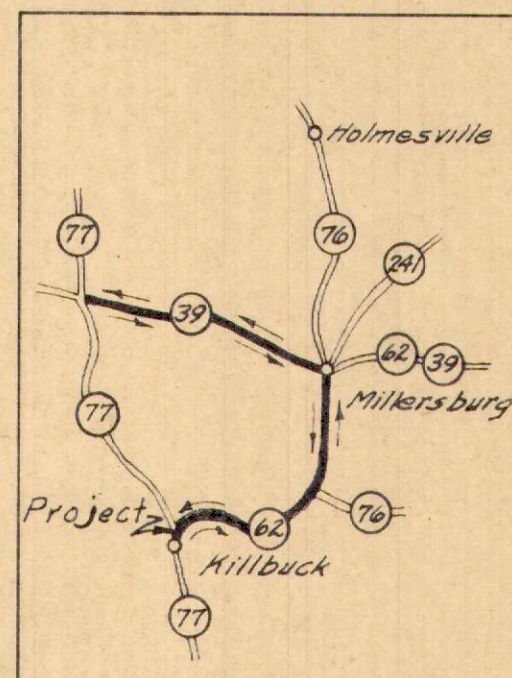


STATE OF OHIO
DEPARTMENT OF HIGHWAYS
HOL-77-4.32
HOLMES COUNTY
KILLBUCK TOWNSHIP

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

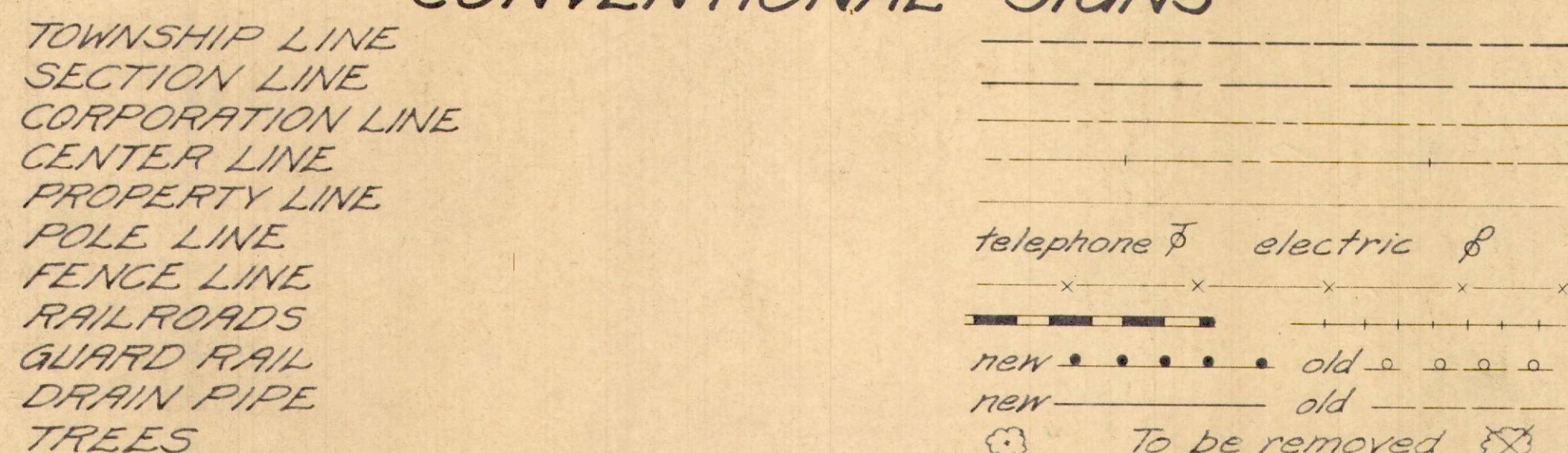
1
29

HOL-77-4.32



MAP OF DETOUR
Scale = 1" = 4 Miles

CONVENTIONAL SIGNS



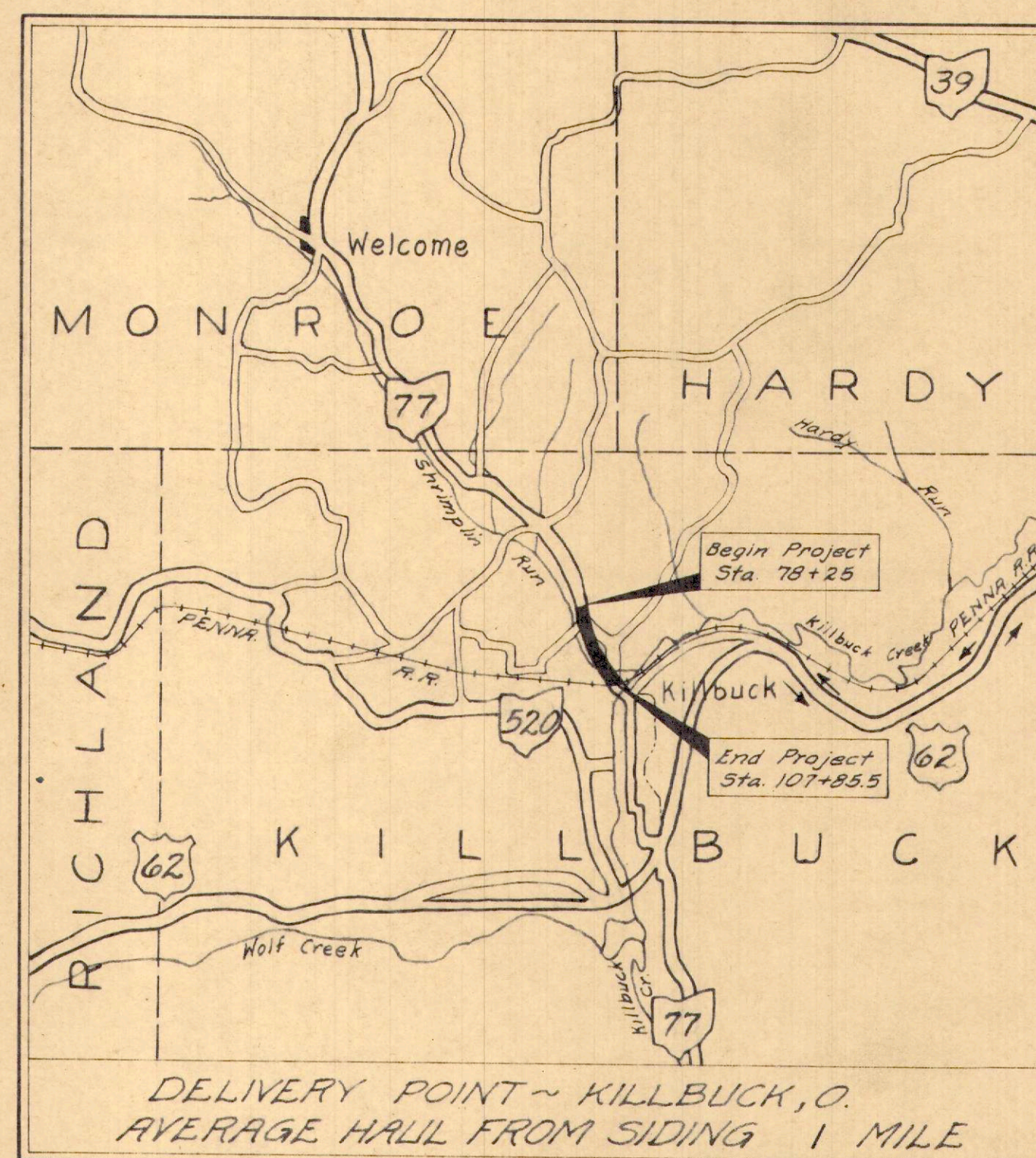
INDEX OF SHEETS

TITLE PAGE	SHEET	1
TYPICAL SECTION	"	2
GENERAL SUMMARY	"	3
CURVE TABLE AND GENERAL NOTES	"	4
PLAN AND PROFILE	"	5-8
CROSS SECTIONS	"	9-16
APPROACH DETAILS	"	17-20
STRUCTURES, 20 FT. SPAN AND UNDER	"	21-23
CHANNEL CHANGE	"	24-25
STRUCTURE OVER 20 FT. SPAN	"	26-27
RIGHT OF WAY	"	28-29

LINE DATA

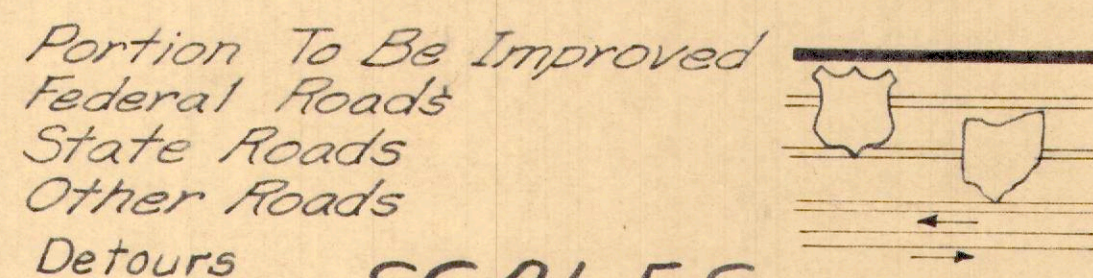
BEGIN PROJECT STA. 78+25
END PROJECT STA. 107+85.5
NO ADDITIONS OR DEDUCTIONS
NET LENGTH OF PROJECT 2,960.5 LIN. FT. OR 0.560 MILE

BEGIN WORK STA. 77+50
END WORK STA. 107+85.5
LENGTH OF WORK 3035.5 LIN. FT.
ROAD APPR. LT. STA. 101+00 390 LIN. FT.
NET LENGTH OF WORK 3425.5 LIN. FT. OR 0.648 MILE



LOCATION PLAN

SCALE: 1" = 1 MILE



SCALES

Plan 1" = 50'
Profile ~ Horizontal 1" = 50'
Profile ~ Vertical 1" = 10'
Cross Sections 1" = 10'

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

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

I hereby approve these plans and declare that the making of this improvement will require the closing to traffic of the highway and that detours will be provided as indicated on the plans.

Approved: Wm. P. McKenna
Date: 3-20-61 Division Deputy Director

Approved: _____
Date: _____ Engineer of Bridges

Approved: _____
Date: _____ Engineer of Location and Design

Approved: _____
Date: _____ Deputy Director of Design and Construction

Approved: _____
Date: _____ Deputy Director of Right of Way

Approved: _____
Date: _____ Deputy Director of Planning and Programming

Approved: _____
Date: _____ First Assistant Director

Approved: _____
Date: _____ Director of Highways

S.R.60

FILE NO.	HOLMES COUNTY HOL-77-4.32
Date of Letting	196
Contract No.	

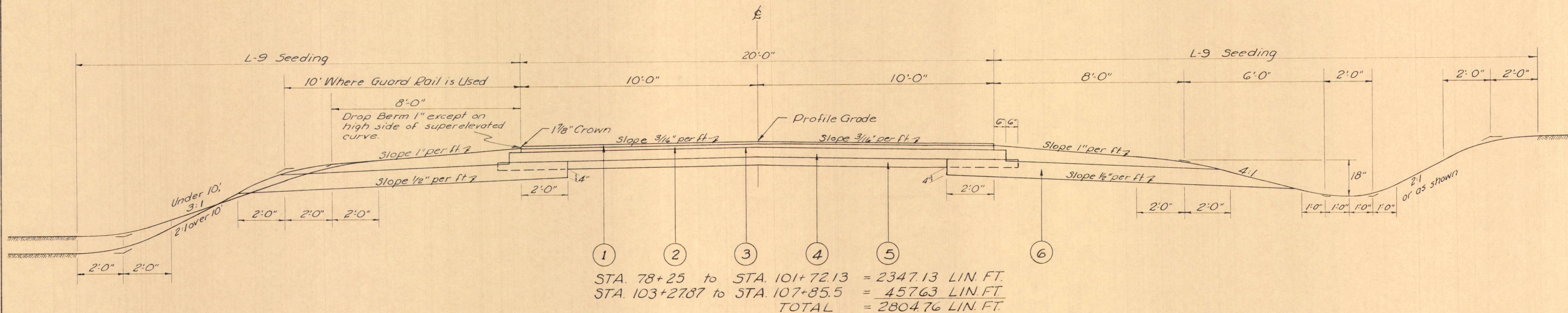
STANDARD DRAWINGS			
DR-1	1-3-55	RI-1	7-15-58
G-7.07	6-1-56	AS-1-54	12-1-54
HW-E	11-15-60	T-35	1-2-56
I-15 N ^o 1	11-15-60	I-1	11-15-60
I-15 N ^o 2A	8-17-60	CS-1-54 (Sh 142)	7-16-56
L-1	4-1-50	A-1-54	12-1-54
L-3	4-1-50	P-1-54	2-2-59
L-3-A	4-1-50		

SUPPLEMENTAL SPECIFICATIONS	

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____
DIVISION ENGINEER DATE

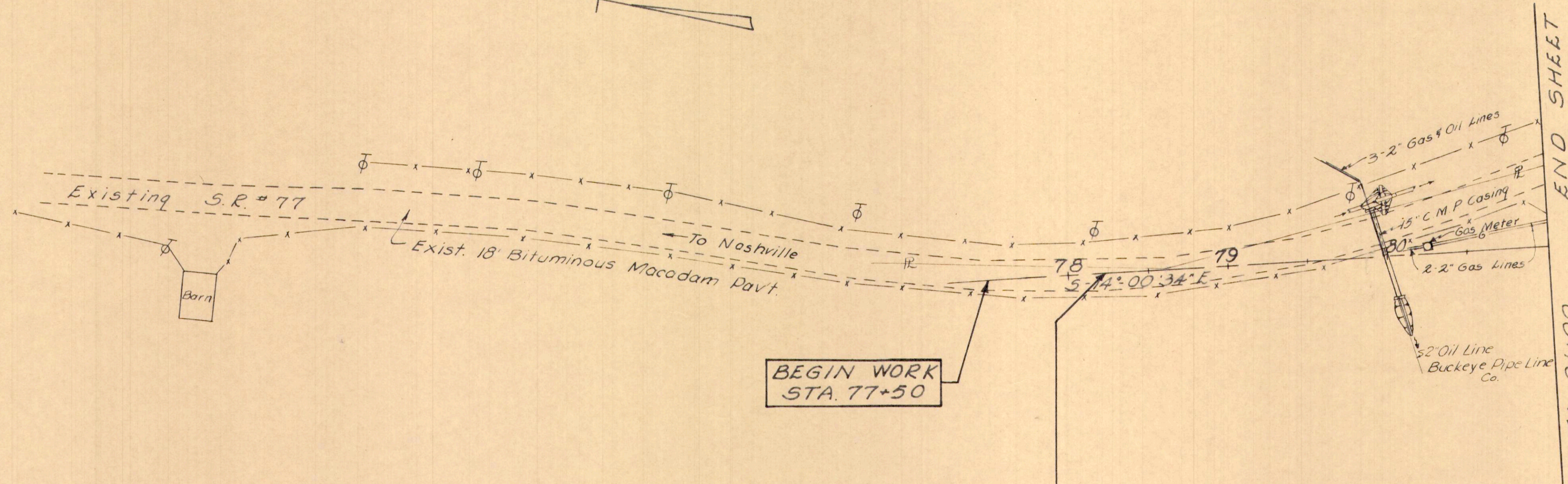
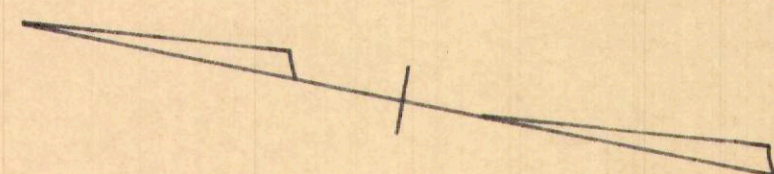
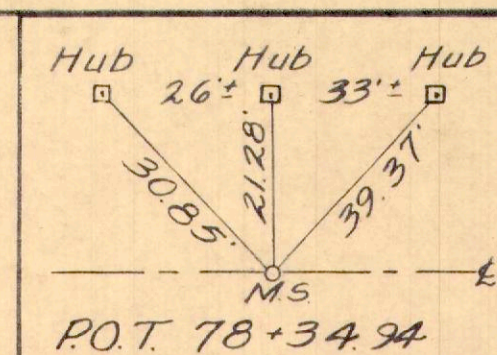
TYPICAL SECTION TYPE T-35 ON B-19 SCALE 1"=2'-0"



STA. 78+25 to STA. 101+72.13 = 2347.13 LIN. FT.
 STA. 103+2787 to STA. 107+85.5 = 457.63 LIN. FT.
 TOTAL = 2804.76 LIN. FT.

-KEY-

- ① — Item T-35 1 1/4" Asphaltic Concrete Surface Course, Type "C" (85-100)
- ② — Item B-35 1 3/4" Asphaltic Concrete Leveling Course (85-100)
- ③ — Item T-30 Bituminous Prime Coat, Sec. M-5.7, RT-2 or RT-3, applied at the rate of 0.4 gal. per sq. yd.
- ④ — Item B-19 5" Aggregate Base Course
- ⑤ — Item I-22 4" Subbase
- ⑥ — Item I-9 Stone Underdrains, No 2.



BEGIN WORK
STA. 77+50

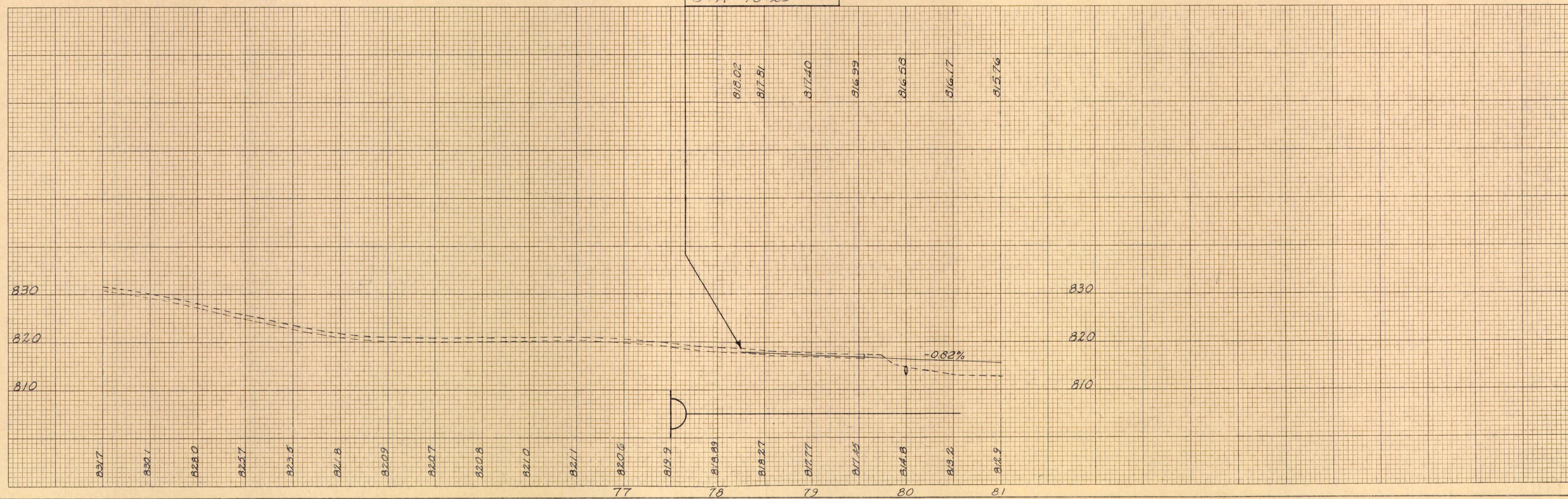
S.L.M. 4.93 Back=
S.L.M. 4.88 Ahead

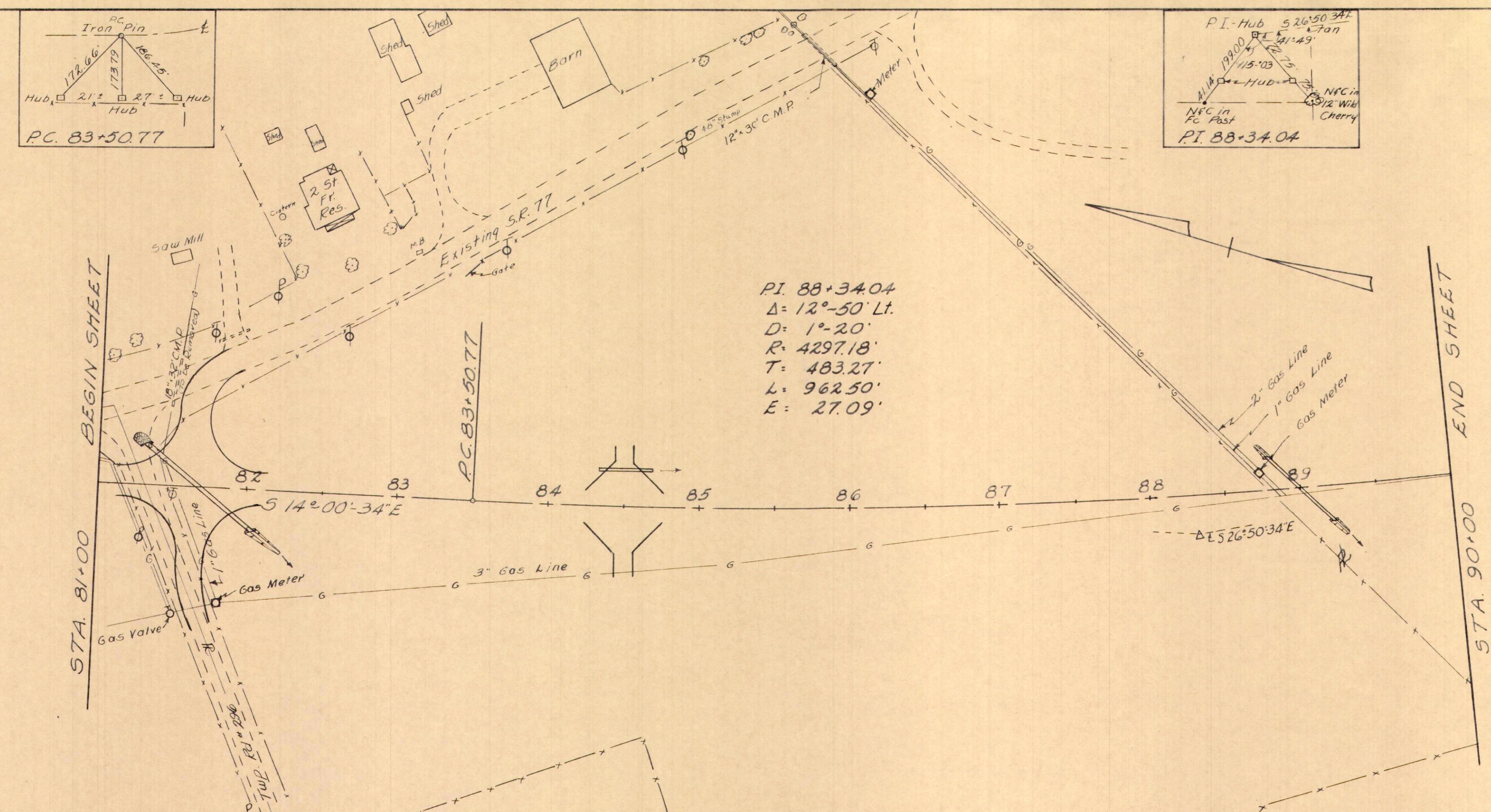
BEGIN PROJECT
STA 78+25

DRAINAGE					
Station		Side	See Sheet	New Work	
From	To			Type	Size Length
79+99		Lt&Rt	21	Pipe 24"	52'
Totals					

MISCELLANEOUS			
Station		Side	Standard Man. Assy. Each
From	To		
79+00		Lt	1
Total			

PAVEMENT REMOVAL			
Station		Side	Sq. Yds.
From	To		
80+13	81+00	Lt	101
Total			



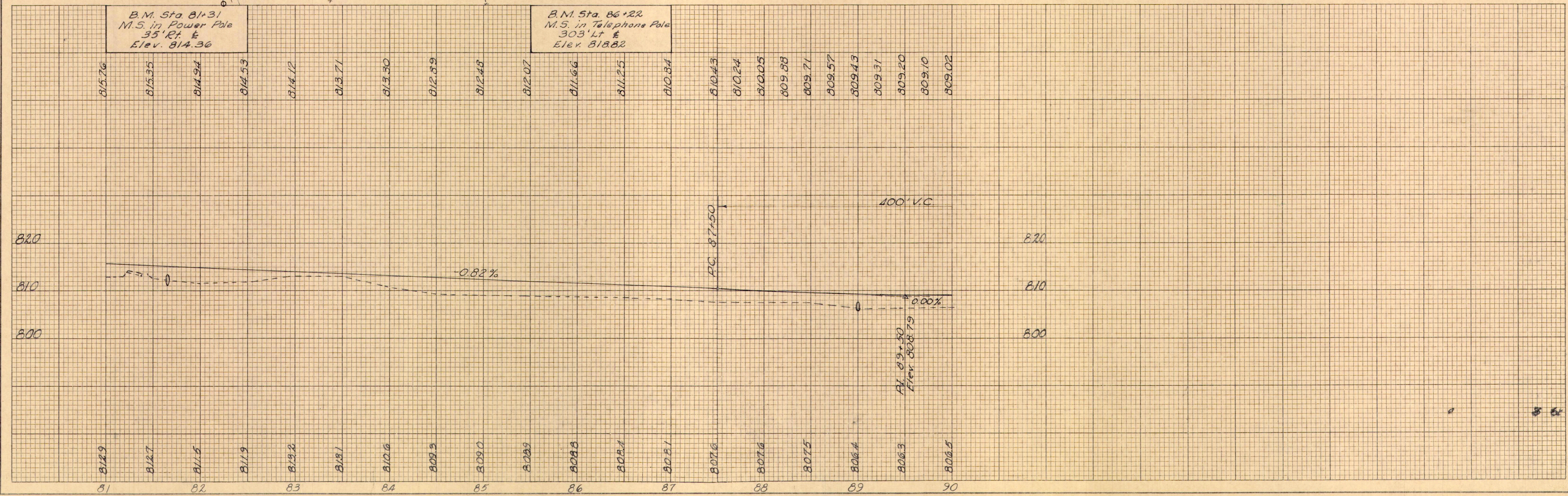


Station	Side	See Sheet	B-19 Aggr. Cu. Yds.	Pipe New 12" CI F.I. Lin. Ft.
81+63.50	Lt.	17		
81+63.50	Rt.	17		
84+50	Lt.	10	15	36
84+50	Rt.	10	16	
Totals			31	36

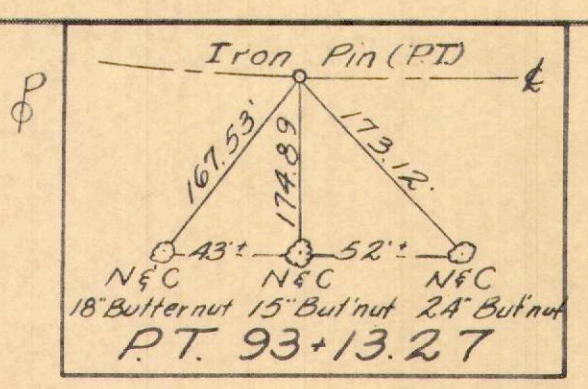
Station	Side	See Sheet	New Work			Pipe Remd. Over 15" (Lin. Ft.)
From To	£		Type	Size	Length	
81+50	Lt.	6				32
81+65	Lt. & Rt.	21	Pipe	30"	90'	
89+00	Lt. & Rt.	22	Pipe	24"	62'	
Totals						32

Station	Side	Standard Man Ass'y Each
From To	£	
83+50.77	£	1
88+00	£	1
Total		2

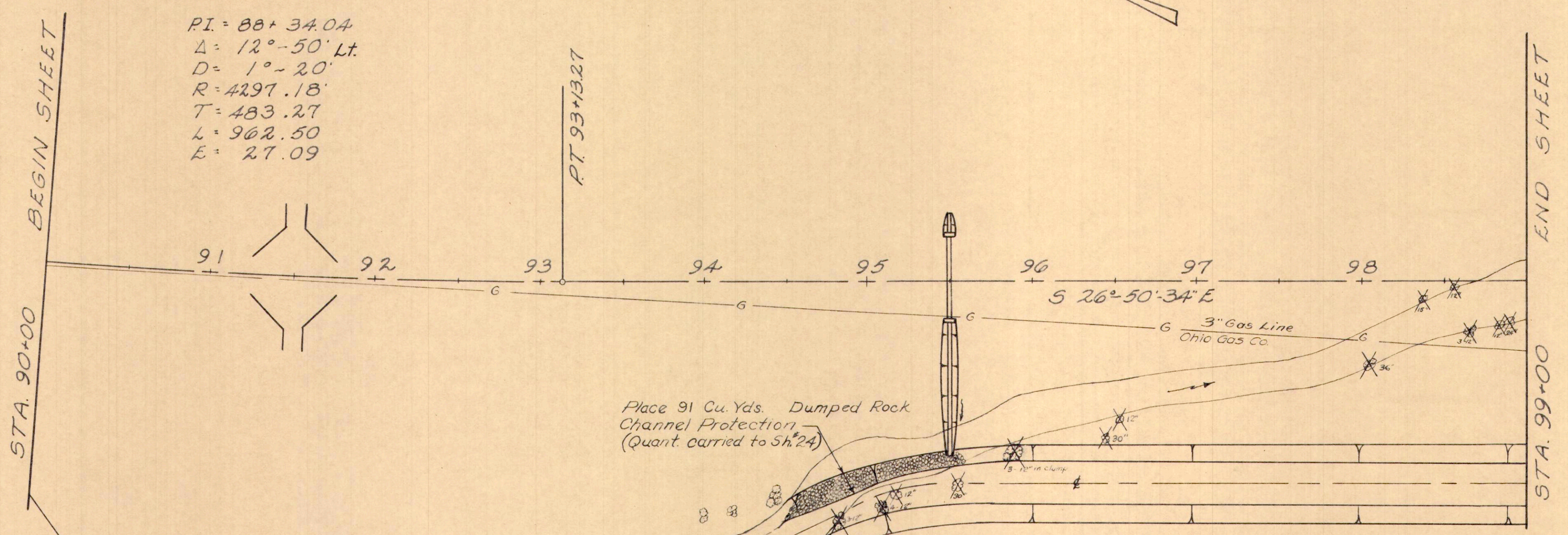
Station	Side	Sq. Yds.
From To	£	
81+00	81+60 Lt.	106
Total		106



HOL-77-4.32



O Oil Well
 PI = 88+34.04
 Δ = 12°-50' Lt.
 D = 1°-20'
 R = 4297.18'
 T = 483.27
 L = 962.50
 E = 27.09

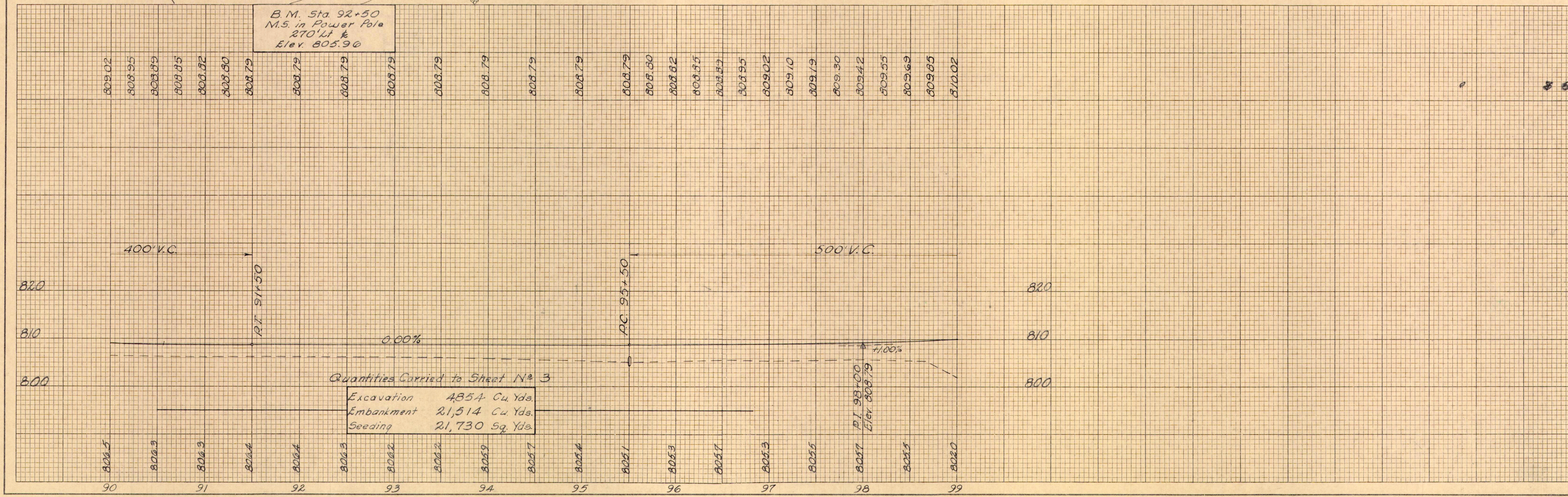


APPROACHES			
Station	Side	See Sheet	B-19 Aggr. Cu. Yds.
91+50	Lt.	11	15
91+50	Rt.	11	16
Totals			31

DRAINAGE					
Station	Side	See Sheet	New Work		
From	To	Sheet	Type	Size	Length
95+50		Lt&Rt	22	Pipe	24" 54'
Totals					

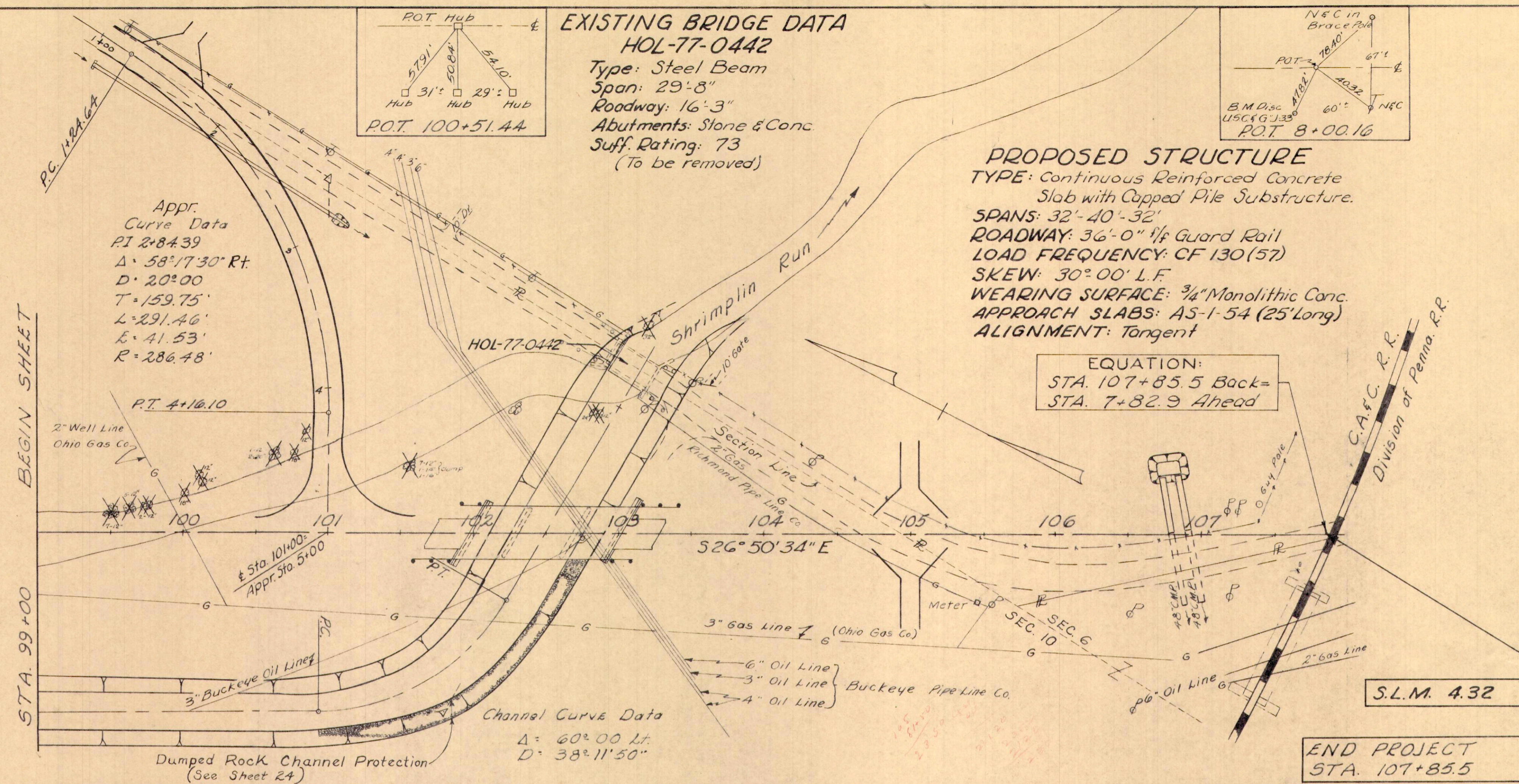
MISCELLANEOUS						
Station	Side	See Sheet	Standard Mon. Assy. Each	TREE REMOVAL		
From	To	Sheet		12"-18"	18"-24"	30"-36"
93+13.27		7	1			
98+00		7	1			
94+50	99+00	Rt.	7	18	1	3
Totals			2	18	1	3

B.M. Sta. 92+50
 M.S. in Power Pole
 270' Lt. &
 Elev. 805.90



EXISTING BRIDGE DATA
HOL-77-0442
 Type: Steel Beam
 Span: 29'-8"
 Roadway: 16'-3"
 Abutments: Stone & Conc
 Suff. Rating: 73
 (To be removed)

PROPOSED STRUCTURE
 TYPE: Continuous Reinforced Concrete
 Slab with Capped Pile Substructure.
 SPANS: 32'-40'-32'
 ROADWAY: 36'-0" 1/2 Guard Rail
 LOAD FREQUENCY: CF 130(57)
 SKEW: 30° 00' L.F.
 WEARING SURFACE: 3/4" Monolithic Conc.
 APPROACH SLABS: AS-1-54 (25' Long)
 ALIGNMENT: Tangent



APPROACHES

Station	Side	See	B-19
	£	Sheet	Aggr. Cu Yds.
101+00	Lt.	19	
Appr.-1+50	Lt.	20	13
105+00	Lt.	15	19
105+00	Rt.	15	20
Total			52

DRAINAGE

Station	Side	See	New Work	
From To	£	Sheet	Type	Size Length
2+32 (Appr. Sta)	Lt.	23	Pipe	36" 196'
106+85.27	Lt.	23	Twin Pipes	48" 40'
Totals				

GUARD RAIL

From Sta	To Sta.	Side	New Lin. Ft.	Remove Lin. Ft.
101+91.64	103+41.64*	Lt.	44.26	
101+58.36	103+08.36*	Rt.	44.26	
102+58	103+39	Lt.		72.5
Totals			88.52	72

* 105.74 Lin. Ft. deducted for Bridge Railing on each side.

APPROACH SLABS

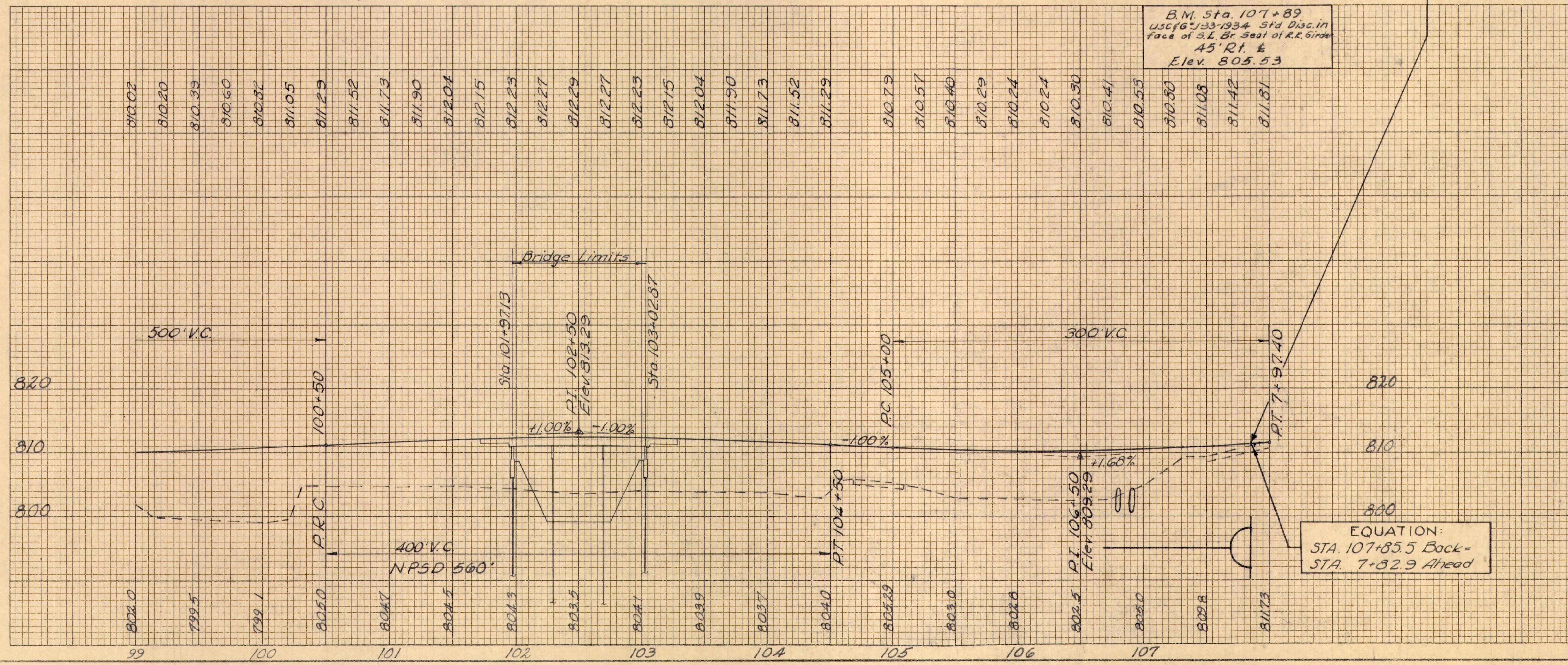
Station	Sq Yds.	
From To		
101+72.13	101+97.13	55.56
103+02.87	103+27.87	55.56
Total		111.12

PAVEMENT REMOVAL

Station	Side	Sq Yds.	
From To	£		
100+42	102+99	Lt.	540
103+20	104+50	Lt.	254
105+46	106+82	Rt.	36
Total			830

MISCELLANEOUS

Station	Side	See	Standard Mon. Assy. Each	TREE REMOVAL		
From To	£	Sheet		12" 18"	18" 24"	30" 36"
101+50	£	8	1			
106+50	£	8	1			
99+00	103+50	Lt.	8	29	4	1
Totals			2	29	4	1



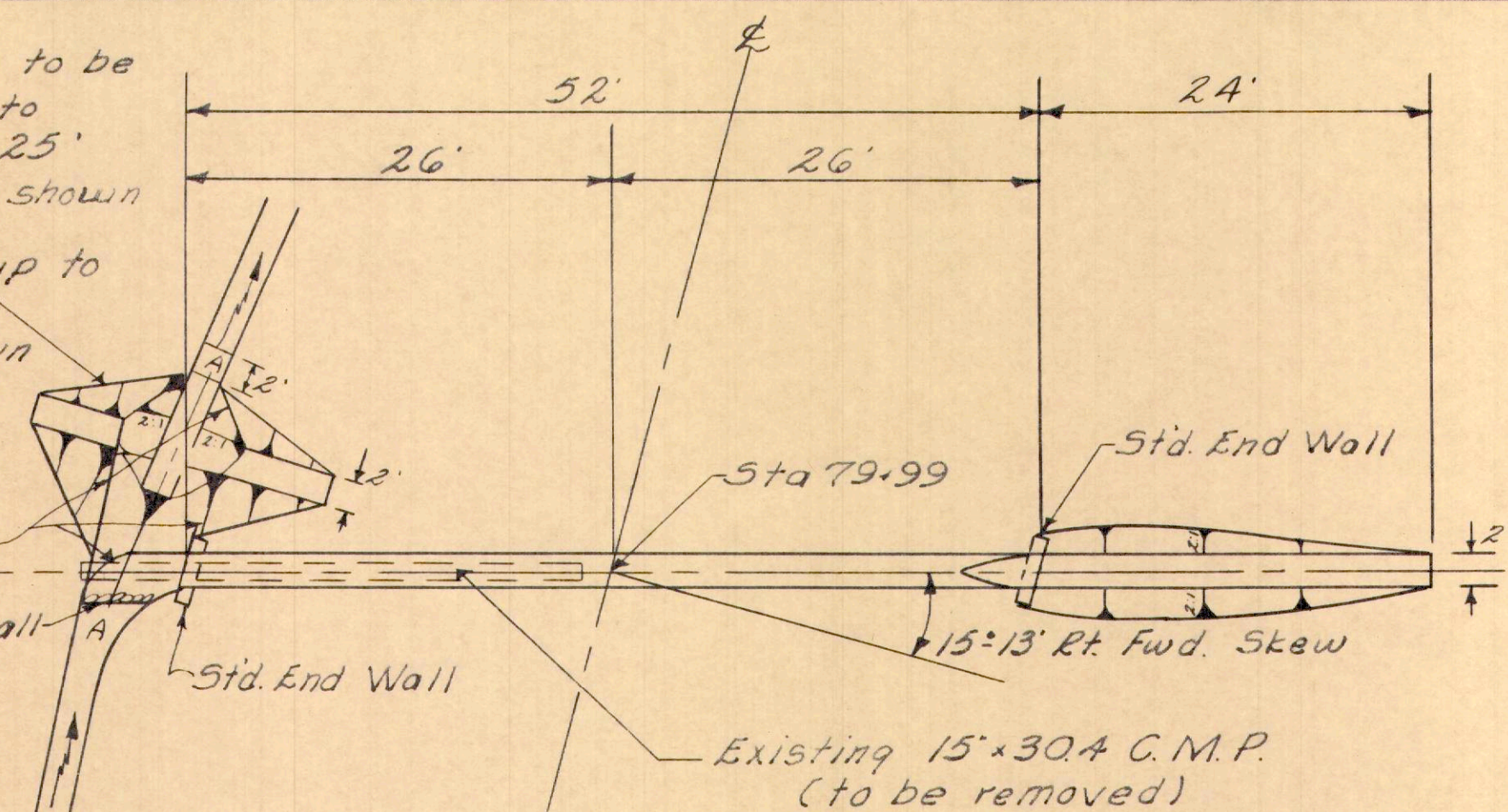
B.M. Sta. 107+89
 USC&G 133-1334 Std Disc. in
 face of S.L. Br. Seat of R.R. Sider
 45' Rt. £
 Elev. 805.53

NOTE: Roadway ditch to be warped back in to Std ditch in the 25' beyond Dike as shown

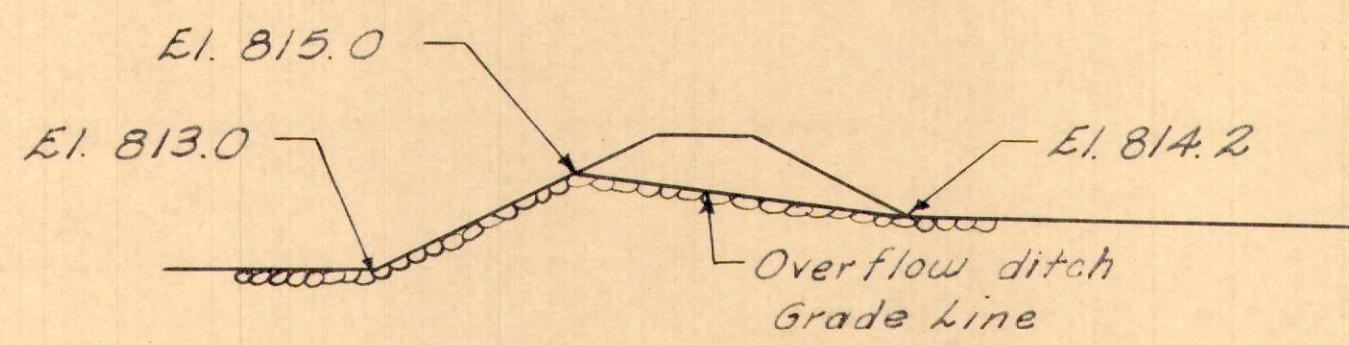
NOTE: Build Dike up to Berm Elev. with overflow ditch as shown See Section A-A

Place 10 Sq. Yds. Riprap as directed

4'x2'x1' Riprap Cutoff wall



PLAN
Scale: 1"=10'



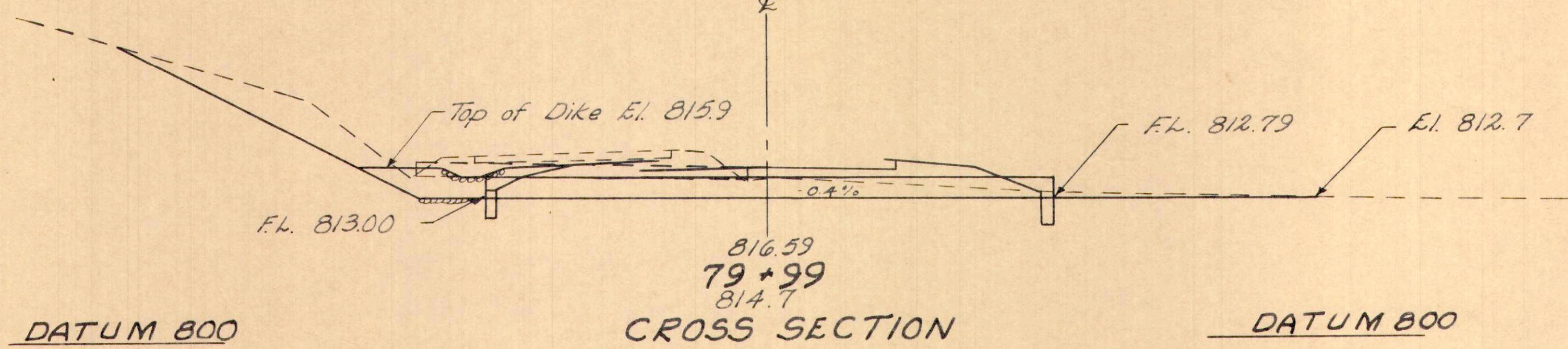
SECTION A-A
Scale: 1/4"=1'

ESTIMATED QUANTITIES

24" Pipe, Sec. M-6.4(d), Class A-1
Masonry
Channel Excavation
Riprap
Pipe Removed, 15" and Under

52 Lin. Ft.
0.8 Cu. Yds.
5 Cu. Yds.
10 Sq. Yds.
31 Lin. Ft.

Area: 7 Acres
Q₁₀: 14 cfs.

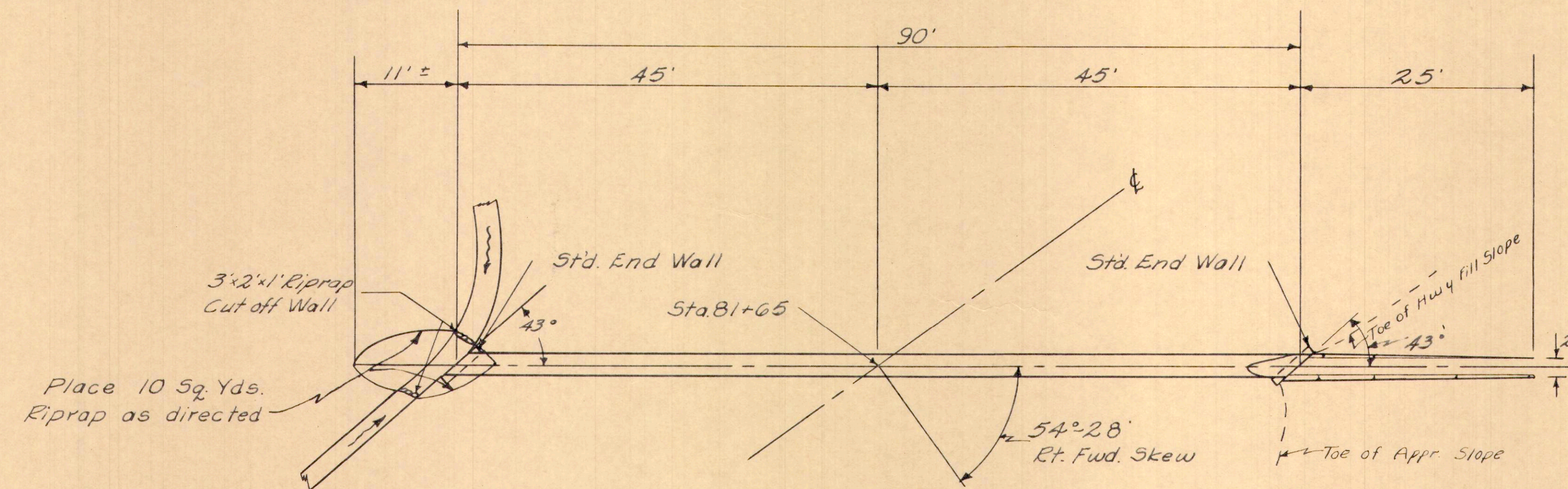


CROSS SECTION
Scale: 1"=10'

STA 79+99
24"x52' PIPE CULVERT

DATUM 800

DATUM 800



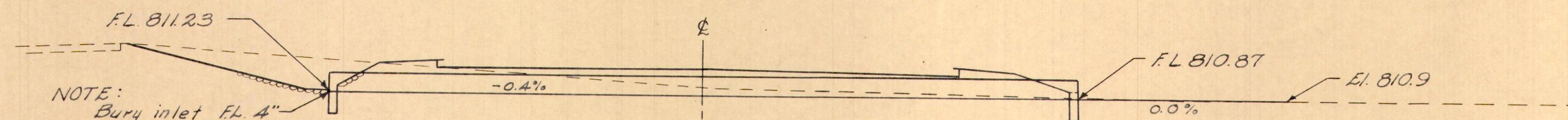
PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES

30" Pipe, Sec. M-6.4(d) Class A-1
Masonry
Riprap
Channel Excavation

90 Lin. Ft.
1.0 Cu. Yds.
10 Sq. Yds.
1 Cu. Yds.

Area: 9 Acres
Q₁₀: 17 cfs.



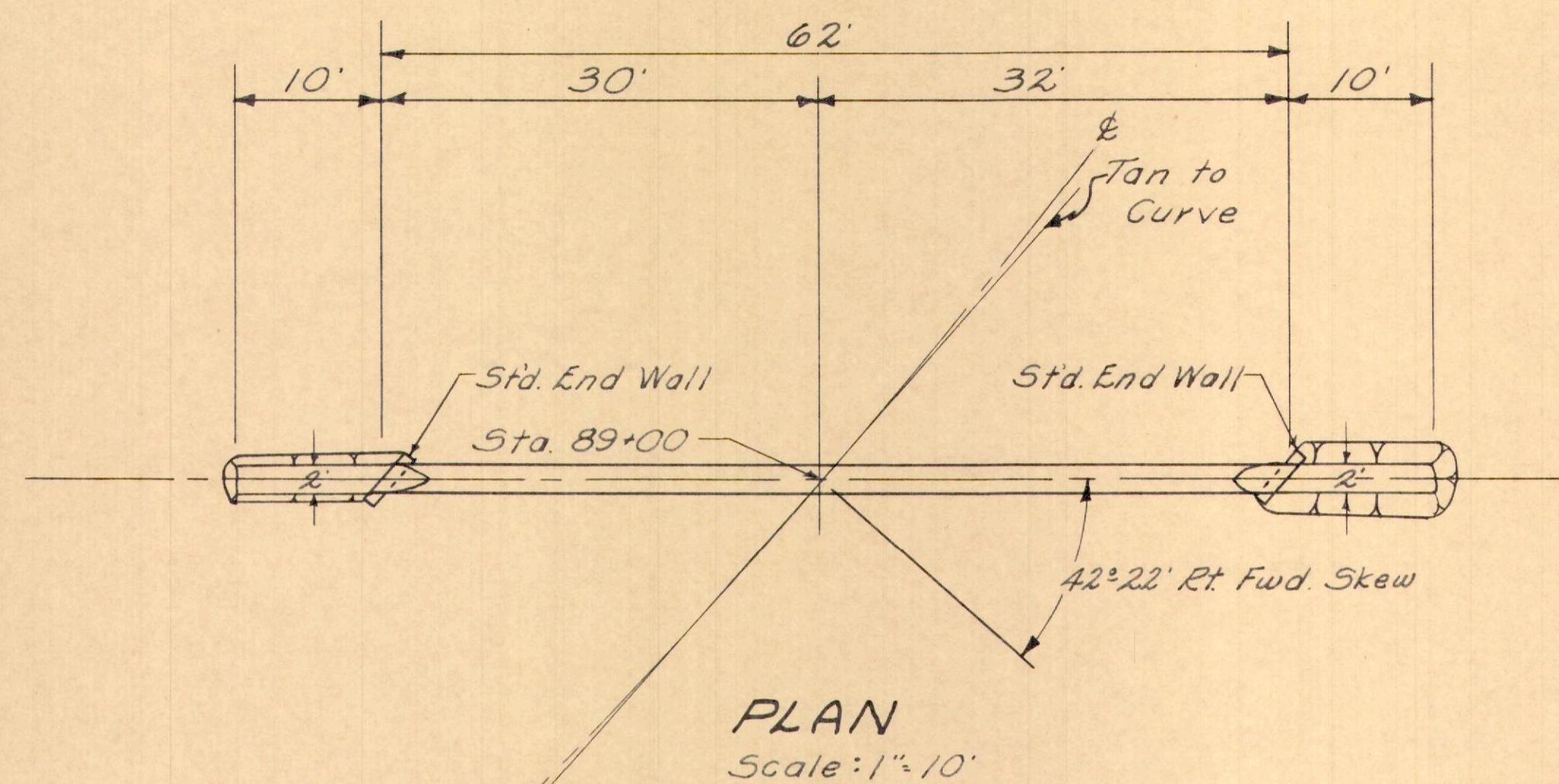
CROSS SECTION
Scale: 1"=10'

STA 81+65
30"x90' PIPE CULVERT

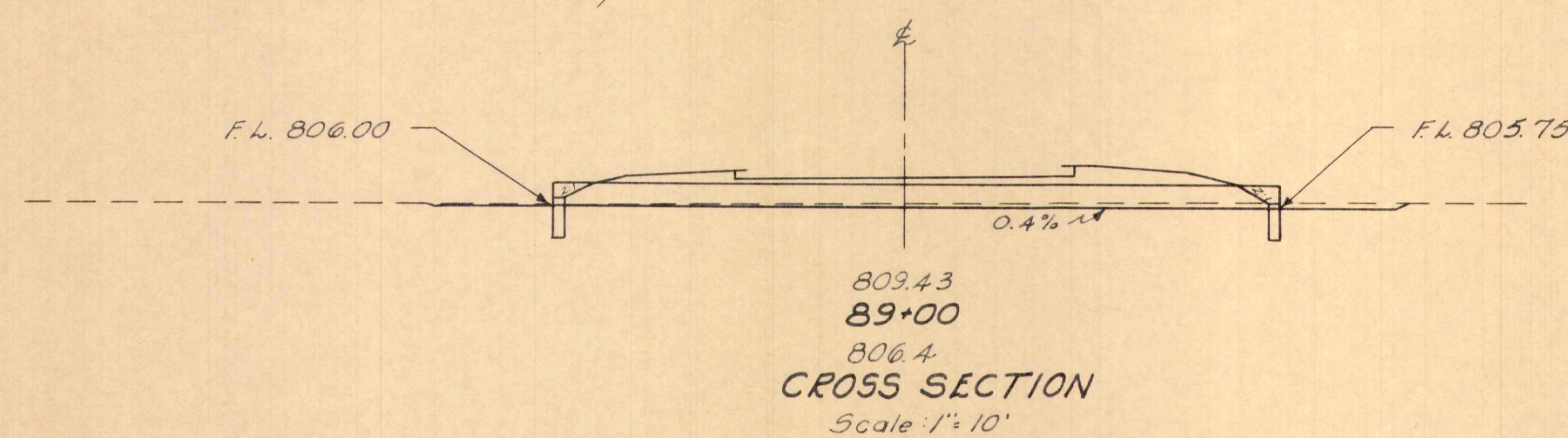
DATUM 800

DATUM 800

NOTE: Bury inlet FL 4"



PLAN
Scale: 1"=10'



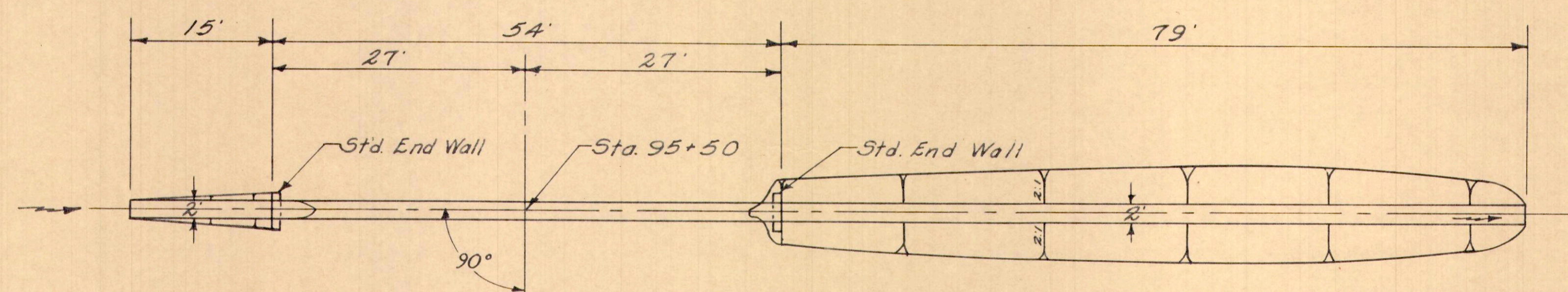
CROSS SECTION
Scale: 1"=10'

ESTIMATED QUANTITIES
 24" Pipe, Sec. M-6.4 (d), Class A-1
 Masonry
 Channel Excavation

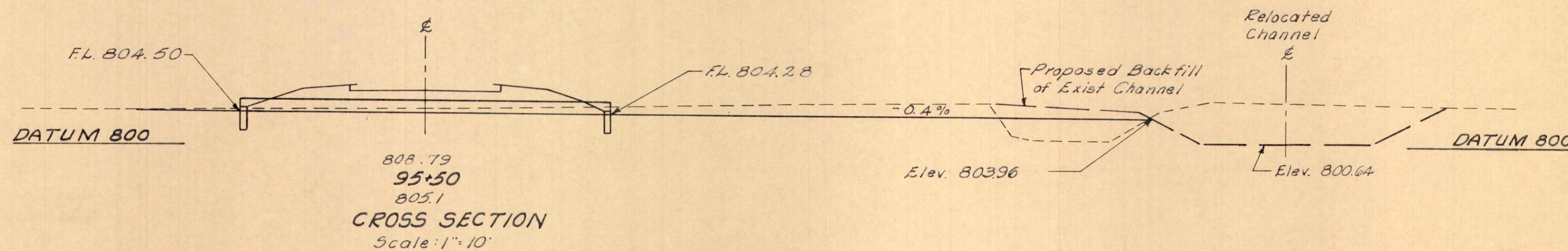
62 Lin. Ft.
 0.8 Cu. Yds.
 2 Cu. Yds.

Area: 9 Acres
 Q₁₀: 22 c.f.s.

STA. 89+00
24" x 62' PIPE CULVERT



PLAN
Scale: 1"=10'



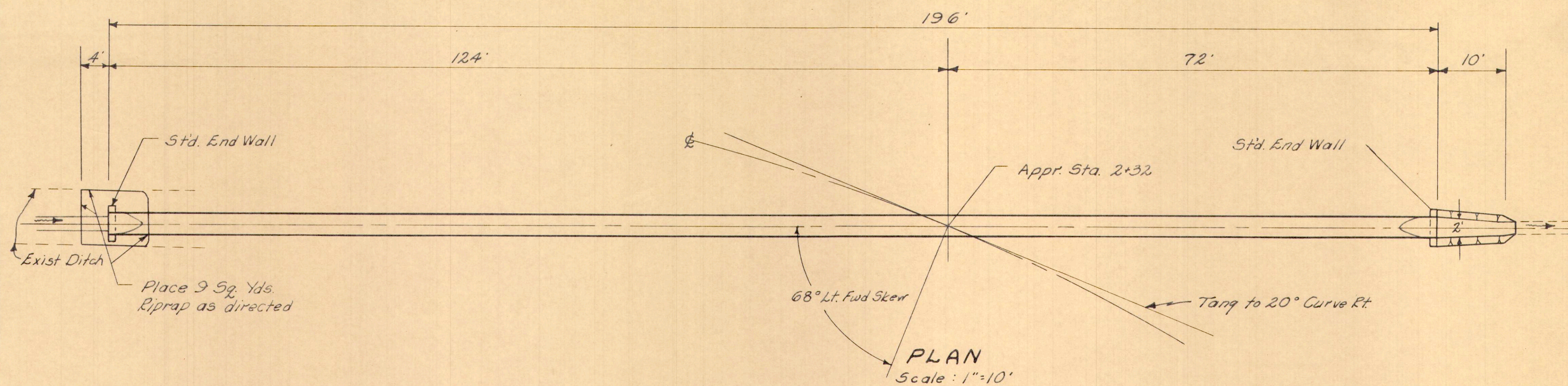
CROSS SECTION
Scale: 1"=10'

ESTIMATED QUANTITIES
 24" Pipe, Class A-1
 Masonry
 Channel Excavation

54 Lin. Ft.
 0.8 Cu. Yds.
 2.2 Cu. Yds.

Area: 11 Acres
 Q₁₀: 9 c.f.s.

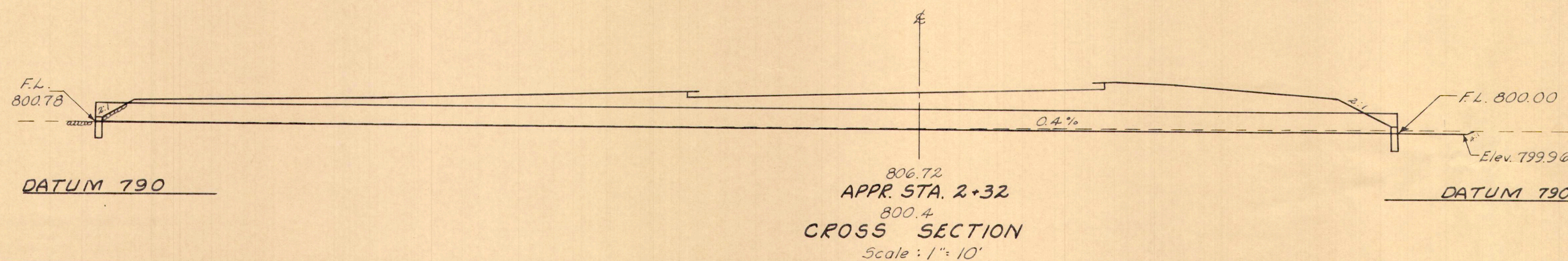
STA. 95+50
24" x 54' PIPE CULVERT



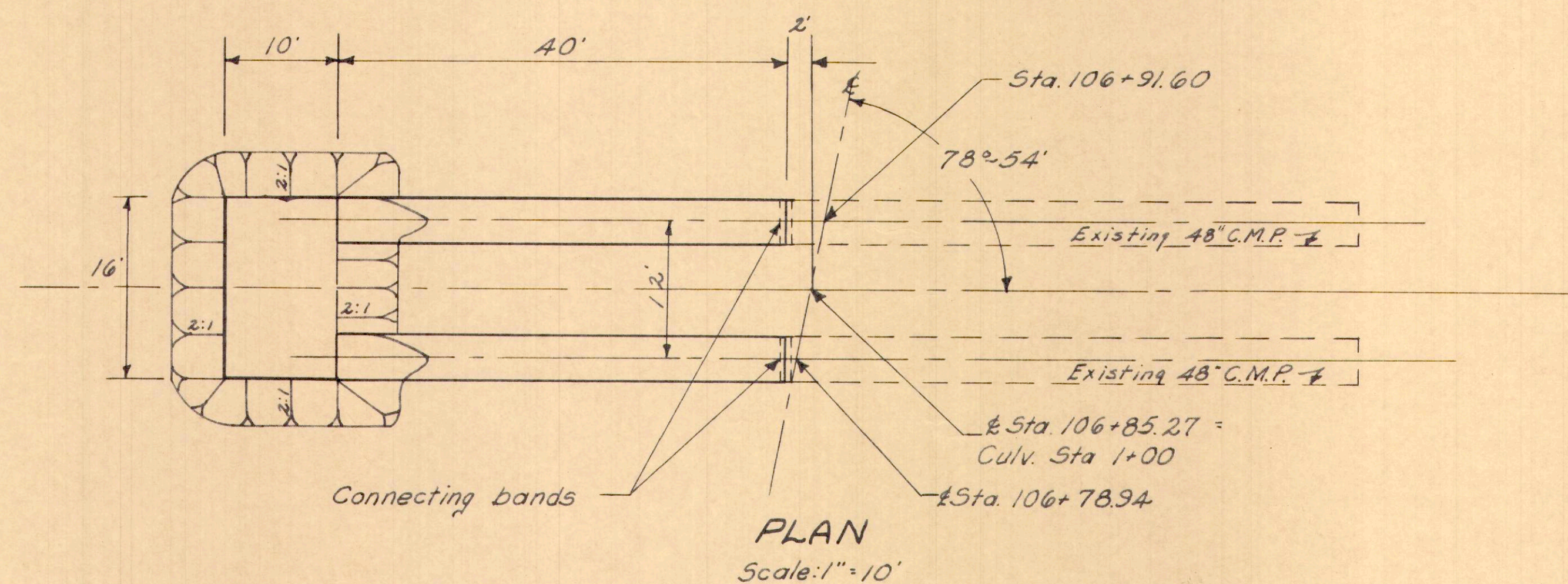
ESTIMATED QUANTITIES

36" Pipe, Class A-1	196 Lin.Ft.
Masonry	1.2 Cu.Yds.
Riprap	9 Sq. Yds.
Channel Excavation	1 Cu.Yds.

Area : 2.5 Acres
Q₁₀ : 42 c.f.s.



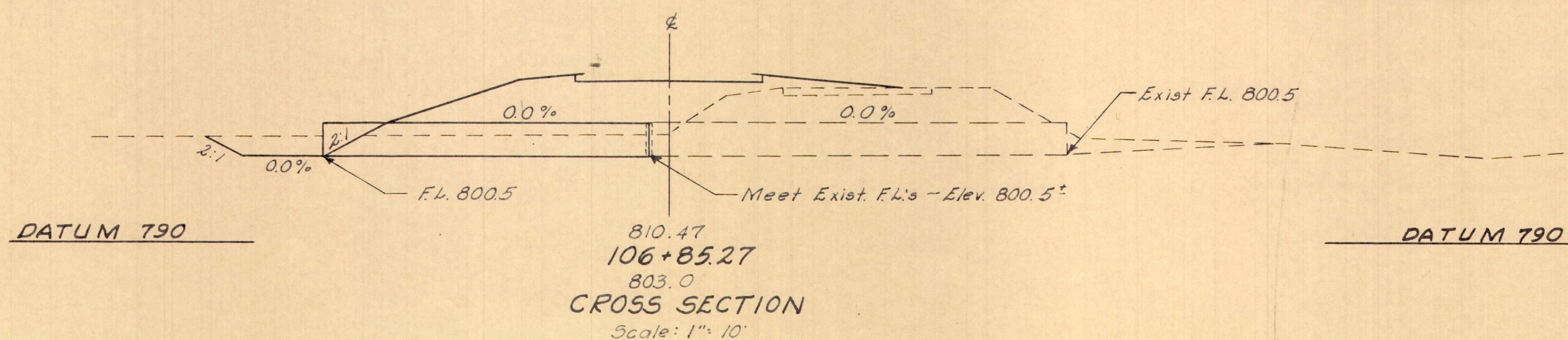
**APPR. LT OF STA. 101+00
APPR. STA. 2+32
36" x 196' PIPE CULVERT**



ESTIMATED QUANTITIES

48" Pipe, Sec. M-6.4(d), Class A-1	80 Lin.Ft.
Channel Excavation	24 Cu. Yds.

NOTE: Corrugated metal connecting bands shall be used to couple proposed to existing corrugated metal pipes. The cost of bands shall be included in price bid per lineal foot of pipe.



**STA. 106+85.27
TWIN 48" x 40' PIPE CULVERT EXTENSIONS**