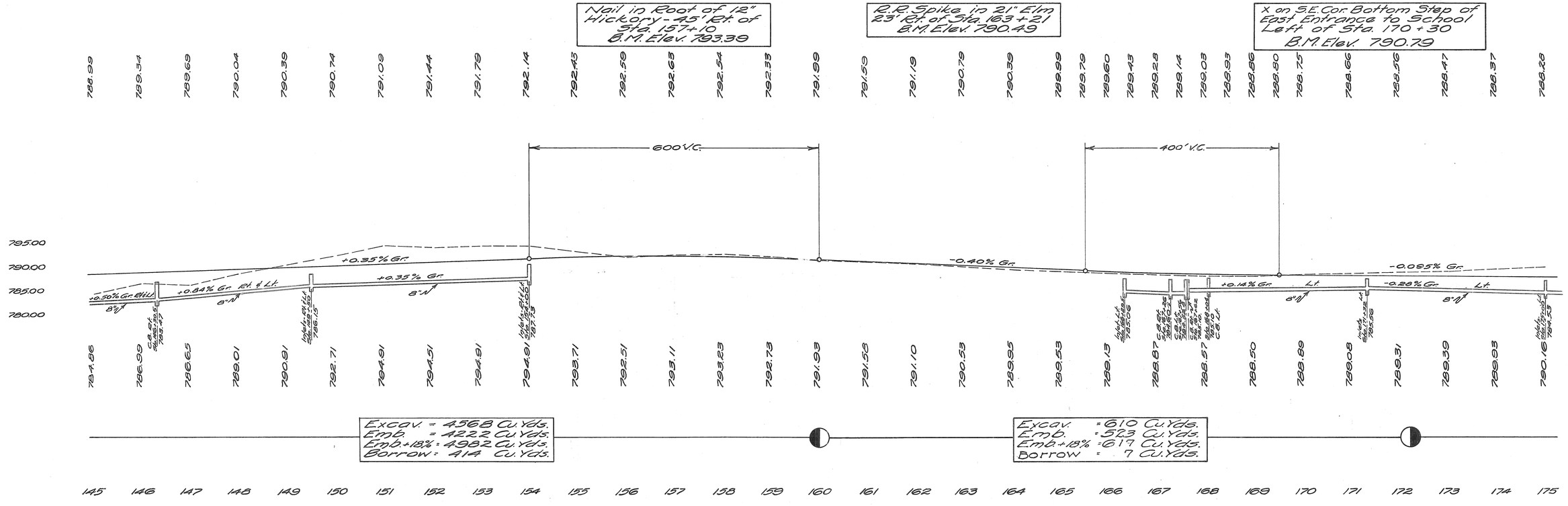


R'd'w'y Drainage & Storm Sewer Pipe

Item No.	Station From	Station To	Rt. or Lt.	R'd'w'y Drain Pipe Lin. Ft. 8"	Storm Sewer Pipe Lin. Ft. 8"	Std. No. 1 Inlet	Sunnyside Cemented Joints @	Remarks
1-D	144+20	154+00	Lt.	974	2	2		Inlets Sta. 145+30 & 153+00
2-D	144+20	146+30.5	Rt.	204.5	4			
3-D	146+30.5	154+00	Rt.	763.5	2	2		Inlets Sta. 149+50 & 153+00
4-D	166+23.5	167+55	Lt.	102.5	2	1		Inlet 166+29.5
5-D	168+04	175+00	Lt.	690	2	2		Inlets Sta. 171+32 & 175+00
Totals				1734.5	12	7		

Structures Under 20' Span

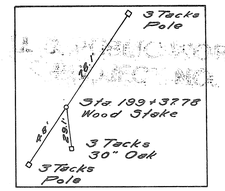
Item No.	Station	Removals Type	Removals Size	Removals Lin. Ft.	Type	Size	Exc. Cu. Yds.	Culvert Pipe Lin. Ft. 12"	Storm Sewer Pipe Lin. Ft. 8"	Storm Sewer Pipe Lin. Ft. 12"	Std. #1-2 C.B.	Std. #2-2 C.B.	Remove Exist. C.B.	Remove & Store Existing V.S.P. 12" Lin. Ft.
1-C	146+30.5								2		1			
2-C	166+45	Remove	C.B.										1	
3-C	167+43	V.S.P.	12"	48	Vert. Entr. Pipe	18" 30°	60	104	12	10	1	3	2	48
Totals							60	104	14	10	2	3	3	48

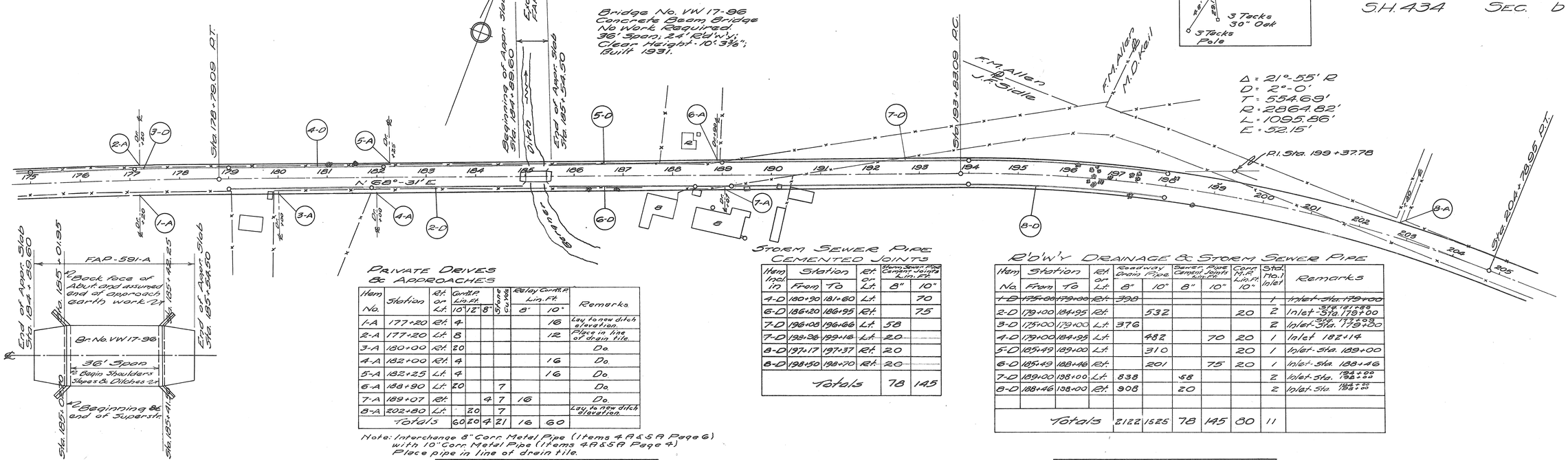


FED.RD. DIST.NO	STATE	U.S.P.W. PROJ.NO.	FISCAL YEAR
10	OHIO	NRH 591-B	1934

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VAN WERT COUNTY
S.H. 434 Sec. b





Private Drives & Approaches

Item No.	Station	Rt. or Lt.	Cont'd P. Lin. Ft. 10"	12"	8"	Stone Curbs	Relay Cont'd P. Lin. Ft. 8"	10"	Remarks
1-A	177+20	Rt.	4					16	Lay to new ditch elevation.
2-A	177+20	Lt.	8					12	Place in line of drain tile.
3-A	180+00	Rt.	20						Do.
4-A	182+00	Rt.	4					16	Do.
5-A	182+25	Lt.	4					16	Do.
6-A	188+90	Lt.	20			7			Do.
7-A	189+07	Rt.			4	7	16		Do.
8-A	202+80	Lt.		20		7			Lay to new ditch elevation.
	Totals		60	20	4	21	16	60	

Note: Interchange 8" Corr. Metal Pipe (Items 4A & 5A Page 6) with 10" Corr. Metal Pipe (Items 4A & 5A Page 4) Place pipe in line of drain tile.

Storm Sewer Pipe Cemented Joints

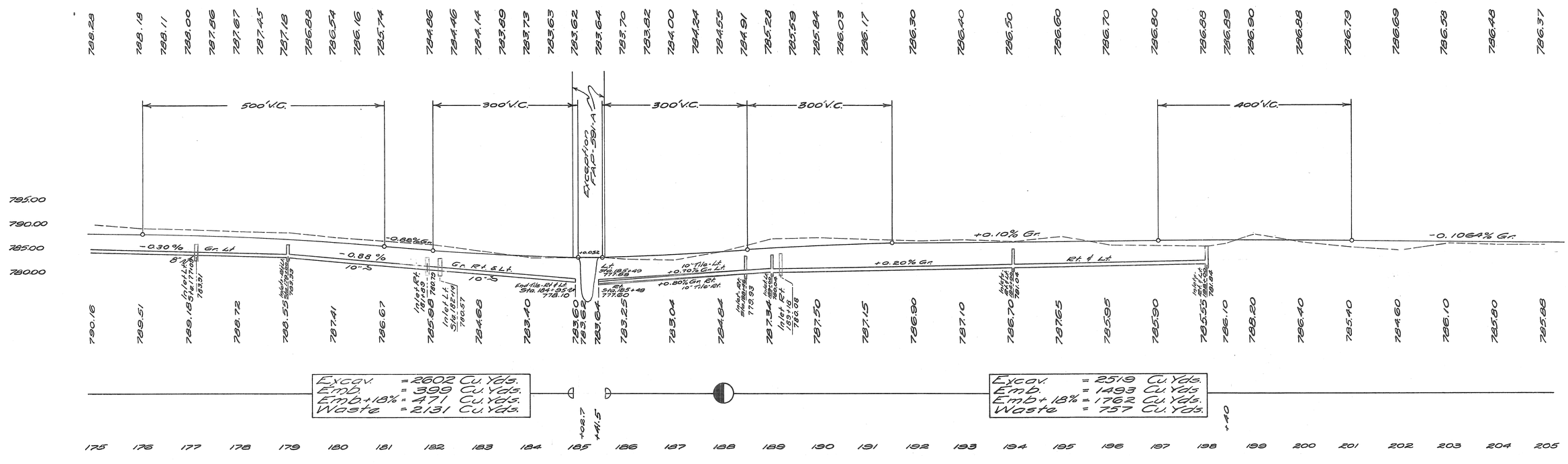
Item Incl. in	Station From	Station To	Rt. or Lt.	Storm Sewer Pipe Corr. Metal Lin. Ft. 8"	10"
4-D	180+90	181+60	Lt.		70
6-D	186+20	186+95	Rt.		75
7-D	196+08	196+66	Lt.	58	
7-D	198+36	199+16	Lt.	80	
8-D	197+17	197+37	Rt.	20	
8-D	198+50	198+70	Rt.	20	
	Totals			78	145

R'd'w'y Drainage & Storm Sewer Pipe

Item No.	Station From	Station To	Rt. or Lt.	Roadway Drain Pipe 8"	10"	Sewer Pipe Corr. Metal Joints Lin. Ft. 8"	10"	Conc. M.H. Lin. Ft. 10"	Std. No. Inlet	Remarks
1-D	175+00	179+00	Rt.	398					1	Inlet - Sta. 179+00
2-D	179+00	184+95	Rt.		532			20	2	Inlet - Sta. 179+00 Sta. 181+88 Inlet - Sta. 179+80
3-D	175+00	179+00	Lt.	376					2	Sta. 179+80
4-D	179+00	184+95	Lt.		482		70	20	1	Inlet 182+14
5-D	185+49	189+00	Lt.		310			20	1	Inlet - Sta. 189+00
6-D	185+49	188+46	Rt.		201		75	20	1	Inlet - Sta. 188+46
7-D	189+00	198+00	Lt.	838		58			2	Inlet - Sta. 194+00 Sta. 198+00
8-D	188+46	198+00	Rt.	908		20			2	Inlet - Sta. 194+00 Sta. 198+00
	Totals			2122	1525	78	145	80	11	

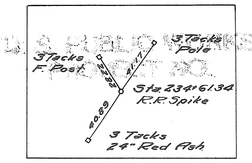
X on W. end So. Curb of Conc. Br. No. VW-17-96
B.M. Elev. 784.26

R.R. Spike in 24" Stump 46' Lt. of Sta. 198+62
B.M. Elev. 787.17



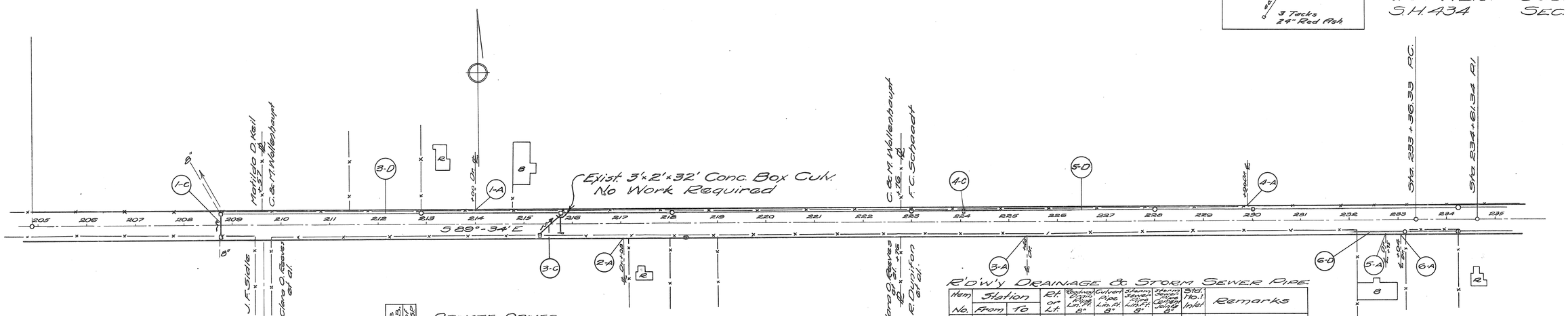
Excav.	= 2602 Cu. Yds.
Emb.	= 399 Cu. Yds.
Emb + 18%	= 471 Cu. Yds.
Waste	= 2131 Cu. Yds.

Excav.	= 2519 Cu. Yds.
Emb.	= 1493 Cu. Yds.
Emb + 18%	= 1762 Cu. Yds.
Waste	= 757 Cu. Yds.



FEDRD. DIST. NO.	STATE	U.S.P.W. PROJ. NO.	FISCAL YEAR	7/24
10	OHIO	NBH 591-8	1934	

VAN WERT COUNTY
S.H. 434 SEC. 6



Structures Under 20' Span

Item No.	Station	Removal Type	Removal Size	Removal Lin. Ft.	Type	Size	Exc. Cu. Yds.	Salv. Pipe Lin. Ft. 8"	Salv. Pipe Lin. Ft. 12"	Culvert Pipe Lin. Ft. 12"	Salv. #1-2 C.B.	Remove exist. C.B. Remove #3 to ditch & dump
1-C	208+77	V.S.P.	10"	42.5	V.S.P. or R.C.P.	12"	5.5	10		46	2	2
~~2-C~~	~~209+40~~							~~2~~				1
3-C	215+76				V.S.P. or R.C.P.	10" or 12"	38	8	2	60	2	
4-C	224+05	To be abandoned -										1
					Totals		93	18	2	106	4	3

Relay in new ditch elevation
Place in line of drain tile.

Private Drives & Approaches

Item No.	Station	Rt. or Lt.	Corrug. Metal Pipe Lin. Ft. 8"	Corrug. Metal Pipe Lin. Ft. 10"	Stone Cu. Yds.	Corr. M.P. Pipe Ends 8"	Corr. M.P. Pipe Ends 10"
1-A	214+00	Lt.		18	7		2
2-A	217+08	Rt.	16		7	4	
3-A	225+40	Rt.	16			4	
4-A	229+90	Lt.	16			4	
5-A	232+75	Rt.	16		3	4	
6-A	233+09	Rt.			7	20	
		Totals	64	18	24	36	2

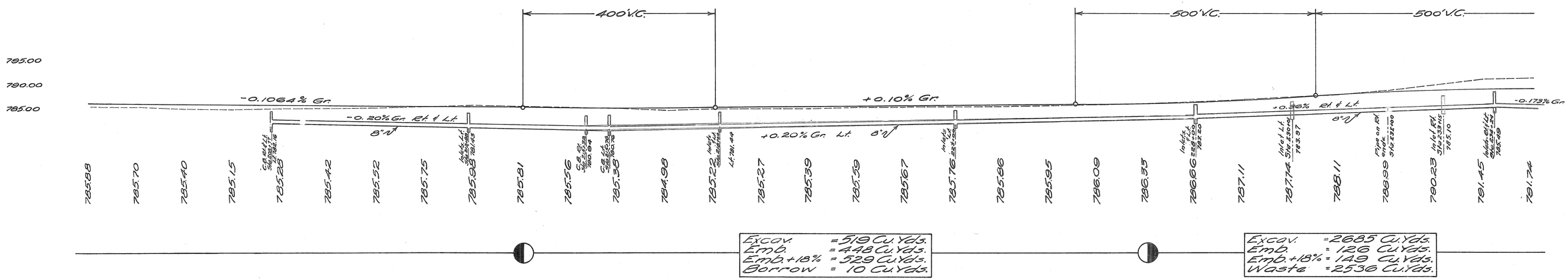
Storm Sewer Pipe Cemented Joints

Item Inch. In	Station From	Station To	Rt. or Lt.	Sewer Pipe, Cemented Joints, Lineal Ft.
6-D	217+50	218+34	Rt.	82
6-D	234+17	234+24	Rt.	6
		Totals		6

R.R. Spike in 15" Stump - 70' Lt. of Sta. 213+38
B.M. Elev. 787.40

R'd'w'y Drainage & Storm Sewer Pipe

Item No.	Station From	Station To	Rt. or Lt.	Roadway Ditch Pipe Lin. Ft. 8"	Culvert Pipe Lin. Ft. 8"	Storm Sewer Pipe Lin. Ft. 8"	Storm Sewer Pipe Cement Joints 8"	Sta. No. 1 Inlet	Remarks
~~1-D~~	~~202+30~~	~~203+77~~	~~Rt.~~	~~679~~		~~2~~			
~~2-D~~	~~202+30~~	~~208+77~~	~~Lt.~~	~~613~~		~~2~~			
3-D	208+77	215+76	Lt.	671		4		1	Inlet Sta. - 212+88
~~4-D~~	~~209+40~~	~~215+32~~	~~Rt.~~	~~556~~	~~30~~	~~4~~			V.S.P. 8"ø or R.C.P. 10"ø or 12"ø 208+77 to 209+37
5-D	215+76	234+24	Lt.	1816		2		5	Inlets 218+04 228+00 230+01 233+00 234+24
~~6-D~~	~~215+32~~	~~234+24~~	~~Rt.~~	~~1794~~		~~2~~	~~88~~	~~4~~	~~Inlets 218+04 228+00 229+00 233+00 234+24~~
6-D	232+00	234+24	Rt.	175			6	2	Inlets 233+15 234+24
		Totals		2662		6	6	8	



Excav.	= 519 Cu. Yds.
Emb.	= 448 Cu. Yds.
Emb. +18%	= 529 Cu. Yds.
Borrow	= 10 Cu. Yds.

Excav.	= 2685 Cu. Yds.
Emb.	= 126 Cu. Yds.
Emb. +18%	= 149 Cu. Yds.
Waste	= 2536 Cu. Yds.

FED.RD DIST.NO	STATE	U.S.P.W. PROJ.NO	FISCAL YEAR
10	OHIO	NRH-591-B NRM-591-C	1934

B 24

VAN WERT COUNTY
SH. 434 SEC. b & Van Wert (pk)
Proposal No. 1 - NRH-591-B
Proposal No. 2 - NRM-591-C
Van Wert (pk.)

3 Tacks Tel. Pole
Sta. 259+28.55 R.R. Spike
3 Tacks Tel. Pole
3 Tacks Tel. Pole

Sta. 234+61.34 Ahd.
F.C. Schaadt
Sta. 235+96.39 Ahd.
Bessie O. Reid
Δ = 0°-10'-L
D = 0°-04'
T = 125.01'
L = 250.00'
R = 859+9.60'
E = 0.09'
Bessie O. Reid
Christian Roesner
Christian Roesner
Ora Van Wormer
Ora Van Wormer
John W. Keck
Sta. 249+15 Begin Proj. No. 2 NRM-591-C
John W. Keck
Evan Wert Corp. Line
H.E. & B.M. Haley
H.E. & B.M. Haley
Robert Gleason
Sta. 259+28.55 End of USPWP NRH-591-B and Proj. NRM-591-C USPWP
Robert Gleason
C.E. Dunton et al.
Louis Dickinson
Louis Dickinson?
S 1° E 265'

1-A 2-A 1-C 3-A 2-C 5-A 1-D 6-A 7-A 4-D 8-A 3-C 3-D 4-A 2-D 5-D 9-A

235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259

S 89°-44' E

℄ Corporation line

Storm Sewer See Sheet Nos. 24 & 25 No Work Required.

5' 17' 5'
10" Thickness Tar Bound Macadam
TYPICAL ROADWAY SECTION PAVEMENT

PRIVATE DRIVES & APPROACHES

Item No.	Station	Rt. or Lt.	Conc. Culv. Lin. Ft. 8"	10"	Conc. & Rubble Culv. Lin. Ft. 10"	Stone Cu. Yds.
1-A	235+80	Lt.	20			3
2-A	237+95	Lt.	20			7
3-A	239+60	Lt.	20			7
4-A	239+86	Rt.	20			7
5-A	242+52	Lt.	20			7
6-A	249+00	Lt.		4	16	3
9-A	253+92	Rt.	20			7
8-A	253+48	Lt.	32			6
7-A	250+56	Lt.	32			6
Proposal #1, 30' Width, Totals - NRH-591-B			100	4	16	34
Proposal #2, 10' Width, Totals - NRM-591-C			64			12

Note: Place Corr Metal Pipe in line of drain tile.

(10' Pav't. Ht. 591-B NRH)
Prop. #2 NRM-591-C
Prop. #2 NRM-591-C

STORM SEWER PIPE CEMENTED JOINTS

Item Incl. Int.	Station From	Station To	Rt. or Lt.	Storm Sewer Pipe Cemented Joints Lin. Ft.
2-D	234+24	234+37	Rt.	12
1-D	236+20	236+40	Lt.	20
2-D	238+85	239+05	Rt.	20
2-D	239+65	239+76	Rt.	11
1-D	241+11	241+31	Lt.	20
Totals				83

ROADWAY DRAIN & STORM SEWER PIPE

Item No.	Station From	Station To	Rt. or Lt.	Roadway Drain Pipe Lin. Ft. 8"	Storm Sewer Pipe Lin. Ft. 8"	Storm Sewer Pipe Cemented Joints Lin. Ft.	Std. No. 1 Inlets
1-D	234+24	249+15	Lt.	1332	8	40	3
2-D	234+24	249+15	Rt.	1423		43	2
3-D (Prop. No. 2 NRH-591-C)	256+41	259+19	Lt.	274	2		1
4-D (Prop. No. 2 NRH-591-C)	249+15	256+41	Lt.	653	2		3
Proposal #1, 30' Width, Totals - NRH-591-B				2755	8	83	5
Proposal No. 2, 12' Width, Totals - NRM-591-C				927	4		4
10' Pav't. Ht. 591-B NRH	5-D	249+15	256+41	Rt.	699	2		2

STRUCTURES UNDER 20' SPAN

Item No.	Station	Exc. Cu. Yds.	Storm Sewer Pipe Lin. Ft. 8"	Std. No. 1 C.B.	Remove existing C.B.
1-C	239+47.5		4	1	1
2-C	241+71		4	1	1
3-C	No Work Req.				
Totals			8	2	2

R.R. Spike in 50" Elm Lt. or Sta. 236+35 B.M. Elev. 790.42

X in South end of Conc. Pump Base - Filling Sta. Lt. or Sta. 259+10 B.M. Elev. 786.60

759.32 759.26 759.17 758.99 758.92 758.65 758.48 758.31 758.13 757.96 757.79 757.61 757.44 757.27 757.09 756.92 756.75 756.58 756.40 756.23 756.11 756.10 756.19 756.38 756.69 757.10 757.16 757.23

Sta. 249+15 Begin Proj. No. 2 NRM-591-C

Proposal #2 NRM-591-C
Exc. = 428 Cu. Yds.
Emb. = 202 Cu. Yds.
Emb + 18% = 238 Cu. Yds.
Waste = 190 Cu. Yds.

600' V.C.

Sta. 259+28.55 USPWP End of Proj. No. 1 - NRH-591-B and End of Proj. No. 2 - NRM-591-C

790.00
785.00
-0.173% Gr.
-0.173% Gr.
Rt. & Lt.
+0.56% Gr. Lt.
8"
8"

Inlet Lt. Sta. 234+61.34 756.38
Inlet Lt. 237+00 745.18
Inlet Rt. Sta. 238+62.34 754.84
C.B. Lt. Sta. 239+47.5 754.72
C.B. Lt. Sta. 241+71 754.33
Inlet Rt. Sta. 248+83.83 738.83
Inlet Lt. Sta. 249+15 738.41
Inlet Lt. Sta. 256+81.34 782.34
Inlet Lt. Sta. 256+81.16 782.54
Ref. Pt. Lt. Sta. 256+81.34 782.84
Inlet Lt. Sta. 256+81.16 782.33
Inlet Rt. Sta. 258+55.16 781.00
C.B. Rt. Lt. Sta. 259+28.55 Lt. 78.66 Rt. 78.66 Elev. 781.00
Inlet Lt. Sta. 259+28.55 782.32

791.74 790.79 790.41 790.07 789.54 788.89 788.52 788.25 788.32 788.30 788.22 788.14 787.61 787.54 787.42 787.28 787.45 787.28 786.72 786.00 785.81 785.66 785.13 785.60 786.89

Proposal #1 NRH-591-B
Excav. = 2 Cu. Yds.
Emb. = No Cu. Yds.
Emb + 18% = No Cu. Yds.
Waste = 2 Cu. Yds.

Proposal #1 NRH-591-B.
Excav. = 351 Cu. Yds.
Emb. = 246 Cu. Yds.
Emb + 18% = 290 Cu. Yds.
Waste = 61 Cu. Yds.

Excav. = 1422 Cu. Yds.
Emb. = 12 Cu. Yds.
Emb + 18% = 14 Cu. Yds.
Waste = 1408 Cu. Yds.

+15 +28.55

235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259

U.S. PUBLIC WORKS
PROJECT NO.

FED.RD DIST.NO.	STATE	U.S.P.W. PROJ.NO.	FISCAL YEAR
10	OHIO	PRPT 591-B	1934

9/24

VAN WERT COUNTY
S.H. 434 SEC. b

P.C. 136+66.77 D = 3°-30' L. P.T. 147+29.28

Left					Right		
Deduct from Gr. Elev.	Edge of Pav't.	Width	Station	Grade Elevation	Width	Edge of Pav't.	Add to Lt. Edge Grade
.10	786.44	10'	135+66.77	786.54	10'	786.44	0.00
	786.44		+75	786.54		786.44	
	786.44		136+00	786.54		786.62	0.18
	786.44		+25	786.54		786.75	0.31
	786.45		+50	786.55		786.90	0.45
	786.46		+66.77	786.56		786.99	0.53
	786.46		+75	786.56		787.04	0.58
	786.48		137+00	786.58		787.20	0.72
	786.50		+16.77	786.60		787.31	0.81
	786.51		+25	786.61		787.32	
	786.54		+50	786.64		787.35	
	786.57		+75	786.67		787.38	
	786.61		138+00	786.71		787.42	
	786.66		+25	786.76		787.47	
	786.71		+50	786.81		787.52	
	786.77		+75	786.87		787.58	
	786.83		139+00	786.93		787.64	
	786.90		+25	787.00		787.71	
	786.98		+50	787.08		787.79	
	787.05		+75	787.15		787.86	
	787.14		140+00	787.24		787.95	
	787.23		+25	787.33		788.04	
	787.31		+50	787.41		788.12	
	787.40		+75	787.50		788.21	
	787.49		141+00	787.59		788.30	
	787.58		+25	787.68		788.39	
	787.66		+50	787.76		788.47	
	787.75		+75	787.85		788.56	
	787.84		142+00	787.94		788.65	
	787.93		+25	788.03		788.74	
	788.01		+50	788.11		788.82	
	788.10		+75	788.20		788.91	
	788.19		143+00	788.29		789.00	
	788.28		+25	788.38		789.09	
	788.36		+50	788.46		789.17	
	788.45		+75	788.55		789.26	
	788.54		144+00	788.64		789.35	
	788.63		+25	788.73		789.44	
	788.71		+50	788.81		789.52	
	788.80		+75	788.90		789.61	
	788.89		145+00	788.99		789.70	
	788.98		+25	789.08		789.79	
	789.06		+50	789.16		789.87	
	789.15		+75	789.25		789.96	
	789.24		146+00	789.34		790.05	
	789.33		+25	789.43		790.14	
	789.41		+50	789.51		790.22	
	789.51		+79.28	789.61		790.32	0.81
	789.59		147+00	789.69		790.29	0.70
	789.68		+25	789.78		790.25	0.57
	789.69		+29.28	789.79		790.23	0.54
	789.76		+50	789.86		790.19	0.43
	789.85		+75	789.95		790.15	0.30
	789.94		148+00	790.04		790.10	0.16
	790.03		+25	790.13		790.05	0.02
.10	790.12	10'	+29.28	790.22	10'	790.12	0.00

No Extra Pavement

P.C. 193+83.09 D = 2°-00' R. P.T. 204+78.95

Left					Right		
Add to Rt. Edge Grade	Edge of Pav't.	Width	Station	Grade Elevation	Width	Edge of Pav't.	Deduct from Gr. Elev.
0.00	786.28	10'	192+83.09	786.38	10'	786.28	.10
0.06	786.36		193+00	786.40		786.30	
0.15	786.48		+25	786.43		786.33	
0.24	786.59		+50	786.45		786.35	
0.33	786.70		+75	786.48		786.38	
0.36	786.74		+83.09	786.48		786.38	
0.42	786.82		194+00	786.50		786.40	
0.51	786.94		+25	786.53		786.43	
0.54	786.97		+33.09	786.53		786.43	
	786.99		+50	786.55		786.45	
	787.02		+75	786.57		786.47	
	787.04		195+00	786.60		786.50	
	787.07		+25	786.63		786.53	
	787.09		+50	786.65		786.55	
	787.12		+75	786.68		786.58	
	787.14		196+00	786.70		786.60	
	787.17		+25	786.73		786.63	
	787.19		+50	786.75		786.65	
	787.22		+75	786.78		786.68	
	787.24		197+00	786.80		786.70	
	787.26		+25	786.82		786.72	
	787.28		+50	786.84		786.74	
	787.30		+75	786.86		786.76	
	787.31		198+00	786.87		786.77	
	787.32		+25	786.88		786.78	
	787.33		+40	786.89		786.79	
	787.33		+50	786.89		786.79	
	787.34		+75	786.90		786.80	
	787.34		199+00	786.90		786.80	
	787.34		+25	786.90		786.80	
	787.33		+50	786.89		786.79	
	787.32		+75	786.88		786.78	
	787.31		200+00	786.87		786.77	
	787.30		+25	786.86		786.76	
	787.28		+50	786.84		786.74	
	787.26		+75	786.82		786.72	
	787.24		201+00	786.79		786.70	
	787.21		+25	786.76		786.67	
	787.18		+50	786.74		786.64	
	787.16		+75	786.72		786.62	
	787.13		202+00	786.69		786.59	
	787.11		+25	786.66		786.57	
	787.08		+50	786.64		786.54	
	787.06		+75	786.62		786.52	
	787.03		203+00	786.59		786.49	
	787.01		+25	786.56		786.47	
	786.98		+50	786.54		786.44	
	786.96		+75	786.52		786.42	
	786.93		204+00	786.49		786.39	
	786.91		+25	786.46		786.37	
0.54	786.90		+28.95	786.46		786.36	
0.46	786.80		+50	786.44		786.34	
0.37	786.69		+75	786.42		786.32	
0.36	786.67		+78.95	786.41		786.31	
0.28	786.57		205+00	786.39		786.29	
0.19	786.46		+25	786.37		786.26	
0.10	786.34		+50	786.34		786.24	
0.00	786.21	10'	+78.95	786.31	10'	786.21	.10

No Extra Pavement

SUPERELEVATION FOR CURVES

U. S. PUBLIC WORKS
PROJECT NO.

FED. ED DIST. NO.	STATE	U.S. PW PROJECT	FISCAL YEAR
10	OHIO	N.R.H. 591-B	1934

10/24

VAN WERT COUNTY

S.H. 434 SEC. A (Pt.) & b

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.
39	0		
		72	39
0	21		
		0	83
0	24		
		7	39
8	21		
9	28		
		16	110
0	35		
		0	135
0	38		
		0	141
0	38		
		0	107

50 ← 57

+47

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

791.34
111+00
791.72

790.675
110+00
790.29

790.34
109+00
789.89

790.30
108+52.74
790.10

EXC. = 718 Cu. Yds.
EMB. + 18% = 179 " "
Waste = 211 " "
= 307 Cu. Yds.

From Sta. 108+52.74 to Sta. 115+62

Sta. 108+52.74 - Begin U.S.R.W.P. - NRH-591-B - Proposal No. 1

BRIDGE

790.30
107+94
790.11

790.30
107+08
789.62

790.40
106+00
789.97

790.70
105+90
789.83

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.
0	25		
		30	54
16	4		
		80	7
27	0		
		85	0
19	0		
		96	0
33	0		
		106	2
24	1		
		113	7
37	3		
		161	7
50	1		
		168	2
59	0		
		91	0

60 ← 96

+62

EXC. 235 Cu. Yds.
EMB. 200 " "
EMB. + 18% 236 " "
Borrow 1 " "

Sta. 115+62 to 120+23

788.58
119+00
787.86

789.03
118+00
789.09

789.71
117+00
790.07

790.59
116+00
790.75

791.49
115+00
791.82

792.32
114+00
792.86

792.59
113+00
793.27

792.22
112+00
793.11

791.49
111+17.25
792.09

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJECT	FISCAL YEAR
10	OHIO	NBH 391-B	1934

U. S. PUBLIC WORKS PROJECT NO.

VAN WERT COUNTY

S.H. 434 SEC. b

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.	
0	57			
		0	232	
0	68			
		15	159	
8	15			
5	1			Sta. 122 on Right
		1	0	
4	1			Sta. 121+92 on Right
3	17			Sta. 122+00 on Left
		3	21	
2	20			Sta. 121+69.5 on Left
8	0			Sta. 121+22 on Right
		6	0	
6	0			Sta. 121+00 on Right
4	22			Sta. 121+08 on Left
		1	6	
4	20			Sta. 121+00 on Left
10	20			
		4→15	24→82	
		19	106	
				1-23
0	37			
		0	115	

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

788.24
124+00
786.85

788.32
123+00
786.83

788.34
122+00
788.03

788.34
121+92
788.03
Balance with Sta. 122+00 on Right

788.34
121+69.5
788.03
Balance with 122+00 on Left

BRIDGE

788.33
121+22
787.96
Balance with Sta. 121+00 on Right

788.33
121+08
787.96
Balance with 121+00 on Left

788.33
121+00
787.96

788.36
120+00
787.37

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.
0	37		
		33	74
18	3		
		82	7
26	1		
		72	11
13	5		
		74	13
27	2		
		96	13
25	5		
		111	9
35	0		
		98	7
18	4		
		33	69
0	33		
		0	167

640 Cu. Yds. Exc.
870 " " Emb. +15%
1027 " " Emb. +15% Borrow
387 " " Sta. 120+23 to 119+00

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

786.63
133+00
785.70

786.75
132+00
786.88

786.98
131+00
787.21

787.13
130+00
787.37

787.34
129+00
787.64

787.54
128+00
787.85

787.74
127+08
788.22

787.94
126+00
788.16

788.12
125+00
787.36

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJECT	FISCAL YEAR
10	OHIO	M.R.M. 591-B	1934

J. S. PUBLIC WORKS PROJECT NO.

VAN WERT COUNTY

S.H. 434 SEC. b

12 / 24

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.	
0	77			
		0	293	
0	81			
		0	237	
0	47			
0	25			136+00 on Right
		0	17	
0	23			135+81 on Right
0	22			136+00 on Left
		2	24	
3	19			135+68 on Left
2	22			
		2	20	
2	21			135+00 on Right
1	23			
		1	8	
2	22			135+00 on Left
4	43			
		7	185	
0	57			
		0	174	

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

786.72
138+00
785.17

786.58
137+00
785.21

786.54
136+00
785.94

786.54
135+81
785.94

Balance with 136+00 on Right

786.54
135+68
785.94

Balance with 136+00 on Left

BRIDGE

786.53
135+24.5
786.03

Balance with 135+00 on Right

786.53
135+11
786.03

Balance with 135+00 on left

786.53
135+00
786.03

786.55
134+00
785.14

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.
0	112		
		0	504
0	160		
		0	609
0	169		
		0	587
0	148		
		0	363
0	48		
		46	93
25	2		
		89	26
23	12		
		44	104
1	44		
		2	224

789.34
136+00
786.99

788.99
135+00
784.86

788.64
134+00
784.45

788.29
133+00
784.67

787.92
132+00
786.71

787.59
131+00
788.01

787.24
130+00
787.77

786.93
139+00
784.97

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

FED. RD. DIST. NO.	STATE	U.S. PVT. PROJECT	FISCAL YEAR
10	OHIO	NBH 591-B	1934

13/24

U. S. PUBLIC WORKS PROJECT NO.

VAN WERT COUNTY

S.H. 434 SEC. b

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.
96	0		
		457	0
152	0		
		608	0
176	0		
		674	0
198	0		
		774	0
230	0		
		569	0
77	0		
		243	0
54	0		
		100	52
0	28		
		0	256
0	110		
		0	411

EXC. 4569 Cu. Yds.
EMB 4222 " " "
EMB + 18% Boreau 4982 " " "

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

792.43
155+00
793.71

792.14
154+00
794.91

791.79
153+00
794.91

791.44
152+00
794.51

791.09
151+00
794.91

790.74
150+00
792.71

790.39
149+00
790.91

790.04
148+00
789.01

789.69
147+00
786.65

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

END AREA EXC.	END AREA EMB.	CU. YDS. EXC.	CU. YDS. EMB.
5	18		
		22	61
7	15		
		39	48
14	11		
		50	39
13	10		
		46	35
12	9		
		69	24
25	4		
		156	9
59	1		
		209	2
54	0		
		220	0
65	0		
		296	0

30 25 20 15 10 5 ℄ 5

790.39
164+00
789.95

790.79
163+00
790.53

791.19
162+00
791.10

791.59
161+00
791.62

791.99
160+00
791.93

792.33
159+00
792.73

792.54
158+00
793.23

792.63
157+00
793.11

792.59
156+00
792.51

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

FED RD DIST Nº	STATE	U.S.P.W. PROJ. Nº	FISCAL YEAR	14 / 24
10	OHIO	M.R.M. 591-B	1934	

U. S. PUBLIC WORKS
PROJECT NO

S.H. 434 SEC b
VAN WERT COUNTY

End Area Exc.	End Area Emb.	Cu Yds Exc.	Cu Yds Emb.
41	0		
		120	5
40	3	30	1
		135	11
33	3		
		111	24
27	10		
		72	35
12	9		
		46	41
13	13		
		33	44
5	11		
		11	50
1	16		
		4	65
1	19		
		11	69

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

+20

788.465
173+00
789.39

788.56
172+00
789.31

788.655
171+00
789.08

788.75
170+00
788.89

788.86
169+00
788.50

789.03
168+00
788.57

789.28
167+00
788.87

789.60
166+00
789.13

789.99
165+00
789.53

G.O Cu. Yds.
523 " "
617 " "
?
EXC.
EMB.+18%
EMB.+18%
BOTTOM
Sta. 160+00 to 172+20

End Area Exc	End Area Emb	Cu Yds Exc	Cu Yds Emb
50	0		
		191	0
53	0		
		226	0
69	0		
		239	0
60	0		
		242	0
71	0		
		242	0
60	0		
		270	0
86	0		
		294	0
73	0		
		211	0

2602 Cu. Yds.
389 " " "
471 " " "
2181 " " "
EXC.
EMB.+18%
EMB.+18%
WASTE
Sta. 172+20 to 188+00

30 25 20 15 10 5 ℄ 5

785.74
181+00
786.67

786.54
180+00
787.41

787.18
179+00
788.55

787.67
178+00
788.72

788.00
177+00
789.18

788.18
176+00
789.51

788.275
175+00
790.16

788.37
174+00
789.93

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

End Area		Cu Yds	
Exc	Emb	Exc	Emb
0	45		
		4	139
2	30		
		12	64
11	38		
10	28		
		25	78
4	16		
		76	30
37	0		
		174	0
57	0		
		198	0

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

784.00
187+00
783.04

783.70
186+00
783.25

783.64
185+49
783.62

Sta. 185+00 on bridge

783.62
184+95
783.62

783.73
184+00
783.40

784.14
183+00
784.68

784.86
182+00
785.98

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

End Area		Cu Yds	
Exc	Emb	Exc	Emb
66	0		
		191	0
37	0		
		178	0
59	0		
		211	0
55	0		
		241	0
75	0		
		324	0
100	0		
		396	0
115	0		
		291	0
42	0		
		78	83

30 25 20 15 10 5 ℄ 5

U. S. PUBLIC WORKS
PROJECT NO.

FED RD DIST Nº	STATE	USPW PROJ Nº	FISCAL YEAR
10	OHIO	NBH 591-B	1934

15/24

S.H. 434 SEC b
VAN WERT COUNTY

786.60
195+00
787.65

786.50
194+00
786.70

786.40
193+00
787.10

786.30
192+00
786.90

786.17
191+00
787.15

785.84
190+00
787.50

785.28
189+00
787.34

784.55
188+00
784.34

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

FED. RD. DIST. Nº	STATE	U.S.P.W. PROJ. Nº	FISCAL YEAR
10	OHIO	NRH 391-B	1934

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U. S. PUBLIC WORKS PROJECT NO.

S. H. 434 SEC b
VAN WERT COUNTY

End Area Exc	End Area Emb	Cu. Yds Exc	Cu. Yds Emb	Station	Elevation
3	26				
		6	122	203+00	786.12
0	41				
		0	176	202+00	784.60
0	54				
		9	115	201+00	785.40
5	8				
		152	15	200+00	786.40
77	0				
		88	30	199+00	788.20
2	27				
		2	54	198+40	786.10
0	46				
		2	135	198+00	785.55
1	27				
		9	82	197+00	785.90
4	17				
		130	32	196+00	785.95
9	11				
		20	50	211+00	785.52
2	16				
		4	80	210+00	785.42
0	27				
		0	107	209+00	785.28
0	31				
		0	111	208+00	785.15
0	29				
		0	85	207+00	785.40
0	17				
		0	65	206+00	785.70
0	18				
		0	91	205+00	785.85
0	31				
		6	104	204+00	785.30

EXC. .2519 Cu Yds
EMB. .1493 Cu Yds
EMB+VOL. .1782 Cu Yds
WASTE = .7517 Cu Yds
Sta 188+00 to 214+00

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

FED.RD. DIST.NO.	STATE	U.S.P.W. PROJ.NO.	FISCAL YEAR
10	OHIO	NBH 391-B	1934

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U. S. PUBLIC WORKS
PROJECT NO.

SH. 434 SEC. b
VAN WERT COUNTY

END AREA		CU. YDS.	
Exc.	Emb.	Exc.	Emb.
6	13		
		19	44
4	11		
		26	35
10	8		
		28	41
5	14		
		39	26
16	0		
		65	2
19	1		
		102	2
36	0		
		126	2
32	1		
		87	11
15	5		
		44	26

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

785.66
220+00
785.39

785.56
219+00
785.27

785.46
218+00
785.22

785.385
217+00
784.98

785.36
216+00
785.38

785.325
215+00
785.56

785.47
214+00
785.81

785.57
213+00
785.98

785.67
212+00
785.75

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

END AREA		CU. YDS.	
Exc.	Emb.	Exc.	Emb.
10	6		
		39	30
11	10		
		39	41
10	12		
		33	46
8	13		
		30	46
8	12		
		32	48
9	14		
		37	41
11	8		
		39	33
10	10		
		30	43

EXC. 519 Cu. Yds.
EMB. 448 " "
EMB.+EXC. 329 " "
BORROW 10 " "
Sta. 214+00 to 227+00

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

786.80
228+00
786.66

786.48
227+00
786.33

786.27
226+00
786.09

786.16
225+00
785.95

786.06
224+00
785.86

785.96
223+00
785.76

785.86
222+00
785.67

785.76
221+00
785.59

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

FED.ROD. DIST. NO.	STATE	U.S.P.W. PROJ. NO.	FISCAL YEAR	18/24
10	OHIO	NRH 591-B	1934	

S.H. 434 SEC. b
VAN WERT COUNTY

U.S. PUBLIC WORKS
PROJECT NO.

End Area Exc.	End Area Emb.	Cu. Yds. Exc.	Cu. Yds. Emb.
80	0		
		315	0
90	0		
		439	0
197	0		
		541	0
145	0		
		413	0
78	0		
		182	4
20	2		
		56	20
10	9		
		48	28
16	6		
		50	22
11	6		
		39	22

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

789.00
237+00
790.41

789.17
236+00
790.78

788.32
235+00
791.74

788.34
234+00
791.45

2685 Cu. Yds.
126 " "
149 " "
2538 " "
Sta. 227+00 to 239+00
EXC.
EMB.
EMB+18%
WASTE

788.18
233+00
790.23

788.86
232+00
788.99

788.38
231+00
788.11

787.76
230+00
787.74

787.23
229+00
787.11

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

End Area Exc.	End Area Emb.	Cu. Yds. Exc.	Cu. Yds. Emb.
42	0		
		144	0
36	0		
		119	2
28	1		
		94	4
23	1		
		94	4
28	1		
		146	2
51	0		
		213	0
64	0		
		267	0
80	0		
		296	0

1422 Cu. Yds.
12 " "
14 " "
1403 " "
Sta. 239+00 to 249+15
EXC.
EMB.
EMB+18%
WASTE

787.61
245+00
788.22

787.79
244+00
788.30

787.96
243+00
788.32

788.13
242+00
788.25

788.31
241+00
788.52

788.48
240+00
788.89

788.65
239+00
789.54

788.82
238+00
790.07

30 25 20 15 10 5 ℄ 5 10 15 20 25 30

U. S. PUBLIC WORKS PROJECT NO

FED. RD. DIST. Nº	STATE	US P.W. PROJ. Nº	FISCAL YEAR
10	OHIO	NRM-391-B NRM-391-C	1934

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S.H. 434 SEC. b, Var-1, pt.
VAN WERT COUNTY

Proposal #1
Proposal #2 - NRM-591-C

End Area Exc.	End Area Emb.	Cu. Yds. Exc.	Cu. Yds. Emb.
6	6		
		37	13
14	1		
		69	2
23	0		
		82	0
21	0		
		69	2
16	1		
		52	2
17	0		
		39	0
		164	0
38	0		
		128	0
31	0		
		150	0
50	0		
		170	0

Exc. 429 Cu. Yds.
Emb. " 202 Cu. Yds.
Emb. +18% " 238 Cu. Yds.
Waste " 190 Cu. Yds.
Sta. 249+15 to Sta. 259+28.55
Proposal #2 - NRM-591-C

End Area Exc.	End Area Emb.	Cu. Yds. Exc.	Cu. Yds. Emb.
7	0		
		44	0
17	0		
		82	0
27	0		
		100	0
27	0		
		89	0
21	0		
		80	0
22	0		

786.11 254+00 786+00
786.23 253+00 786.72
786.40 252+00 787.28
786.575 251+00 787.45
786.75 250+00 787.28
786.92 249+15 787.42
787.09 248+00 787.54
787.27 247+00 787.61
787.44 246+00 788.14

End Area Exc.	End Area Emb.	Cu. Yds. Exc.	Cu. Yds. Emb.
0	0		
		2	0
10	0		
		19	30
0	16		
		0	69
0	21		
		0	61
0	12		
		6	39
3	9		
		17	28

Exc. 2 Cu. Yds.
Emb. " "
Emb. +18% NOCO " "
Waste 2 " "
Sta. 259+00 to 259+13.49

Exc. 351 Cu. Yds.
Emb. 249 " "
Emb. +18% 290 " "
Waste 0 " "
Sta. 248+15 to 259+00

End Area Exc.	End Area Emb.	Cu. Yds. Exc.	Cu. Yds. Emb.
0	0		
		2	3
3	5		
		6	46
0	20		
		0	78
0	22		
		0	52
0	6		
		6	17
3	3		
		19	6

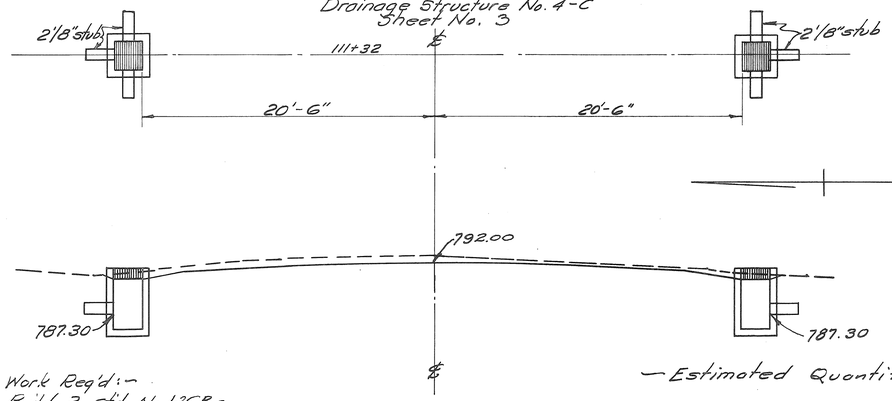
259+28.55 787.23
259+13.49 787.16
787.10 259+00 786.89
786.69 258+00 785.60
786.38 257+00 785.19
786.19 256+00 785.66
786.10 255+00 785.81

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJECT	FISCAL YEAR
10	OHIO	NRH 591-B	1934

VAN WERT S.H. 434 — COUNTY Sec. A(Pt) b

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Station 111+32
Drainage Structure No. 4-C
Sheet No. 3

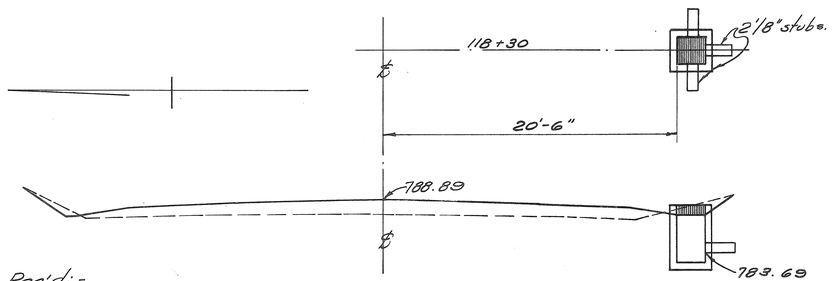


Work Req'd:-
Build 2 Std. No. 12CB's and make connections.

— Estimated Quantities —

Std. No. 12C.B.	2
8" Sewer Pipe	8 Lin. Ft.

Station 118+30
Drainage Structure No. 1-C
Sheet No. 4

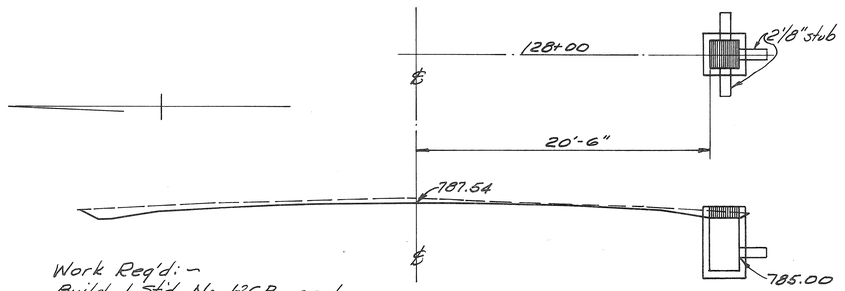


Work Req'd:-
Build 1 Std. No. 12C B and make connections.

— Estimated Quantities —

Std. No. 12C.B.	1
8" Sewer Pipe	4 Lin. Ft.

Station 128+00
Drainage Structure No. 2-C
Sheet No. 4



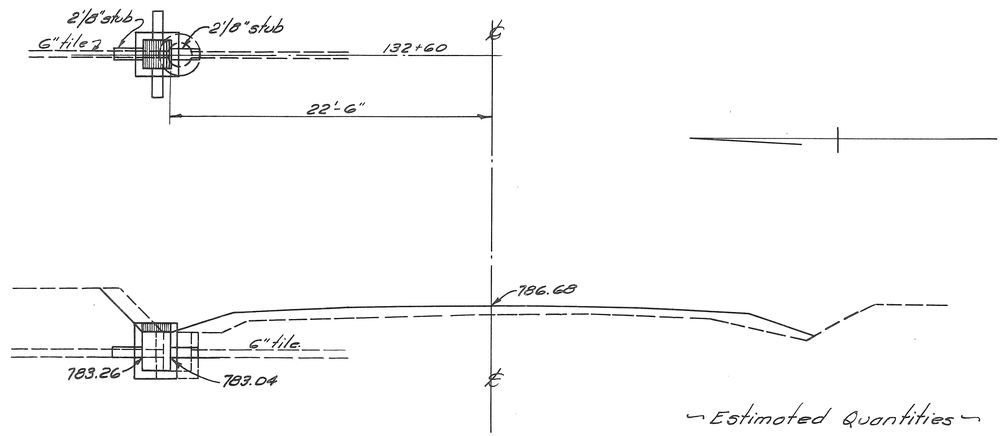
Work Req'd:-
Build 1 Std. No. 12C.B. and make connections.

— Estimated Quantities —

Std. No. 12C.B.	1
8" Sewer Pipe	4 Lin. Ft.

Station 130+88
Drainage Structure No. 3-C Sheet 4
Lump Sum Removal of Existing Catch Basin.

Station 132+60
Drainage Structure No. 4-C
Sheet No. 4



Work Req'd:-
Remove existing C.B.
Build 1 Std. No. 12C.B. and make Connections.

— Estimated Quantities —

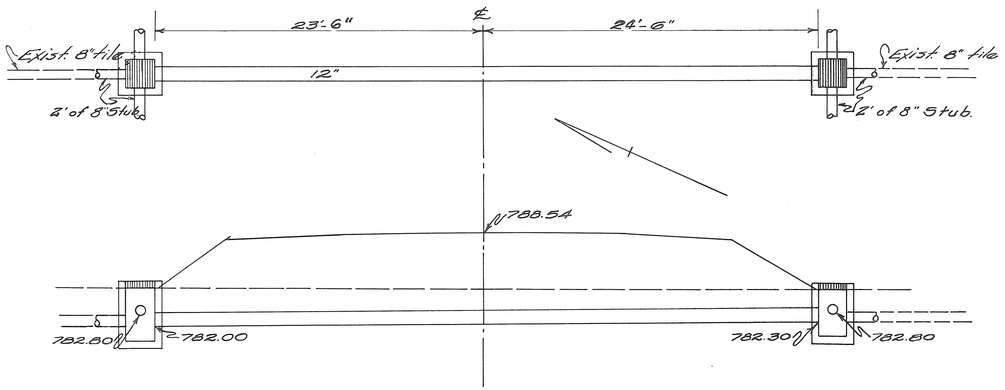
Std. No. 12C.B.	1
8" Sewer Pipe	4 Lin. Ft.

FED. RD. DIST. NO.	STATE	USPW PROJECT	FISCAL YEAR
10	OHIO	NRH 591-B	1934

VAN WERT COUNTY
SH. 434 SEC. 6

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STA. 143+66
DRAINAGE STRUCTURE NO. 5-C
Sheet No. 4



TYPE: Std. Pipe Culv. Std. Dr. No. 527 P.C. 1 & 2
SIZE: 12" x 48
Work Req'd: Construct Culv. as shown on plan. Lay 48 of 12" Culvert Pipe. Build 2 Std. No. 12C.B. Make connections.

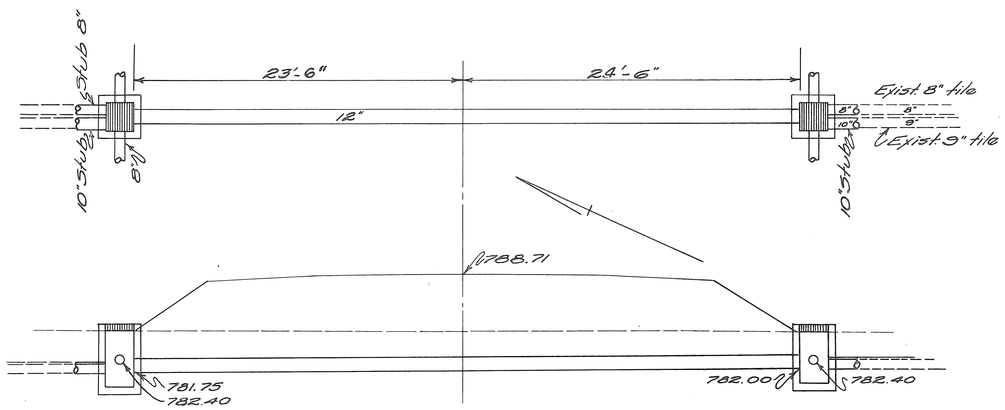
ESTIMATED QUANTITIES:

12" Culvert Pipe	48	Lin. Ft.
8" Sewer Pipe	8	Lin. Ft.
Excavation Std. No. 12C.B.	17	Cu. Yds.
	2	

Drainage Structure No. 7-C
Station 128+92 - Sheet No. 4
Lump Sum Removal of Existing Catch Basin

Drainage Structure No. 2-C
Station 166+45 - Sheet No. 5
Lump Sum Removal of Existing Catch Basin.

STA. 144+20
DRAINAGE STRUCTURE NO. 6-C
Sheet No. 4

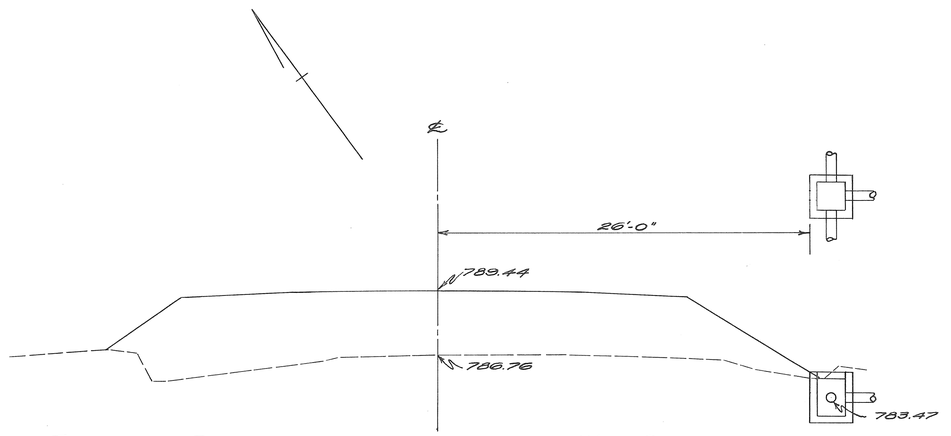


TYPE: Std. Pipe Culv. Std. Dr. No. 527 P.C. 1 & 2
SIZE: 12" x 48
Work Req'd: Construct Culv. as shown on plan. Lay 48 of 12" Culvert Pipe. Build 2 Std. No. 12C.B's. Make connections. as shown.

ESTIMATED QUANTITIES:

12" Culvert Pipe	48	Lin. Ft.
10" Sewer Pipe	4	Lin. Ft.
8" Sewer Pipe	4	Lin. Ft.
Excavation Std. No. 12C.B.	22	Cu. Yds.
	2	

STA. 146+30.5
DRAINAGE STRUCTURE NO. 1-C
Sheet No. 5



ESTIMATED QUANTITIES:-

Std. No. 12C.B	1	
8" Sewer Pipe	2	Lin. Ft.

WORK REQUIRED

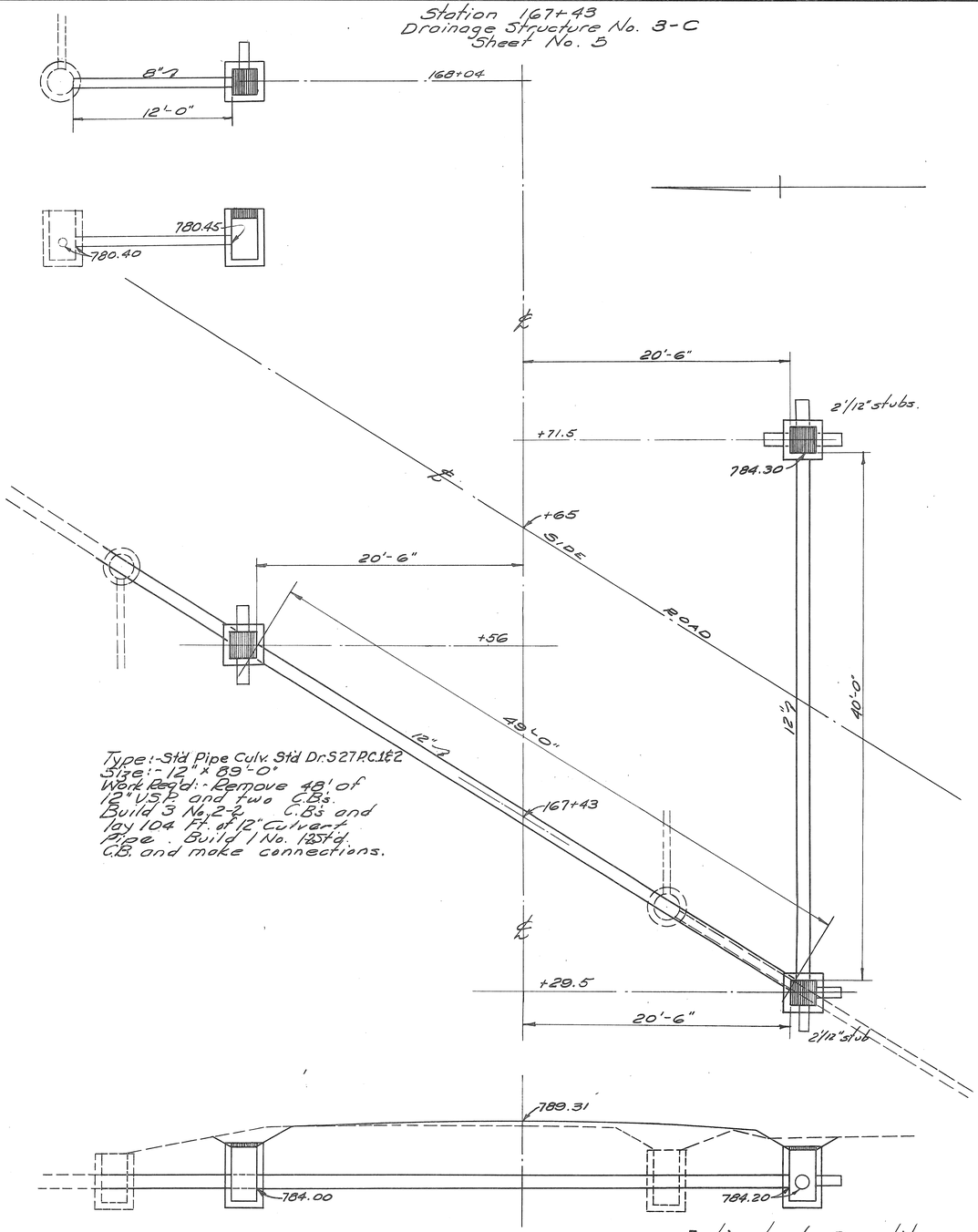
Build standard No. 1-2 catch basin and make connections as shown above.

FED. RD. DIST. NO.	STATE	U.S.P.W. PROJECT	FISCAL YEAR
10	OHIO	NRH 591-B	1934

VAN WERT COUNTY
S.H. 434 SEC. 6

(2.2) (2.4)

Station 167+43
Drainage Structure No. 3-C
Sheet No. 5

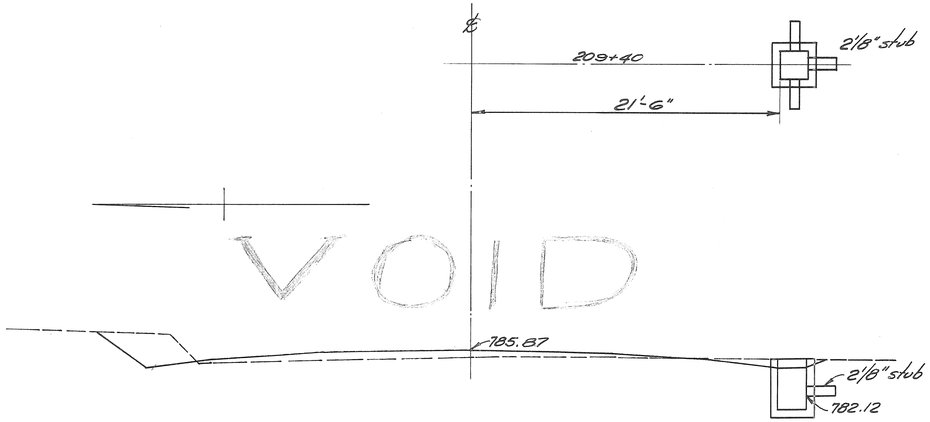


Type:- Std Pipe Culv. Std Dr. S27 PC1&2
Size:- 12" x 89'-0"
Work Req'd:- Remove 48' of 12" V.S.P. and two C.B's. Build 3 No. 2-2 C.B's and lay 104 Ft. of 12" Culvert Pipe. Build 1 No. 1-2 Std. C.B. and make connections.

Estimated Quantities

Excavation	60 Cu.Yds.
12" Culvert Pipe	104 Lin. Ft.
No. 2-2 C.B.	3
No. 1-2 C.B. std.	1
12" Sewer Pipe	10 Lin. Ft.
8" Sewer Pipe	12 Lin. Ft.

Station 209+40
Drainage Structure No. 2-C
Sheet No. 7

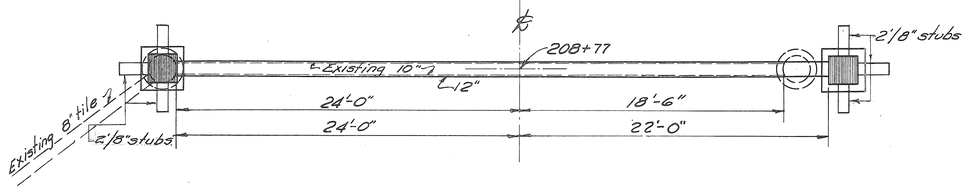


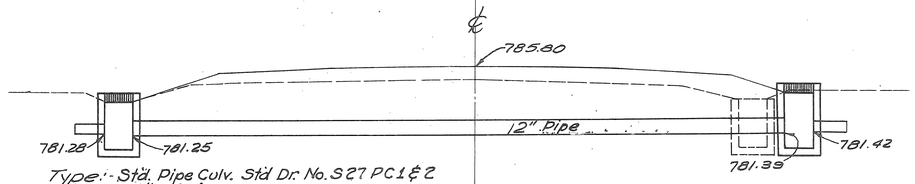
Work Req'd:-
Build 1 Std. No. 1-2 C.B. and make connections.

– Estimated Quantities –

Std. No. 1-2 C.B.	1
8" Sewer Pipe	2 Lin Ft.

Station 208+77
Drainage Structure No. 1-C
Sheet No. 7





Type:- Std. Pipe Culv. Std Dr. No. S27 PC1&2
Size:- 12" x 46'
Work Req'd:- Remove 10" V.S.P. & C.B's Construct 2 No. 1-2 Std. C.B's & lay 46 Culvert Pipe and make connections.

Estimated Quantities

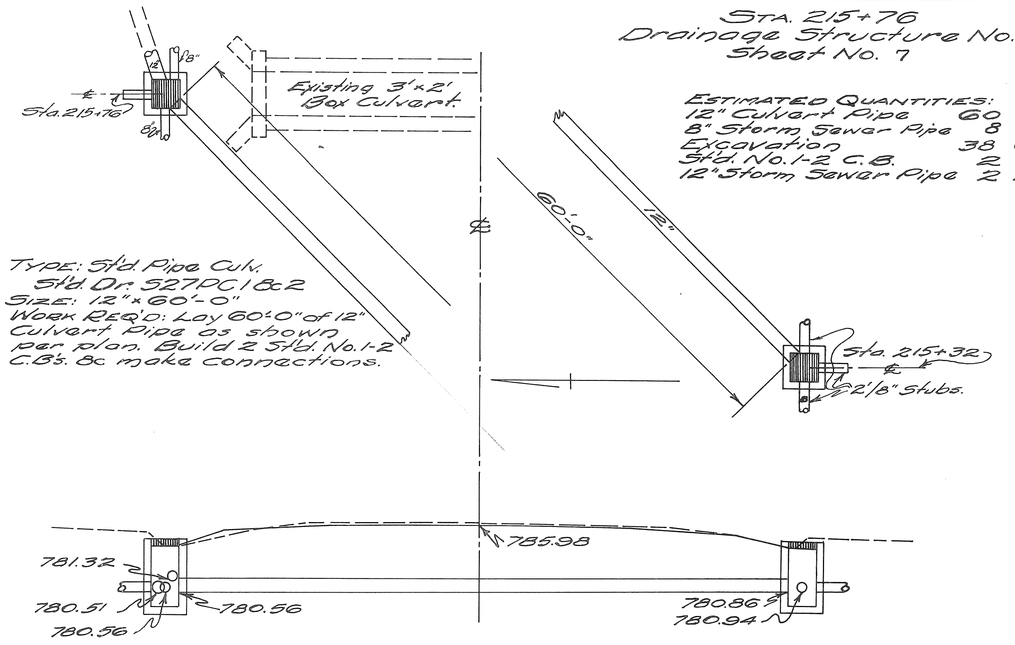
Excavation	55 Cu.Yds.
12" Culvert Pipe	46 Lin. Ft.
No. 1-2 Std. C.B.	2
8" Sewer Pipe	1040 Lin. Ft.

FED.RD. DIST. NO.	STATE	U.S.P.W. PROJ. NO.	FISCAL YEAR
10	OHIO	NRH 581-B	1934

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VAN WERT COUNTY
S.H. 434 SEC. b

STA. 215+76
Drainage Structure No. 3-C
Sheet No. 7



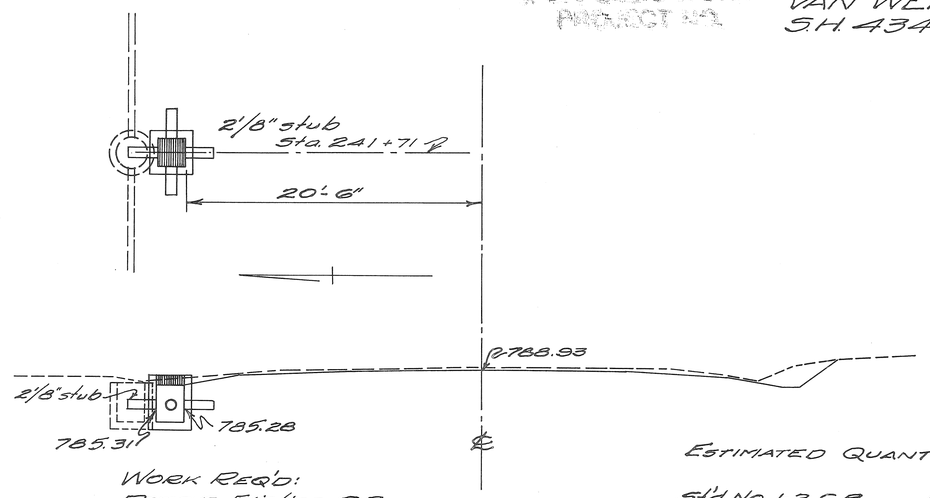
ESTIMATED QUANTITIES:

12" Culvert Pipe	60	Lin. Ft.
8" Storm Sewer Pipe	8	Lin. Ft.
Excavation	38	Cu. Yds.
Std. No. 1-2 C.B.	2	
12" Storm Sewer Pipe	2	Lin. Ft.

TYPE: Std. Pipe Culv.
Std. Dr. 527.PC.1&2
SIZE: 12" × 60'-0"
WORK REQ'D: Lay 60'-0" of 12" Culvert Pipe as shown per plan. Build 2 Std. No. 1-2 C.B's. & make connections.

STA. 241+71
Drainage Structure No. 2-C
Sheet No. 8

U.S. PUBLIC WORKS
PROJECT NO.



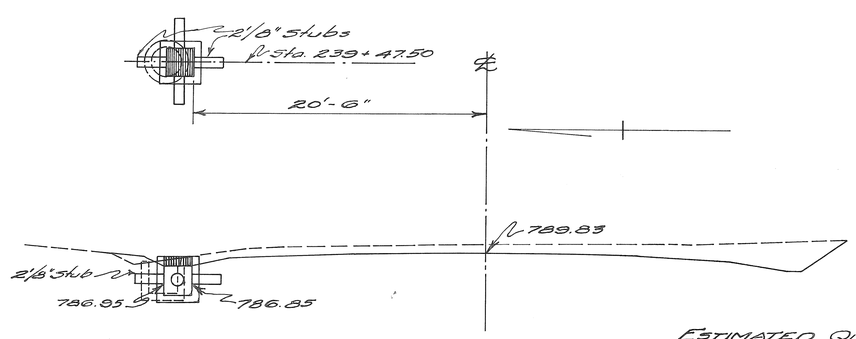
WORK REQ'D:
Remove Existing C.B.
Build 1 Std. No. 1-2 C.B.
and make Connections.

ESTIMATED QUANTITIES

Std. No. 1-2 C.B.	1
8" Storm Sewer Pipe	4 Lin. Ft.

Drainage Str. No. 3-C. Sheet 8
Exist. 4'×2'-6"×32' Slab Top Culv.
No Work Required.

STA. 239+47.50
Drainage Structure No. 1-C
Sheet No. 8



WORK REQ'D:
Remove existing C.B.
Build Std. No. 1-2 C.B.
and make connections.

ESTIMATED QUANTITIES:
Std. No. 1-2 C.B. 1
8" Storm Sewer Pipe 4 Lin. Ft.

SUMMARY OF QUANTITIES

Proposal No. 1 – U.S.P.W.P. N.R.H. 591B
Proposal No. 1 – U.S.P.W.P. N.R.M. 591C

FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
10	OHIO	NRH-591B NRM-591C	1934

24
24

VAN WERT COUNTY
S.H. 434, SEC. A (PT.), B, VAN WERT (PT.)

ROADWAY DRAINAGE & STORM SEWERS

SHEET NO.	PIPE FOR ROADWAY DRAINAGE LIN. FT. 8"	10"	12"	PIPE FOR C.B. CONNECTIONS LIN. FT. 8"	10"	12"	PIPE FOR STORM SEWERS. CEM'T JTS. LIN. FT. 8"	10"	CORRUGATED METAL PIPE LIN. FT. 8"	10"	12"	PIPE FOR CULVRTS. LIN. FT. 8"	STD. No. 1. DITCH INLET EACH.
PROPOSAL No. 1 — 20' PAVEMENT													
3	1063								60			60	2
4	2140			8			87		100				6
5	2735			12									7
6	2122	1525					78	145		80			11
7	2662			6			6						8
8	2755			8			83						5
TOTALS	13,477	1525		34			174	145	160	80		60	39
PROPOSAL No. 1 — 10' PAVEMENT													
8	699			2									2
PROPOSAL No. 2 — 10' PAVEMENT													
8	927			4									4

PRIVATE DRIVES & APPROACHES

SHEET No.	RELAY CORR. METAL PIPE LIN. FT. 8"	10"	12"	CORRUGATED METAL PIPE LIN. FT. 8"	10"	12"	STONE FOR DRIVES CU. YDS.
PROPOSAL No. 1 — 20' PAV'M'T.							
3							20
4	48	16		112	24		39
5				40			64
6	16	60		4	60	20	21
7	64	18		36	2		24
8		16		100	4		34
TOTAL	128	110		292	90	20	202
PROPOSAL No. 1 — 10' PAV'M'T.							
8				20			7
PROPOSAL No. 2 — 10' PAV'M'T.							
8				64			12

STRUCTURES UNDER 20' SPAN

STRUCTURE NOS. INCLUSIVE	SHEET NO.	PIPE FOR ROADWAY CULVERTS LIN. FT. 8"	12"	15"	18"	PIPE FOR STORM SEWER C.B. STUBS LIN. FT. 8"	10"	12"	15"	RELAY CORR. I.P. LIN. FT. 10"	12"	EXCAV. STRUC. E2 CU. YDS.	1-5½ CONC. CU. YDS.	REINF. STEEL LBS.	OLD CONC. REMOV. CU. YDS.	STD. No. 1-2 C.B. EACH.	STD. No. 2-2 C.B. MOD.	10" C.I.P. REMO. LIN. FT.	CHAN. EXCAV. CU. YDS.	REMOVE & DISPOSE OF C.B. EACH.	REMOVE & STORE EXIST. V.S.P. LIN. FT. 10"	12"
PROPOSAL No. 1 — 20' PAVEMENT																						
4c	3					8										2						
1c to 7c	4		96			24	4					39				7				2		
1c to 3c	5		104			14		10				60				2	3			3		48
1c to 4c	7		106			18		2				93				4				3	43	
1c to 3c	8					8										2				2		
TOTALS			306			72	4	12				192				17	3			10	43	48

EXCAVATION & EMBANKMENT

STATION FROM	STATION TO	EXCAV. CU. YDS.	EMB. CU. YDS.	EMB. +18% CU. YDS.	WASTE CU. YDS.	BORROW CU. YDS.
PROPOSAL No. 1 — 20' PAVEMENT						
108+52.74	115+62	718	179	211	507	
115+62	120+23	235	200	236		1
120+23	133+00	640	870	1027		387
133+00	160+00	4568	4222	4982		414
160+00	172+20	610	523	617		7
172+20	188+00	2602	399	471	2131	
188+00	214+00	2519	1493	1762	757	
214+00	227+00	519	448	529		10
227+00	239+00	2685	126	149	2536	
239+00	249+15	1422	12	14	1408	
TOTALS		16,518	8,472	9998	7,339	819
PROPOSAL No. 1 — 10' PAVEMENT						
249+15	259+00	351	246	290	61	
259+00	259+28.55	2			2	
TOTALS		353	246	290	63	
PROPOSAL No. 2 — 10' PAVEMENT						
249+15	259+28.55	428	202	238	190	
TOTALS		428	202	238	190	

PAVEMENT CALCULATIONS

Beginning of Proj. – Sta. 108+52.74
End of Proj. Sta. 259+28.55
Gross Length of Proj. (Proposals No. 1 & 2 = 15075.81 Lin. Ft.
Deductions (Bridges)
Sta. 121+15 to Sta. 121+86 = 71.00 Lin. Ft.
Sta. 135+11 to Sta. 135+80 = 69.00 Lin. Ft.
Sta. 184+89.60 to Sta. 185+54.50 = 64.90 Lin. Ft.
Total Deductions: 204.90 Lin. Ft.
Net Length of Proj. (Proposals No. 1 & 2) 14,870.91 Lin. Ft.

PROPOSAL No. 1 — 10' & 20' PAVEMENT

PROPOSAL No. 1 — N.R.H. – 591-B — 20' PAVEMENT.—
Sta. 108+52.74 to Sta. 249+15 14,062.26 Lin. Ft.
Deductions for Bridges. 204.90 Lin. Ft.
Total Length for 20' Paving. 13,857.36 Lin. Ft.

$\frac{13,857.36' \times 20'}{9}$ = 30,794.13 Sq. Yds.

PROPOSAL No. 1 — N.R.M. – 591-B — 10' PAVEMENT.—
Sta. 249+15 to Sta. 259+28.55 1013.55 Lin. Ft.

$\frac{1013.55' \times 10'}{9}$ = 1126.16 Sq. Yds.

TOTAL PAVING (PROPOSAL No. 1) = 31,920.29 Sq. Yds.

PROPOSAL No. 2 — 10' PAVEMENT.

PROPOSAL No. 2 — N.R.M. – 591-C – 10' PAVEMENT.
Sta. 249+15 to Sta. 259+28.55 1013.55 Lin. Ft.

$\frac{1013.55' \times 10'}{9}$ = 1126.16 Sq. Yds.

TOTAL PAVING (PROPOSAL No. 2) 1,126.16 Sq. Yds.
TOTAL PAVING, PROPOSALS No. 1 & 2 = 33,046.45 Sq. Yds.

FINISHING SHOULDERS, SLOPES, & DITCHES, PROPOSALS No. 1 & 2.
Sta. 108+52.74 to Sta. 249+15 – (20' Paving, Both sides) = 14,062.26 Lin. Ft.
Deductions (35'-6½" + 39'-10¾" + 36") = 111.44 Lin. Ft.
Finishing Shoulders Slopes & Ditches (20' Paving Prop. No. 1) = 13,951. Lin. Ft.
Sta. 249+15 to Sta. 259+28.55 (10' Paving, one side) = 1013.55 Lin. Ft.
Finishing Shoulders Slopes & Ditches (10' Paving, Prop. No. 1) = 1014. Lin. Ft.
Sta. 249+15 to Sta. 259+28.55 (10' Paving, One Side) = 1013.55 Lin. Ft.
Finishing Shoulders, Slopes & Ditches (10' Paving Prop. No. 2) = 1014. Lin. Ft.

GENERAL SUMMARY

Proposal No. 1 – U.S.P.W.P. N.R.H. 591B

20' Pavement

Roadway

Item	Quantities	
E-1	16,518	Cu. Yds. Roadway excavation (unclassified)
E-5	13,951	Lin. Ft. Finishing Shoulders, Slopes & Ditches (Incl. placing berm matl.)
I-1	452	Lin. Ft. 8" Corr. M.P. roadway drain for driveways.
I-1	170	Lin. Ft. 10" Corr. M.P. roadway drain for driveways.
I-1	20	Lin. Ft. 12" Corr. M.P. roadway drain for driveways.
I-2	174	Lin. Ft. 8" Pipe for Storm Sewer, with cement joints.
I-2	145	Lin. Ft. 10" Pipe for Storm Sewer, with cement joints.
I-2	34	Lin. Ft. 8" Pipe for Storm Sewer, (Catch Basin Connections)
I-3	13,477	Lin. Ft. 8" Pipe for Roadway drainage.
I-3	1,525	Lin. Ft. 10" Pipe for Roadway drainage.
I-6	110	Lin. Ft. 10" Corr. Metal Pipe, Relaid for driveways.
I-6	128	Lin. Ft. 8" Corr. Metal Pipe, Relaid for driveways.
I-8	39	Each Std. No. 1 Side Ditch Inlets.
I-17	202	Cu. Yds. Aggregate for Traffic bound Side Approaches.
S-27	60	Lin. Ft. 8" Pipe for Roadway Culverts.

Pavement

T-70	30,794	Sq. Yds. 9"-7"-7-9" Portland Cement Concrete Paving.

Structures

E-2	192	Cu. Yds. Excavation for Structures (Unclassified)
S-27	306	Lin. Ft. 12" Pipe for Roadway Culverts.
Special	10	Each Removal & Disposal of existing Catch Basins.
I-2	72	Lin. Ft. 8" Pipe for Storm Sewers, (Catch Basin Stubs)
I-2	4	Lin. Ft. 10" Pipe for Storm Sewers, (Catch Basin Stubs)
I-2	12	Lin. Ft. 12" Pipe for Storm Sewers (Catch Basin Stubs)
I-6	48	Lin. Ft. 12" V.S.P. Removed & Stored.
I-6	43	Lin. Ft. 10" V.S.P. Removed & Stored.
I-8	17	Each Std. No. 1-2 Catch Basins.
I-8	3	Each Std. No. 2-2 Catch Basins.

Proposal No. 1 — 10' Pavement

Roadway

E-1	353	Cu. Yds. Roadway Excavation (Unclassified)
E-5	1014	Lin. Ft. Finishing Shoulders, Slopes & Ditches. (one side)
I-1	20	Lin. Ft. 8" Corrugated Metal Pipe for Driveways.
I-2	2	Lin. Ft. 8" Pipe for Storm Sewers (Catch Basin Connections)
I-3	699	Lin. Ft. 8" Pipe for Roadway Drainage.
I-8	2	Each Std. No. 1 Side Ditch Inlets.
I-17	7	Cu. Yds. Aggregate for traffic bound Side Approaches.

9"-7"-7"-9" Pavement

T-70	1,126	Sq. Yds. Portland Cement Concrete Paving

Proposal No. 2 — U.S.P.W.P. N.R.M. 591-C

10' Pavement — Roadway

E-1	428	Cu. Yds. Roadway Excavation (Unclassified)
E-5	1014	Lin. Ft. Finishing Shoulders, Slopes, & Ditches (one Side)
I-1	64	Lin. Ft. 8" Corrugated Metal Pipe for Driveways.
I-2	4	Lin. Ft. 8" Pipe for Storm Sewers, (Catch Basin Connections)
I-3	927	Lin. Ft. 8" Pipe for Roadway Drainage.
I-8	4	Each Std. No. 1 Side Ditch Inlet.
I-17	12	Cu. Yds. Aggregate for Traffic bound Side Approaches.

Pavement

T-70	1,126	Sq. Yds. 9"-7"-7"-9" Portland Cement Concrete Paving.