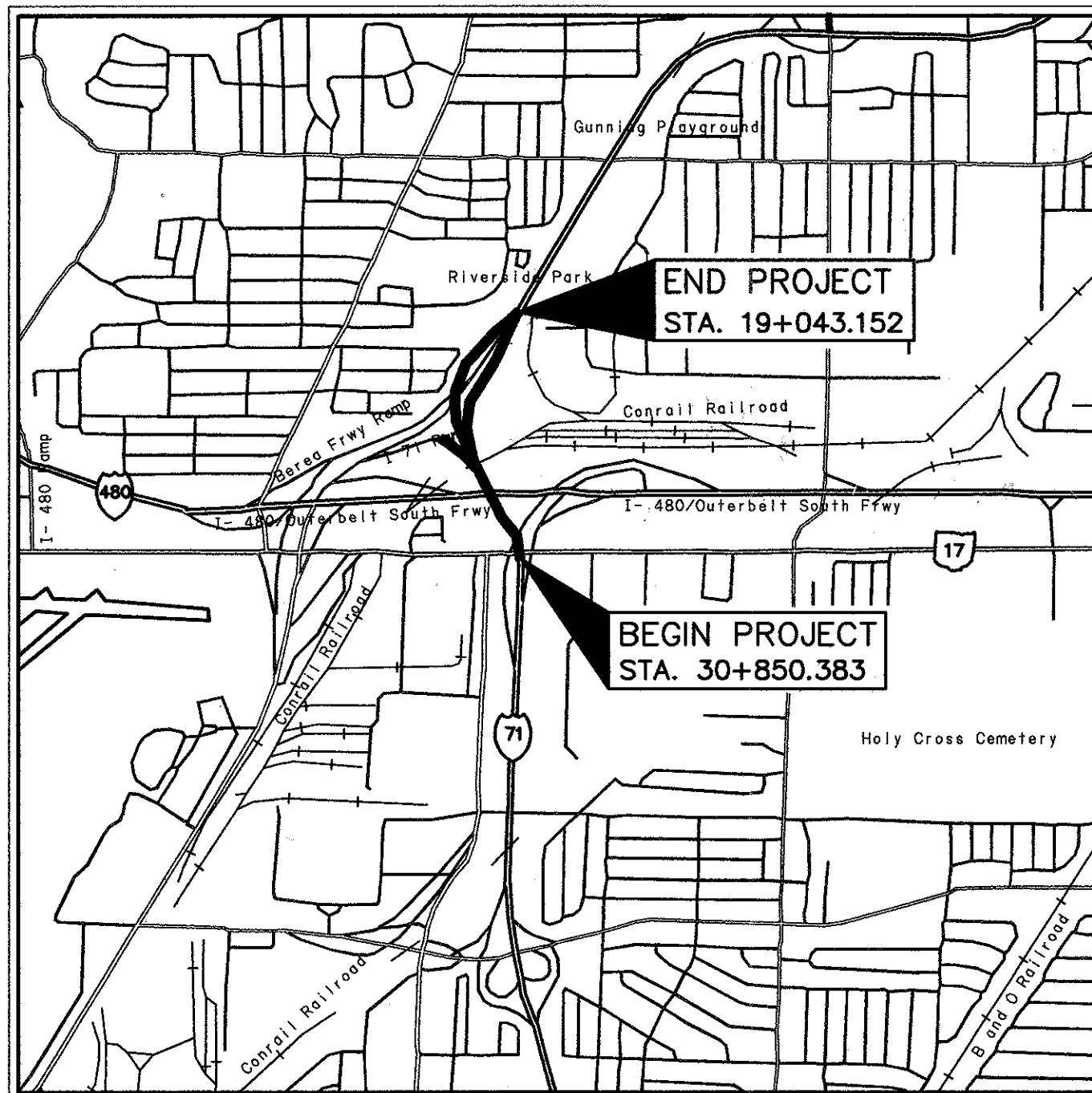


07-7

S

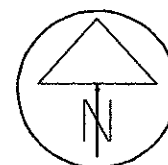
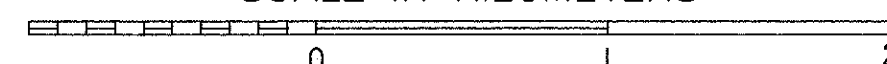
CUY-71-9.94(15.996)
970314 05-07-97
283PGS DIST.12



LOCATION MAP

LONG.: 81°49' LAT.: 41°25'

SCALE IN KILOMETERS



PORTION TO BE IMPROVED _____
STATE & FEDERAL ROUTES _____
OTHER ROADS _____

DESIGN DESIGNATION

CURRENT ADT (1996) _____ 100 950
DESIGN YEAR ADT (2016) _____ 105 440
DESIGN HOURLY VOLUME (2016) _____ 10 544
DIRECTIONAL DISTRIBUTION _____ 0.72
TRUCKS (24 HOUR B&C) _____ 7%
DESIGN SPEED _____ 55 MPH (90 km/H)
LEGAL SPEED _____ 55 MPH
DESIGN FUNCTIONAL CLASSIFICATION - URBAN INTERSTATE

DESIGN EXCEPTIONS

NONE REQUIRED



PLAN PREPARED BY:

BURGESS & NIPLE, LTD.
100 WEST ERIE STREET
PAINSEVILLE, OHIO 44077

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

CUY-71-9.94 (15.996)

RECONSTRUCTION OF EXISTING SEPARATED CROSSING WITH THE CONRAIL RAILROAD AND THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY

CITY OF CLEVELAND CITY OF BROOKPARK CUYAHOGA COUNTY

MICROFILMED

OCT 16 1998

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STANDARD CONSTRUCTION DRAWINGS												SUPPLEMENTAL SPECIFICATIONS	
BP-1.1M	10/28/94	GR-1.1M	11/30/94	MH-1.1M	9/6/95	HL-10.11M	5/1/95	MT-95.30M	4/25/94	TC-12.30M	2/1/94	802	3/23/95
BP-1.2M	10/28/94	GR-1.3M	11/30/94	MH-1.2M	9/6/95	HL-10.12M	5/1/95	MT-95.40M	4/25/94	TC-21.20M	2/1/94	815	7/17/95
BP-2.1M	10/28/94	GR-2.1M	11/30/94	MH-1.3M	9/6/95	HL-10.13M	5/1/95	MT-97.10M	4/25/94	TC-22.10M	2/1/94	820	6/14/95
BP-2.2M	10/28/94	GR-3.1M	11/30/94			HL-20.13M	5/1/95	MT-99.10M	1/30/95	TC-22.20M	2/1/94	931	7/17/95
BP-2.3M	10/28/94	GR-3.2M	11/30/94	HW-2.1M	7/12/95	HL-20.14M	5/1/95	MT-99.20M	1/30/95	TC-41.10M	3/31/94	942	6/14/95
BP-3.1M	10/28/94	GR-4.2M	4/21/95	HW-2.2M	7/12/95	HL-30.11M	3/31/95	MT-101.60M	4/25/94	TC-41.20M	7/1/94	933	7/17/95
BP-5.1M	10/28/94					HL-30.22M	3/31/95	MT-102.10M	1/30/95	TC-41.40M	3/31/94	944	12/7/95
BP-8.1M	10/28/94	RM-1.1M	6/30/95	DM-1.1M	6/30/95	HL-30.31M	5/1/95	MT-105.10M	4/25/94	TC-42.10M	3/31/94	945	6/14/95
		RM-4.1M	6/30/95	DM-1.2M	6/30/95	HL-30.33M	5/1/95	MT-105.11M	4/25/94	TC-42.20M	3/31/94	946	6/14/95
CB-2.2M	7/12/95	RM-4.2M	6/30/95	DM-2.1M	6/30/95	HL-40.10M	3/31/95			TC-51.11M	9/30/94	948	6/14/95
CB-2.3M	7/12/95	RM-4.3M	6/30/95	DM-4.1M	6/30/95	HL-50.21M	5/1/95	AS-1-81M	10/25/94	TC-52.10M	7/29/94	910	7/17/95
		RM-4.4M	6/30/95	DM-4.2M	6/30/95	HL-60.11M	5/1/95	PCB-91M	3/20/95	TC-52.20M	7/29/94	927	6/14/95
F-1.1M	4/21/95			DM-4.3M	6/30/95	HL-60.12M	3/31/95	EXJ-4-87M	3/20/95	TC-65.10M	11/3/93		
F-3.1M	4/21/95	I-1.2M	9/6/95	DM-4.4M	6/30/95			RB-1-55M	10/25/94	TC-65.11M	11/3/93		
		I-2.1M	9/6/95							TC-72.20M	9/1/93		

PROJECT DESCRIPTION

REHABILITATION OF THE EXISTING STRUCTURES OVER BROOKPARK ROAD, INTERSTATE 480, THE CONRAIL RAILROAD AND THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY BY REPLACING THE BRIDGE DECKS AND APPROACH PAVEMENT.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

1995 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE SET FORTH ON THE PLANS AND ESTIMATES.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (1) OF THE REVISED CODE OF OHIO, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED _____
DATE 6 JAN 97 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 1-28-97 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.

PTD NO. 9174

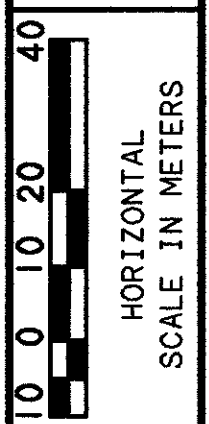
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
CONRAIL RAILROAD AND GREATER CLEVELAND
REGIONAL TRANSIT AUTHORITY

CUY-71-9.94

283

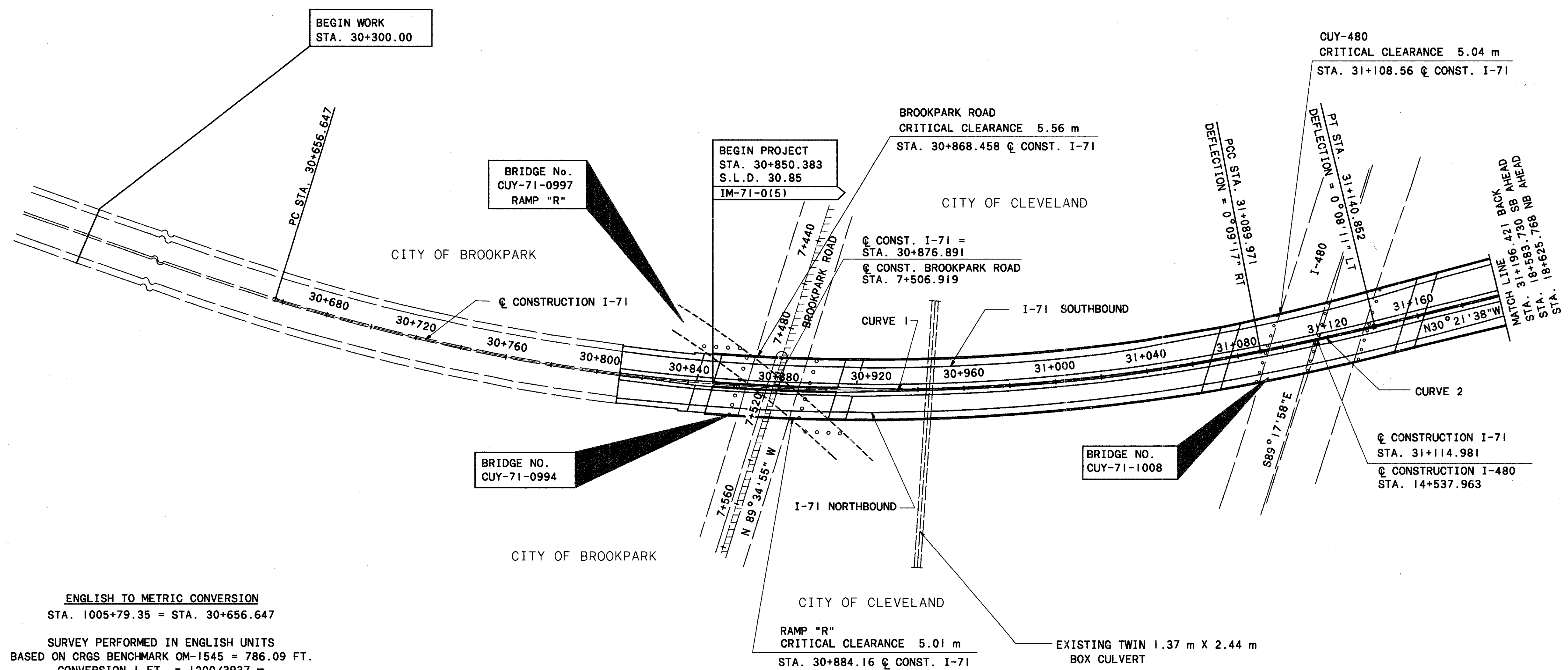
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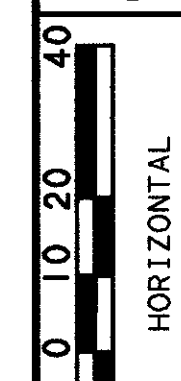
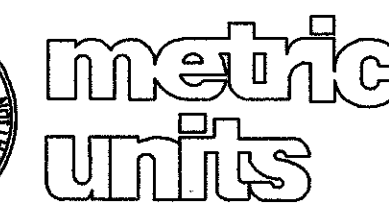


CALCULATED
SNR
CHECKED
ALM

SCHEMATIC PLAN

CUY-71-9.94

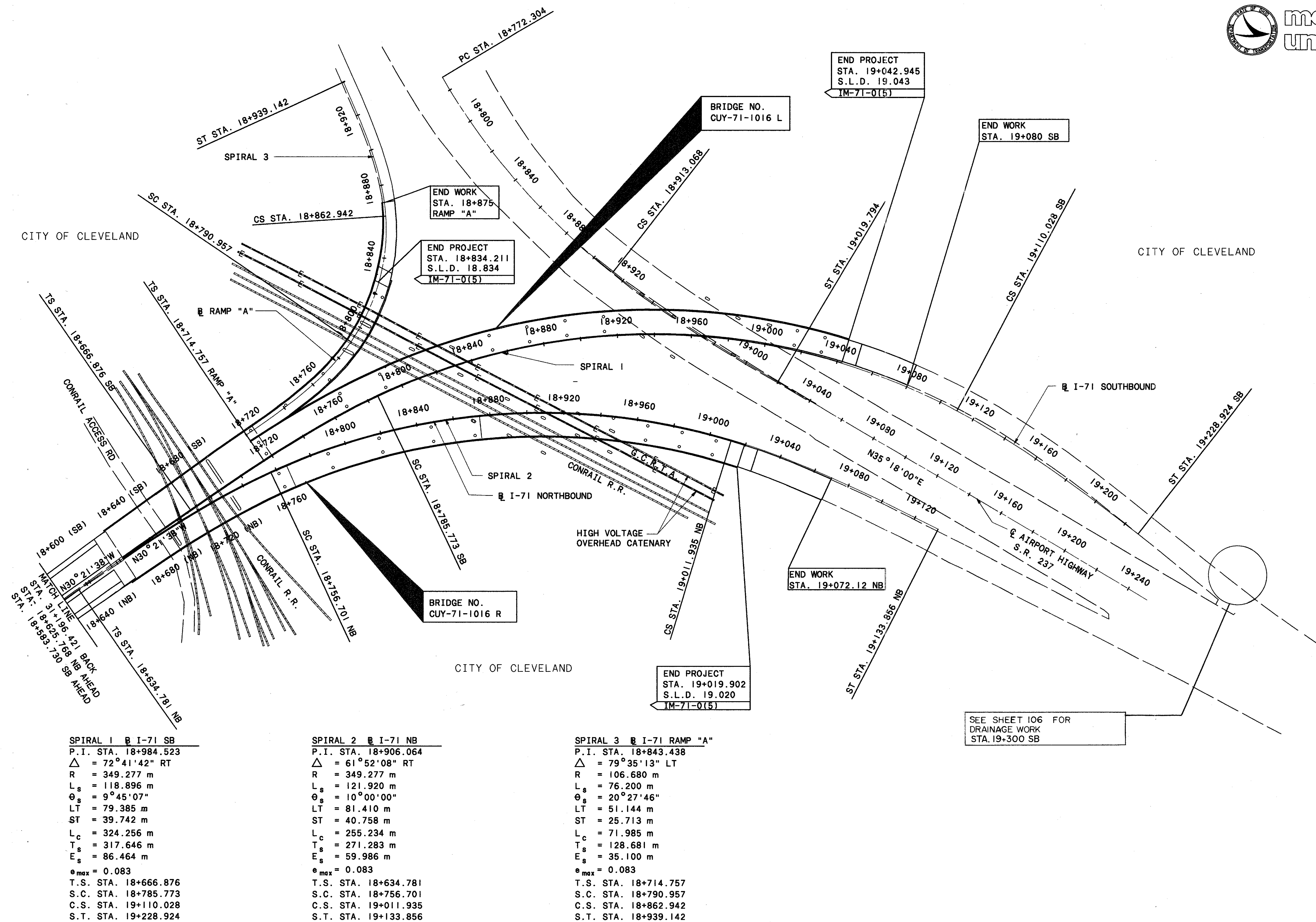




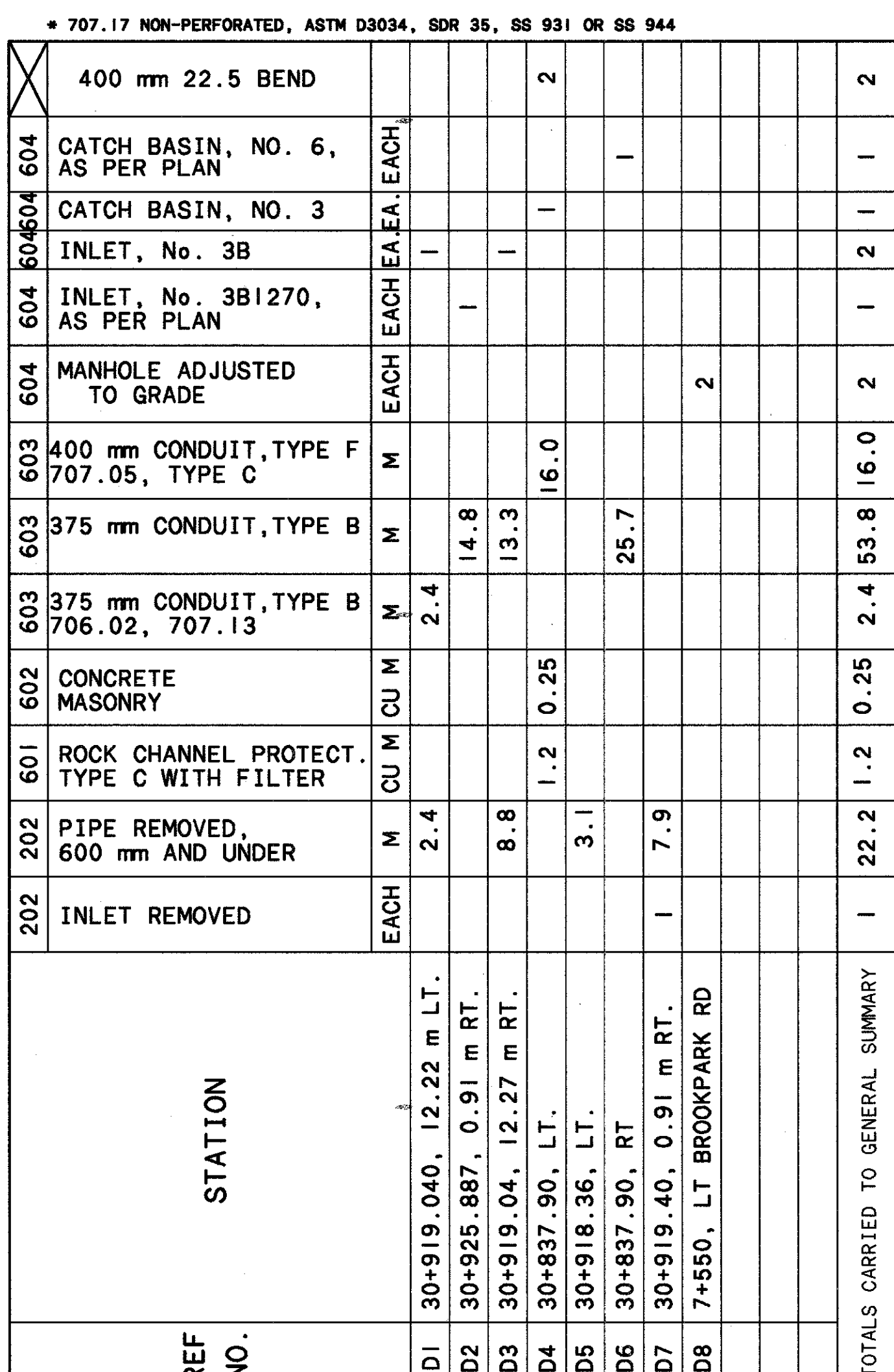
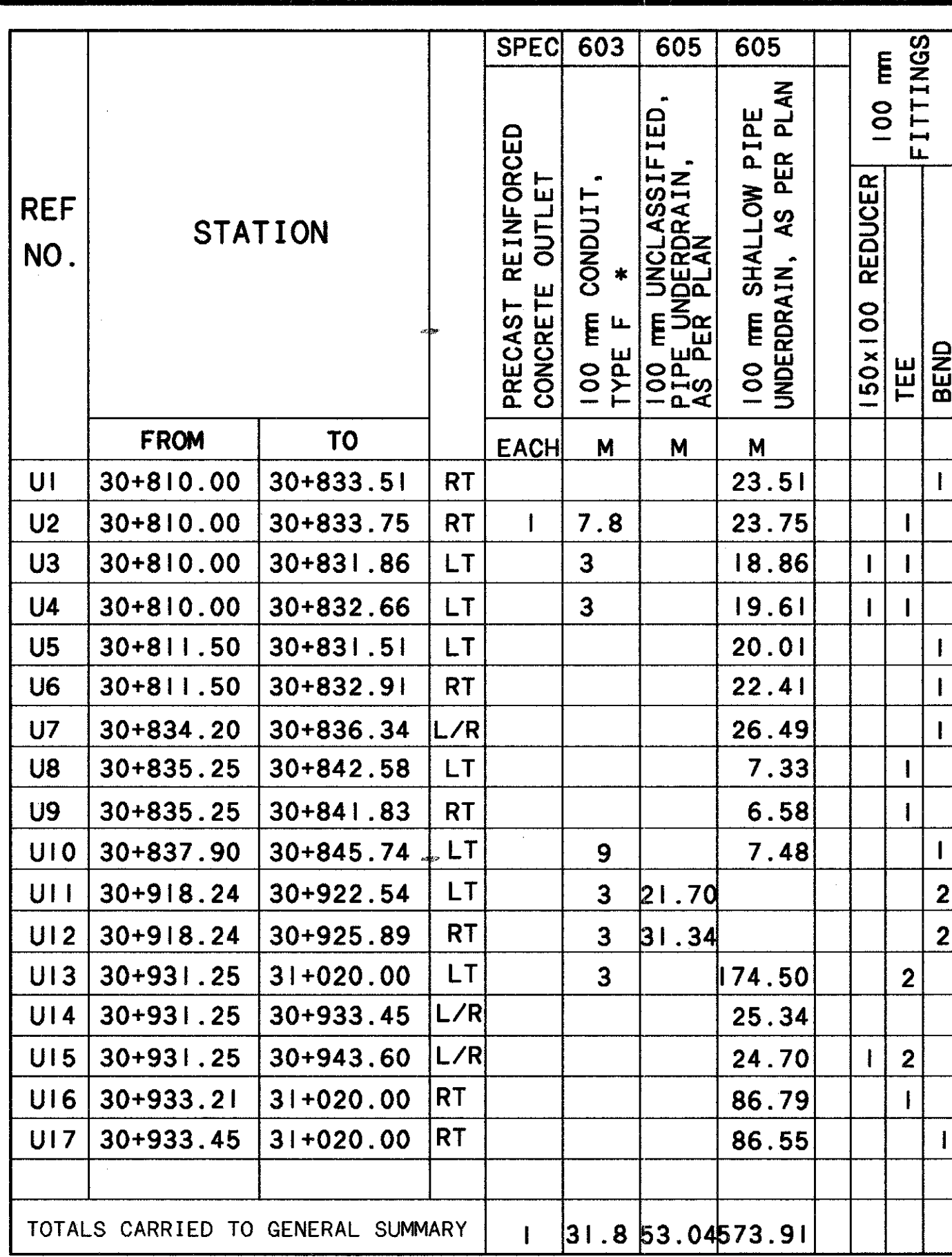
CALCULATED SNR	CHECKED A.M.
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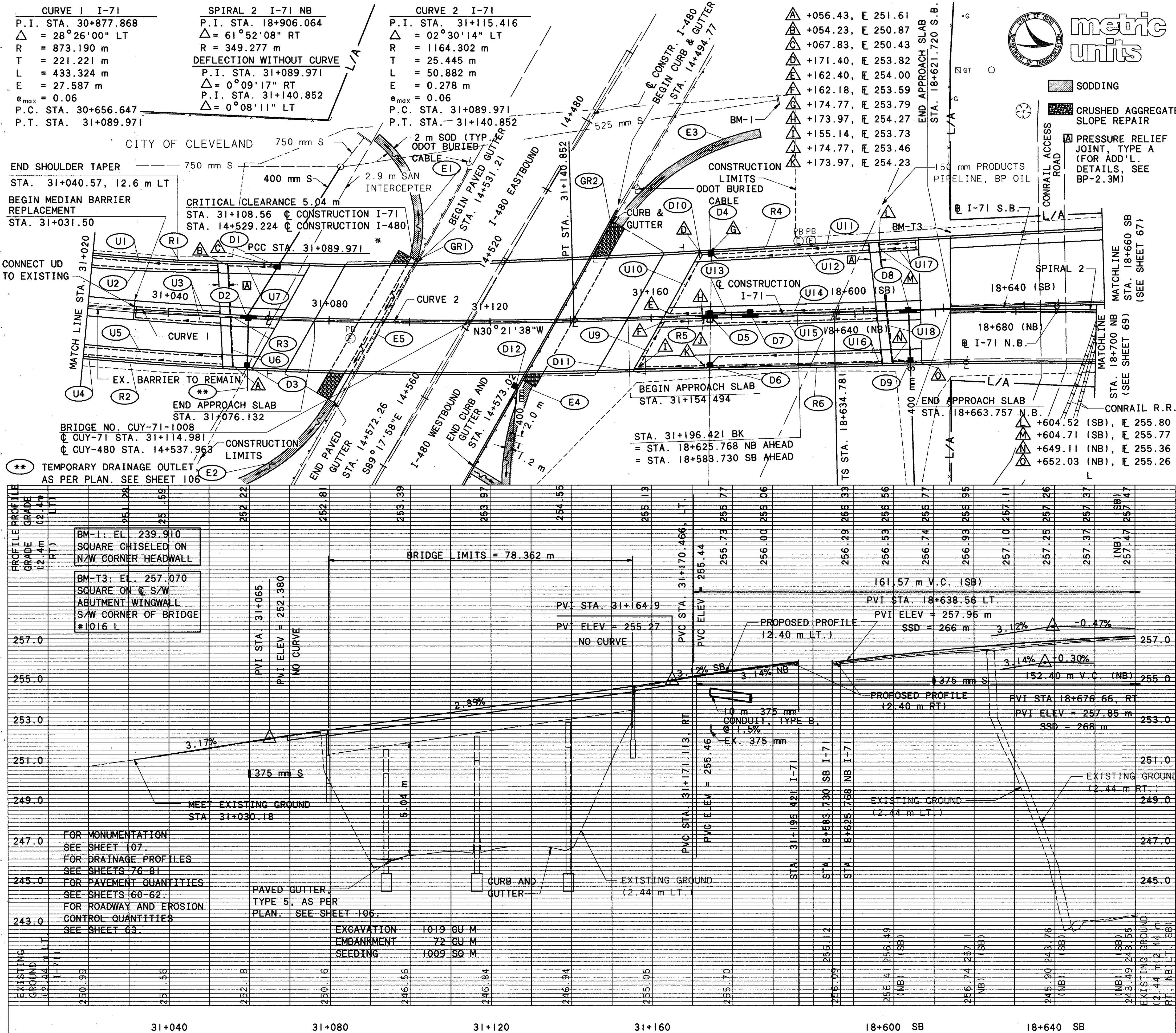
SCHEMATIC PLAN

CUY-71-9.94

$$\frac{3}{28}$$



20-NOV-95 P:\PRI5280\CADD\SCHEME1.DWG





REF NO.	STATION		FROM	TO	L/A	M	M	M	100 mm CONDUIT, TYPE F *	100 mm UNCLASSIFIED PIPE UNDERDRAIN, AS PER PLAN	100 mm SHALLOW PIPE UNDERDRAIN, AS PER PLAN	100x150 mm REDUCER	BEND	TEE	WYE	100 mm FITTINGS
U1	31+020.00	31+051.54	LT													
U2	31+020.00	31+051.73	LT													
U3	31+031.05	31+053.02	L/R	3												
U4	31+020.00	31+054.12	RT													
U5	31+020.00	31+053.25	RT													
U6	31+054.25	31+060.00	L/R													
U7	31+060.00	31+066.66	LT	3												
U9	31+173.97	31+174.77	RT	3												
U10	31+173.97	31+174.77	LT	3												
U11	31+174.77	18+601.83	SB	3												
U12	31+174.77	18+602.02	SB	3												
U13	31+174.77	31+184.16	SB	3												
U14	31+184.77	18+606.02	SB	3												
U15	31+174.77	18+648.26	NB	6												
U16	31+174.77	18+649.11	NB	9												
U17	18+604.52	18+613.82	SB													
U18	18+604.52	18+652.30	S/N	3												
TOTALS CARRIED TO GENERAL SUMMARY										42.00	73.07	481.99				

REF NO.	STATION		FROM	TO	L/A	M	M	M	100 mm CONDUIT, TYPE F *	100 mm UNCLASSIFIED PIPE UNDERDRAIN, AS PER PLAN	100 mm SHALLOW PIPE UNDERDRAIN, AS PER PLAN	100x150 mm REDUCER	BEND	TEE	WYE	100 mm FITTINGS
D1	31+067.63	13.28 m LT.														
D2	31+060.000	0.91 m RT.														
D3	31+060.000	12.07 m RT.														
D4	31+174.770	15.43 m LT.														
D5	31+174.770	0.91 m LT.														
D6	31+174.770	12.07 m RT.														
D7	31+184.770	0.91 m LT.														
D8	18+652.03	0.91 m LT.														
D9	18+652.030	12.07 m RT.														
D10	31+172.430	LT.														
D11	31+158.240	RT.														
D12	14+546.500	LT. (I-480)														
TOTALS CARRIED TO GENERAL SUMMARY										6.2	2.4	0.50				



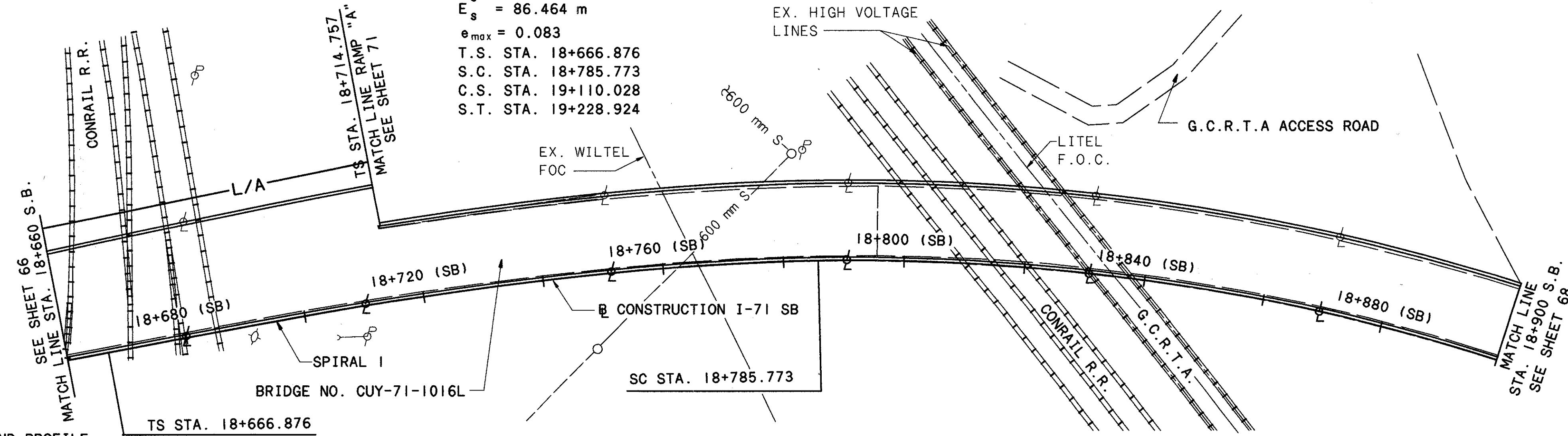
HORIZONTAL
SCALE IN METERS

PLAN AND PROFILE
STA. 18+660 SB TO STA. 18+900 SB

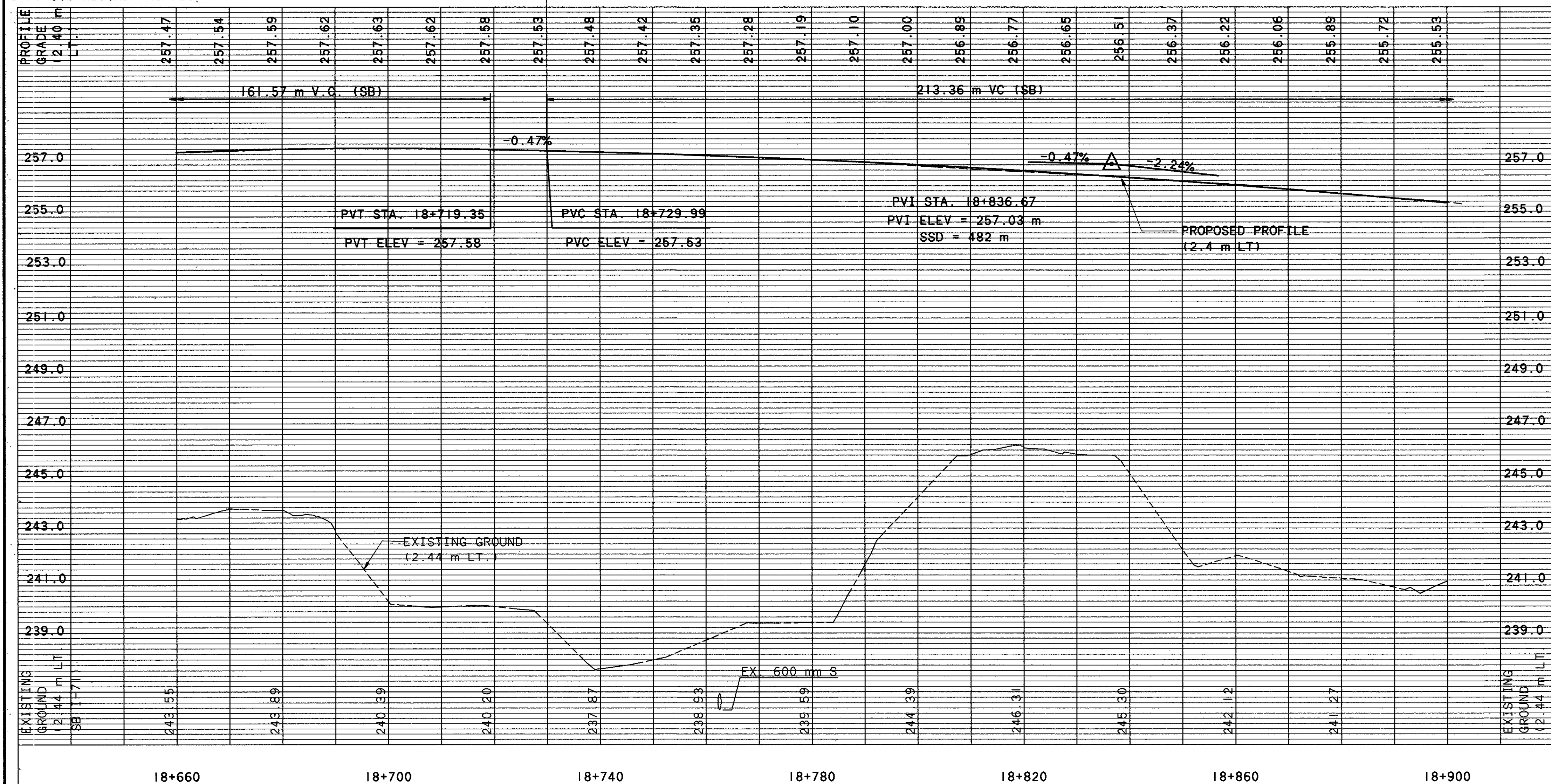
CUY-71-9. 94

$$\frac{67}{283}$$

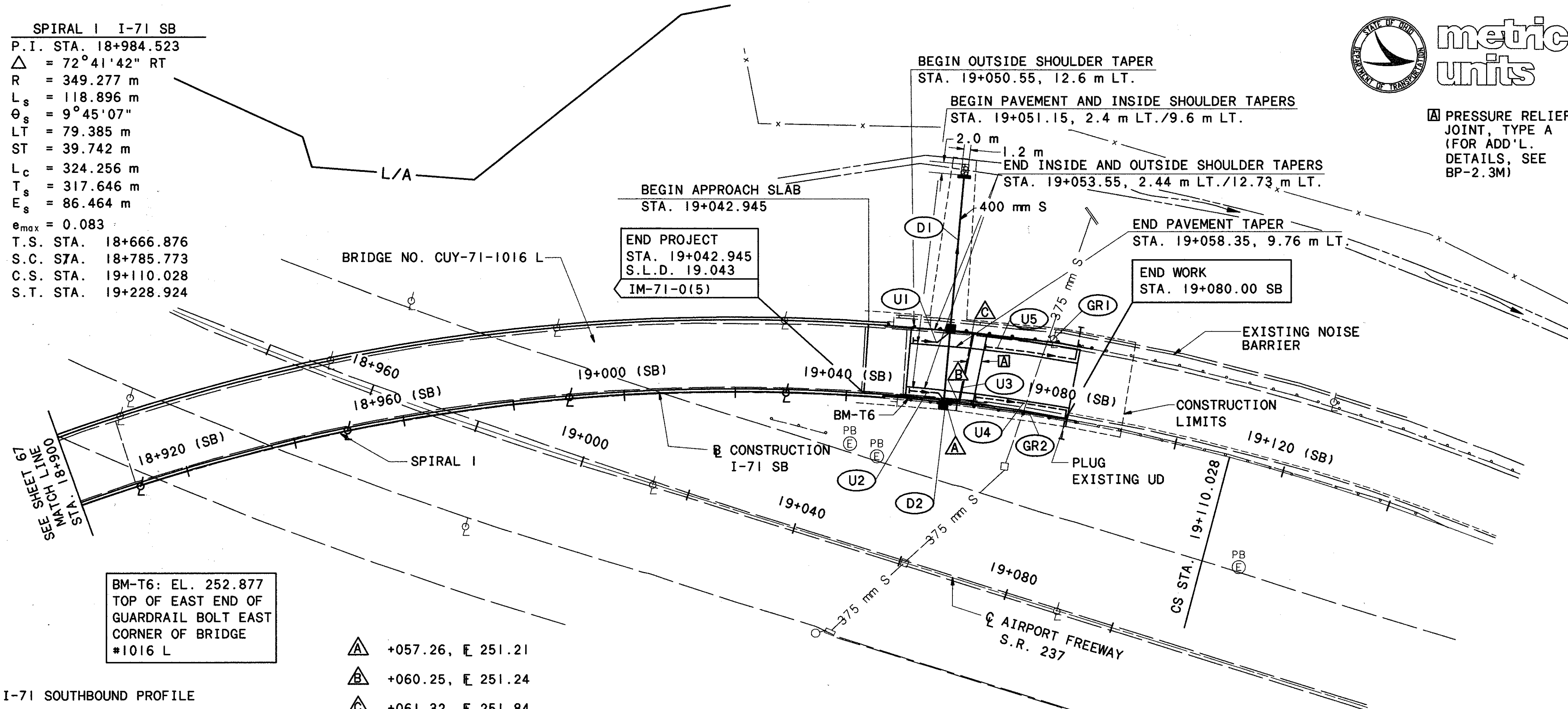
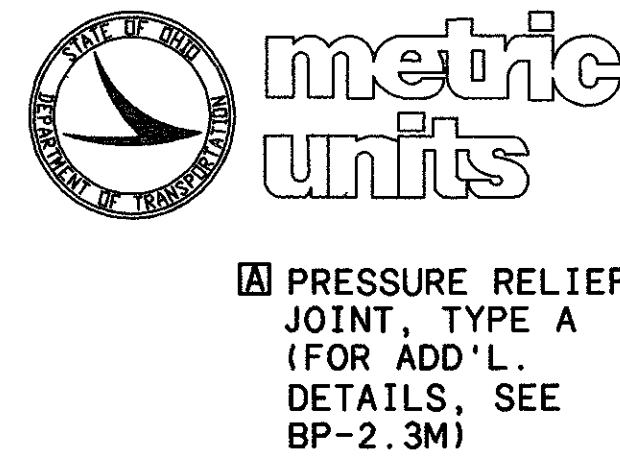
SPIRAL	I	I-7I SB
P.I.	STA. 18+984.523	
Δ	= 72° 41' 42" RT	
R	= 349.277 m	
L _s	= 118.896 m	
θ_s	= 9° 45' 07"	
LT	= 79.385 m	
ST	= 39.742 m	
L _C	= 324.256 m	
E	= 317.646 m	
E _s	= 86.464 m	
e _{max}	= 0.083	
T.S.	STA. 18+666.876	
S.C.	STA. 18+785.773	
C.S.	STA. 19+110.028	
S.T.	STA. 19+228.924	



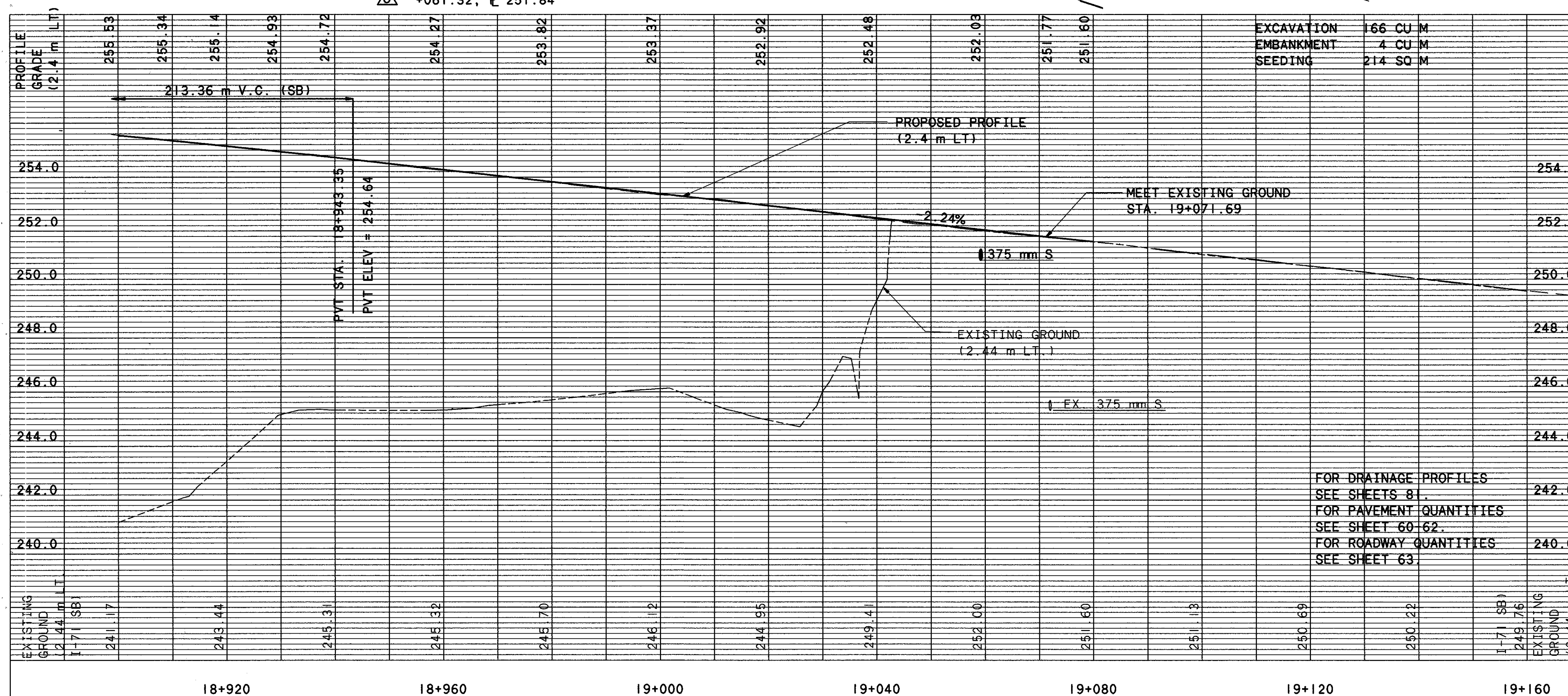
I-71 SOUTHBOUND PROFILE.

[illegible][illegible]

SPIRAL I I-71 SB
P.I. STA. 18+984.523
 $\Delta = 72^\circ 41' 42''$ RT
R = 349.277 m
 $L_s = 118.896$ m
 $\theta_s = 9^\circ 45' 07''$
LT = 79.385 m
ST = 39.742 m
 $L_c = 324.256$ m
 $T_s = 317.646$ m
 $E_s = 86.464$ m
 $e_{max} = 0.083$
T.S. STA. 18+666.876
S.C. STA. 18+785.773
C.S. STA. 19+110.028
S.T. STA. 19+228.924



I-71 SOUTHBOUND PROFILE



REF NO.	STATION		SPEC	605	605	100 mm FITTINGS		
	FROM	TO				BEND	TEE	WYE
U1	19+050.65	19+057.26	SB	3.00	3.61	I		
U2	19+050.65	19+057.26	SB	3.00	3.61	I		
U3	19+057.26	19+061.32	SB	3.00	12.84	I		
U4	19+063.13	19+080.00	SB	I	16.87	I		
U5	19+063.76	19+080.00	SB	I	16.24	I		
TOTALS CARRIED TO GENERAL SUMMARY			2	22.00	53.17			

* 707.17 NON-PERFORATED ASTM D3034, SDR 35, SS 931 OR SS 944

REF NO.	STATION		SPEC	605	605	100 mm FITTINGS		
	FROM	TO				BEND	TEE	WYE
D1	19+057.260	13.89 m LT.						
D2	19+057.260	0.00 m LT.						
TOTALS CARRIED TO GENERAL SUMMARY			1.2	0.25				

I-71 NORTHBOUND PROFILE

EXISTING GROUND (2.44 m RT.) NB I-71

EXISTING PROFILE

PROPOSED PROFILE (2.4 m RT.)

PVCC STA. 18+752.86
PVCC ELEV = 257.526

152.40 m V.C. (NB)

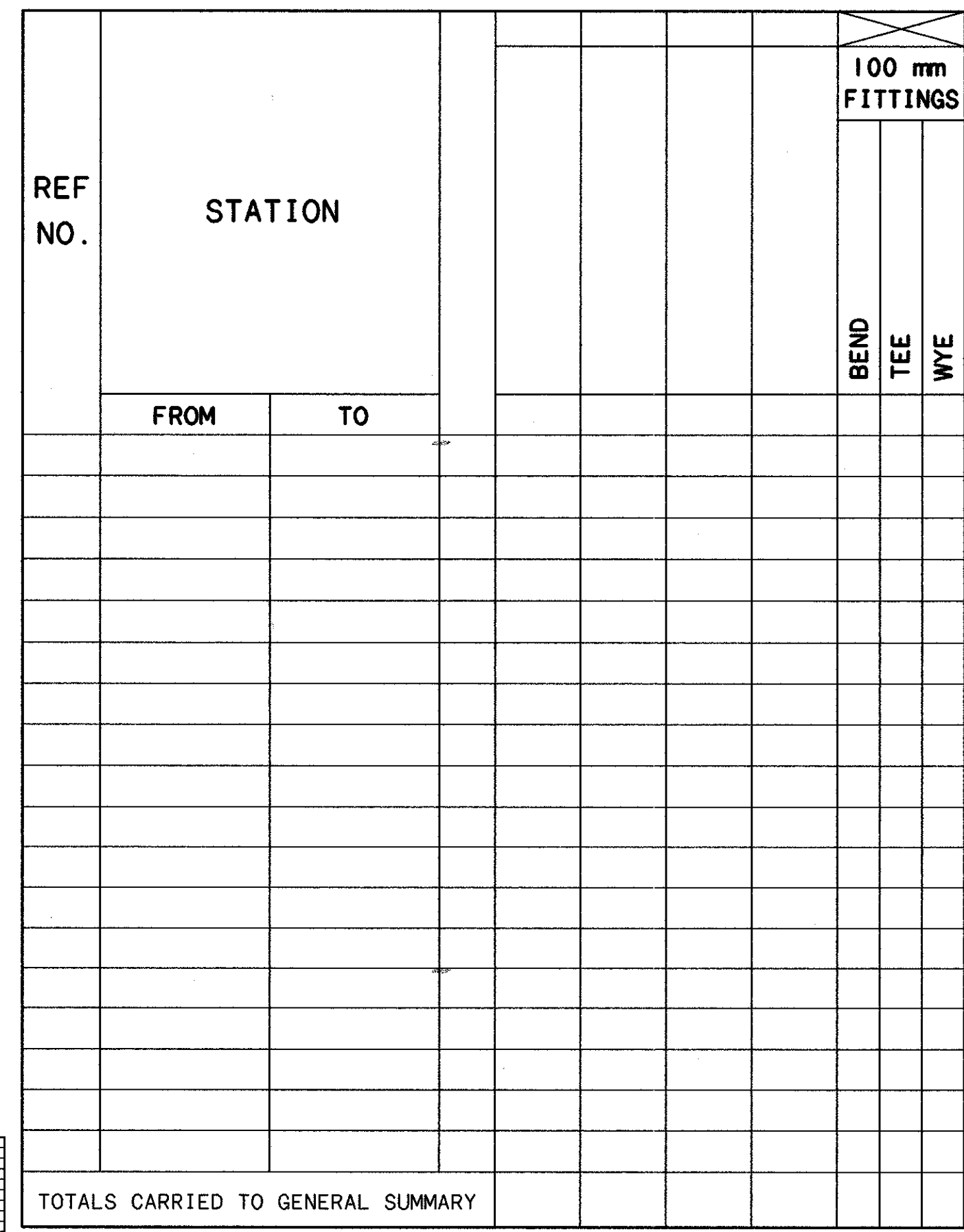
289.56 m V.C. (NB)

PVI STA. 18+897.64
PVI ELEV = 257.19 m
SSD = 429 m

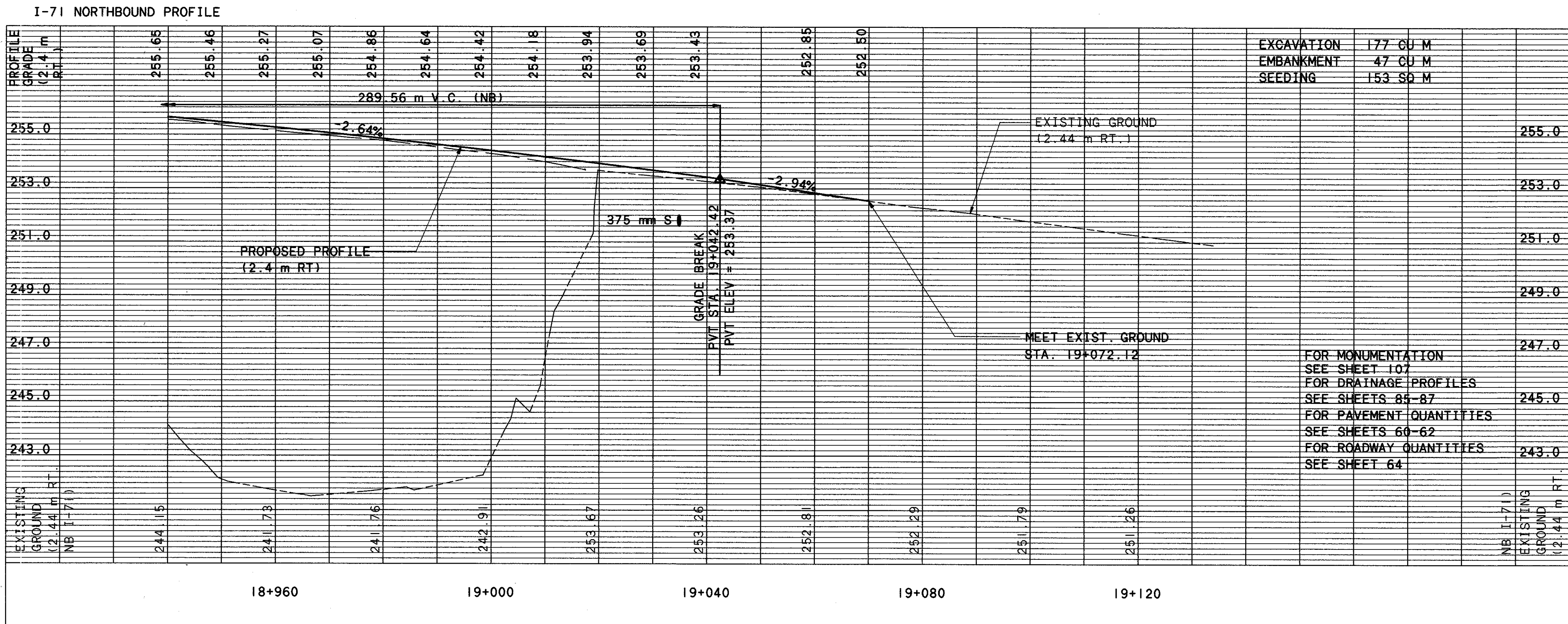
-0.30%
-2.64%

EXISTING GROUND (2.44 m RT.) NB I-71

Station	Existing Ground (2.44 m RT.)	Existing Profile	Proposed Profile (2.4 m RT.)
18+720	243.49	257.47	257.47
18+760	238.85	257.63	257.63
18+800	238.56	257.39	257.39
18+840	240.29	257.15	257.15
18+880	245.80	256.59	256.59
18+920	245.85	255.83	255.83

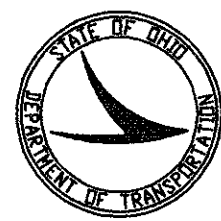
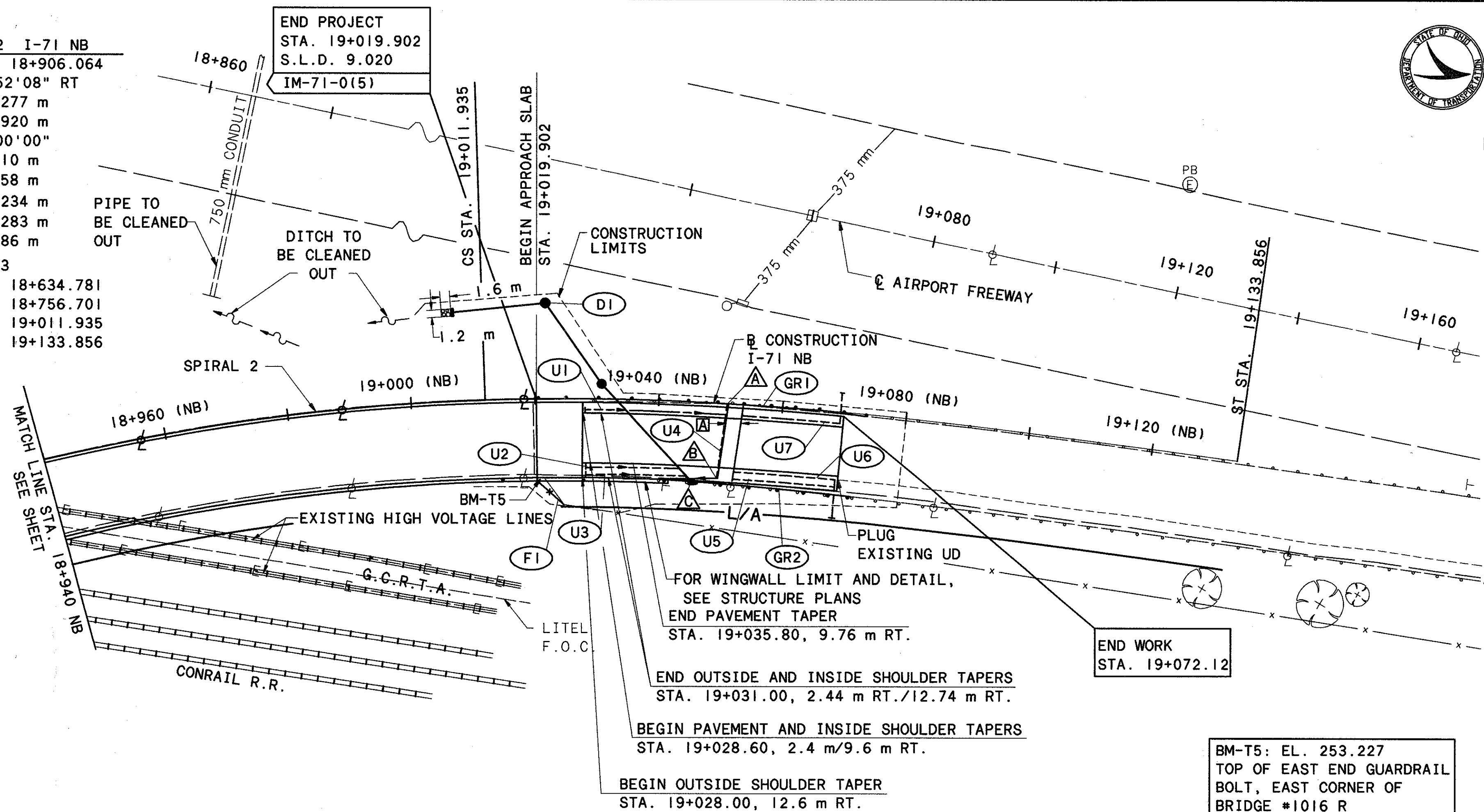
[illegible]

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; padding: 5px; text-align: center;"> <div style="display: flex; justify-content: space-between;"> 69 2833 </div> </div> <div style="text-align: center; flex-grow: 1;"> <p>CUY-71-9.94</p> </div> </div>	<div style="text-align: center; padding: 10px;"> <p>PLAN AND PROFILE</p> <p>STA. 18+700 NB TO STA. 18+940 NB</p> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p>CALCULATED</p> <p>TGW</p> <p>CHECKED</p> <p>ALM</p> </div> <div style="width: 60%; text-align: right;">  <p>5 0 5 10 20</p> <p>HORIZONTAL</p> <p>SCALE IN METERS</p> </div> </div>
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- △ +051.07 E 252.49
△ +050.00 E 251.73
△ +042.24 E 251.50

SPIRAL 2 I-71 NB
P.I. STA. 18+906.064
Δ = 61°52'08" RT
R = 349.277 m
L_s = 121.920 m
θ_s = 10°00'00"
LT = 81.410 m
ST = 40.758 m
L_c = 255.234 m
T_s = 271.283 m
E_s = 59.986 m
e_{max} = 0.083
T.S. STA. 18+634.781
S.C. STA. 18+756.701
C.S. STA. 19+011.935
S.T. STA. 19+133.856



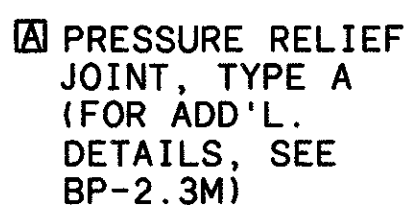
metric
units

△ PRESSURE RELIEF
JOINT, TYPE A
(FOR ADD'L.
DETAILS, SEE
BP-2.3M)

REF NO.	STATION		SPEC	605	605	100 mm FITTINGS		
	FROM	TO				BEND	TEE	WYE
U1	19+027.50	19+050.87	NB			23.37		
U2	19+027.50	19+042.24	NB	3.00		14.74		
U3	19+027.50	19+042.24	NB			14.74		
U4	19+051.07	19+042.24	NB	3.00		17.57		
U5	19+052.60	19+072.12	NB			19.52		
U6	19+052.60	19+072.12	NB	1	6.50	19.52		
U7	19+053.66	19+072.12	NB	1	6.00	18.46		
TOTALS CARRIED TO GENERAL SUMMARY			2	18.50		127.92		

* 707.10 NON-PERFORATED ASTM D3034, SDR 35, SS 931 OR SS 944

REF NO.	STATION		SPEC	605	605	100 mm FITTINGS		
	FROM	TO				BEND	TEE	WYE
400 mm 22.5° BEND								
604 MANHOLE, No. 5								
604 INLET, PAVEMENT 3.6 m AS PER PLAN								
603 400 mm CONDUIT, TYPE F, 707.05, TYPE C								
603 375 mm CONDUIT, TYPE B								
602 CONCRETE MASONRY								
601 ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER								
TOTALS CARRIED TO GENERAL SUMMARY			0.96	0.25		0.25		

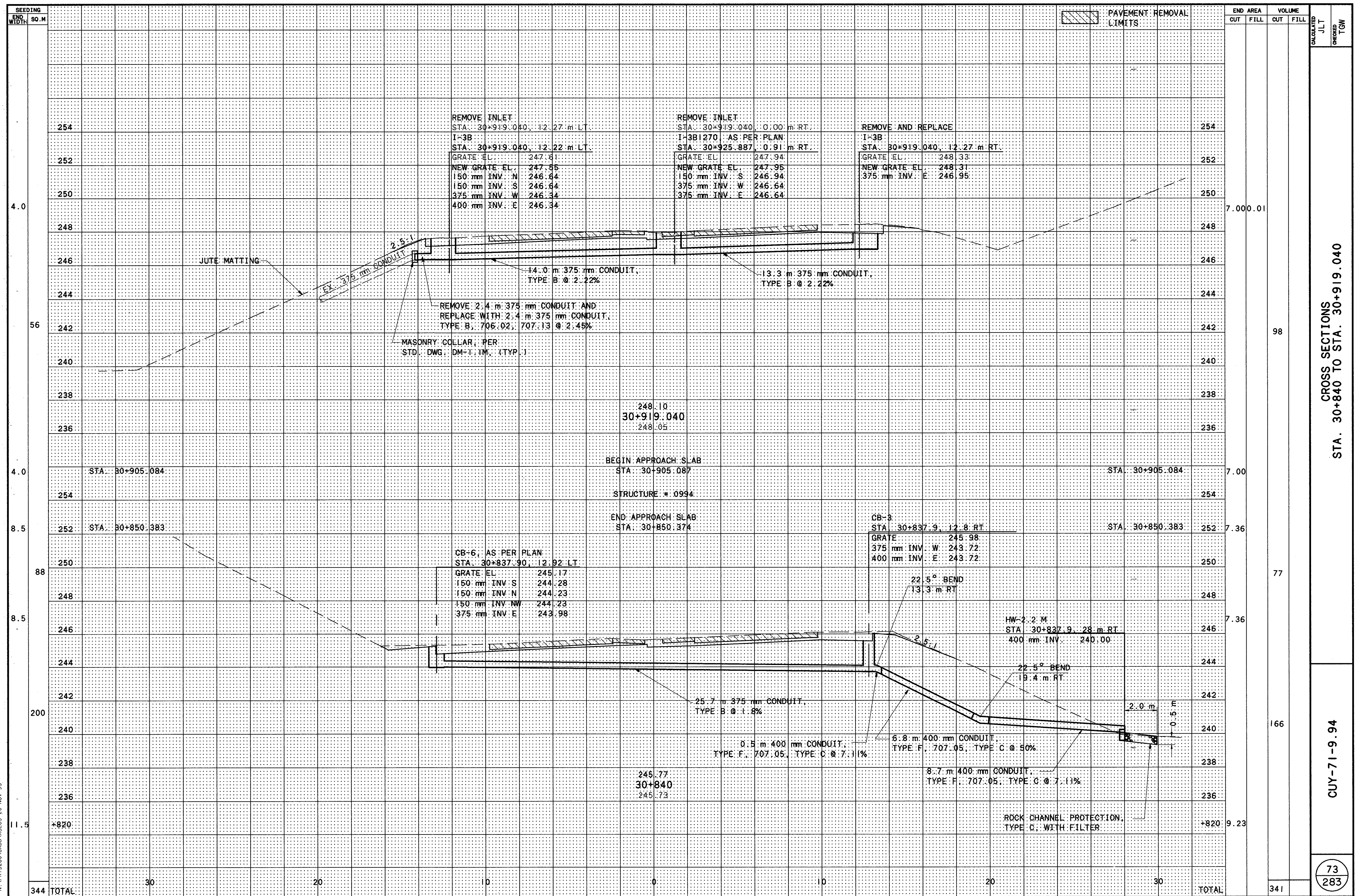


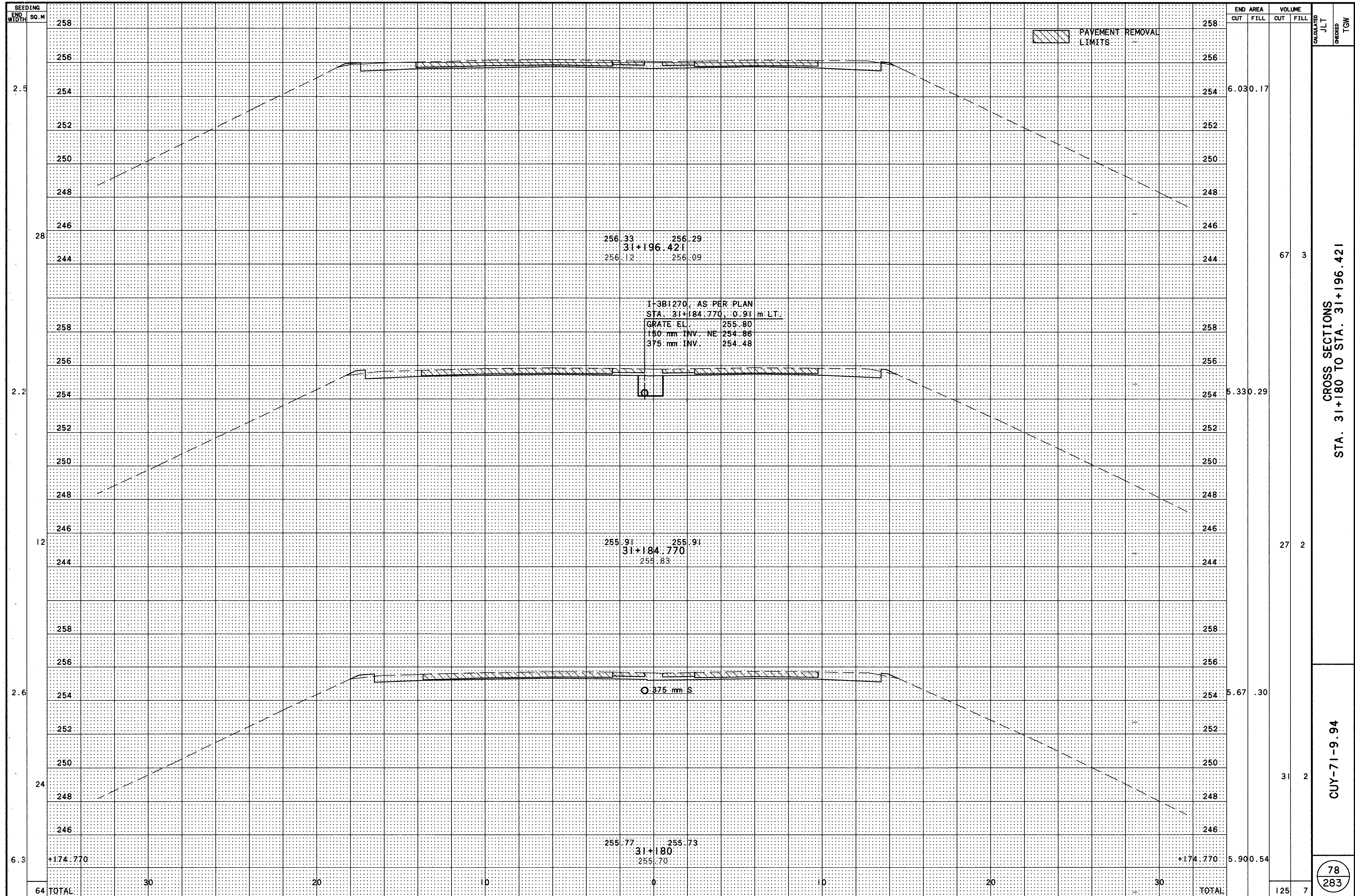
BM-T4 EL. 256.214
TOP OF N/W END GUARDRAIL
BOLT ON BEGINNING OF
BRIDGE #1016 RAMP A

EXCAVATION	10 CU M	
EMBANKMENT	49 CU M	
SEEDING	322 SQ M	245.0
		243.0
FOR MONUMENTATION		
SEE SHEET 107		
FOR DRAINAGE PROFILES		
SEE SHEETS 88-89		241.0
FOR PAVEMENT QUANTITIES		
SEE SHEET 60-62.		
FOR ROADWAY QUANTITIES		239.0
SEE SHEET 64		

* 707.17 NON-PERFORATED ASTM D3034, SDR 35. SS 931 OR SS 944

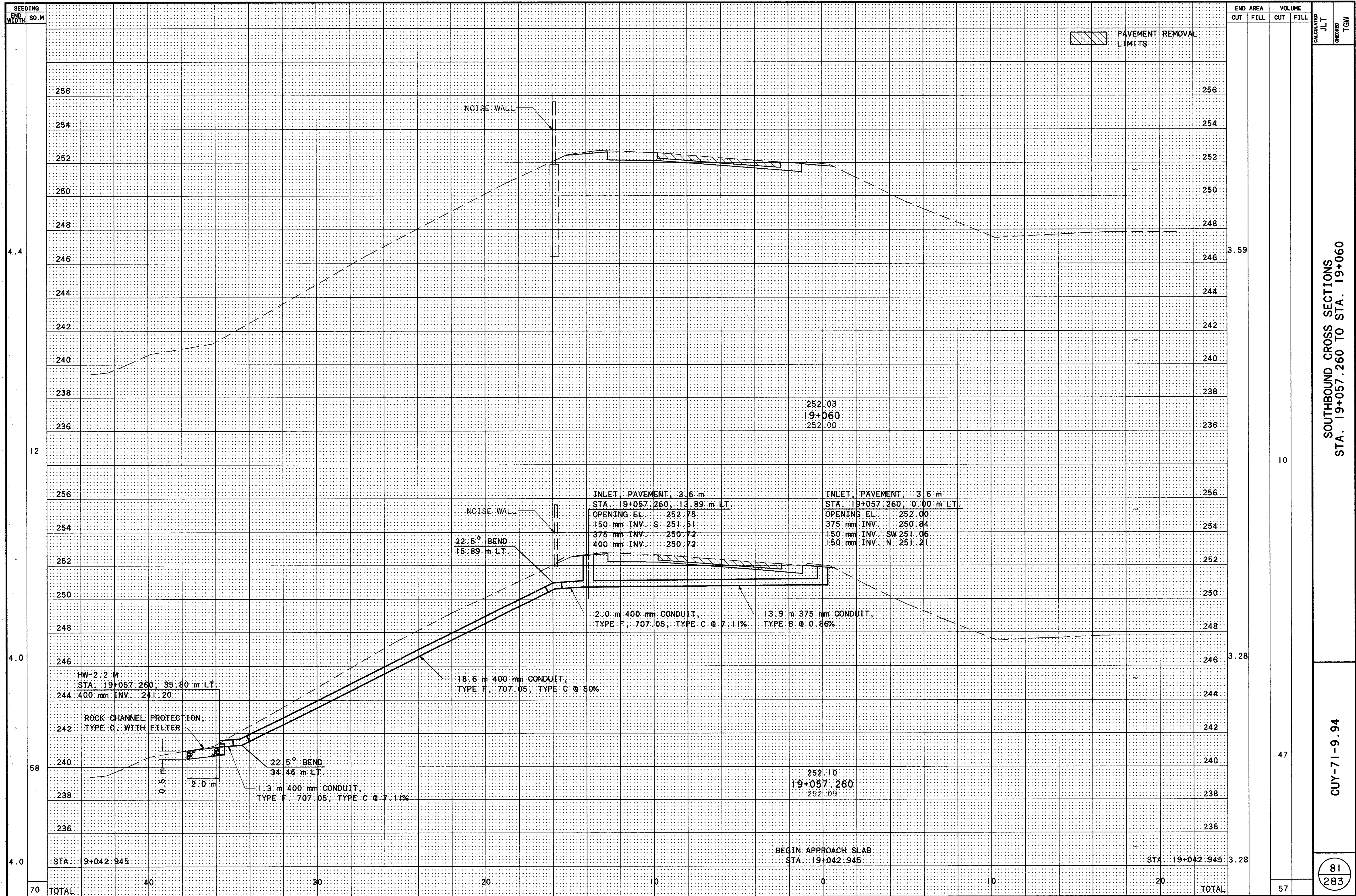
HORIZONTAL
SCALE IN METERS

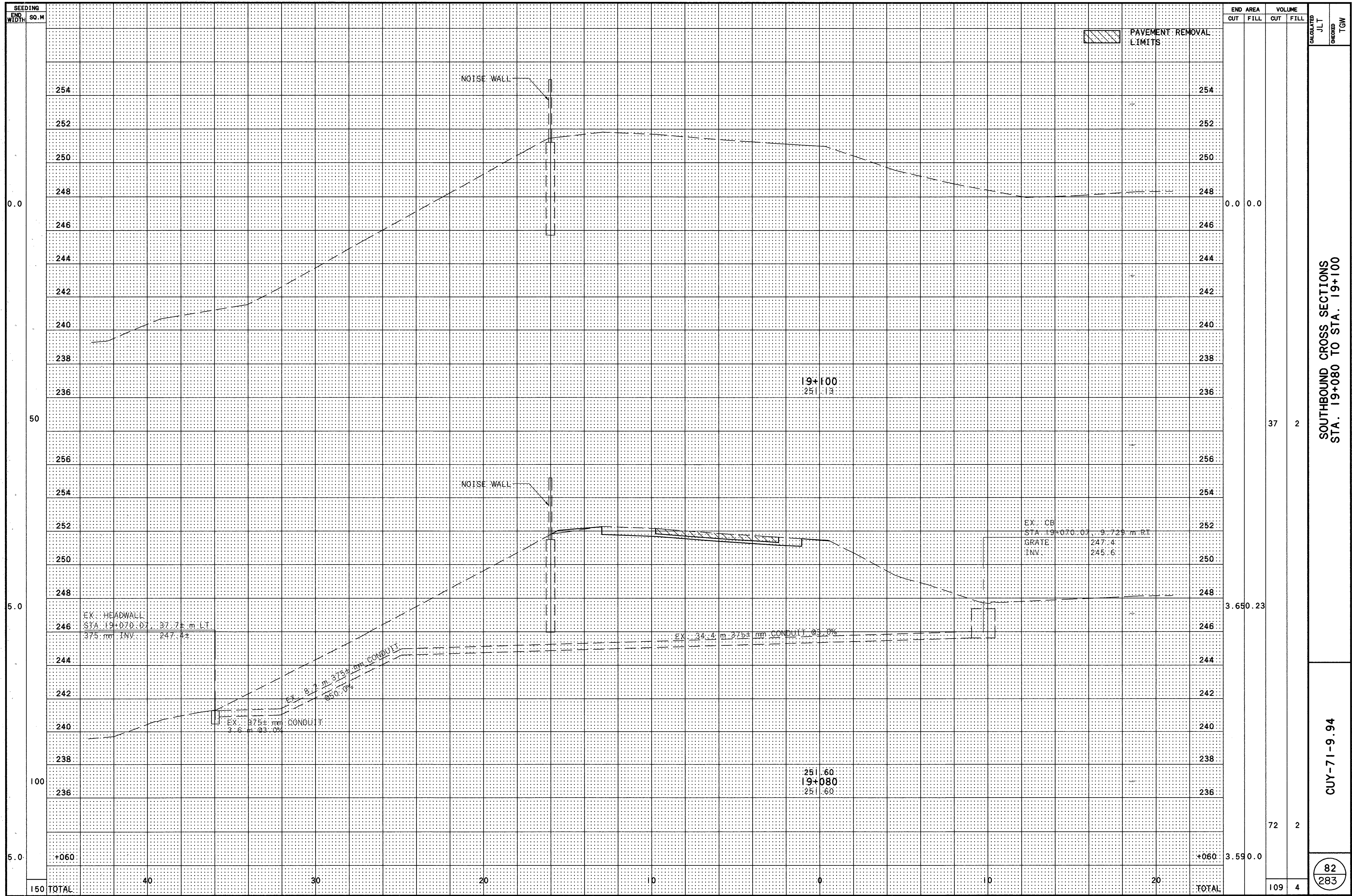


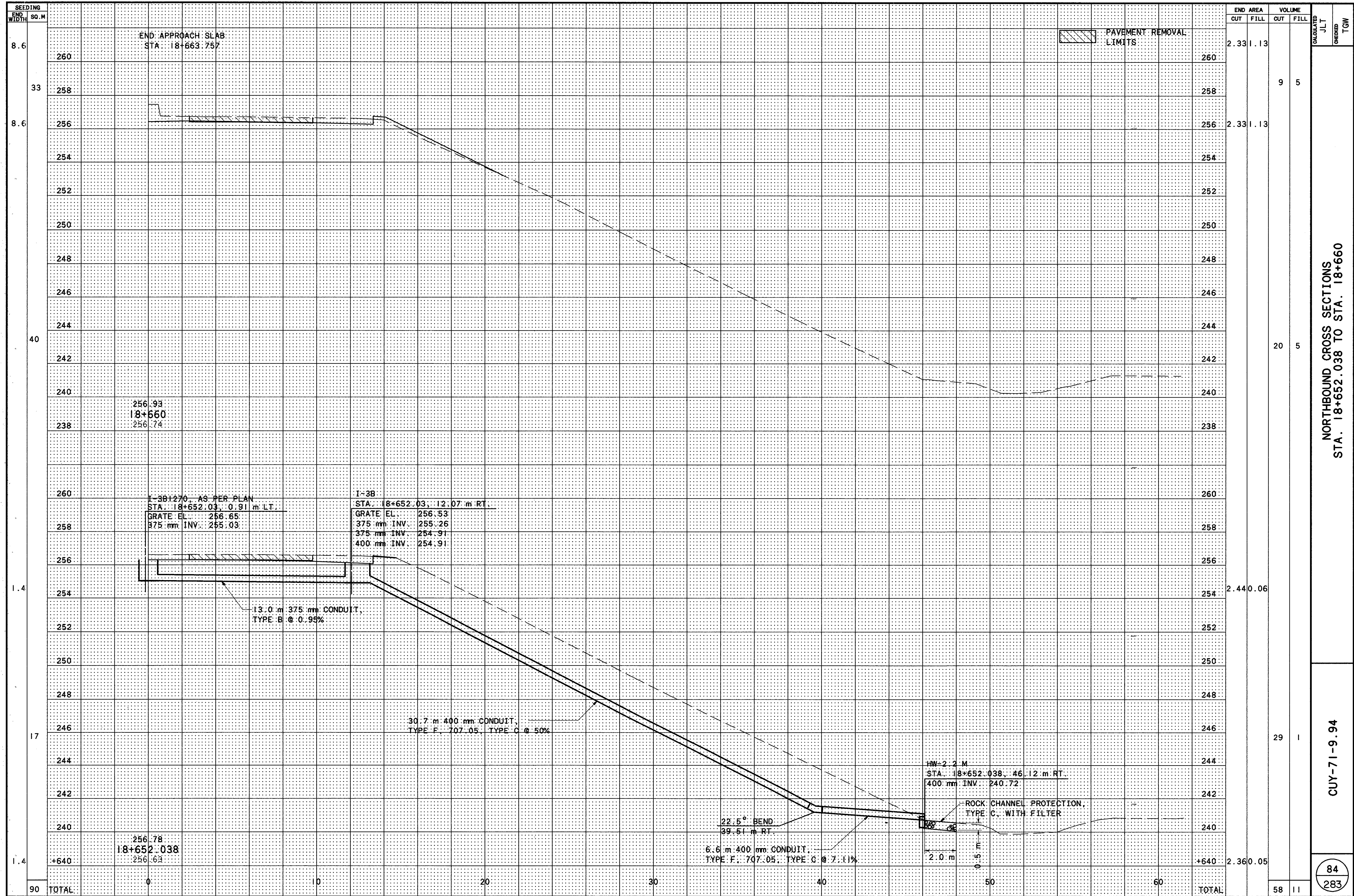


CROSS SECTIONS
STA. 31+180 TO STA. 31+196.421

CUY-71-9.94

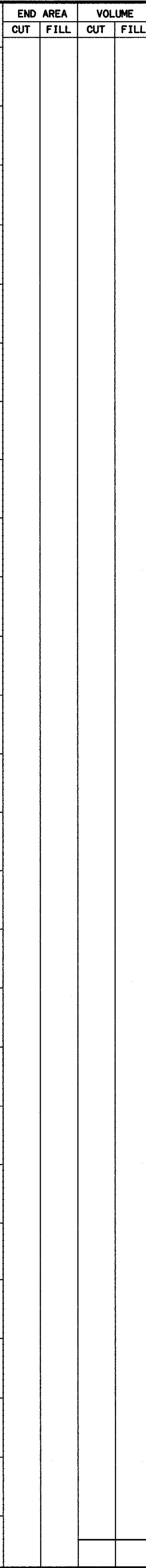




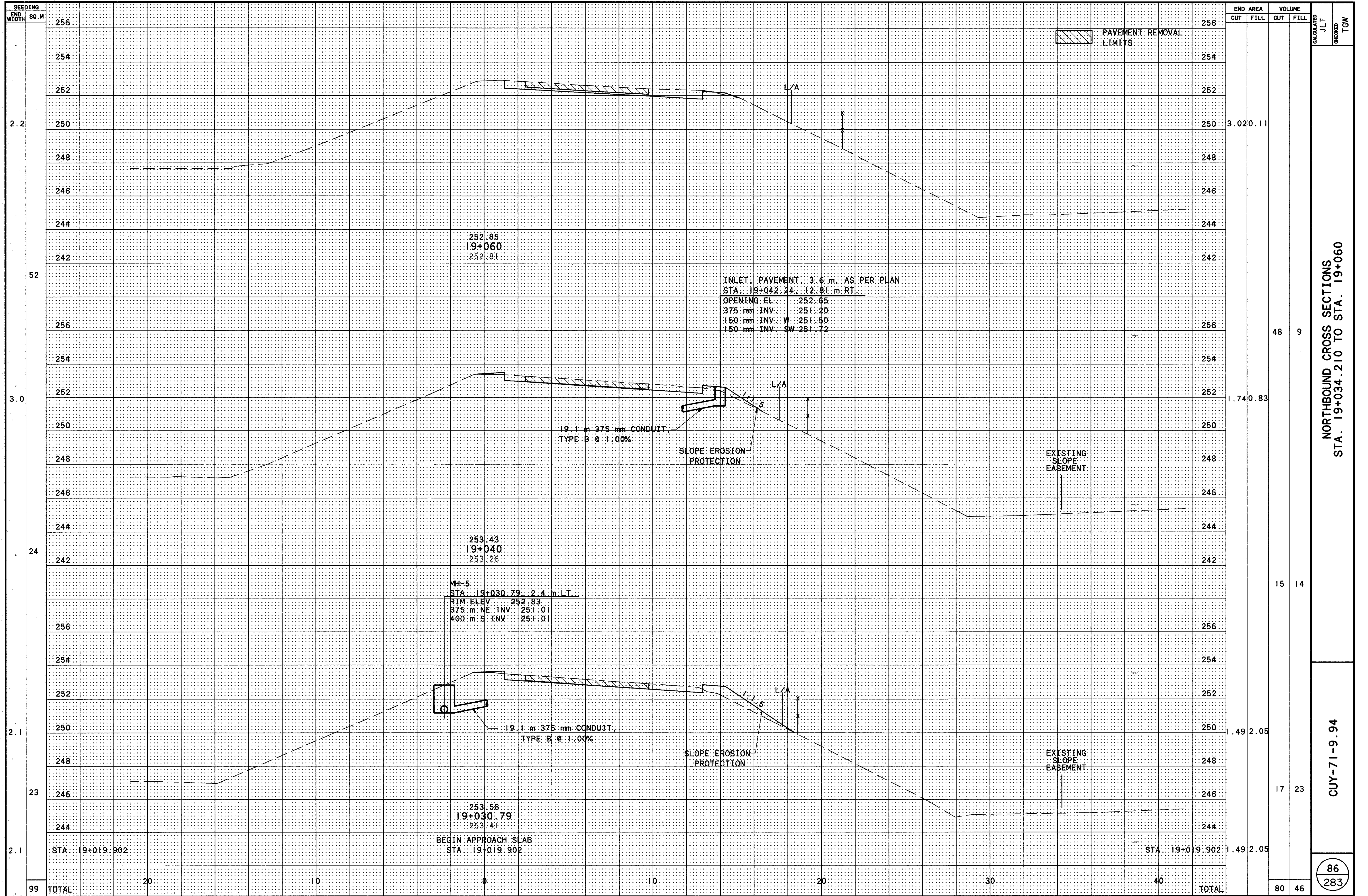


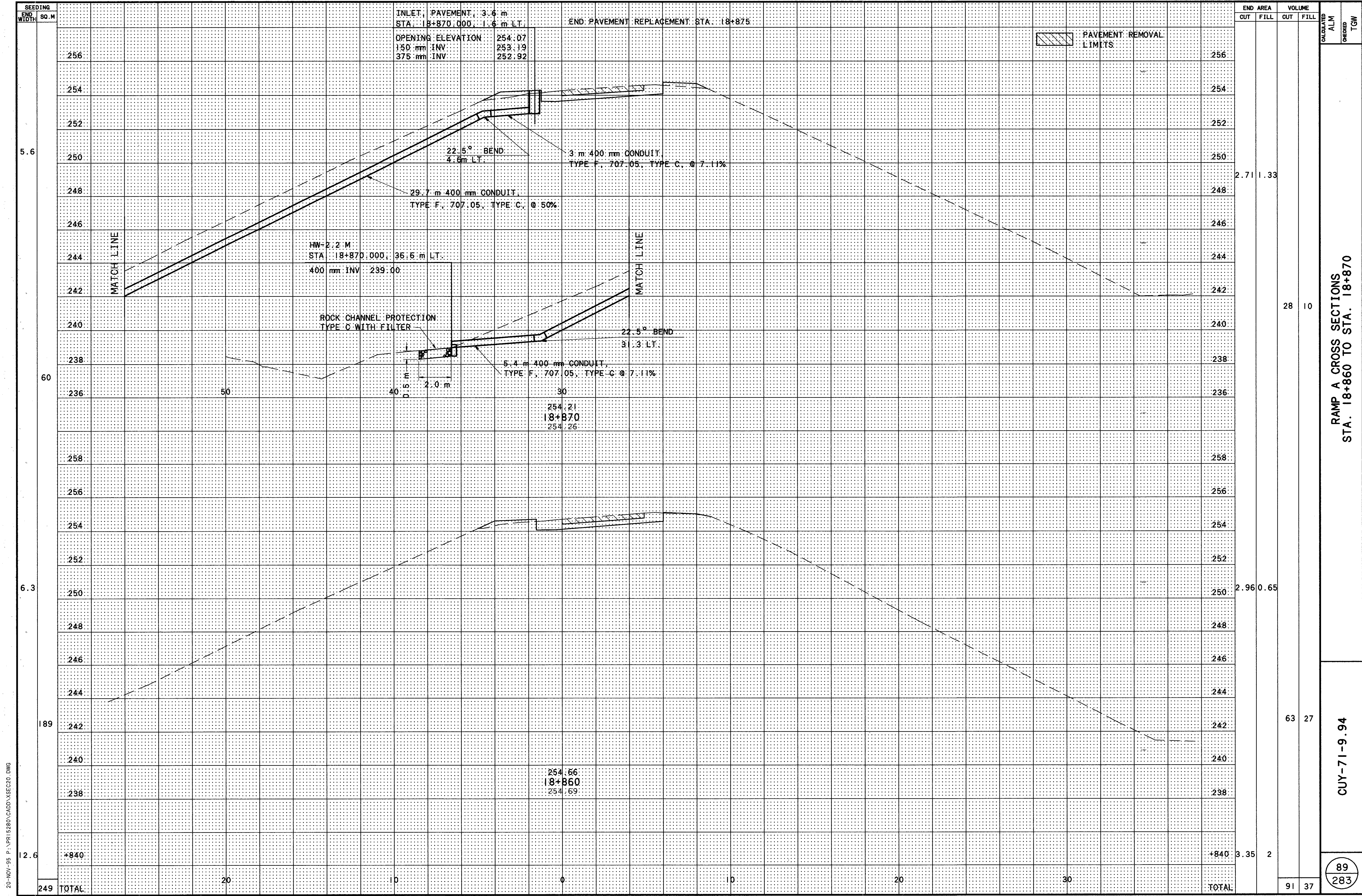
NORTHBOUND CROSS SECTIONS
STA. 18+652.038 TO STA. 18+660

CUY-71-9.94



85
283





20-NOV-95 P:\PRI5280\CADD\XSEC20.DWG

