

24570

FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1940

1
32

OTTAWA COUNTY
S.H. 440-SEC. F & I

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

PORT CLINTON-MARBLEHEAD ROAD

S. H. 440 SEC'S. F & I OTTAWA COUNTY

DANBURY TOWNSHIP

NET LENGTH OF WORK 31564.39 LIN. FT. OR 5.978 MILES

CONVENTIONAL SIGNS

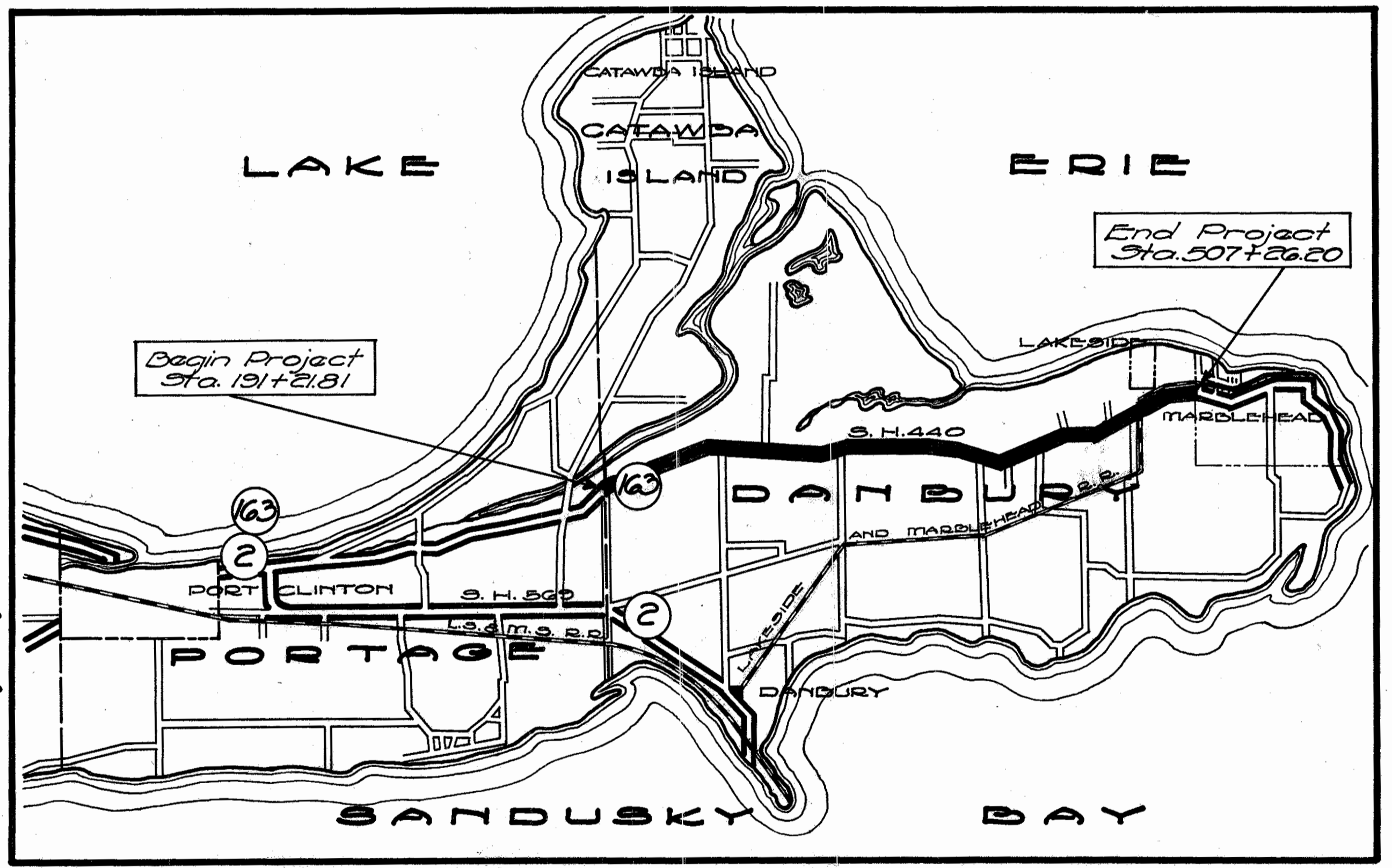
STATE LINE	-----
COUNTY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
CENTER LINE	-----
PROPERTY LINE	-----
CITY OR VILLAGE LINE	-----
FENCE LINE	-----
STEAM RAILROAD	-----
ELECTRIC RAILROAD	-----
POLE LINE	-----
GUARD RAIL	-----
DRAIN PIPE, NEW	-----
DRAIN PIPE, OLD	-----

INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTION	2
GENERAL NOTES	2
PLAN & PROFILE	3-13
CROSS SECTIONS	14-29
STRUCTURES	30-31
SUMMARY	31-32

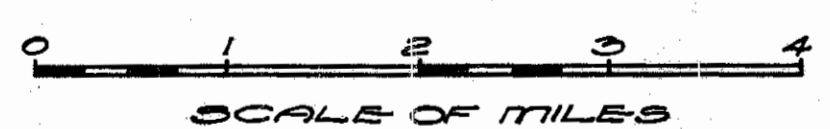
LINE DATA

Beginning of Project	Sta. 191+21.81
End of Project	Sta. 507+26.20
Gross Length of Project	= 31,604.39 Lin. Ft.
Additions - None	
Deductions - For Railroad	
Sta. 474+50 to Sta. 474+90	= 40.00 Lin. Ft.
Net Length of Work	= 31,564.39 Lin. Ft. or 5.978 Miles



Delivery Point - Marblehead Av. Haul - 3 1/2 Miles

LOCATION PLAN



PORTION TO BE IMPROVED
DETOURS SHOWN THUS
STATE HIGHWAYS
COUNTY HIGHWAYS

SCALES

PLAN 1" = 100'
PROFILE - HORIZONTAL 1" = 100'
PROFILE - VERTICAL 1" = 5'
CROSS SECTIONS 1" = 5'

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

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

The necessary Right-of-Way for this improvement will be provided by The State of Ohio.

- Approved _____
Date _____ Resident District Deputy Director.
- Approved J. K. Leonard
Date 8-26-40 Resident Division Deputy Director.
- Approved _____
Date _____ Chief Engineer, Bureau of Maintenance.
- Approved _____
Date _____ Chief Engineer, Bureau of Bridges.
- Approved W. H. Jones PE. 25
Date 8-30-40 Chief Engineer, Location & Right-of-Way.
- Approved W. H. Jones
Date 8-20-40 First Ass't. Director & Chief Engineer.
- Approved Walt C. Poyette
Date 8-30-40 Director of Highways.

SUPPLEMENTAL PRINTS
OF STANDARD
CONSTRUCTION DRAWINGS

DRAWING	DATE	DRAWING	DATE
E-5	7-12-35		
S-27, R.C.3	3-1-39		
I-1, 2, 3, 4 & 5	3-1-39		
I-8 C. B. 1-2 & 2-2	11-24-39		
I-8 C. B. 2-3 & 2-4	11-1-39		
I-8 C. B. No. 7	3-1-39		
SBC-34	3-8-39		
G-7-07	10-33		

SUPPLEMENTAL
SPECIFICATIONS

NUMBER	DATE
M-105.9 Adp.	1-4-40
M-205.10 Adp.	5-23-40

CONSTRUCTION BUREAU
JUL 8 1955
GROUND PHOTOLAB

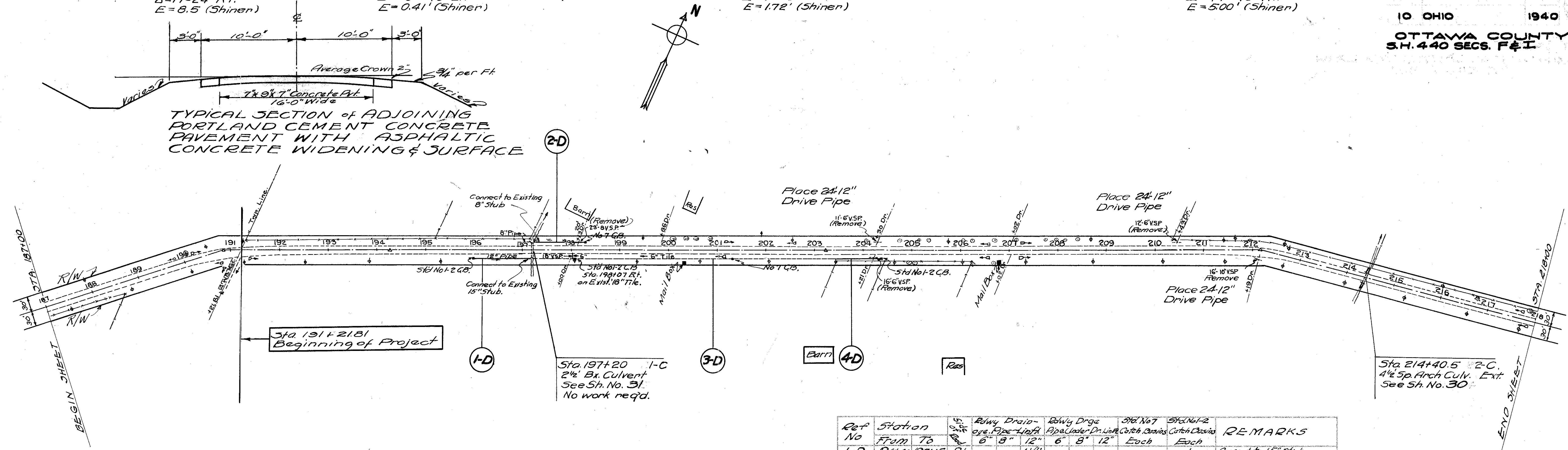
281

P.I. Sta. 190+85.48
 $\Delta = 17^{\circ} 24' \text{ Rt.}$
 $E = 8.5' \text{ (Shiner)}$

P.I. Sta. 194+37.85
 $\Delta = 0^{\circ} 40' \text{ Lt.}$
 $E = 0.41' \text{ (Shiner)}$

P.I. Sta. 203+23.54
 $\Delta = 1^{\circ} 45' \text{ Rt.}$
 $E = 1.72' \text{ (Shiner)}$

P.I. Sta. 212+15.50
 $\Delta = 14^{\circ} 43' \text{ Rt.}$
 $E = 5.00' \text{ (Shiner)}$

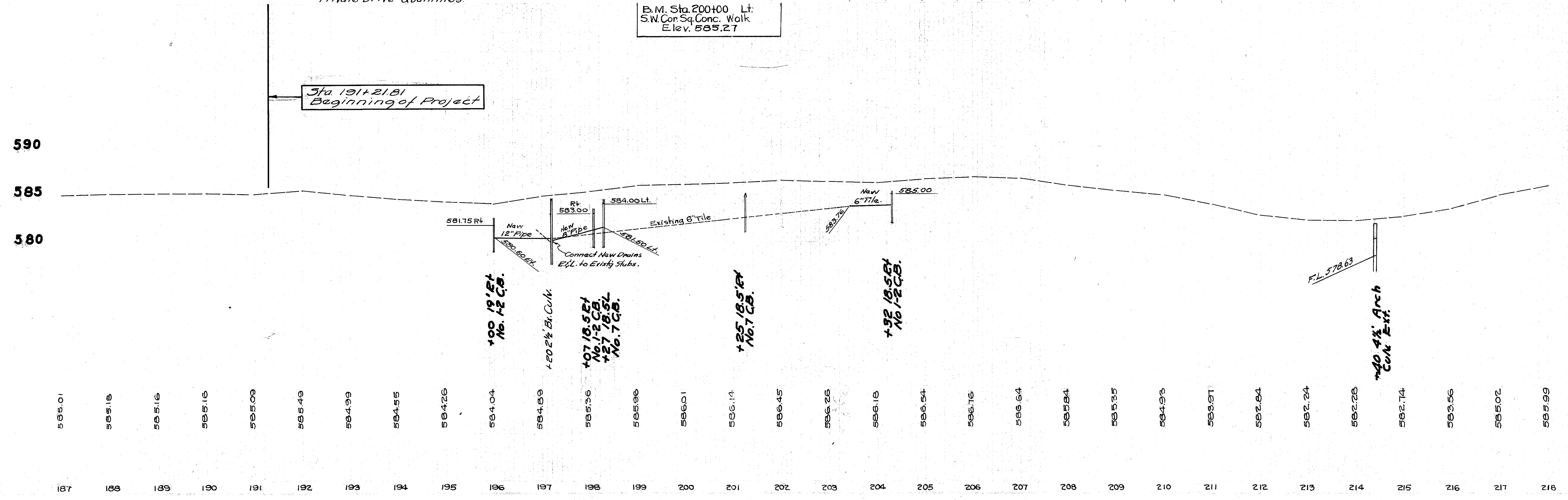


TYPICAL SECTION OF ADJOINING PORTLAND CEMENT CONCRETE PAVEMENT WITH ASPHALTIC CONCRETE WIDENING & SURFACE

Ref No	Station From To	Side	Rwy Drain- Pipe Lift			Rwy Drge Pipe Under Dr. Lift			Sta. No. 7 Catch Basins Each	Sta. No. 2 Catch Basins Each	REMARKS
			6"	8"	12"	6"	8"	12"			
1-D	198+00	197+15	Rt.		114				1	Connect to 15" stub.	
2-D	197+25	198+29	Lt.	32			20		1	Drive 198+13	
3-D	197+25	203+46	Rt.						1	Drive 198+13	
4-D	203+46	204+32	Rt.	66			20		1	Drive 198+13	
Total				66	82	114	20	20	2	3	

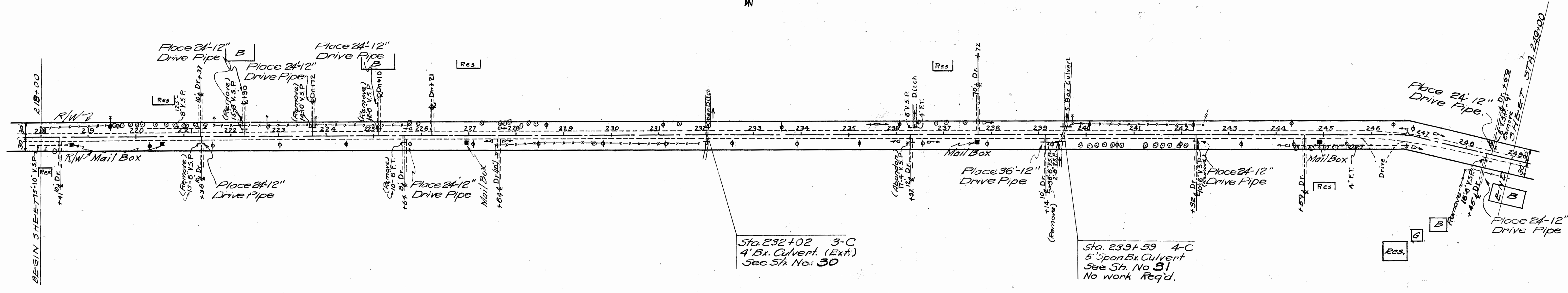
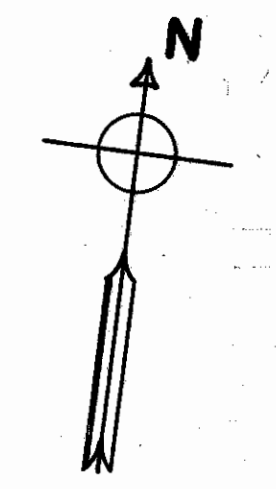
Note - See Sheet No. 13 for Private Drive Quantities.

B.M. Sta. 200+00 Lt.
 S.W. Cor. Sq. Conc. Walk
 E. lev. 585.27



Pi. Sta. 246+75.38
Δ = 13°06' Rt.
E = 5.6' (Shiners)

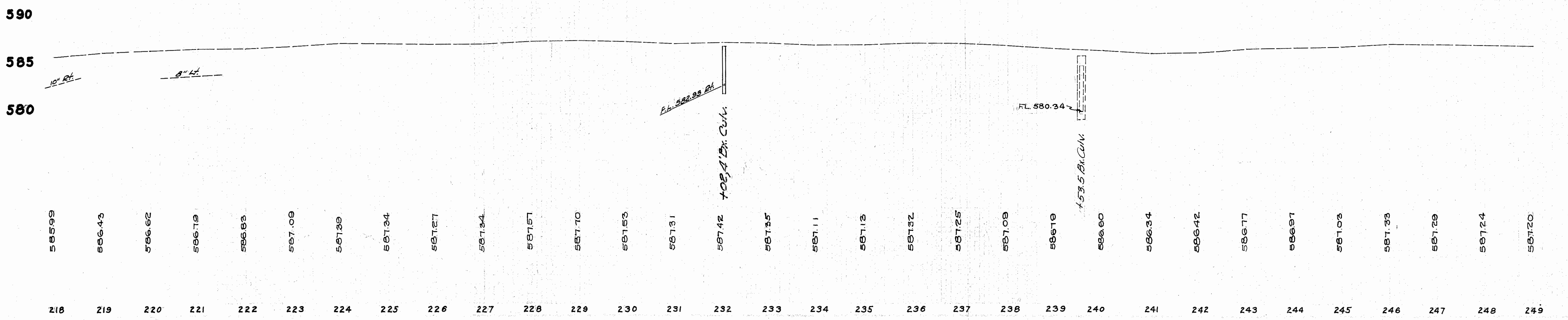
10 OHIO 1940 32
OTTAWA COUNTY
S.H. 440 SECS. F&T



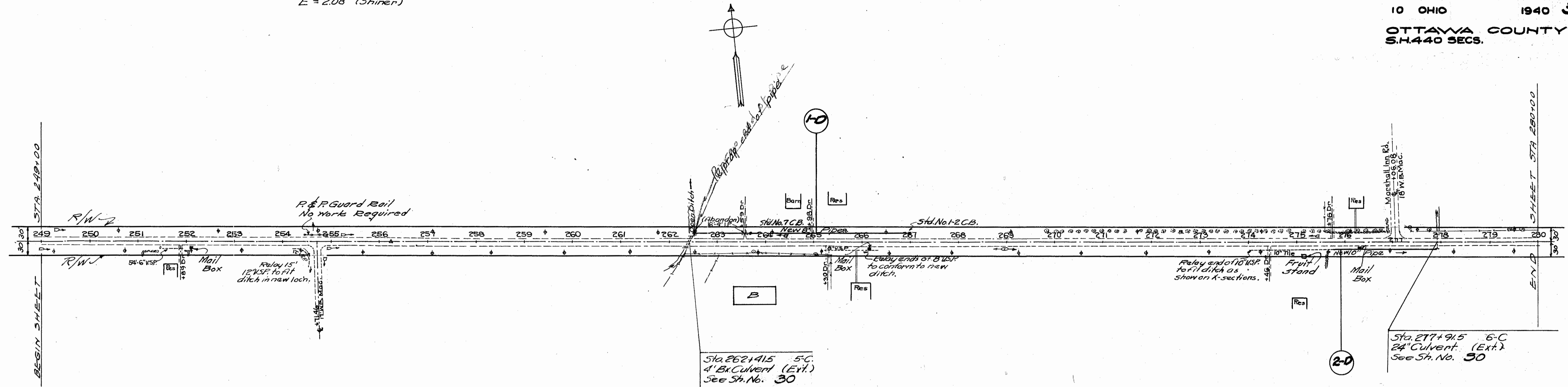
Note - See Sheet No. 13 for Private Drive Quantities.

B.M. Sta. 225+27 Lt. Spike in Power Pole Elev. 587.05

B.M. Sta. 246+75 25' Rt. Spike in 20' Maple Elev. 587.42



PI Sta. 256+26.48
 $\Delta = 0^{\circ} 52' RT$
 $E = 2.08'$ (Shiner)



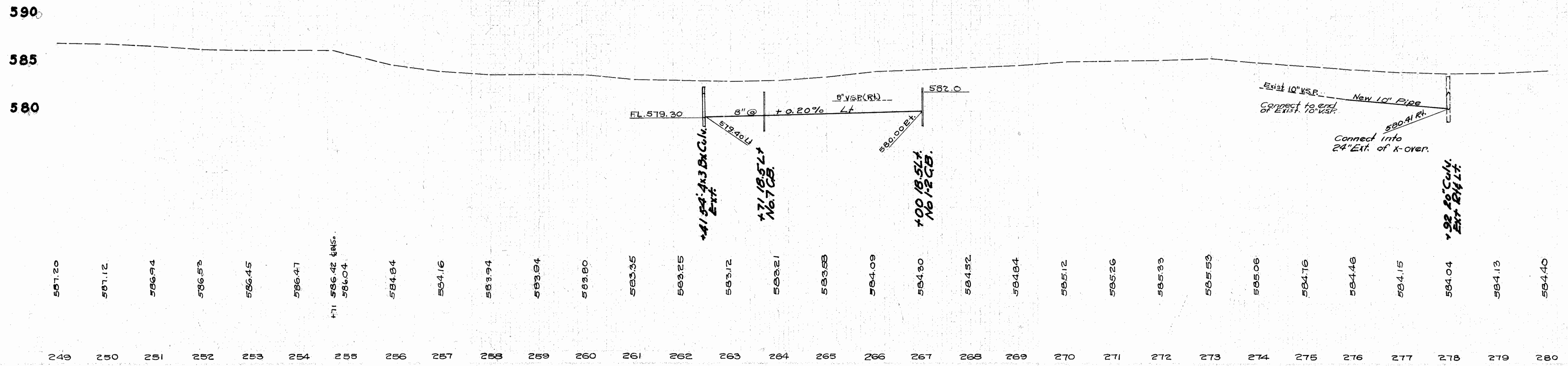
Sta. 262+41.5 5-C.
 4' BK Culvert (Ext.)
 See Sh. No. 30

Sta. 277+91.5 6-C
 24' Culvert (Ext.)
 See Sh. No. 30

Note - See Sheet No. 13 for Private Drive Quantities.

Rept No.	Station From	Station To	Side of Road	Relay Drga Pipe Lin. Ft.	Sta. No. 1 Catch Basin Each	Sta. No. 7 Catch Basin Each	Pipe for Relay Drga Under drives 6" Lin. Ft.	REMARKS
1-D	262+53	267+00	Lt	404	1	1	40	Sh. No. 16 @ Sta. 263+79, 15 @ Sta. 267+00
2-D	273+79	277+91	Rt	212				
TOTALS				404	212	1	1	40

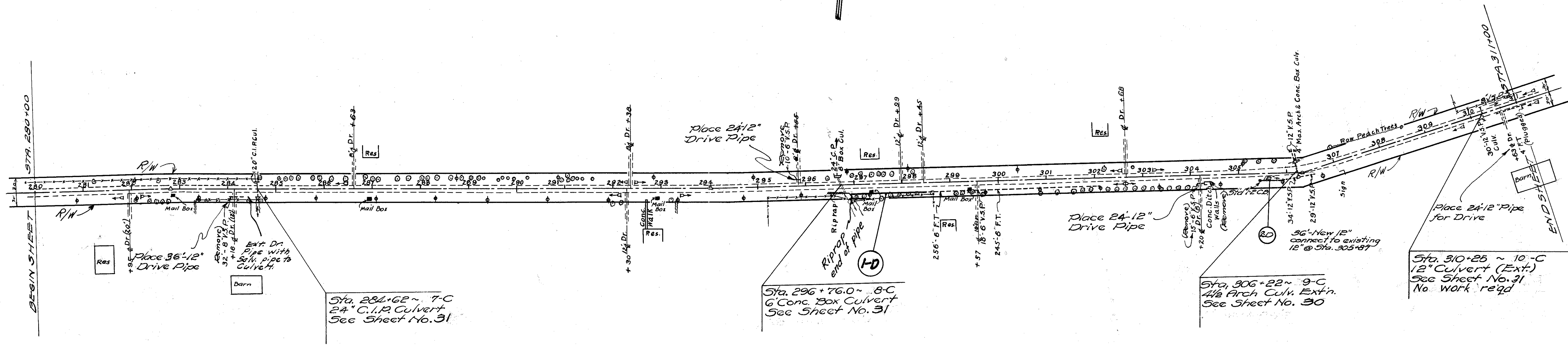
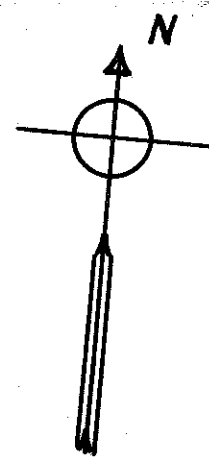
B.M. Sta. 276 +30. 65' Lt
 Top Conc. Walk at Steps
 Elev. 584.76



P.I. = Sta. 282+81.5 (Shiner)
 $\Delta = 1^{\circ}25'27''$
 $E = 0.65'$

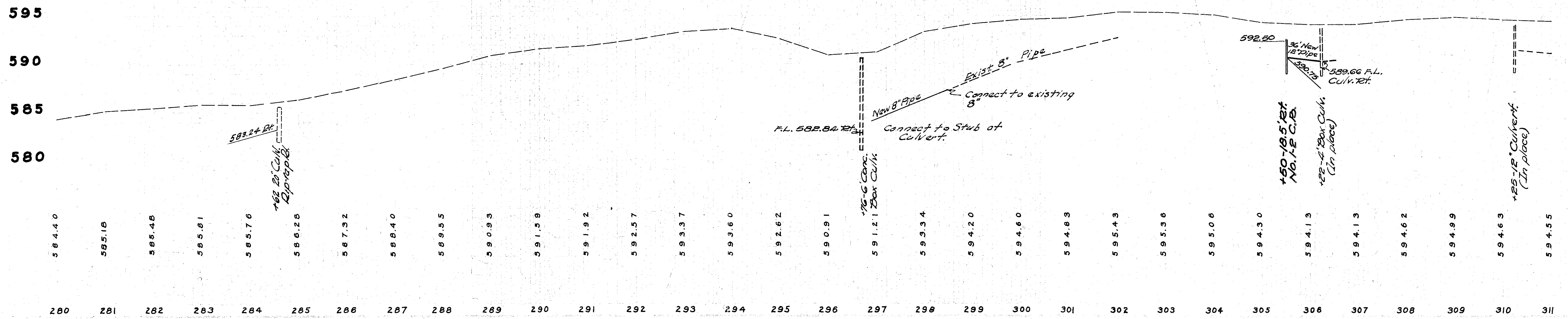
P.I. = 294+02.65
 $\Delta = 1^{\circ}21'17''$
 $E = 0.18'$ (Shiner)

P.I. Sta. 306+31.17
 $\Delta = 16^{\circ}39'17''$
 $E = 8.5'$ (Shiner)



Note~ See Sheet No.13 for Private Drive Quantities.

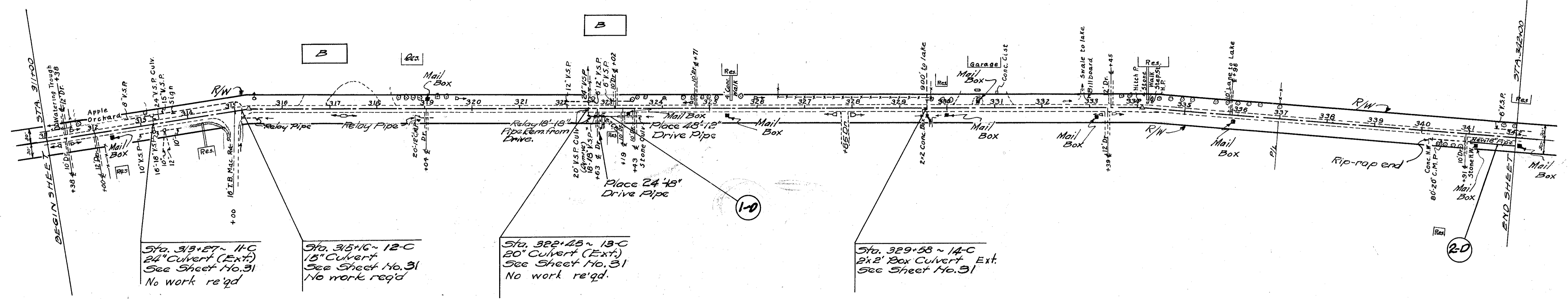
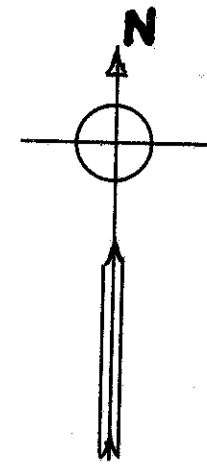
Note: 1-D Sta. 296+95 to Sta. 298+50 Rt; 15'-8" Pipe for Rdwy Drainage
 Note: 2-D, Sta. 305+50 to Sta. 305+87 Rt; 36'-12" Pipe for Roadway Drainage; No.1-C.B. @ 305+50.



P.I. = 315+29.8
 $\Delta = 8^{\circ}40' Lt$
 $E = 3.0'$ (Shiner)

P.I. = Sta. 334+11.0
 $\Delta = 4^{\circ}42' Rt$
 $E = 2.7'$ (Shiner)

10 OHIO 1840 32
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Sta. 313+27 ~ 11-C
 24\"/>

Sta. 315+16 ~ 12-C
 15\"/>

Sta. 322+25 ~ 13-C
 20\"/>

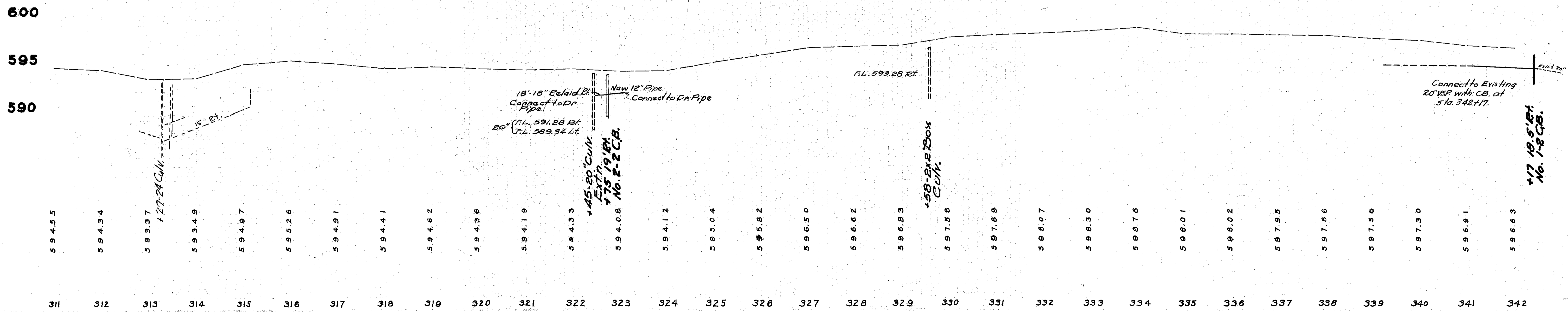
Sta. 329+58 ~ 14-C
 2x2\"/>

Note - see sheet No. 13 for Private Drive Quantities.

D.M. Sta. 312+53 ~ 77' 21\"/>

Ref No	Station From	Station To	Pipe for Drwy Drainage Length	No 1-2 Catch Basins Each	No 2-2 Catch Basins Each	REMARKS
1-D	322+75	323+45	12\"/>			
2-D	341+01	342+17	18\"/>			
TOTALS						
						2-2 C.B. @ Sta. 322+75
						Connect to Exist. Pipe
						1-2 C.B. @ Sta. 342+17

D.M. Sta. 334+15 ~ 16' Lt.
 S.W. Cor. Stopping Stone
 Elev. 599.21



18\"/>

18\"/>

FL. 599.28 Rt.

158-2x2 Box CULV.

Connect to Existing 20\"/>

+17 18.5' 16\"/>

P.I. Sta. 343+49.5
 $\Delta = 1^{\circ} 28' 12''$
 $E = 2.0'$ (Shiner).

P.I. Sta. 362+43.0
 $\Delta = 8^{\circ} 01' 12''$
 $E = 5.15'$ (Shiner)

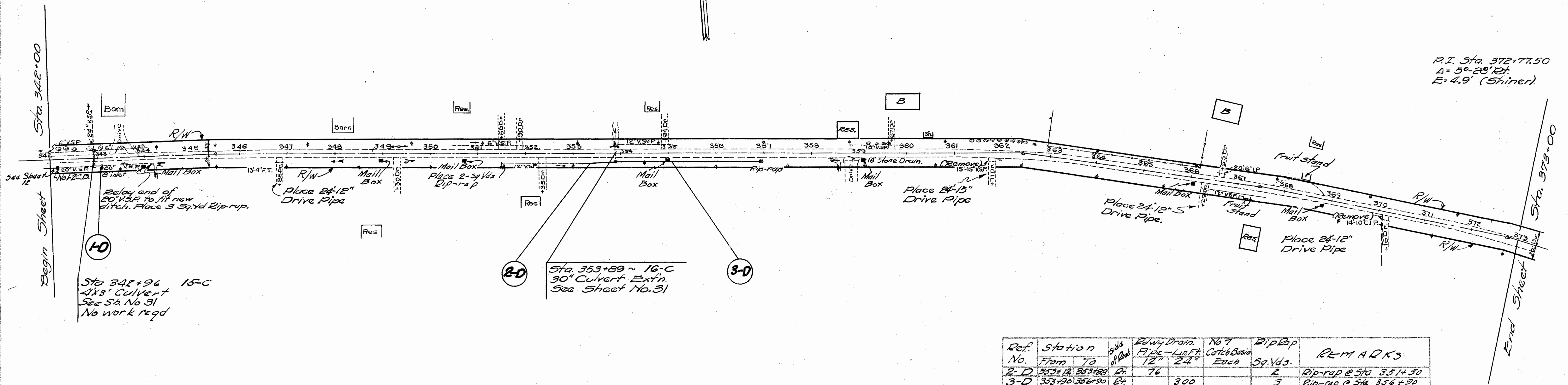
P.I. Sta. 372+77.50
 $\Delta = 3^{\circ} 10' 12''$
 $E = 1.0'$ (Shiner).

FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1940

8
32

OTTAWA COUNTY
 S.H. 440 SECS. F&I

P.I. Sta. 372+77.50
 $\Delta = 5^{\circ} 28' 12''$
 $E = 4.9'$ (Shiner)



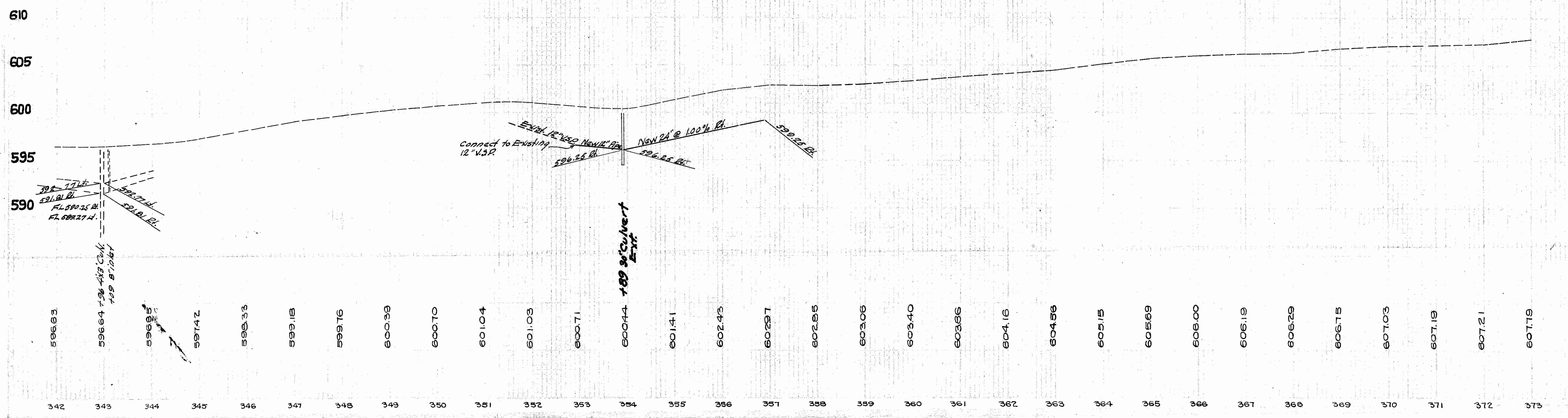
Sta 342+96 15-C
 4x8' Culvert
 See Sh. No. 31
 No work reqd

Sta. 353+89 ~ 16-C
 30" Culvert Extn.
 See Sheet No. 31

Note - See Sheet No. 13 for
 Private Drive Quantities.

Ref. No.	Station From	Station To	Side of Road	Drwy Drain Pipe - Lin. Ft.	No. 7 Catch Basins Each	Dip Rap Sq. Yds.	REMARKS
2-D	353+12	353+89	Rt.	76		2	Rip-rap @ Sta. 351+50
3-D	353+90	356+90	Lt.	300		3	Rip-rap @ Sta. 356+90
1-D	343+09		Lt.		1	5	C.B. @ Sta. 343+09
TOTALS				76	300	1	5

P.M. Sta. 354+60 Lt.
 S.E. cor. First Conc. Step to House.
 Elev. 600.50



596.63 596.64 596.65 597.42 598.33 599.18 599.76 600.39 600.70 601.04 601.03 600.71 600.44 601.41 602.43 602.97 602.85 603.06 603.40 603.36 604.16 604.56 605.15 605.69 606.00 606.19 606.29 606.75 607.03 607.19 607.21 607.19

342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373

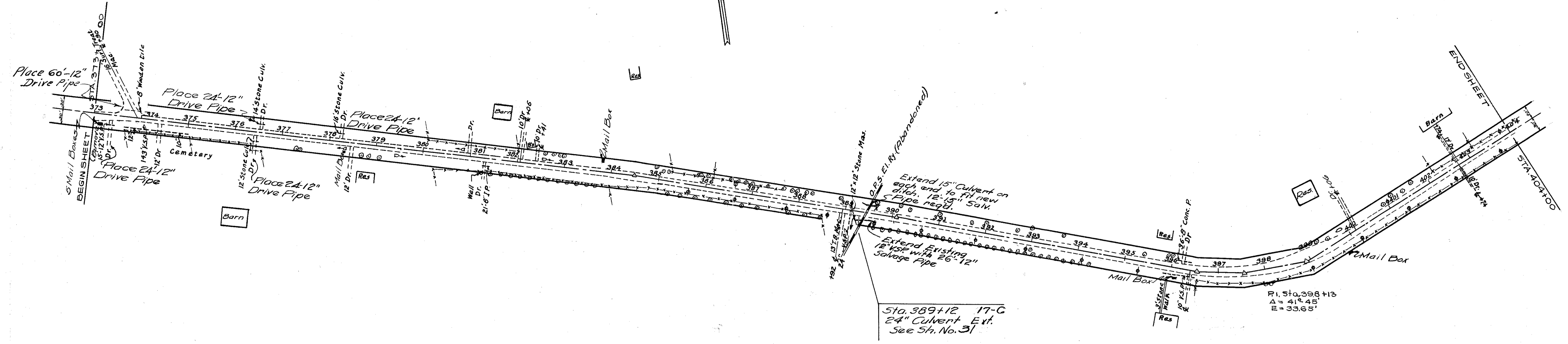
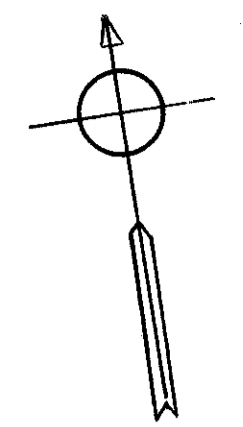
PI. Sta. 384+48.1
 $\Delta = 2^{\circ}00'$ Rt.
 E = (Shiner)

PI. Sta. 390+09
 $\Delta = 0^{\circ}43'$ Lt.
 E = 0.0 (Shiner)

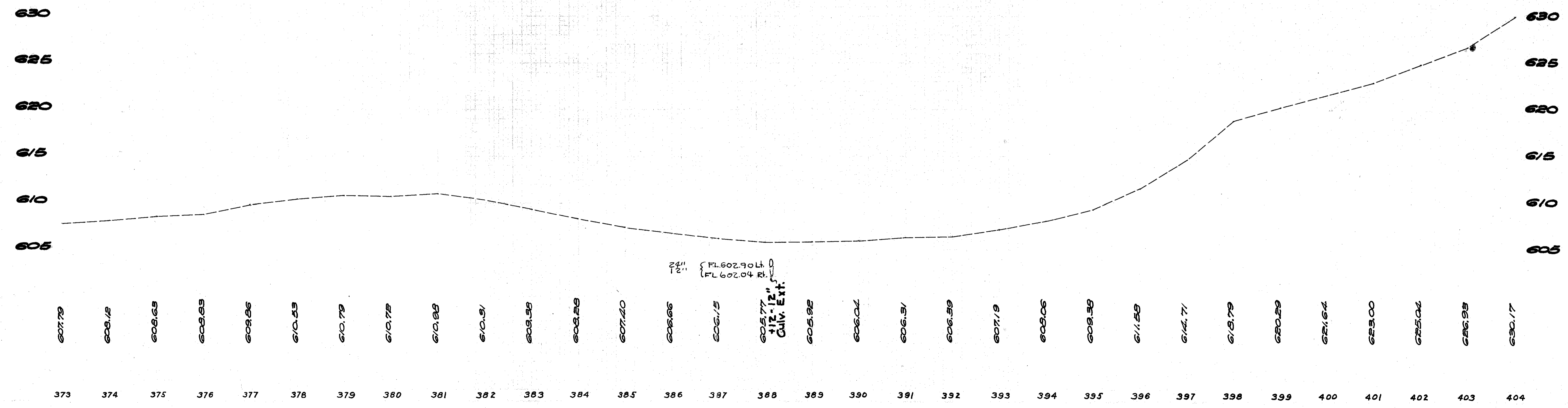
PI. Sta. 396+55.7
 $\Delta = 8^{\circ}34'$ Lt.
 E = 2.1' (Shiner)

PI. Sta. 397+56.5
 $\Delta = 11^{\circ}31'$ Lt.
 E = 3.1 (Shiner)

PI. Sta. 398+89.95
 $\Delta = 21^{\circ}47'$ Lt.
 E = 6.9' (Shiner)



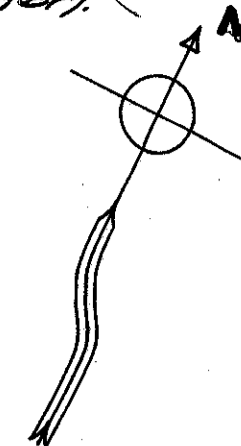
Note - See Sheet No. 13 for Private Drive Quantities.



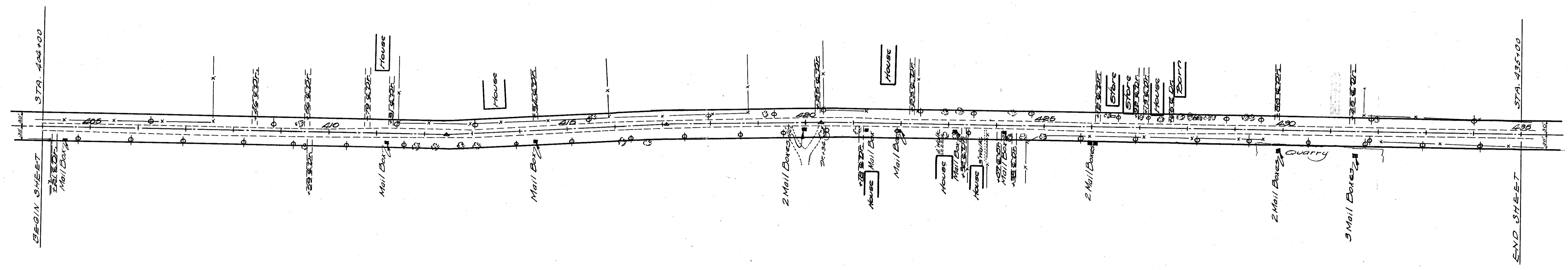
P.I. Sta. 412+45.8
 $\Delta = 3^{\circ} 57' L$
 $E = 2.9'$ (Shiner)

P.I. Sta. 417+0.8
 $\Delta = 1^{\circ} 52' R$
 $E = 0.07'$ (Shiner)

P.I. Sta. 420+32.4
 $\Delta = 1^{\circ} 35' R$
 $E =$ (Shiner)

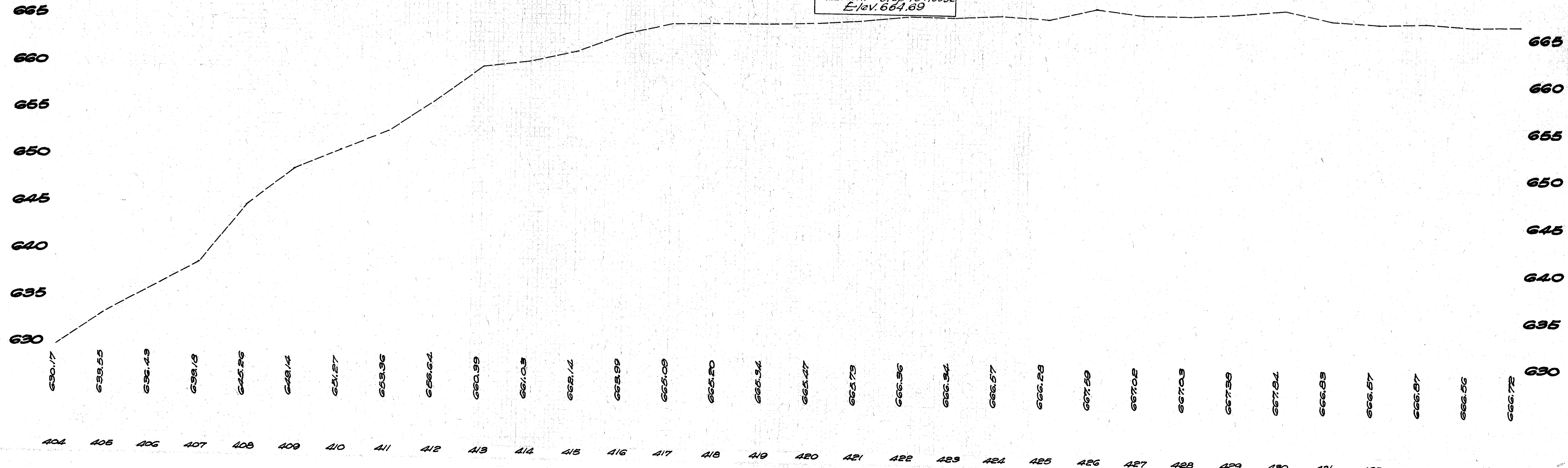


10 OHIO 1940 32
 OTTAWA COUNTY
 S.H. 440, SECS. F & I



Note - See Sheet No. 13 for Private Drive Quantities.

B.M. Sta. 421+92 L.
 N.E. Cor. 1st Step to House
 Elev. 664.69



P.I. = Sta. 436+48.7
 $\Delta = 22^{\circ}55'R.$
 $E = 7.5'$

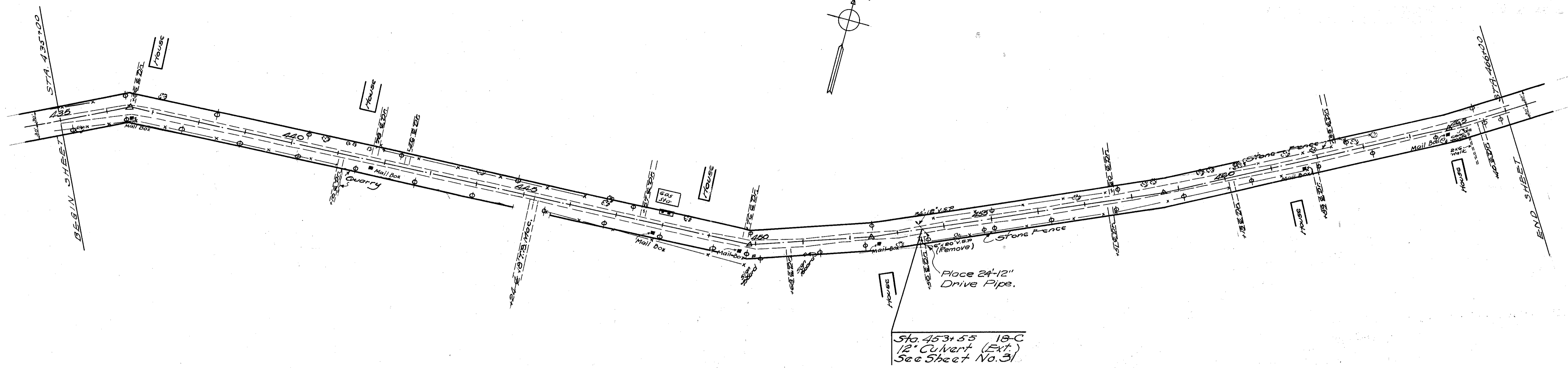
P.I. = Sta. 449+86.8
 $\Delta = 16^{\circ}04'L$
 $E = 1.6'$

P.I. Sta. 452+42.7
 $\Delta = 5^{\circ}20'L$
 $E = 4.95'$

P.I. Sta. 458+65.9
 $\Delta = 4^{\circ}40'L$
 $E = 6.4'$

P.I. Sta. 464+83.8
 $\Delta = 4^{\circ}17'L$
 $E = 3.3'$

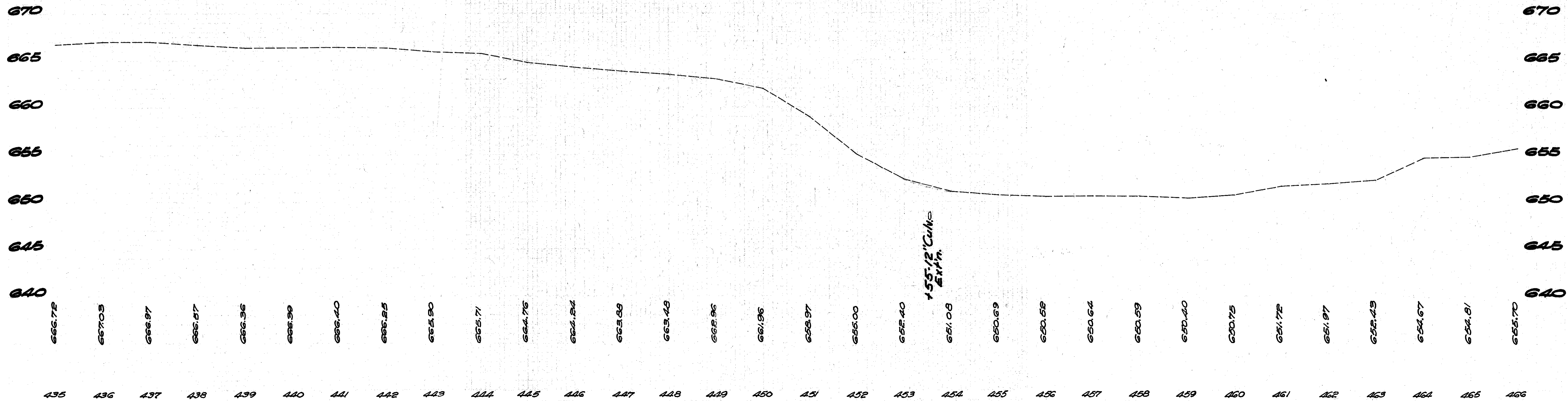
10 OHIO 11
 1940 32
 OTTAWA COUNTY
 S.H. 440, SECS F&I



Note - See Sheet No. 13 for Private Drive Quantities.

B.M. Sta. 442+33 Lt. Boat Spk. in Power Pole Elev. 666.33

B.M. Sta. 465+12 Rt. NW Cor. of Conc. Post E. side Walk Elev. 657.00

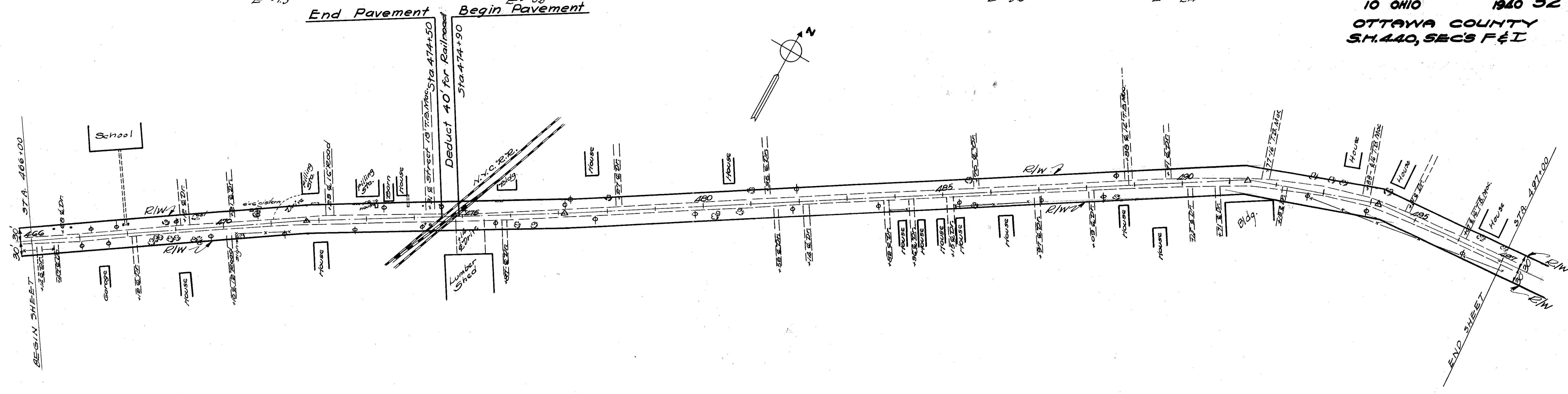


P.I. Sta. 471+73.85
 $\Delta = 2^{\circ}28' R$
 $E = 1.3'$

P.I. Sta. 477+11.6
 $\Delta = 1^{\circ}21' L$
 $E = 0.8'$

P.I. Sta. 491+37
 $\Delta = 13^{\circ}01' R$
 $E = 5.8'$

P.I. Sta. 494+16.3
 $\Delta = 14^{\circ}51' R$
 $E = 2.4'$



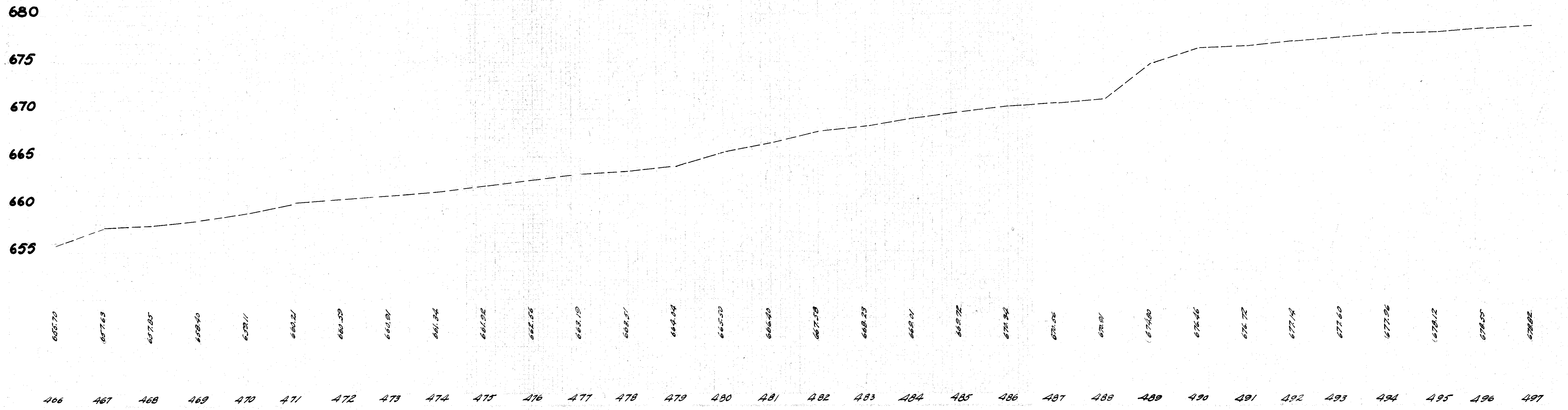
Note - See Sheet No. 13 for Private Drive Quantities

B.M. Sta. 472+90 Lt.
 S.E. Cor. Gas Pump Island
 Elev. 662.40

B.M. Sta. 484+69 Rt.
 N.W. Cor. Conc. Well base
 Elev. 670.17

B.M. Sta. 489+70 Rt.
 N.E. Cor. 1st Step - Brick Ho.
 Elev. 676.46

B.M. Sta. 496+78 Lt.
 S.E. Cor. Conc. Walk
 Elev. 674.23

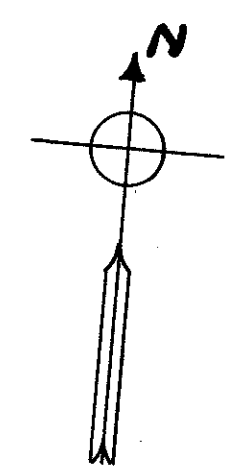


P.I. Sta. 498+24.05
 $\Delta = 7^{\circ}-05' \text{ Lt}$
 $E = 3.8' \text{ (Shiner)}$

P.I. Sta. 501+25.6
 $\Delta = 9^{\circ}-46' \text{ Et}$
 $E = 3.6' \text{ (Shiner)}$

P.I. Sta. 504+43.65
 $\Delta = 10^{\circ}-40' \text{ Lt}$
 $E = 4.8' \text{ (Shiner)}$

P.I. Sta. 507+27.2
 $\Delta = 6^{\circ}-42' \text{ Et}$



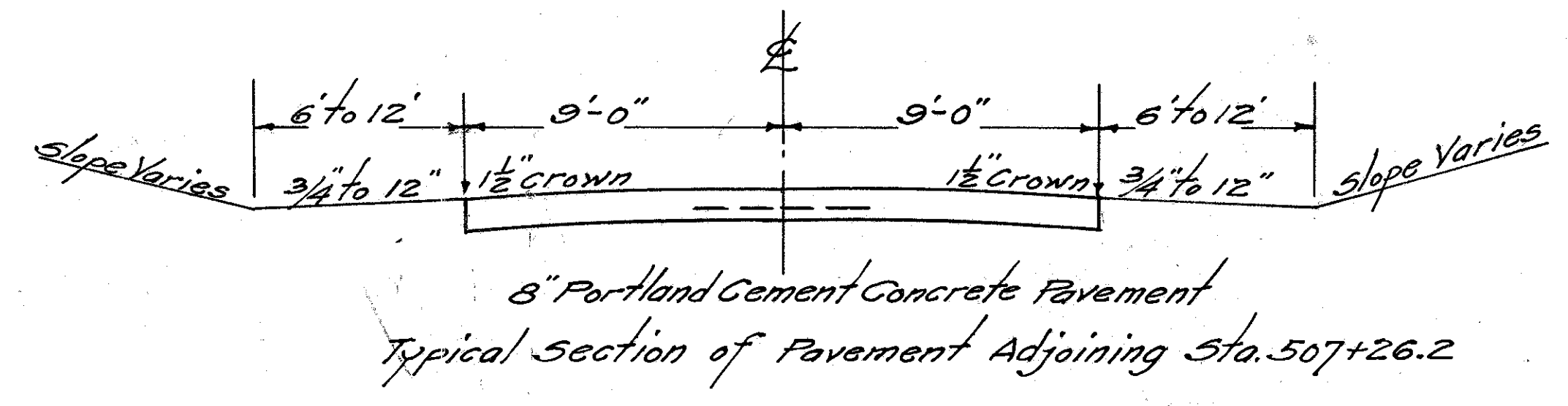
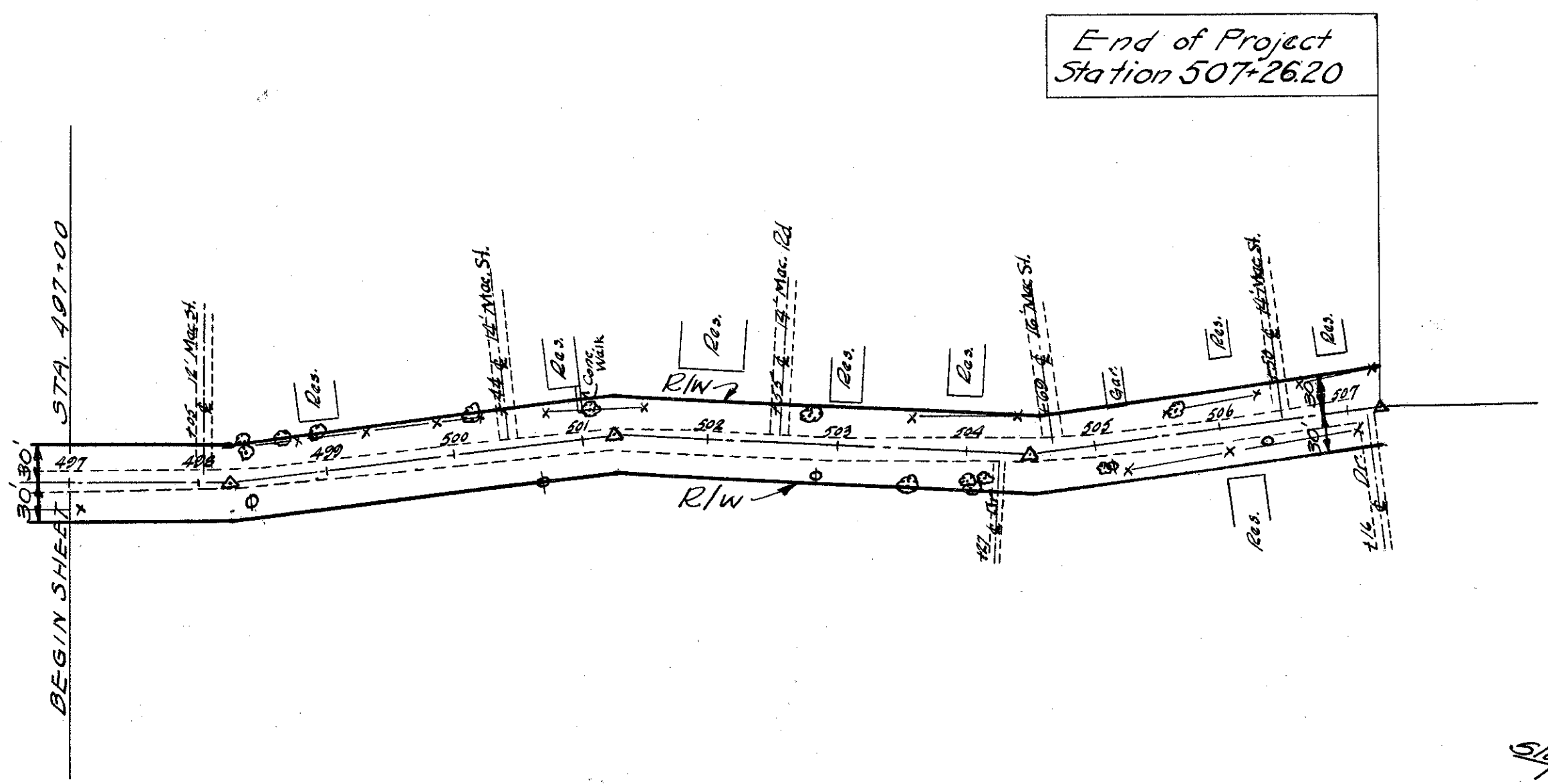
ROADWAY DRAINAGE (Not tabulated)

E-12 { 440'-(Various sizes) Salvage Pipe relaid to repair existing drainage and extend ends to new ditch alignment where necessary.

I-6 { 300'-(Various sizes) Roadway Drainage Pipe removed and relaid to meet new ditch alignment where necessary.

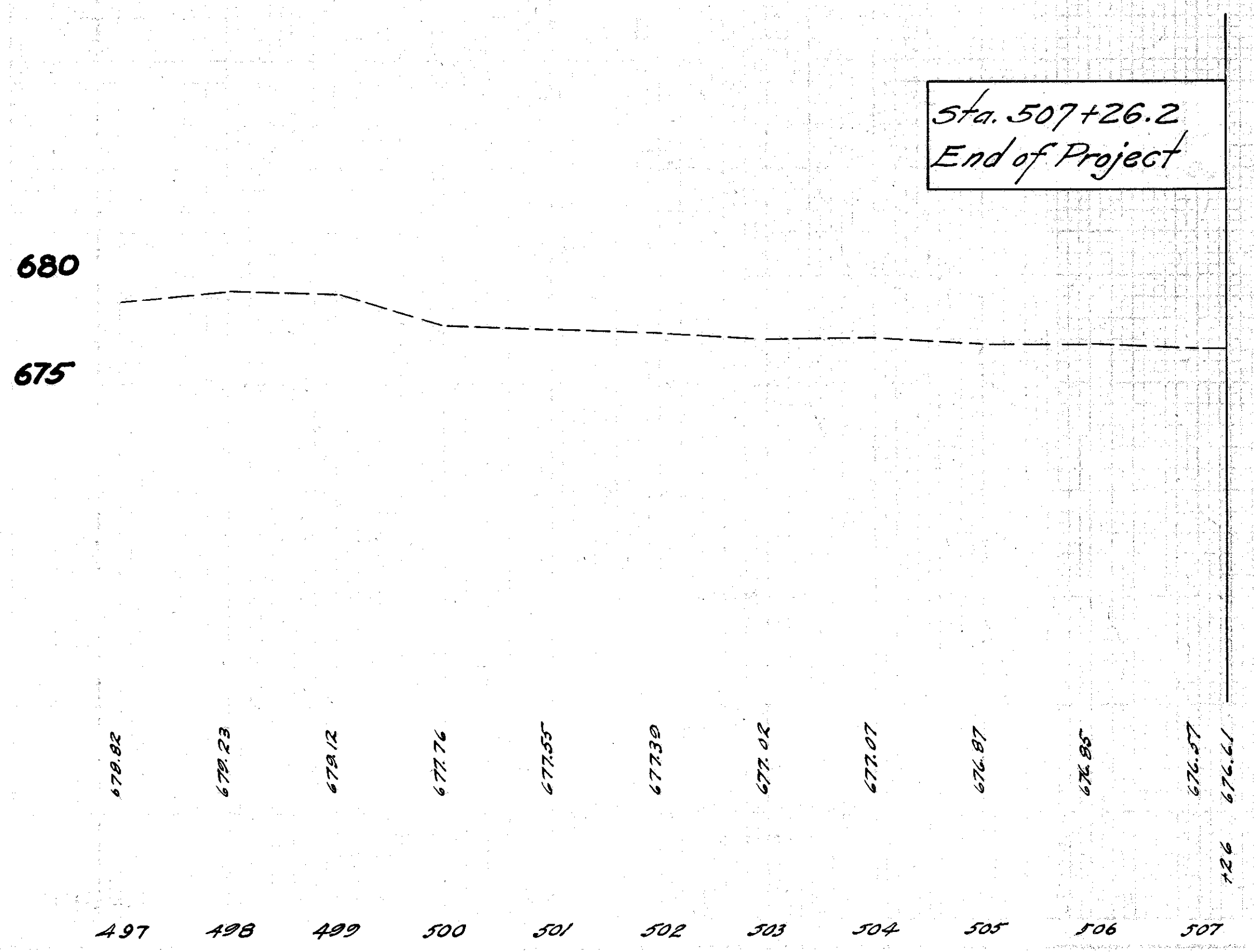
25 Sq.Yds. Rip-rap to be used at ends of existing drains where necessary Carried to Sheet No. 31

10 OHIO 1940
OTTAWA COUNTY
 SH.440 SEC'S. F&I



D.M. Sta. 504+20 Lt.
 S.E. Cor. Top stop E. Side - 16
 Elev. 671.34

Sta. 507+26.2
 End of Project



PRIVATE DRIVE & MAIL BOX APPROACH

Station	Side of Road	Pipe for Drives-Lin.Ft.			Pipe Removed for Reuse-Lin.Ft.				12" Pipe Drives I-17		Cu. Yds.					
		12	15	18	6"	8"	10"	12"	15"	18"		12"	18"			
198+13	Lt							23				2				
199+36	Lt											2				
204+21	Rt							16				2				
204+30	Lt							11				2				
210+23	Lt							12				2				
221+19	Rt									16		2				
221+38	Lt							15				2				
222+30	Lt								15			2				
223+22	Lt									14		2				
225+10	Lt							12				2				
225+62	Rt							10				2				
239+14	Rt							36	2			2				
242+32	Rt							10				2				
248+45	Rt							16				2				
248+59	Lt							9				2				
284+16	Rt							36	32			2				
295+85	Lt							10				2				
304+20	Rt							15				2				
310+63	Rt											2				
319+19	Rt									20	20	2				
322+63	Rt							24			18	2				
323+31	Rt							48				2				
346+85	Rt							24				2				
361+77	Rt										15	2				
366+29	Rt							24				2				
370+16	Rt									14		2				
373+36	Rt										15	2				
376+42	Rt							24				2				
376+55	Lt							24				2				
378+08	Lt							24				2				
453+50	Rt							20				2				
373+90	Lt							60				10				
Various Sta												122				
TOTALS		708	24	24				192	72	44	35	15	18	20	18	194

E-12 Total From Private Drives 386
 From Roadway Drainage (above) 740
 Total Pipe Removed for Reuse 1126

I-6 Relaid for private drives 38
 Relaid for roadway drainage 740