

51-7

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STATE OF OHIO DEPARTMENT OF HIGHWAYS CUY-71-10.16

I-71-5(16)244

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-71-5(16)244

1
150

CUYAHOGA COUNTY
CUY-71-10.16
PART 3

FOR PARTS 1 & 2, SEC CUY-71-9.60

LIMITED ACCESS

GRADE SEPARATION WITH THE NEW YORK CENTRAL RAILROAD CO.
CITY OF CLEVELAND
CUYAHOGA COUNTY

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

1963 SPECIFICATIONS

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 not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on these plans and estimates.

Approved Charles M. J. Swick
Date 3-11-65 Division Deputy Director

Approved R. D. B. K. K. K.
Date 4-2-65 Engineer of Bridges

Approved R. D. B. K. K. K.
Date 4-14-65 Engineer of Location and Design

Approved R. D. B. K. K. K.
Date 4-14-65 Deputy Director of Design and Construction

Approved R. D. B. K. K. K.
Date 3-5-65 Deputy Director of Right of Way

Approved R. D. B. K. K. K.
Date 4-2-65 Deputy Director of Planning and Programming

Approved R. D. B. K. K. K.
Date 4-22-65 Director of Highways

Approved R. D. B. K. K. K.
Date 3-11-65 Director of Public Service, City of Cleveland, Ohio

CONVENTIONAL SIGNS

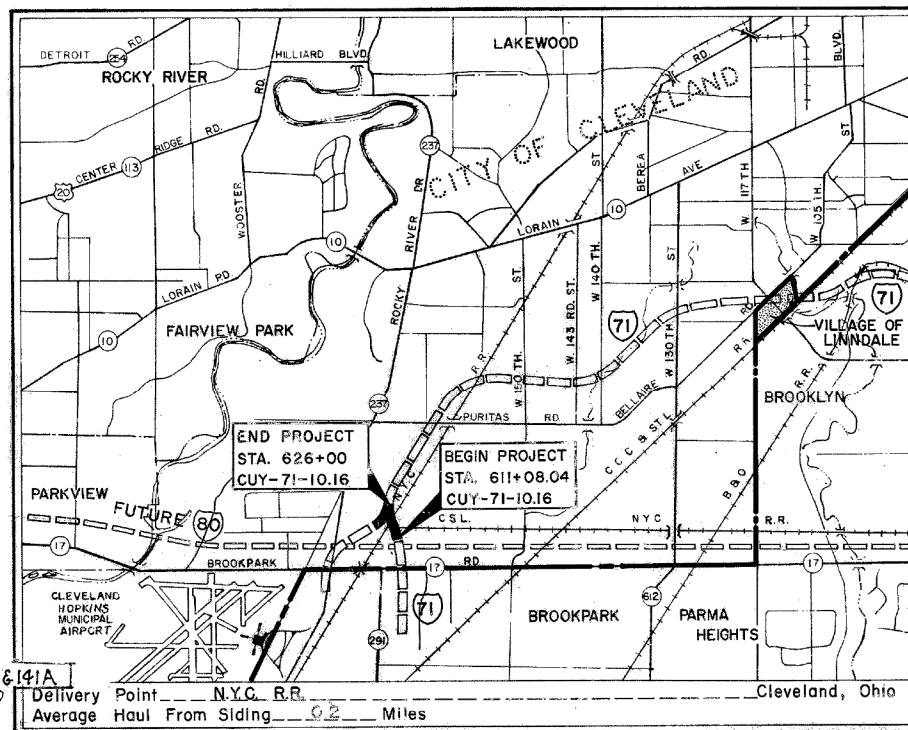
County Line	-----
Corporation Line	-----
Center Line	-----
Township Line	-----
Section Line	-----
Fence Line	x x x x x
Guard Rail (existing)	- - - - -
Guard Rail (proposed)	- - - - -
Railroad	+
Power Poles	P
Telephone Poles	T
Trees or stumps (existing)	⊗
Trees or stumps (to be removed)	⊗
Existing Right of Way	---
Limited Access Only	---
Right of Way Only	---
Limited Access & Right of Way	---

INDEX SHEETS

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LINE DATA

Begin Project	Sta. 611+08.04
End Project	Sta. 626+00.00
Net Length of Project	= 1491.96 Lin. Ft. = 0.282 Miles
ADD FOR APPROACHES	
Airport Freeway	Sta. 614+35.00 - Sta. 626+95.00 = 1260.00 Lin. Ft.
	Sta. 626+00.00 - Sta. 626+95.00 = 95.00 Lin. Ft.
Net Length of Approaches	= 1355.00 Lin. Ft.
Net Length of Work	= 2846.96 Lin. Ft. = 0.539 Miles



LOCATION MAP

SCALE OF MILES



Portion to be improved	-----
State Roads	-----
Construction under other contract	-----
Other Roads	-----

SCALES

Plan	-----
Profile: Horizontal	-----
" Vertical	-----
X-Sections	-----

Sheet No. 53 revised
11-23-65 C.E.H.
Revised Sheet No. 53
11-5-65 C.E.H.

Sheet 131 revised 6-24-65.
Sheets 42 & 43 superseded by
sheets 42R & 43R respectively 6-24-65.
Sheets 43, 45 & 137 revised 8-2-65.
Sheet 137 revised 12-1-65.

Supplemental Specifications

CE-101.04	5-22-66
3-X-1	7-13-64
3-307	10-1-64
SEE PART 1	
T-335	12-28-63

PLANS PREPARED BY
RACKOFF ASSOCIATES
ENGINEERS COLUMBUS, OHIO
Melvin Rackoff

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER DATE

Supplemental Prints of Standard Construction Drawings									
AS-1-54	7-5-62	I-8 M.H. NO. 2	2-1-63	I-15 NO. 6	2-1-63	L-3	4-1-50	AR-1-57	4-2-62
B-T-70-71	11-15-60	HW-NO. 1	8-1-63	I-21-23	3-10-64	L-3A	4-1-50	AR-1-55	2-2-69
B-T-71R	3-2-63	I-1	11-15-60	I-12	2-1-63	LJ NO. 1	7-1-55	FS-1-62	1-15-63
F-1	2-1-63	I-8 C.B. NO. 5	2-1-63	I-15 NO. 1	11-15-60	RI-1	9-1-64	SD-1-63	11-12-63
F-3	2-1-63	I-8 I NO. 2-A	2-1-63	I-15 NO. 2-A	8-17-60	T-1	9-12-60	SD-2-64	11-25-64

File No.	CUYAHOGA COUNTY	CUY-71-10.16
Date of Letting		19
Contract No.		

SCHEMATIC LAYOUT PLAN

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

2

CUYAHOGA COUNTY
CUY-71-10.16

0 200 400 600 800
SCALE IN FEET

CURVE DATA AIRPORT FREEWAY

P.I. STA 618+34.86 Ls = 350.00' P.I. STA 635+70.60
 $\Delta = 36^\circ 30' 00''$ LT. $\Delta_s = 07^\circ 52' 30''$ $\Delta = 03^\circ 28' 48''$ LT.
 $\Delta_c = 20^\circ 45' 00''$ LT. P = 4.01' D = 00°28'00"
 $\Delta_c = 04^\circ 30' 00''$ K = 174.89' R = 12,277.67'
 $R_c = 1273.24$ LT = 233.57' T = 408.72'
 $T_c = 233.11$ ST = 116.88' L = 817.14'
 $L_c = 461.11$ Ts = 596.06' E = 0.80'
 $E_c = 21.16$ Es = 71.66'

CURVE DATA RAMP A
 P.I. STA 618+22.18 Ls = 250.00'
 $\Delta = 79^\circ 35' 14''$ LT. $\Delta = 20^\circ 27' 46''$
 $\Delta_c = 38^\circ 39' 42''$ LT. P = 7.41'
 $\Delta_c = 16^\circ 22' 13''$ K = 124.47'
 $R_c = 350.00$ LT = 167.79'
 $T_c = 122.78$ ST = 84.36'
 $L_c = 236.17$ Ts = 422.18'
 $E_c = 20.91$ Es = 115.16'

CURVE DATA N. BOUND I-71

P.I. STA 620+27.64 Ls = 400.00'
 $\Delta = 61^\circ 52' 08''$ RT. $\Delta_s = 10^\circ 00' 00''$
 $\Delta_c = 41^\circ 52' 08''$ RT. P = 5.81'
 $\Delta_c = 05^\circ 00' 00''$ K = 199.80'
 $R_c = 1145.92$ LT = 267.09'
 $T_c = 438.37$ ST = 133.72'
 $L_c = 837.38$ Ts = 890.03'
 $E_c = 80.99$ Es = 196.81'

CURVE DATA N.B. I-71

P.I. STA 632+59.92 Ls = 400.00'
 $\Delta = 02^\circ 05' 30''$ RT. $\Delta_s = 10^\circ 00' 00''$
 $\Delta_c = 01^\circ 30' 00''$ P = 5.81'
 $\Delta_c = 05^\circ 00' 00''$ K = 199.80'
 $R_c = 1145.92$ LT = 267.09'
 $T_c = 438.37$ ST = 133.72'
 $L_c = 837.38$ Ts = 890.03'
 $E_c = 80.99$ Es = 196.81'

CURVE DATA S.B. I-71

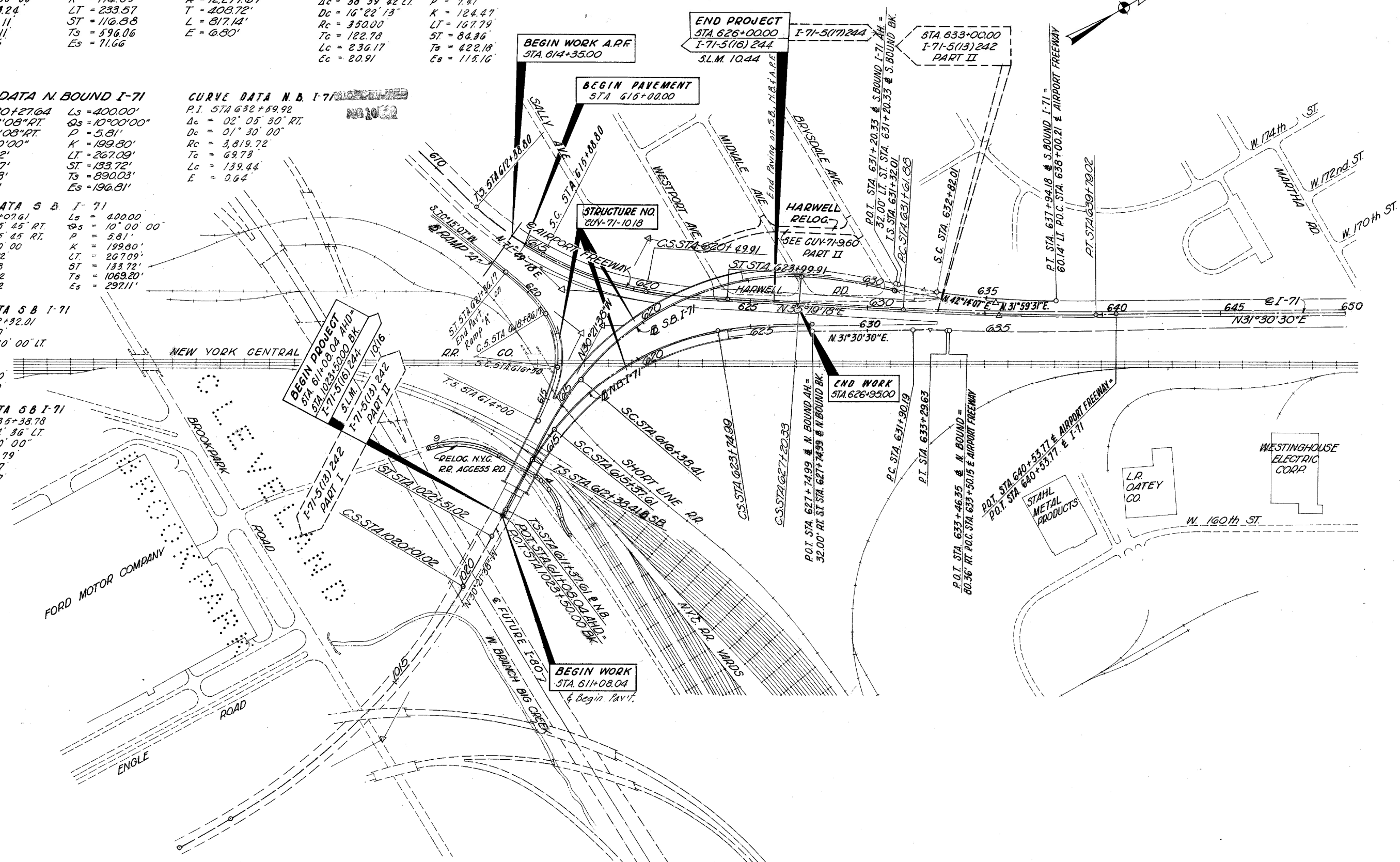
P.I. STA 623+07.61 Ls = 400.00'
 $\Delta = 74^\circ 05' 45''$ RT. $\Delta_s = 10^\circ 00' 00''$
 $\Delta_c = 54^\circ 05' 45''$ RT. P = 5.81'
 $\Delta_c = 05^\circ 00' 00''$ K = 199.80'
 $R_c = 1145.92$ LT = 267.09'
 $T_c = 438.37$ ST = 133.72'
 $L_c = 837.38$ Ts = 890.03'
 $E_c = 80.99$ Es = 196.81'

CURVE DATA S.B. I-71

P.I. STA 632+32.01 Ls = 150.00'
 $\Delta = 01^\circ 30' 00''$ LT. $\Delta_s = 10^\circ 00' 00''$
 $\Delta_c = 02^\circ 00' 00''$ P = 0.33'
 $R_c = 75.00$ LT = 267.09'
 $T_c = 438.37$ ST = 133.72'
 $L_c = 837.38$ Ts = 890.03'
 $E_c = 80.99$ Es = 196.81'

CURVE DATA S.B. I-71

P.I. STA 635+38.78 Ls = 150.00'
 $\Delta = 10^\circ 14' 36''$ LT. $\Delta_s = 10^\circ 00' 00''$
 $\Delta_c = 02^\circ 00' 00''$ P = 0.33'
 $R_c = 75.00$ LT = 267.09'
 $T_c = 438.37$ ST = 133.72'
 $L_c = 837.38$ Ts = 890.03'
 $E_c = 80.99$ Es = 196.81'



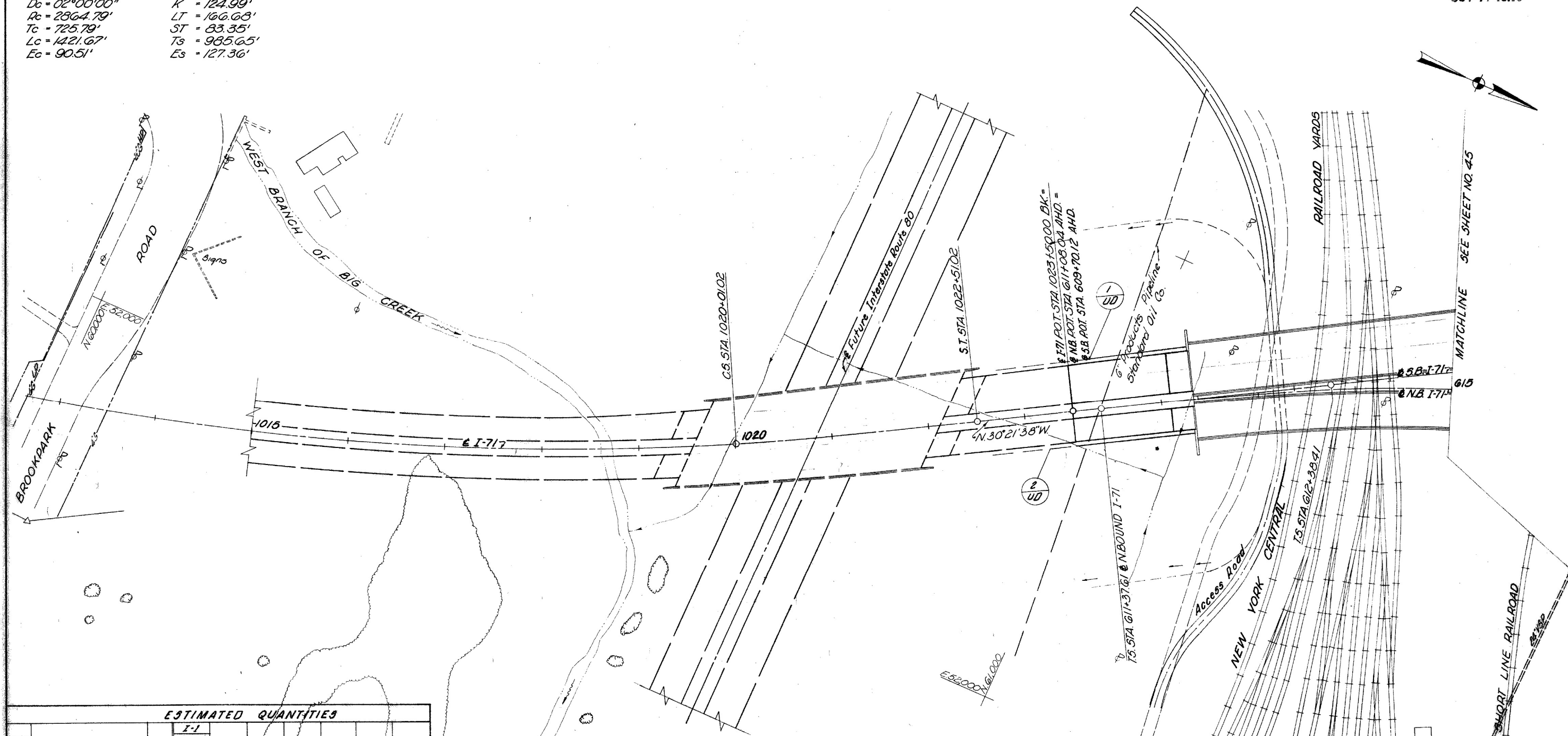
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

CUYAHOGA COUNTY
CUI-71-10.16

44

CURVE DATA

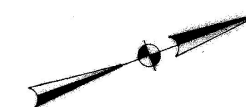
P.I. STA. 1013+15.00 $L_s = 250.00'$
 $\Delta = 33^\circ 26' 00''$ LT. $\Delta_s = 02^\circ 30' 00''$
 $D_c = 23^\circ 26' 00''$ LT. $P = 0.91'$
 $D_c = 02^\circ 00' 00''$ $K = 124.99'$
 $R_c = 2364.79'$ $LT = 166.68'$
 $T_c = 725.79'$ $ST = 83.35'$
 $L_c = 1421.67'$ $T_s = 985.65'$
 $E_c = 90.51'$ $E_s = 127.36'$



ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	I-71 CL. 13 6"	LIN. FT.
1-UD	S.B. 609+70.12 ~ 610+92	LT.	122	
2-UD	N.B. 611+02.04 ~ 612+30	RT.	122	
TOTALS			244	

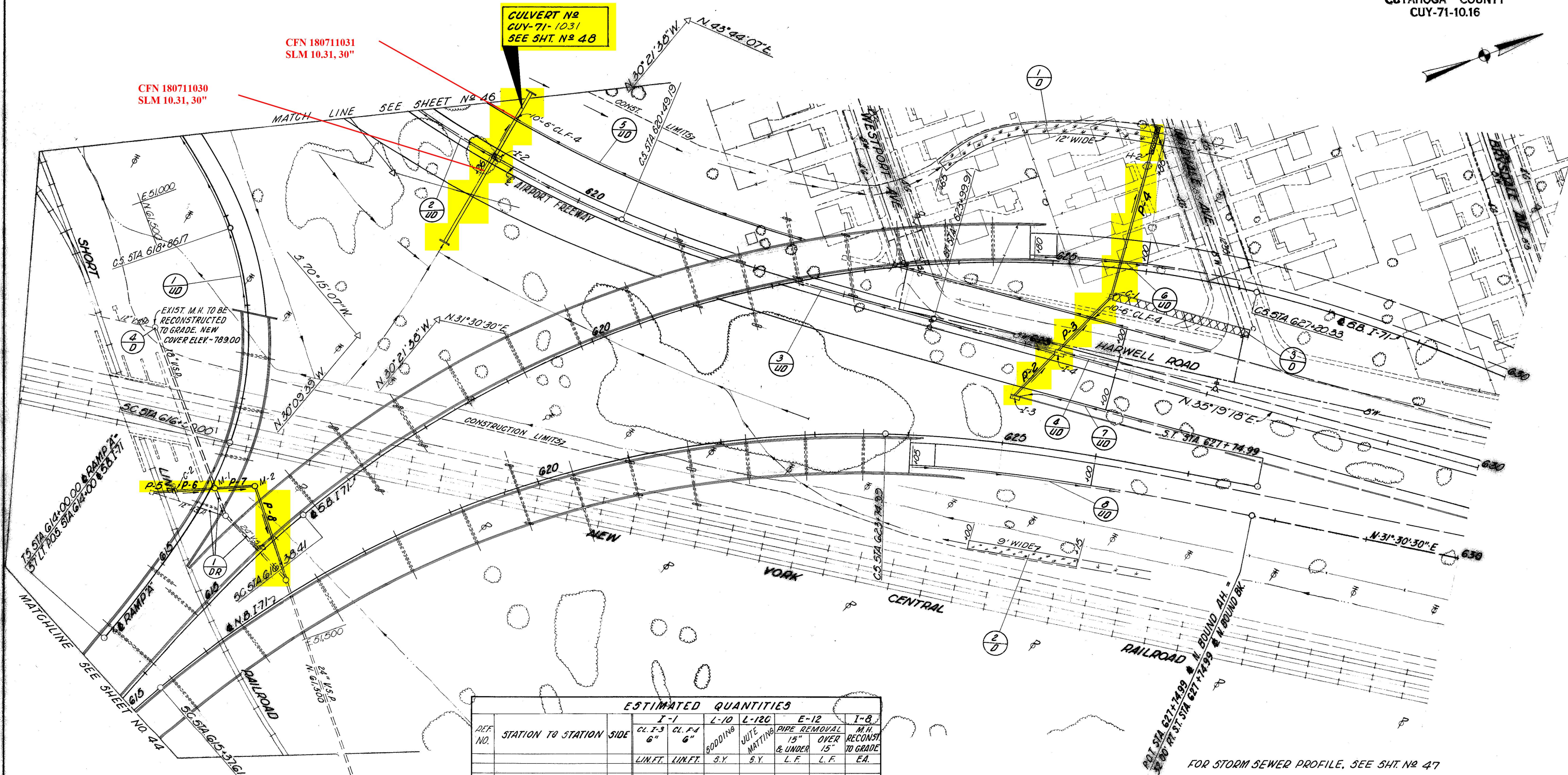
For Access Road See Sheet No. 42



CFN 180711030
SLM 10.31, 30"

CFN 180711031
SLM 10.31, 30"

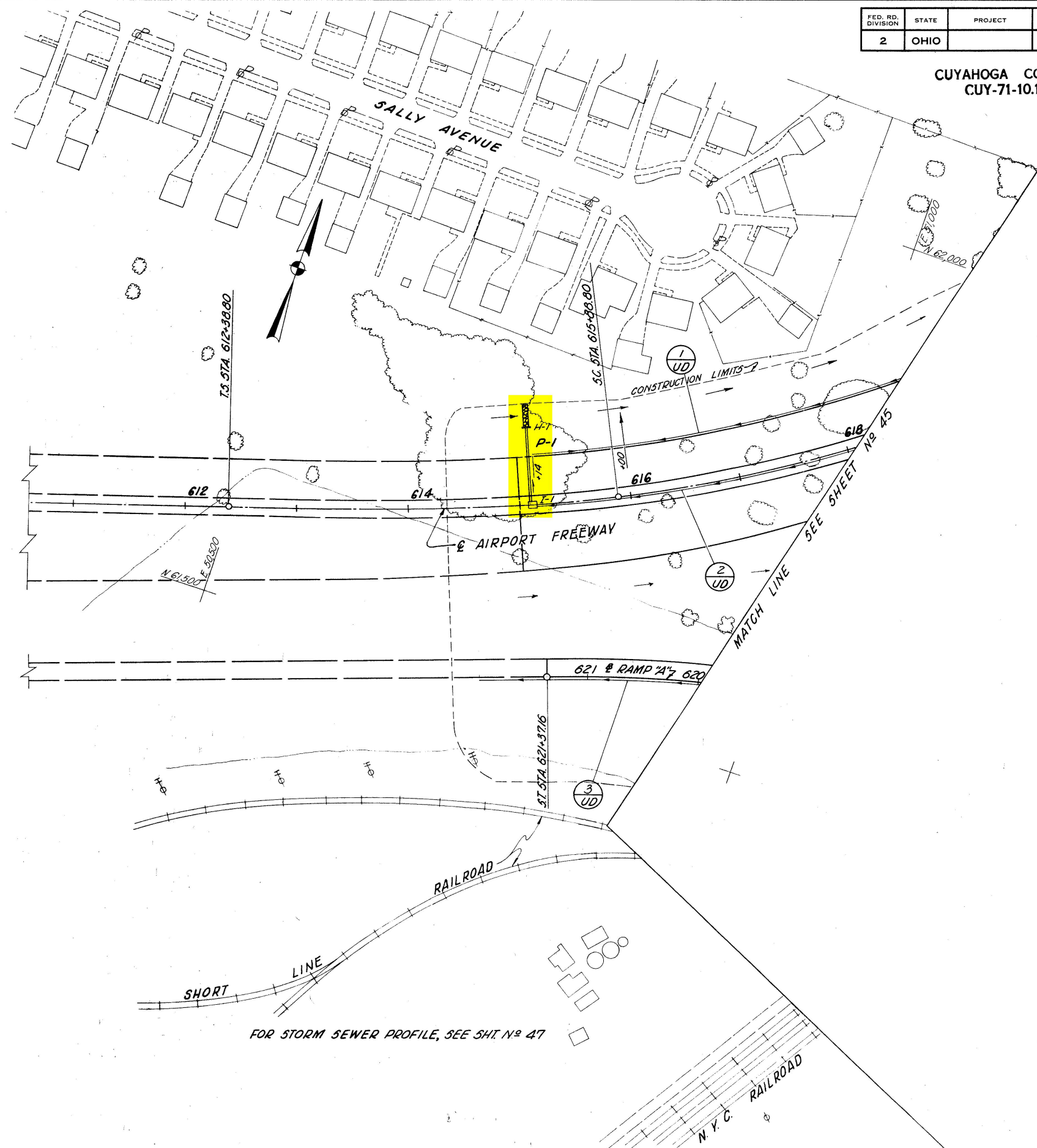
CULVERT NO.
CUY-71-1031
SEE SHT. NO. 48



ESTIMATED QUANTITIES									
REF. NO.	STATION TO STATION	SIDE	I-1		L-10	L-120	E-12		I-8
			CL. I-3	CL. F-4			PIPE REMOVAL	OVER	
			6"	6"			15" & UNDER	15"	
			LINE FT.	LINE FT.	S.Y.	S.Y.	L.F.	L.F.	EA.
1-UD	617+95 ~ 620+00	LT.	205						
2-UD	618+10 ~ 618+96	E	86						
3-UD	619+00 ~ 625+30	E	620	10					
4-UD	625+35 ~ 626+00	E	65	10					
5-UD	618+60 ~ 626+00	LT.	720	20					
6-UD	S.B. 624+00 ~ 626+00	RT.	120						
7-UD	625+00 ~ 626+00	RT.	90	10					
8-UD	N.B. 624+05 ~ 626+00	RT.	195						
4-D	617+90 RAMP "A"	LT.							1
1-D	623+65 ~ 625+85	LT.			320				
2-D	626+00 ~ 626+15	RT.			115				
3-D	625+70 ~ 627+10	LT.				125			
1-D	615+40 ~ 615+80 S.B. L&R						95	125	
TOTALS			2091	50	435	125	95	125	1

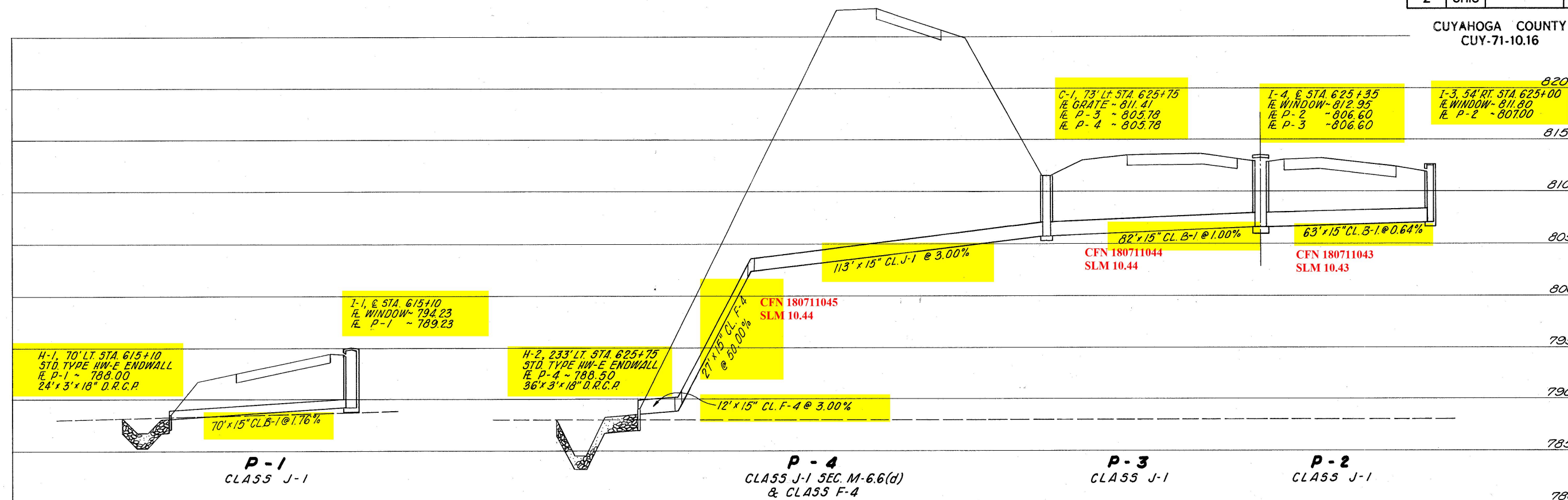
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FOR STORM SEWER PROFILE, SEE SHT. NO. 47



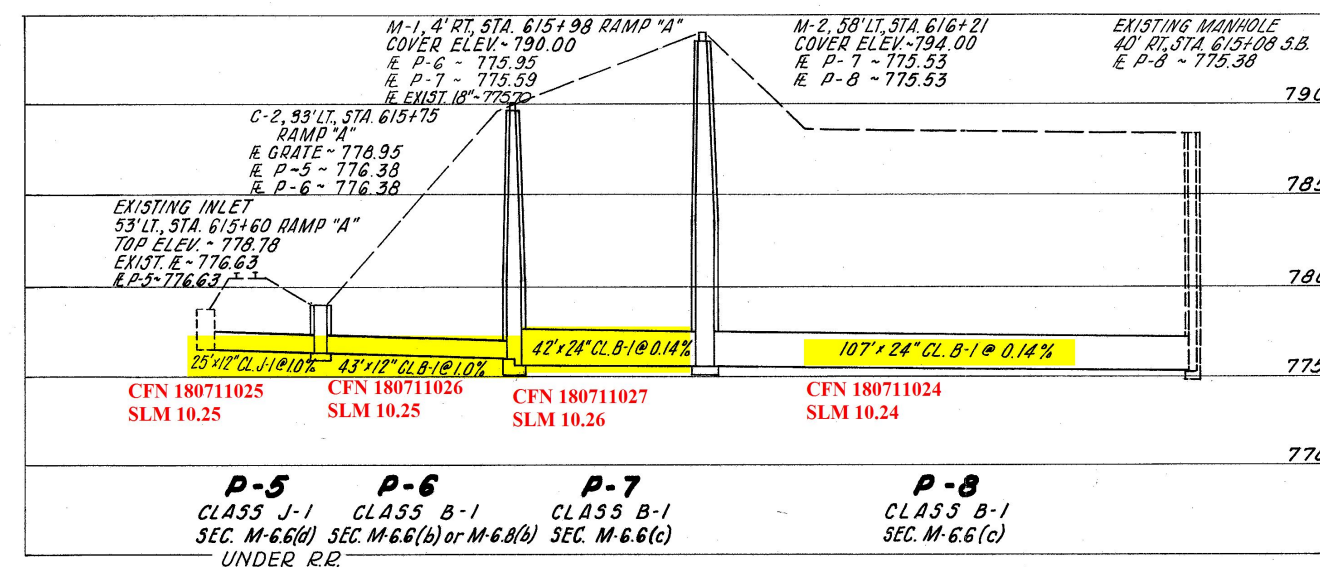
ESTIMATED QUANTITIES									
REF NO.	STATION TO STATION	SIDE	I-1		I-5				
			CL F-3 6"	GLASS F-4					GL F-3
				6"	8", SEC M-646)				6" TEE
			LIN FT.	LIN FT.	EACH				
		LT.	138						
		LT.	431						
1-U0	615+14 ~ 618+60			10	1				
2-U0	615+14 ~ 618+10	E	296	10					
3-U0	"A" 620+00~621+97		197						

CUYAHOGA COUNTY
CUY-71-10.16

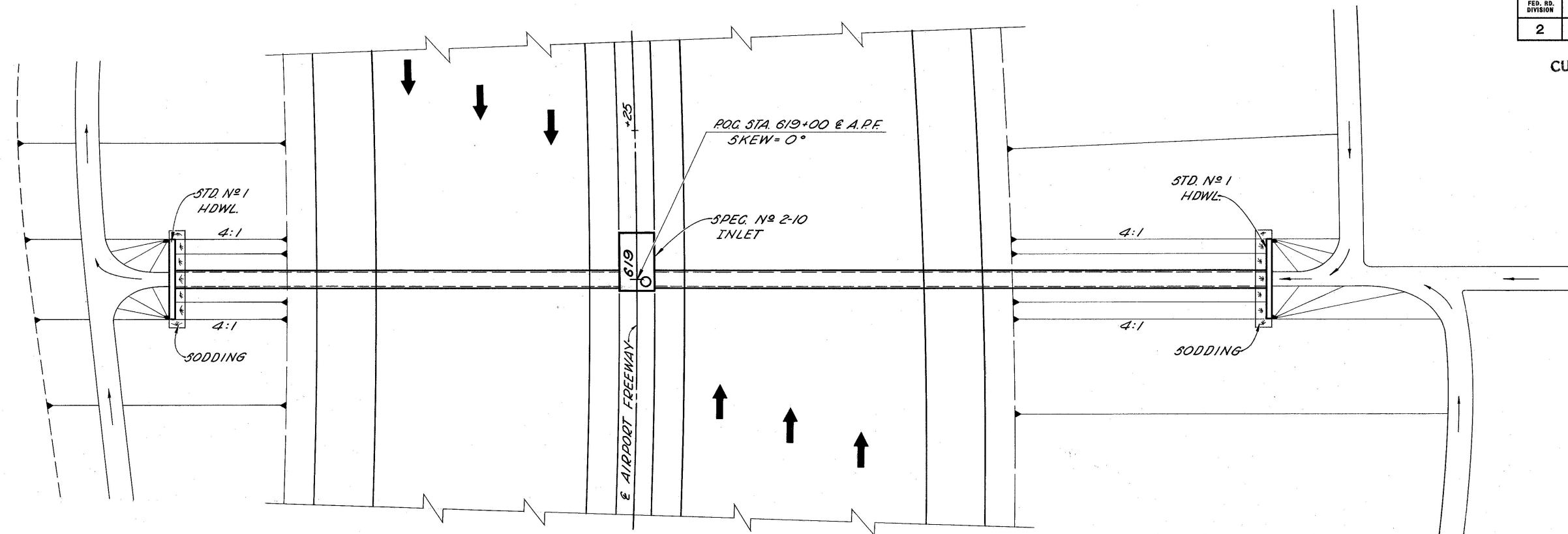


FOR STORM SEWER PLAN VIEWS, See Sht. No 45

ESTIMATED QUANTITIES																
PIPE REF	STRUCTURES INCLUDED	I-1 PIPE						I-2 I-5 PIPE		I ~ 8					L-10	I-10
		CL. J-1	CL. B-1	CL. J-1	CLASS	B-1	CL. F-4	MASONRY	SPECIAL CL. F-4 15x30TREN	STD.	STD. MOD.	As Per Plan	STD.	STD. NO.5		
		12"	15"	15"	12" SEC. M	24"	15"			NO. 2	NO. 2-B	NO. 2-10	NO. 2-4-12	CATCH		
		SEC. M 66G Under R.L.		SEC. M 66 G	6.6 (b) or 60W	SEC. M 66G				MANHOLE	INLET	INLET	INLET	BASIN		
		L I N.		F T.		Cu. Yds	EACH	EACH					SQ. YDS.	CU. YDS.		
P-1	I-1 & H-1		70				0.3			1				4	4	
P-2	I-3		63									1				
P-3	I-4		82								1					
P-4	C-1 & H-2			113			39	0.3	2					1	4	
P-5	-	25														
P-6	C-2				43									1		
P-7	M-1					42				1						
P-8	M-2					107				1						



DRAINAGE PROFILES P-1 THRU P-8



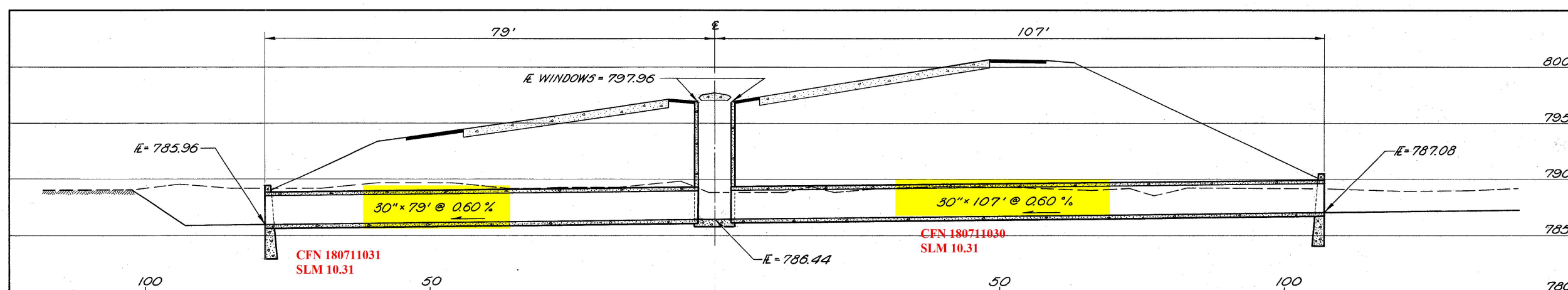
D.A. = 6.2 Acres
Q50 = 30 c.f.s.
SCALE: HOR. 1"=10'
VERT. 1"=5'

CULVERT DATA

TYPE: Standard strength reinforced concrete culvert pipe class A-1, Sec. M-6.6(b) or Sec. M-6.8(b).
Standard headwalls No 1 and special inlet No 2-10
SIZE: 30" x 79' and 30" x 107'

ESTIMATED QUANTITIES

I-1	30" Cl. A-1, Sec. M-6.6(b) or Sec. M-6.8(b)	186 Lin.Ft.
I-2	Masonry	4.7 Cu.Yds.
I-8	Standard No 2-10 Inlet Modified as per plan	1 Each
L-10	Sodding	6 Sq.Yds.



NOTE:
For details of Special
No 2-10 Inlet, See Sht. NO 50

DESCRIPTION	DATE	BY	CHECKED	DATE
DESIGNED				
DRAWN				
CHECKED				
IN CHARGE				