

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PC	PT
PC I	620,346.66	221,666.56	PC 1	3+84.21						
PI I	621,245.78	221,271.32	PC 1 PI 1	13+66.37 13+46.04	20°10'27.10"	5521.02	1943.98	982.16	3+84.21	23+28.20
PI II	623,175.67	219,413.90	PI 1 2	40+24.56 40+00.96	31°12'37.85"	1700.00	926.03	474.82	35+49.74	44+75.78
PI III	623,550.88	218,002.34	2 3	54+61.54 54+57.12	15°25'38.76"	2700.00	727.00	365.71	50+95.83	58+22.83
PI IV	623,541.52	217,012.41	3 4	64+47.10 63+49.83	54°58'07.91"	1200.00	1157.27	624.27	58+22.83	69+74.10
PI V	622,836.58	216,528.11	4 5	72+05.10 72+01.50	17°30'35.07"	1500.00	458.40	231.00	69+74.10	74+32.50
PI VI A	621,831.98	215,242.32	5 6A	88+33.21						
PI V B	621,906.84	215,183.83	PI 5B	88+33.21						
PI VI	621,737.46	214,967.03	5B 6	91+08.33 90+88.83	41°07'51.06"	600.00	430.72	225.11	88+83.22	93+13.94
PI VII	621,810.72	213,627.87	6 7	104+29.99 103+77.13	49°51'07.19"	890.00	774.37	413.62	100+16.38	107+90.75
PI VIII	622,791.70	212,888.20	7 8	116+05.74 115+92.58	31°50'54.83"	890.00	494.72	253.93	113+51.79	118+46.51
PI IX	623,052.89	212,212.53	8 9	123+16.98 123+14.60	20°37'57.54"	600.00	216.06	109.22	122+07.76	124+23.82
PI X	623,596.98	211,603.31	9 10	131+31.42 131+29.70	18°34'53.49"	600.00	194.59	98.15	130+33.27	132+27.85
PI XI A	623,755.79	211,512.91	10 11 A	133+12.44						
PI X B	623,767.41	211,533.33	PI 10B	133+12.44						
PI XI	626,194.10	210,151.89	10B 11	161+04.79 160+43.92	62°20'04.77"	500.00	543.97	302.42	158+02.37	163+46.34
PI XII	626,141.82	208,644.31	11 12	186+91.21 181+79.60	91°59'10.18"	1100.00	1766.01	138.81	175+52.40	193+18.41
PI XIII	628,211.76	207,506.19	12 13	202+89.00 202+53.40	54°33'22.02"	450.00	428.48	232.04	200+56.96	204+85.44
PI XIVA	628,404.31	207,235.68	13 14A	205+85.45						

PI	PLANE COORDINATES		CUT	PI/PI
	X	Y		
PI XIII B	628,409.37	207,239.28	PI 13B	205+85.45
PI XIV	628,573.54	207,008.63	13B 14	208+68.51 208+68.0
PI XV	628,762.82	206,560.85	14 15	213+54.17 213+51.06
PI XVI	630,438.15	204,819.96	15 16	237+67.14 236+75.8
PI XVII	630,089.25	203,324.63	16 17	252+11.38 251+86.31
PI XVIII	629,480.14	202,828.39	17 18	259+72.0 258+87.31
PI XIX A	629,686.01	201,668.91	18 19A	270+65.01
PI XVIII B	629,673.21	201,666.64	PI 18B	270+65.01
PI XIX	629,806.25	200,917.41	18B 19	278+25.95 278+09.51
PI XX	629,429.72	200,294.73	19 20	285+37.21 285+17.21
PI XXI	629,669.10	196,857.32	20 21	319+63.01 319+63.00
PI XXII	629,724.76	196,236.11	21 22	325+86.71 325+86.64
PI XXIII	629,728.97	195,670.00	22 23	331+52.77 331+26.19
PI XXIV	629,197.96	195,294.00	23 24	337+76.84 337+76.71
PI XXV	629,117.02	195,214.00	24 25	338+90.52

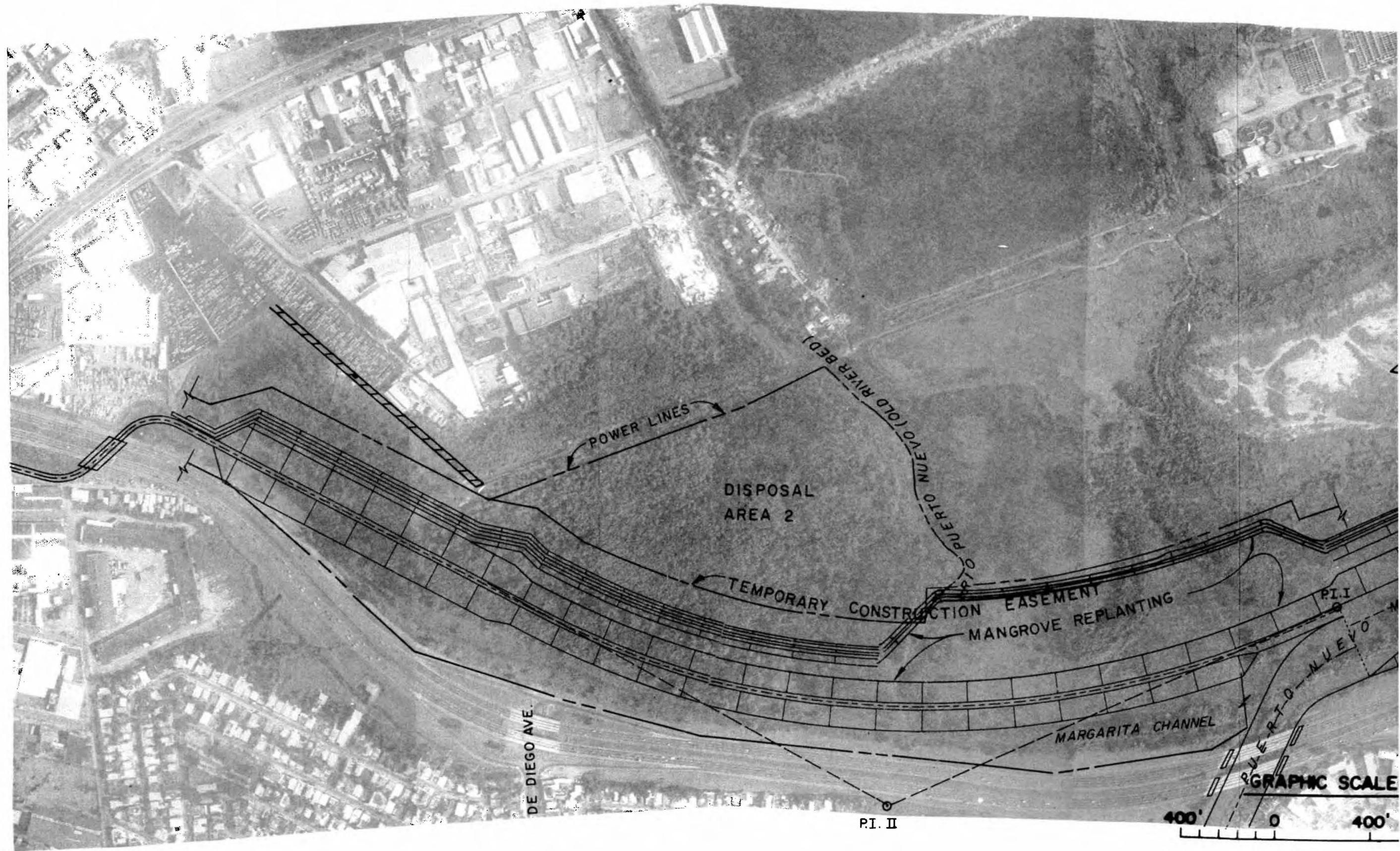
CUT	PI/PI	I	CURVE DATA				
			RADIUS	L	T	PC	PT
PC 1	3+84.21						
PC 1	13+66.37	20°10'27.10"	5521.02	1943.98	982.16	3+84.21	23+28.20
PI 1	13+46.04						
PI 1	40+24.56	31°12'37.85"	1700.00	926.03	474.82	35+49.74	44+75.78
2	40+00.96						
2	54+61.54	15°25'38.76"	2700.00	727.00	365.71	50+95.83	58+22.83
3	54+57.12						
3	64+47.10	54°58'07.91"	1200.00	1157.27	624.27	58+22.83	69+74.10
4	63+49.83						
4	72+05.10	17°30'35.07"	1500.00	458.40	231.00	69+74.10	74+32.50
5	72+01.50						
5	88+33.21						
6A							
PI 5B	88+33.21						
5B	91+08.33	41°07'51.06"	600.00	430.72	225.11	88+83.22	93+13.94
6	90+88.83						
6	104+29.99	49°51'07.19"	890.00	774.37	413.62	100+16.38	107+90.75
7	103+77.13						
7	116+05.74	31°50'54.83"	890.00	494.72	253.93	113+51.79	118+46.51
8	115+92.58						
8	123+16.98	20°37'57.54"	600.00	216.06	109.22	122+07.76	124+23.82
9	123+14.60						
9	131+31.42	18°34'53.49"	600.00	194.59	98.15	130+33.27	132+27.85
10	131+29.70						
10	133+12.44						
11 A							
PI 10B	133+12.44						
10B	161+04.79	62°20'04.77"	500.00	543.97	302.42	158+02.37	163+46.34
11	160+43.92						
11	186+91.21	91°59'10.18"	1100.00	1766.01	138.81	175+52.40	193+18.41
12	181+79.60						
12	202+89.00	54°33'22.02"	450.00	428.48	232.04	200+56.96	204+85.44
13	202+53.40						
13	205+85.45						
14A							

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PC	PT
PI XIII B	628,409.37	207,239.28	PI 13B	205+85.45						
PI XIV	628,573.54	207,008.63	13B	208+68.56						
			14	208+68.03	12°31'42.96"	600.00	131.20	65.86	208+02.69	209+33.89
PI XV	628,762.82	206,560.85	14	213+54.17						
			15	213+51.06	20°59'11.16"	750.00	274.71	138.91	212+15.26	214+89.97
PI XVI	630,438.15	204,819.96	15	237+67.14						
			16	236+75.89	57°02'03.23"	1000.00	995.44	543.34	232+23.79	242+19.23
PI XVII	630,089.25	203,324.63	16	252+11.38						
			17	251+86.33	37°41'48.33"	1010.00	664.51	344.78	248+66.60	255+31.11
PI XVIII	629,480.14	202,828.39	17	259+72.01						
			18	258+87.39	60°53'55.25"	750.00	797.16	440.89	255+31.12	263+28.28
PI XIX A	629,686.01	201,668.91	18	270+65.00						
			19A							
PI XVIII B	629,673.21	201,666.64	PI 18B	270+65.00						
PI XIX	629,806.25	200,917.41	18B	278+25.95						
			19	278+09.57	41°13'47.76"	500.00	359.80	188.09	276+37.86	279+97.66
PI XX	629,429.72	200,294.73	19	285+37.25						
			20	285+17.26	35°08'40.14"	1000.00	613.39	316.69	282+20.56	288+33.95
PI XXI	629,669.10	196,857.32	20	319+63.00						
			21	319+63.00	01°08'11.38"	1200.00	23.80	11.90	319+51.10	319+74.90
PI XXII	629,724.76	196,236.11	21	325+86.70						
			22	325+86.64	04°41'36.93"	1200.00	98.30	49.18	325+37.52	326+35.82
PI XXIII	629,728.97	195,670.00	22	331+52.77						
			23	331+26.19	55°07'28.39"	325.00	312.68	169.63	329+83.13	332+95.82
PI XXIV	629,197.96	195,294.00	23	337+76.84						
			24	337+76.71	09°21'32.96"	337.50	55.13	27.63	337+76.84	338+04.34
PI XXV	629,117.02	195,214.00	24	338+90.52						
			25							

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
PUERTO NUEVO CHANNEL

CONTROL DATA

STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578 DECEMBER 1990



POWER LINES

DISPOSAL
AREA 2

TEMPORARY CONSTRUCTION EASEMENT

MANGROVE REPLANTING

DE DIEGO AVE.

MARGARITA CHANNEL

PUERTO NUEVO (OLD RIVER BED)

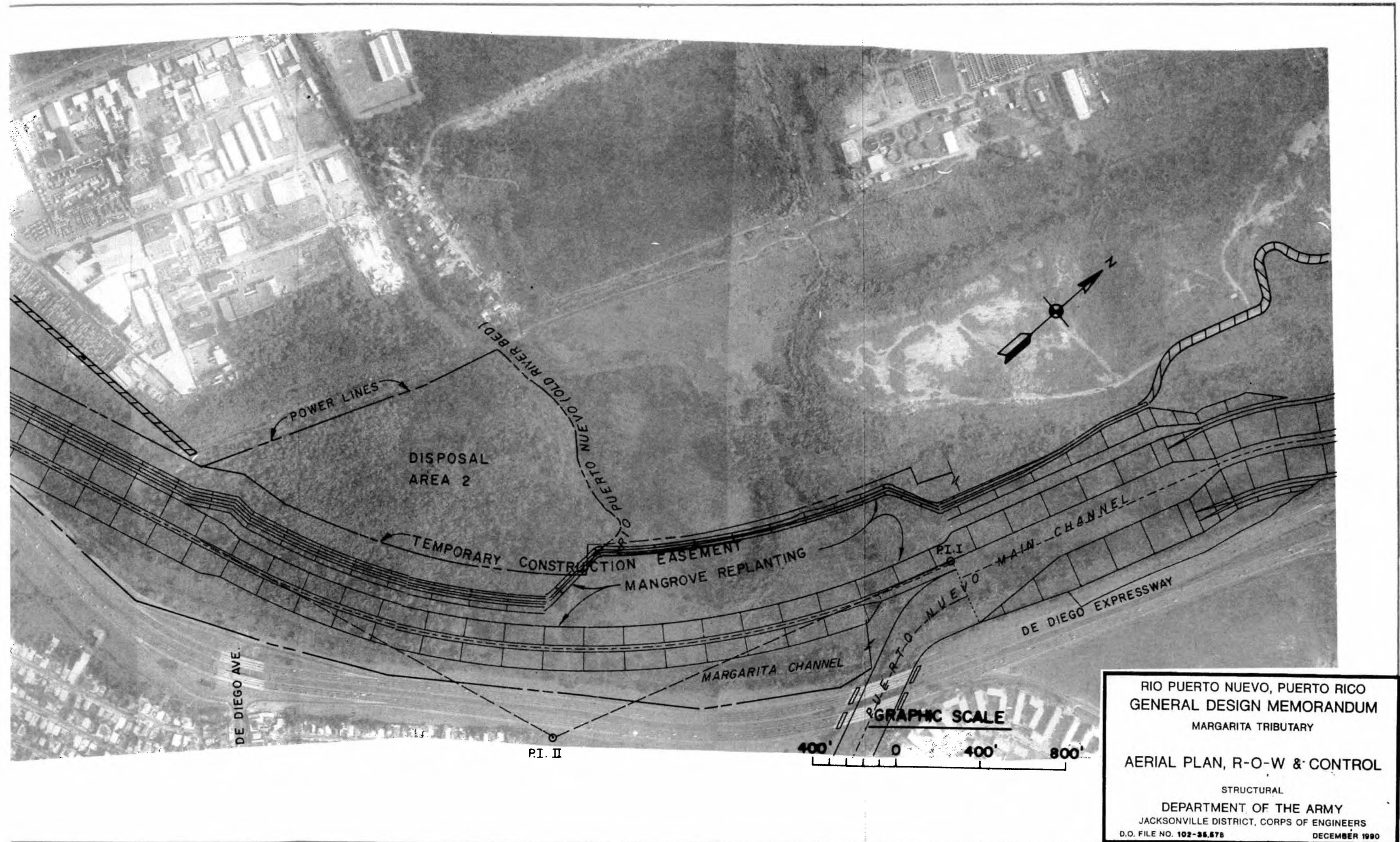
PUERTO NUEVO

P.I. II

P.I. I

GRAPHIC SCALE

400' 0 400'



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 MARGARITA TRIBUTARY
 AERIAL PLAN, R-O-W & CONTROL
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



PI IX
PI VIII

PI VII

JOHN F. KENNEDY AVE.

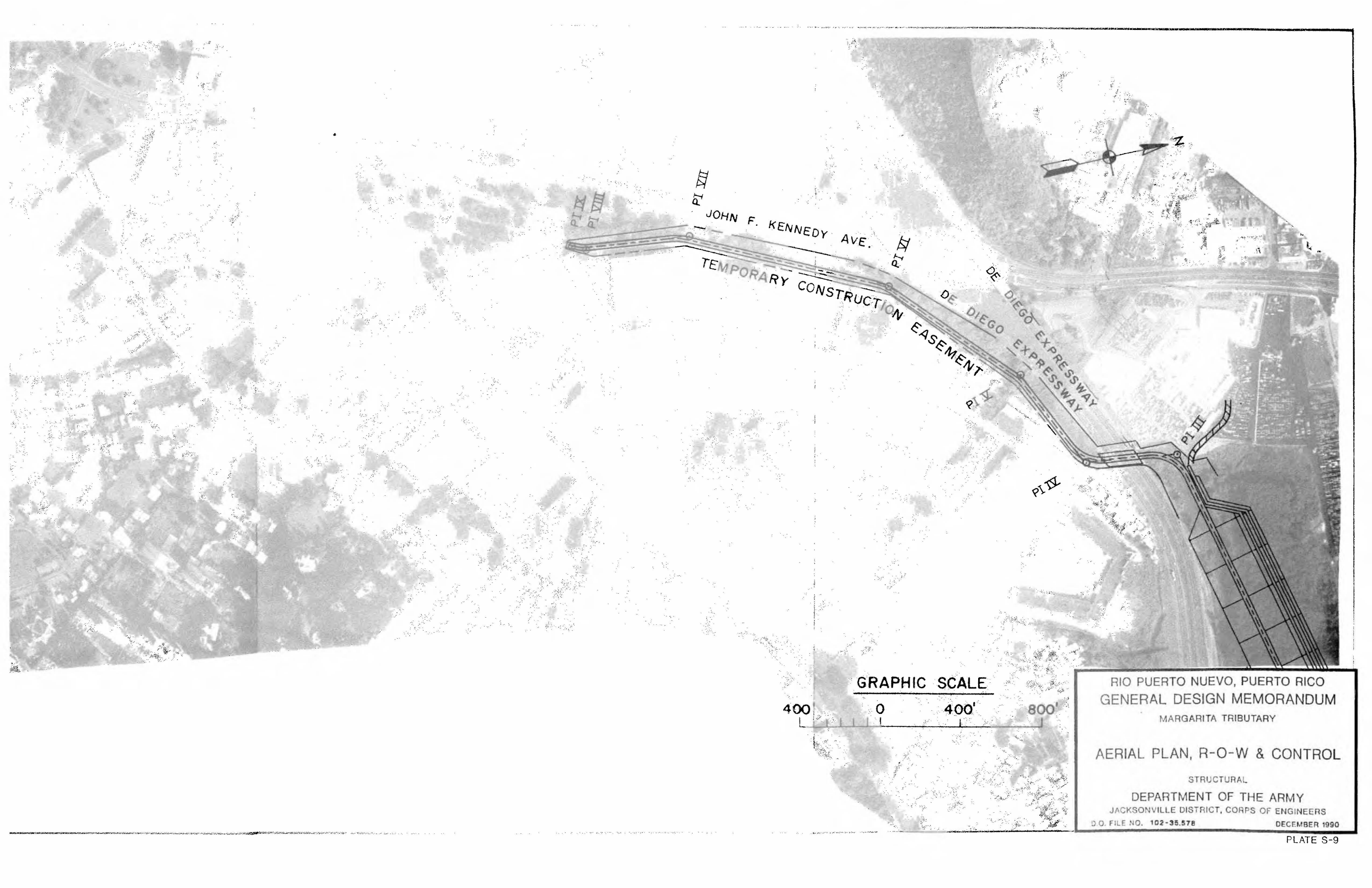
PI VI

TEMPORARY CONSTRUCTION EASEMENT

GRAPHIC SCALE

400

0



PI IX
PI VIII

PI VII

JOHN F. KENNEDY AVE.

PI VI

TEMPORARY CONSTRUCTION EASEMENT

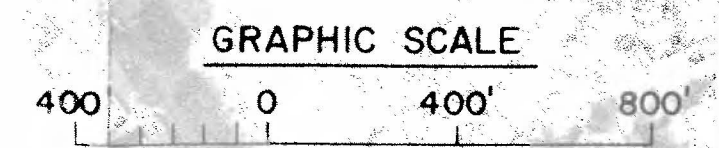
DE DIEGO EXPRESSWAY

DE DIEGO EXPRESSWAY

PI V

PI IV

PI III



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 MARGARITA TRIBUTARY

AERIAL PLAN, R-O-W & CONTROL

STRUCTURAL

DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35.578 DECEMBER 1990

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PC	PT
PI I	621,765.00	215,294.65	PI 1	0+00.00						
PI II	620,437.26	213,595.26	PI 1	21+56.58	51°49'28.74"	4015.00	3631.61	950.65	2+05.93	38+37.54
			PI 2	18+86.89						
PI III	616,593.50	213,583.54	2	57+30.67	70°01'37.40"	200.00	244.44	140.11	55+90.56	58+35.00
			3	56+94.89						
PI IV	616,431.70	213,134.08	3	61+72.58	58°15'04.26"	200.00	203.33	111.44	60+61.15	62+64.48
			4	61+53.04						
PI V	615,900.60	213,021.67	4	66+95.91	17°37'44.33"	200.00	61.54	31.01	66+64.90	67+26.44
			5	66+95.43						
PI VI	615,169.02	212,606.42	5	75+36.64	21°12'43.63"	210.00	77.75	39.32	74+97.31	75+75.06
			6	75+35.74						
PI VII	614,473.14	211,753.44	6	86+36.57	19°34'12.06"	265.00	90.51	45.70	85+90.86	86+81.38
			7	86+35.68						
PI VIII	614,304.47	211,280.76	7	91+37.55	17°30'47.07"	150.00	45.85	23.10	91+14.44	91+60.29
			8	91+37.19						
PI IX	614,251.12	211,210.35	8	92+25.53						

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

MARGARITA TRIBUTARY

CONTROL DATA

STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578

DECEMBER 1991

PLATE S-1

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PC	PT
PI I	621,765.00	215,294.65	PI 1	0+00.00						
PI II	620,437.26	213,595.26	PI 1 PI 2	21+56.58 18+86.89	51°49'28.74"	4015.00	3631.61	950.65	2+05.93	38+37.54
PI III	616,593.50	213,583.54	2 3	57+30.67 56+94.89	70°01'37.40"	200.00	244.44	140.11	55+90.56	58+35.00
PI IV	616,431.70	213,134.08	3 4	61+72.58 61+53.04	58°15'04.26"	200.00	203.33	111.44	60+61.15	62+64.48
PI V	615,900.60	213,021.67	4 5	66+95.91 66+95.43	17°37'44.33"	200.00	61.54	31.01	66+64.90	67+26.44
PI VI	615,169.02	212,606.42	5 6	75+36.64 75+35.74	21°12'43.63"	210.00	77.75	39.32	74+97.31	75+75.06
PI VII	614,473.14	211,753.44	6 7	86+36.57 86+35.68	19°34'12.06"	265.00	90.51	45.70	85+90.86	86+81.38
PI VIII	614,304.47	211,280.76	7 8	91+37.55 91+37.19	17°30'47.07"	150.00	45.85	23.10	91+14.44	91+60.29
PI IX	614,251.12	211,210.35	8	92+25.53						

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

MARGARITA TRIBUTARY

CONTROL DATA

STRUCTURAL

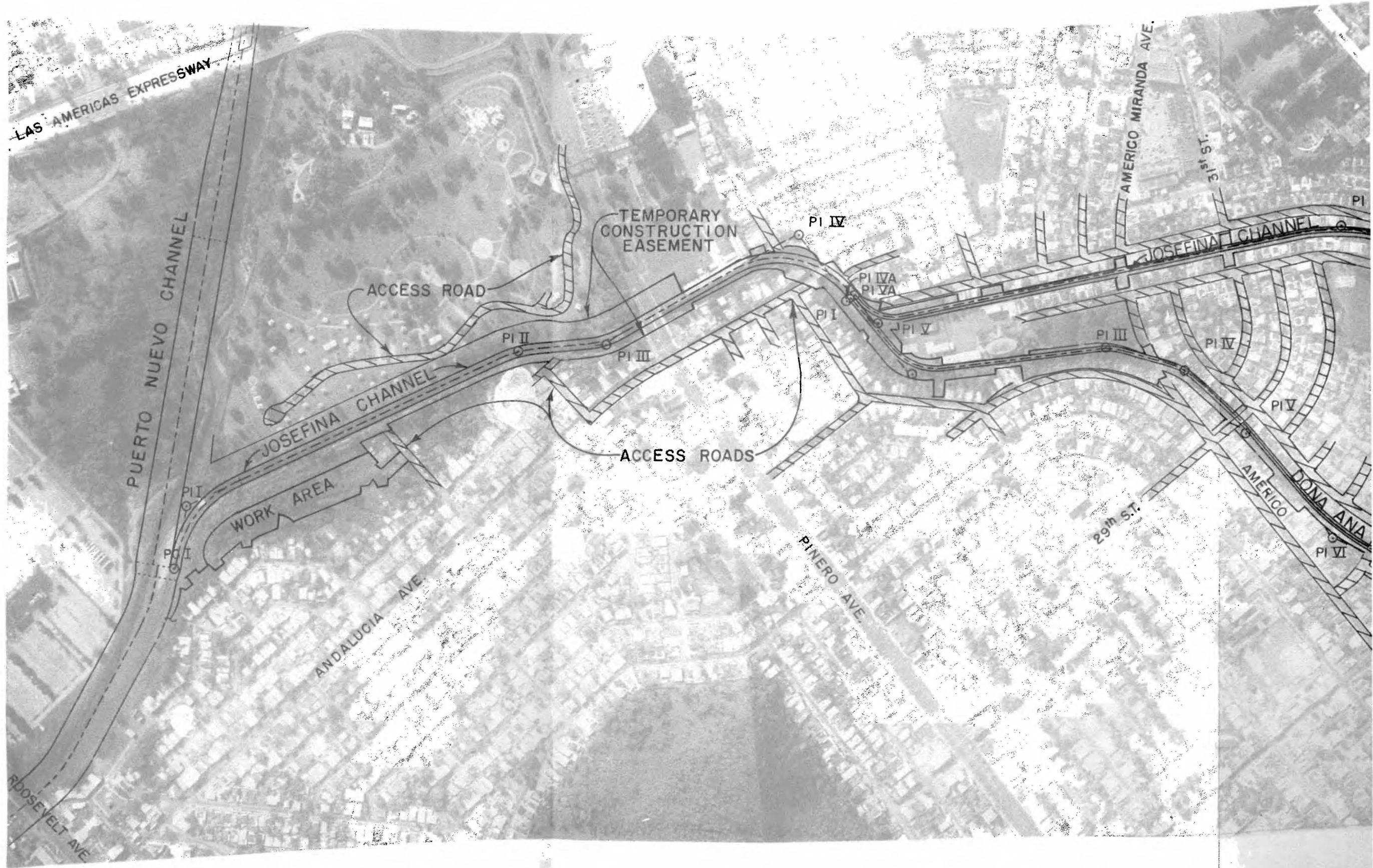
DEPARTMENT OF THE ARMY

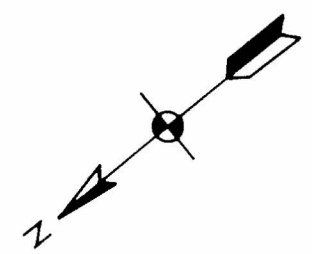
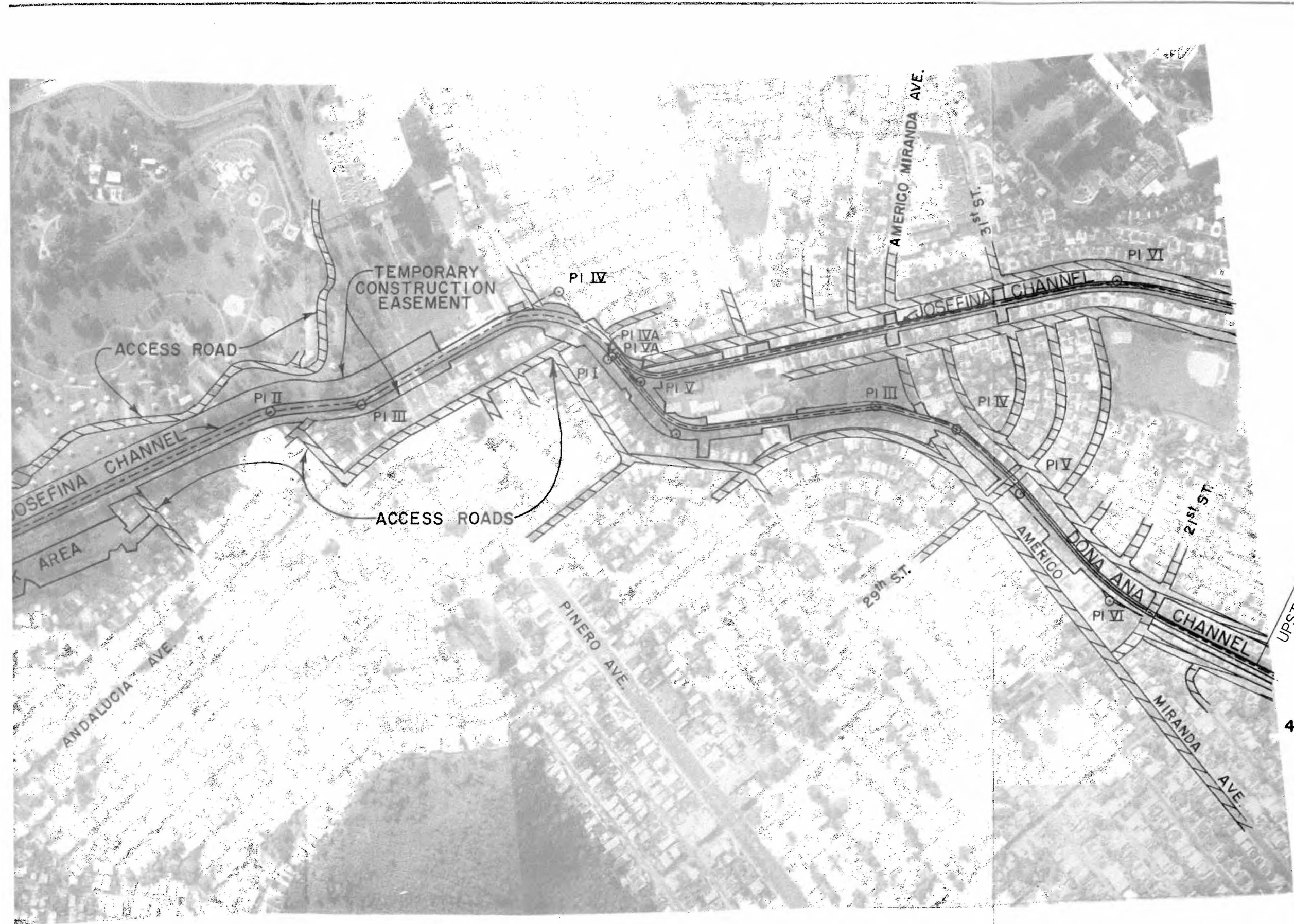
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

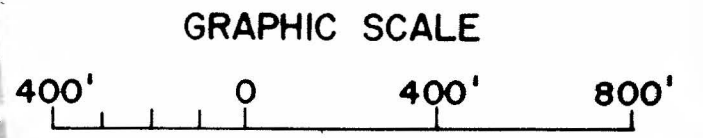
DECEMBER 1990

PI ATF S-10





UPSTREAM LIMIT OF PROJECT
STA 32+80



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 DONA ANA TRIBUTARY
 AERIAL PLAN, R-O-W & CONTROL
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990



JOSEFINA

PI VIII
PI IX

TEMPORARY
CONSTRUCTION
EASEMENT

81ST STREET

9TH STREET
PI VIII

54TH STREET

DOÑA ANA

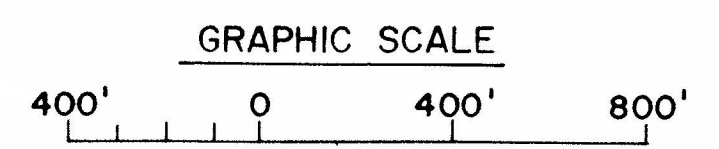
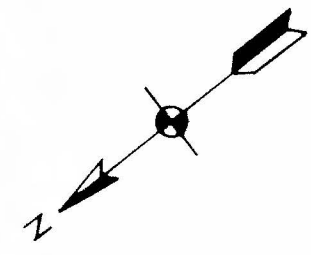
ACCESS
ROADS

PI VIII

PI VIII
PI IX

DE DIEGO AVENUE

RECOMMENDED FUTURE EXTENSION
TO BE PROVIDED BY OTHERS



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
JOSEFINA TRIBUTARY
DONA ANA TRIBUTARY
AERIAL PLAN, R-O-W & CONTROL
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578 DECEMBER 1990

JOSEFINA TRIBUTARY

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PC	PT
PC I	623,718.18	211,446.86	PC 1	0+00.00						
PI I	623,959.78	211,309.34	PC 1	2+77.97	54°58'28.95"	437.500	419.78	227.63	0+50.35	4+70.13
			PI 1	2+42.50						
PI II	624,108.44	209,728.96	1	18+29.86	20°10'50.92"	540.00	190.20	96.10	17+33.76	19+23.96
			2	18+27.86						
PI III	624,007.81	209,348.26	2	22+21.64	24°41'51.60"	375.00	161.65	82.10	21+39.55	23+01.19
			3	22+19.09						
PI IV	624,174.12	208,394.52	3	31+87.22	79°43'50.59"	400.00	556.637	334.04	28+53.18	34+09.81
			4	30+75.77						
PI V A	623,835.28	208,270.12	4	34+36.72						
			5							
PI IV B	623,839.41	208,258.85	4B	34+36.72						
PI V	623,696.19	208,206.27	4B	35+89.30	62°11'19.09"	185.00	200.80	111.57	34+77.72	36+78.53
			5	35+66.95						
PI VI	623,421.69	206,162.88	5	56+28.69	26°23'13.40"	1000.00	443.09	225.24	54+03.45	58+46.54
			6	56+21.30						
PI VII	622,409.82	204,606.70	6	74+77.63	62°26'00.70"	220.00	201.33	108.33	73+69.29	75+70.62
			7	74+62.29						
PI VIII	622,472.98	204,426.73	7	76+53.09	37°55'27.84"	240.00	158.86	82.46	75+70.63	77+29.49
			8	76+47.03						
PI IX	622,446.78	204,348.54	8	77+29.49						
			9							

DONA ANA TRIE

PI	PLANE COORDINATES		CUT	PI/PI	
	X	Y			
PI I	623,831.14	208,281.38	PI 1	0+00	
PI II	623,439.27	208,137.50	PI 1	4+17.45	67°10'
			PI 2	3+94.33	
PI III	623,248.59	207,282.19	PI 2	12+70.64	22°10'
			3	12+69.39	
PI IV	623,064.07	207,017.62	3	15+91.94	27°0'
			4	15+89.02	
PI V	622,751.14	206,850.99	4	19+43.55	7°16'
			5	19+43.37	
PI VI	622,173.54	206,632.03	5	25+61.09	22°4'
			6	25+54.65	
PI VII	621,035.66	205,540.47	6	41+31.48	3°02'
			7	41+31.48	
PI VIII	620,826.28	205,357.62	7	44+09.45	21°4'
			8	44+08.30	
PI IX	620,677.64	205,305.36	8	45+65.86	

NOTE: STA. 32+80 UPSTREAM LIMIT OF PRO
 STA. 32+80 TO STA. 45+65.86 RECOMMENDE
 FUTURE EXTENSION TO BE PROVIDED BY C

JOSEFINA TRIBUTARY

STATION	PI/PI	I	CURVE DATA				
			RADIUS	L	T	PC	PT
1	0+00.00						
1	2+77.97 2+42.50	54°58'28.95"	437.500	419.78	227.63	0+50.35	4+70.13
1	18+29.86 18+27.86	20°10'50.92"	540.00	190.20	96.10	17+33.76	19+23.96
2	22+21.64 22+19.09	24°41'51.60"	375.00	161.65	82.10	21+39.55	23+01.19
3	31+87.22 30+75.77	79°43'50.59"	400.00	556.637	334.04	28+53.18	34+09.81
4	34+36.72						
4B	34+36.72						
4B	35+89.30 35+66.95	62°11'19.09"	185.00	200.80	111.57	34+77.72	36+78.53
5	56+28.69 56+21.30	25°23'13.40"	1000.00	443.09	225.24	54+03.45	58+46.54
6	74+77.63 74+62.29	52°26'00.70"	220.00	201.33	108.33	73+69.29	75+70.62
7	76+53.09 76+47.03	37°55'27.84"	240.00	158.86	82.46	75+70.63	77+29.49
8	77+29.49						
9							

DONA ANA TRIBUTARY

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PC	PT
PI I	623,831.14	208,281.38	PI 1	0+00						
PI II	623,439.27	208,137.50	PI 1 PI 2	4+17.45 3+94.33	57°16'10.67"	250.00	249.89	136.50	2+80.96	5+30.83
PI III	623,248.59	207,282.19	PI 2 3	12+70.64 12+69.39	22°19'30.50"	250.00	97.41	49.33	12+21.30	13+18.72
PI IV	623,064.07	207,017.62	3 4	15+91.94 15+89.02	27°04'19.97"	325.00	153.56	78.24	15+13.70	16+67.26
PI V	622,751.14	206,850.99	4 5	19+43.55 19+43.37	7°16'24.76"	1000.00	126.95	63.56	18+79.99	20+06.93
PI VI	622,173.54	206,632.03	5 6	25+61.09 25+54.65	22°45'27.82"	1212.00	481.40	243.92	23+17.17	27+98.57
PI VII	621,035.66	205,540.47	6 7	41+31.48 41+31.48	3°02'52.10"	100.00	5.32	2.66	41+28.82	41+34.14
PI VIII	620,826.28	205,357.62	7 8	44+09.45 44+08.30	21°45'39.89"	250.00	94.95	48.05	43+61.40	44+56.35
PI IX	620,677.64	205,305.36	8	45+65.86						

NOTE: STA. 32+80 UPSTREAM LIMIT OF PROJECT,
 STA. 32+80 TO STA. 45+65.86 RECOMMENDED
 FUTURE EXTENSION TO BE PROVIDED BY OTHERS.

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 DONA ANA TRIBUTARY
CONTROL DATA
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PG	PT
PC I	628,365.38	207,207.96	PC 1	0+00						
PI I	628,394.47	207,167.08	PC 1 PI 1	1+06.28 0+49.84	11°36'00.49"	494.00	100.02	50.18	0+00.00	1+00.02
SPIRAL									(C.S.) 1+00.030	(S.T.) 2+25.49
PI II	628,483.13	206,911.87	PI 2	3+20.81 3+06.87	53°17'04.72"	190.00	176.70	95.32	2+25.49	4+02.19
PI III	628,125.41	206,429.55	2 3	9+07.36 9+06.60	25°26'44.05"	102.00	45.30	23.03	8+84.33	9+29.63
PI IV	627,719.07	204,361.77	3 4	30+13.93 30+09.37	40°13'50.14"	150.00	105.32	54.94	29+58.99	30+64.31
PI V	627,331.37	204,051.70	4 5	35+05.82 35+05.73	10°45'34.86"	150.00	28.17	14.13	34+91.70	35+19.86
PI VI	627,006.63	203,879.81	5 6	38+73.16 38+50.28	71°22'11.68"	120.00	149.48	86.18	37+86.98	39+36.46
PI VII	627,067.08	203,496.90	6							

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
BUENA VISTA DIVERSION CHANNEL

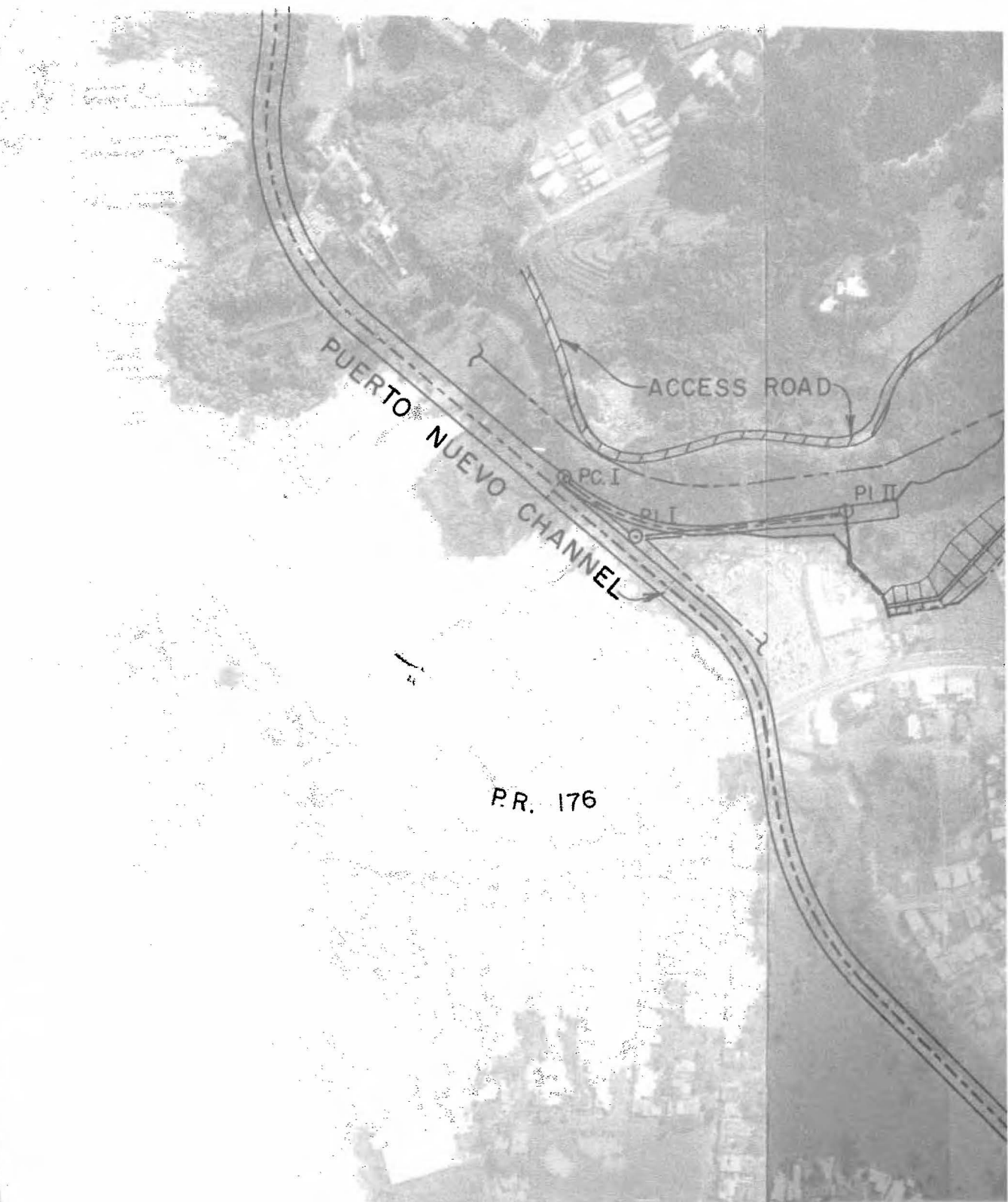
CONTROL DATA

STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

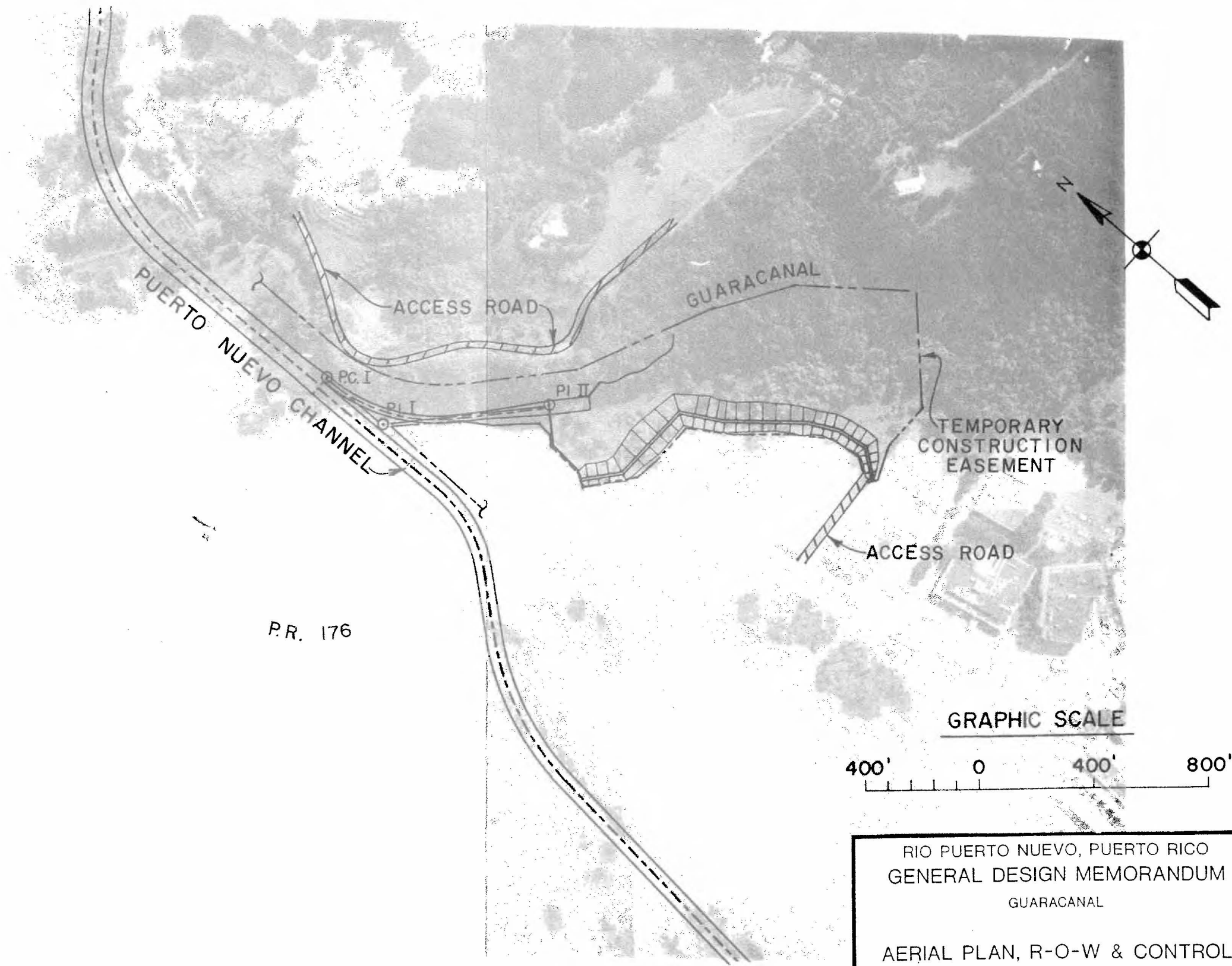
DECEMBER 1990



BUENA VISTA DIVERSION CHANNEL

P.R. 21

P.R. 1



P.R. 176

GRAPHIC SCALE

400' 0 400' 800'

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 GUARACANAL

AERIAL PLAN, R-O-W & CONTROL

STRUCTURAL

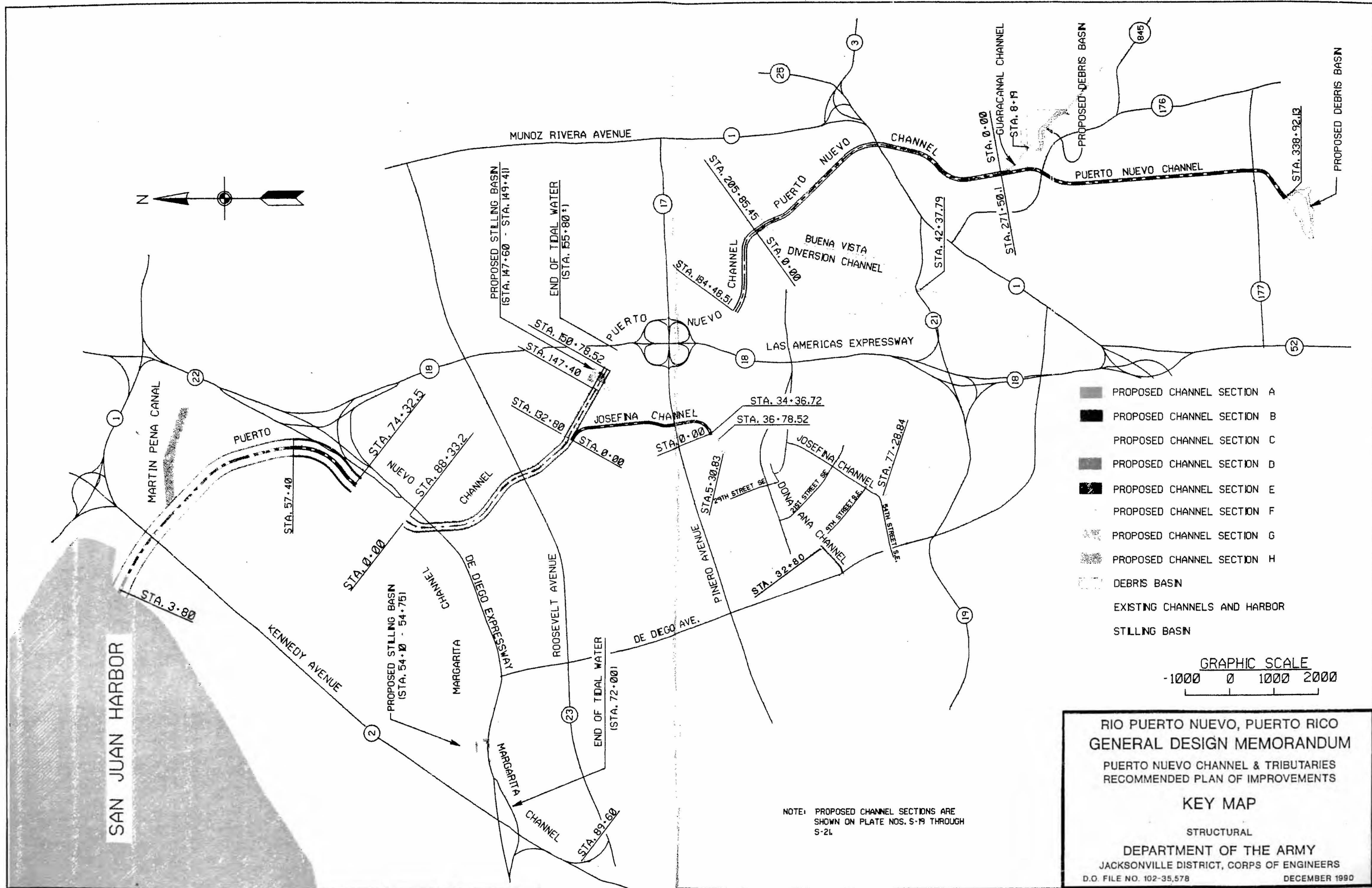
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

PI	PLANE COORDINATES		CUT	PI/PI	I	CURVE DATA				
	X	Y				RADIUS	L	T	PC	PT
PC I	629,717.52	201,674.51	PC 1	0+00						
PI I	629,766.29	201,399.72	PC 1 PI 1	2+79.08 2+48.53	46°30'57.09"	640.00	519.59	275.07	0+04.01	5+23.60
PI II	630,277.80	201,062.19	PI 1	8+61.37						

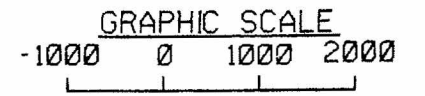
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 GUARACANAL

 CONTROL DATA

 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990



- PROPOSED CHANNEL SECTION A
- PROPOSED CHANNEL SECTION B
- PROPOSED CHANNEL SECTION C
- PROPOSED CHANNEL SECTION D
- PROPOSED CHANNEL SECTION E
- PROPOSED CHANNEL SECTION F
- PROPOSED CHANNEL SECTION G
- PROPOSED CHANNEL SECTION H
- DEBRIS BASIN
- EXISTING CHANNELS AND HARBOR
- STILLING BASIN

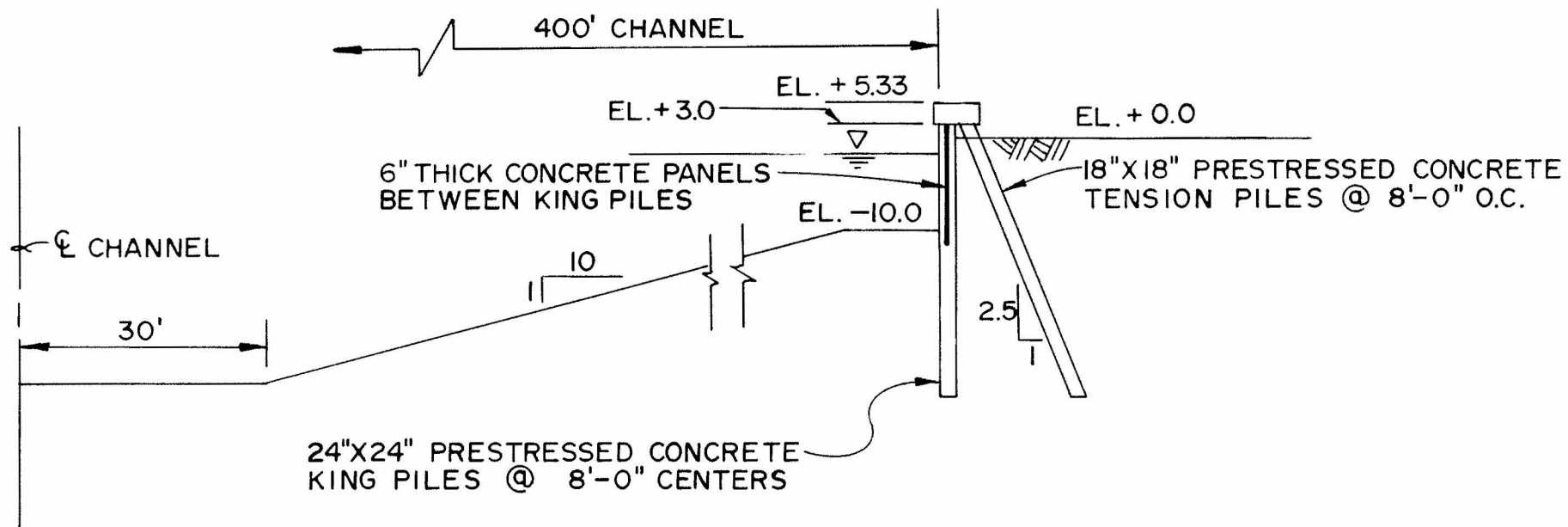


NOTE: PROPOSED CHANNEL SECTIONS ARE SHOWN ON PLATE NOS. S-19 THROUGH S-21

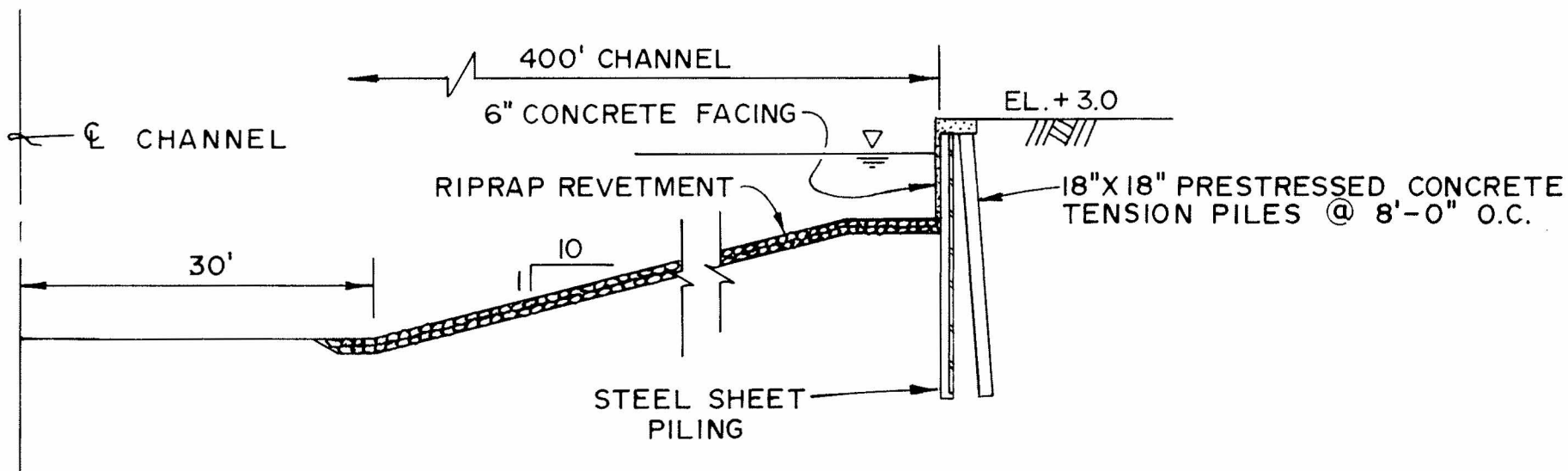
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL & TRIBUTARIES
 RECOMMENDED PLAN OF IMPROVEMENTS

KEY MAP

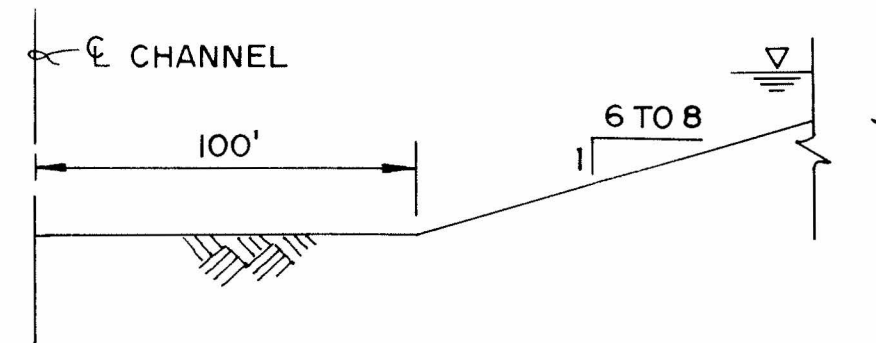
 STRUCTURAL
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



(A) KING PILE CHANNEL WALL
 PUERTO NUEVO STA. 3+80 TO STA. 57+40



(B) SHEET PILE CHANNEL WALL
 PUERTO NUEVO STA. 57+40 TO STA. 74+32.5



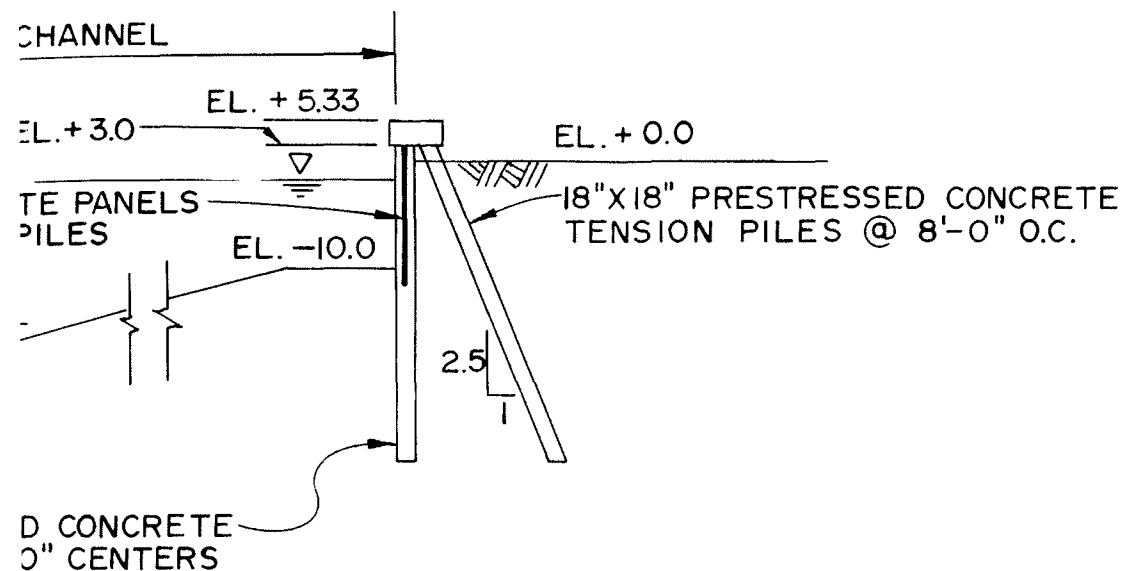
(C) EARTH TRAPEZOIDAL
 PUERTO NUEVO STA. 74+32.5
 MARGARITA STA. 0+00 TO

NOTES:

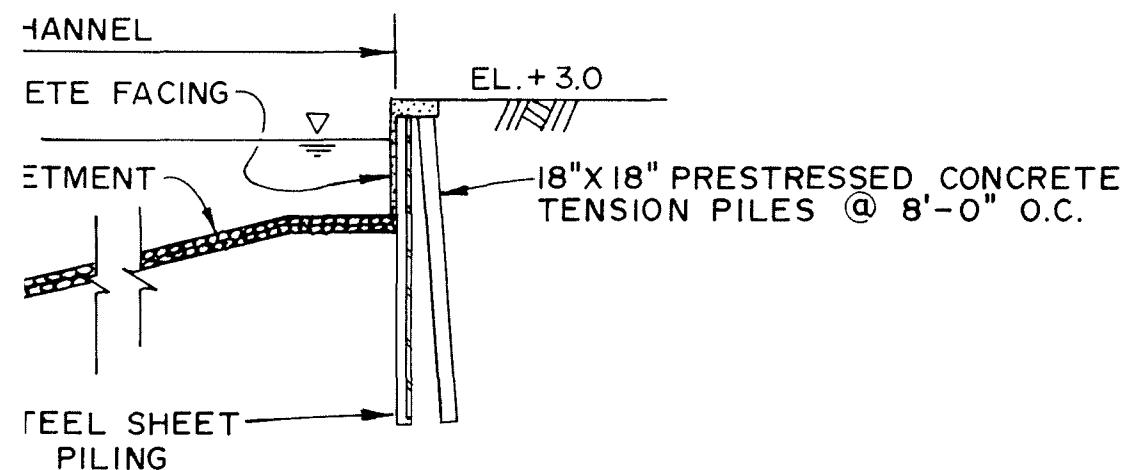
1. RIPRAP IS REQUIRED FOR

STATION
STA. 51+85 TO S
STA. 54+00 TO S

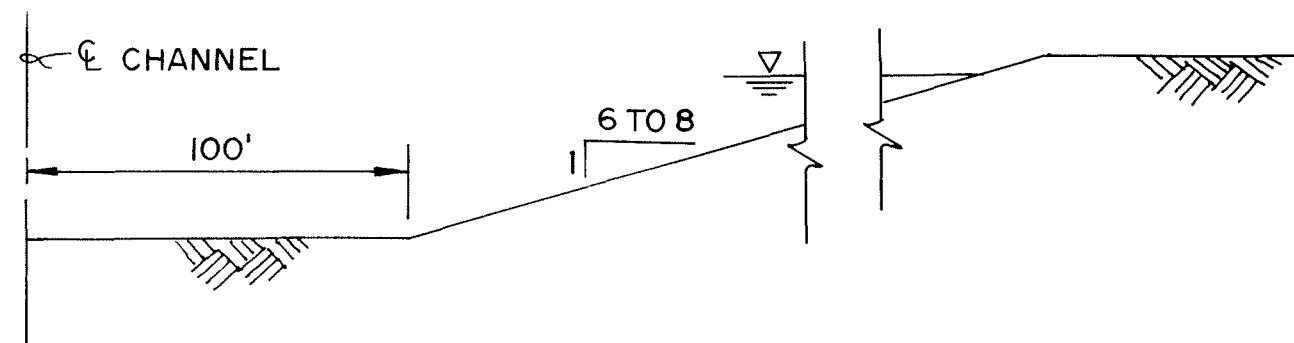
2. SIDE SLOPES FOR MARGARITA
 1V:8H FROM STA. 40+00



CHANNEL WALL
3+80 TO STA. 57+40



CHANNEL WALL
57+40 TO STA. 74+32.5



(C) EARTH TRAPEZOIDAL CHANNEL
 PUERTO NUEVO STA. 74+32.5 TO STA. 88+33.2
 MARGARITA STA. 0+00 TO STA. 54+10

NOTES:

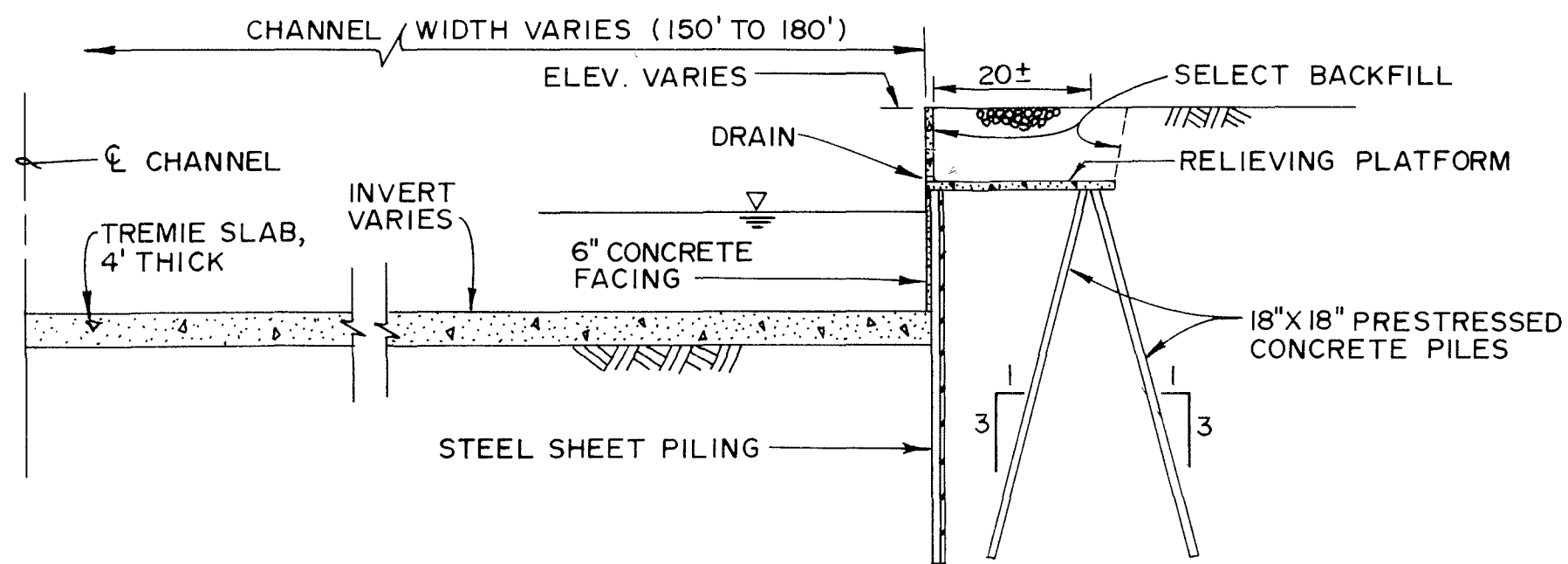
1. RIPRAP IS REQUIRED FOR MARGARITA TRIBUTARY AS FOLLOWS:

STATION	THICKNESS	
	BOTTOM	SIDES
STA. 51+85 TO STA. 54+00	12"	12"
STA. 54+00 TO STA. 54+10	24"	27"

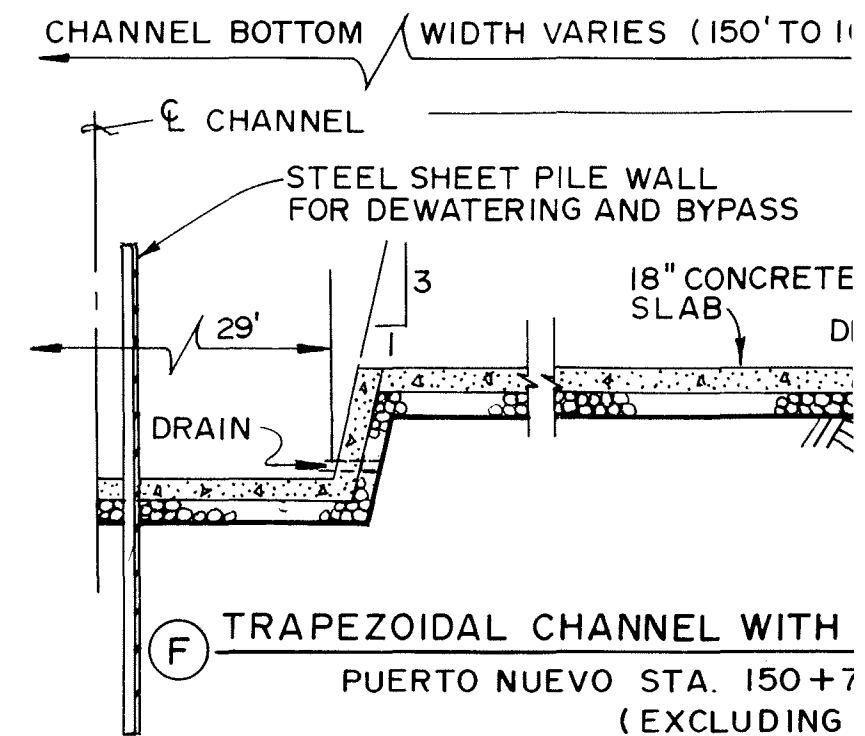
2. SIDE SLOPES FOR MARGARITA TRIBUTARY ARE
 1V:8H FROM STA. 40+00 TO STA. 54+10.

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL & TRIBUTARIES
 RECOMMENDED PLAN OF IMPROVEMENTS
 PROPOSED CHANNEL SECTIONS

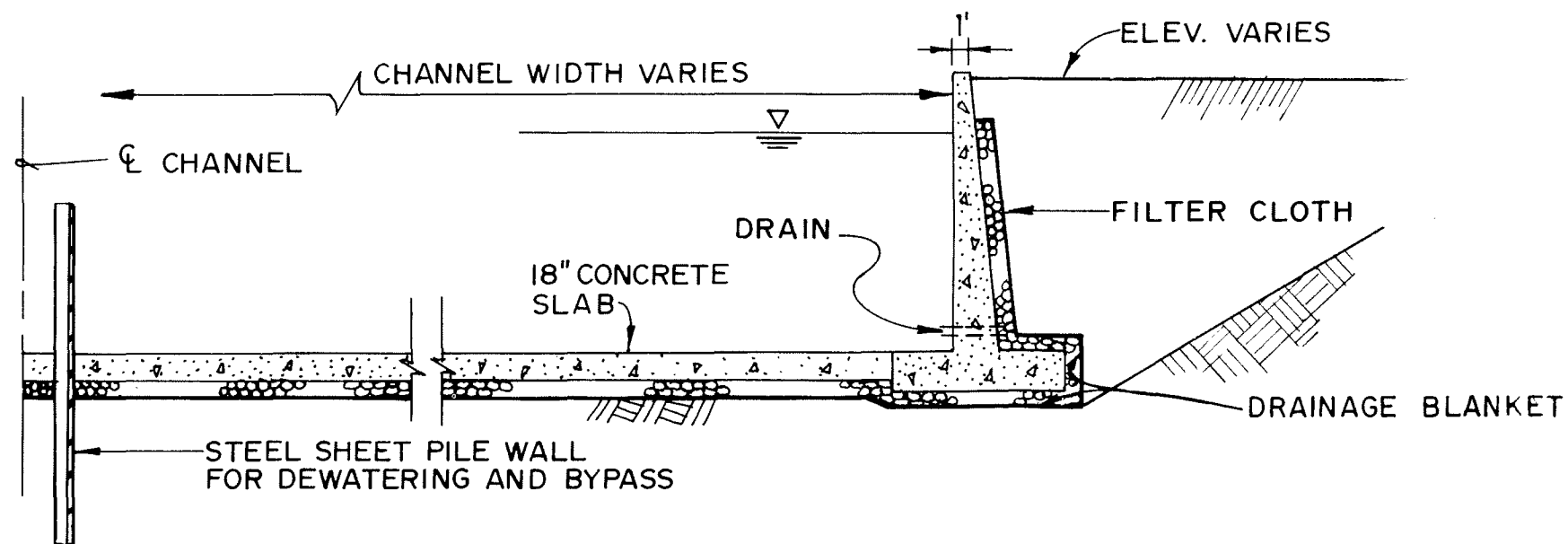
STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,678
 DECEMBER 1990



(D) RELIEVING PLATFORM CHANNEL WALL
 PUERTO NUEVO STA. 88+33.2 TO STA. 147+40

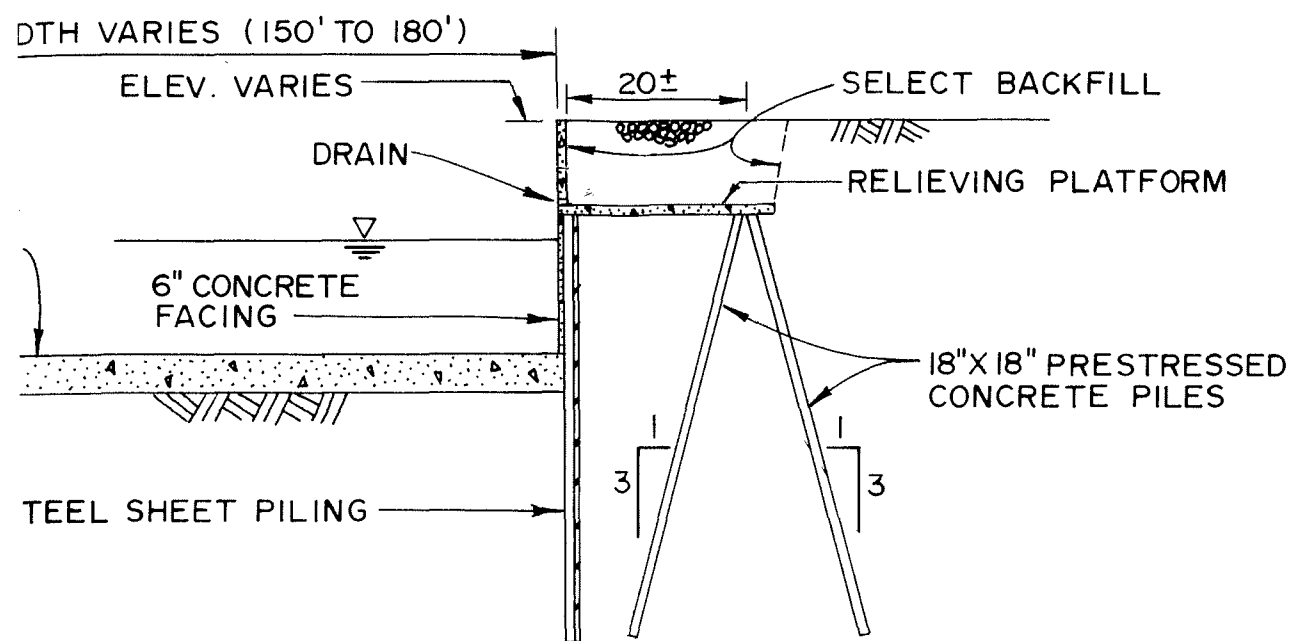


(F) TRAPEZOIDAL CHANNEL WITH
 PUERTO NUEVO STA. 150+7
 (EXCLUDING

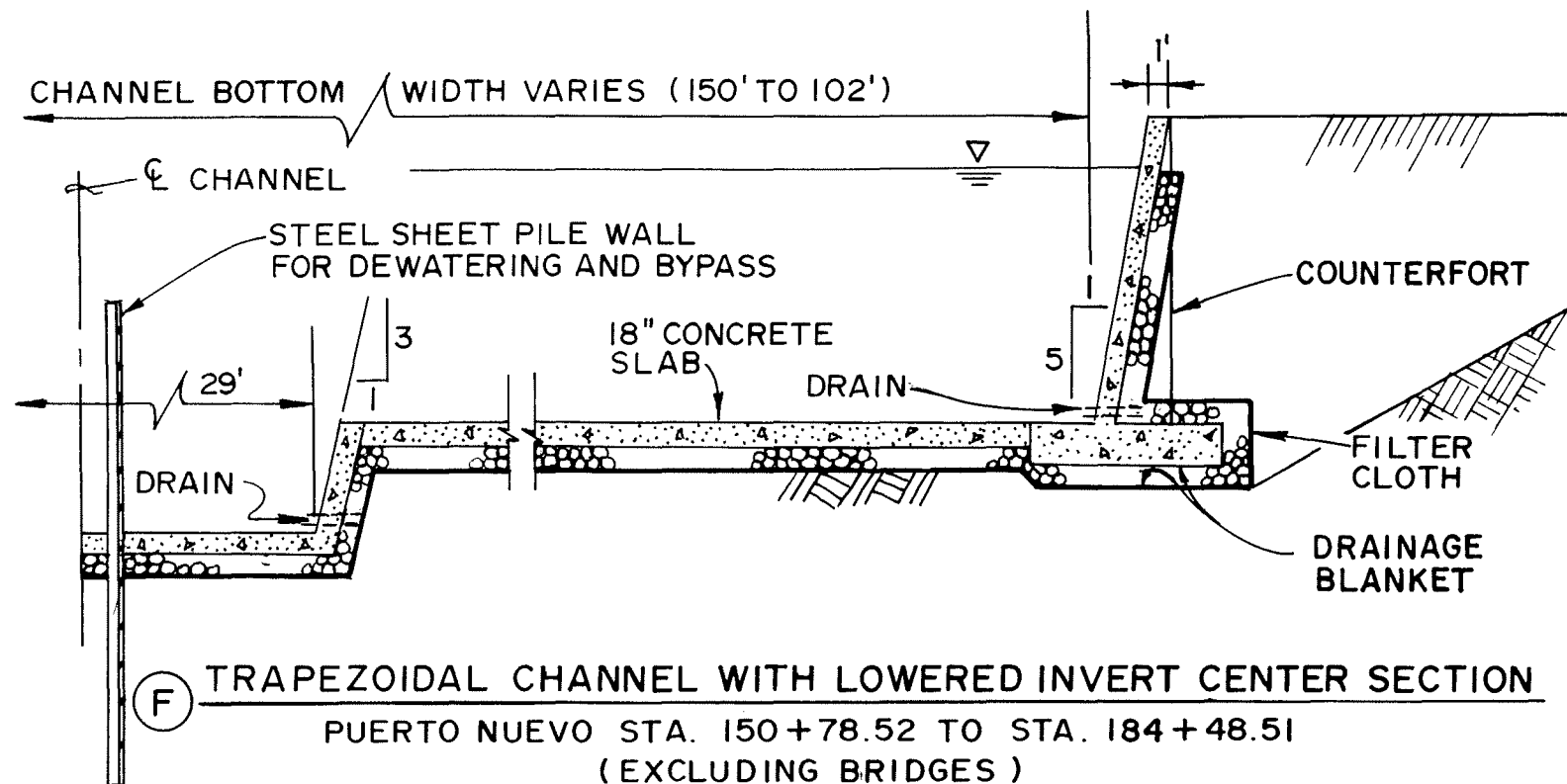


(E) INVERTED TEE CHANNEL WALL
 PUERTO NUEVO STA. 147+40 TO STA. 150+78.52
 PUERTO NUEVO STA. 184+48.51 TO STA. 338+92.13
 JOSEFINA STA. 0+00 TO 34+36.72

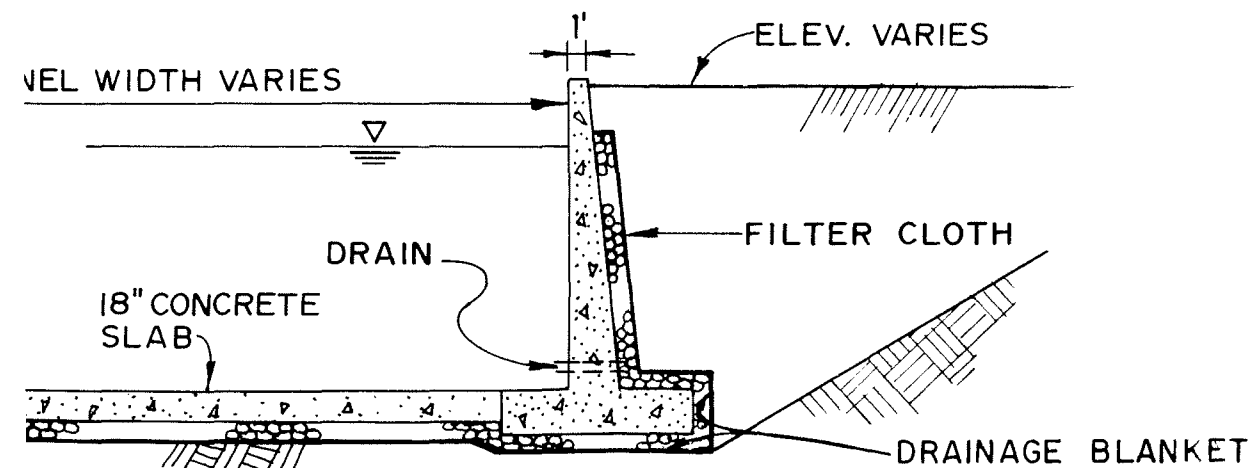
NOTE:
 FOUNDATION IMPROVEMENTS MA
 FOR PORTIONS OF PROPOSED C
 REFER TO TEXT SECTION "GEO



RETAINING PLATFORM CHANNEL WALL
 STA. 88+33.2 TO STA. 147+40



(F) TRAPEZOIDAL CHANNEL WITH LOWERED INVERT CENTER SECTION
 PUERTO NUEVO STA. 150+78.52 TO STA. 184+48.51
 (EXCLUDING BRIDGES)



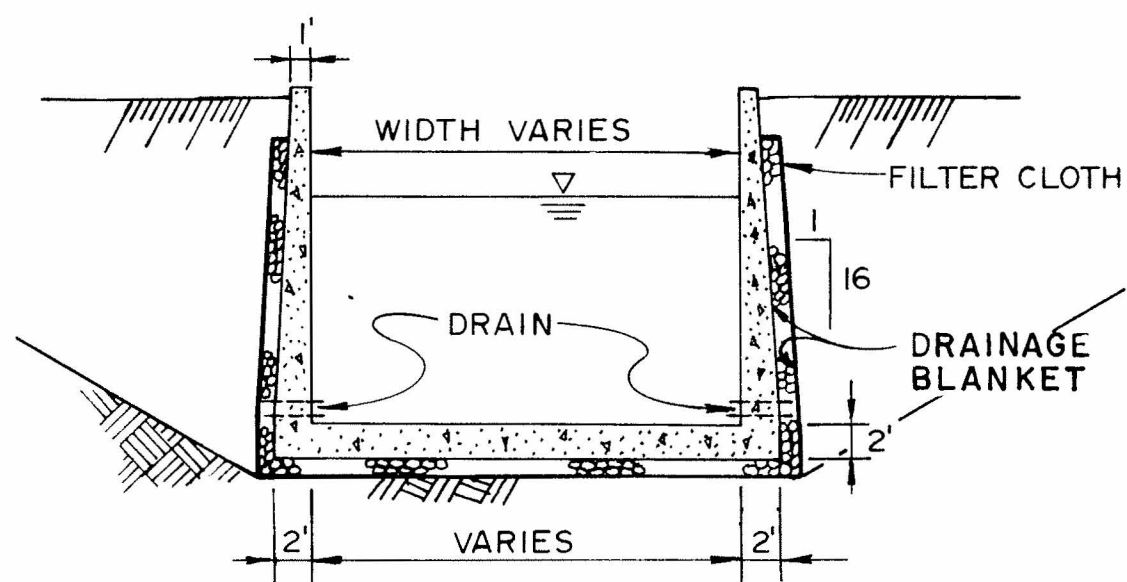
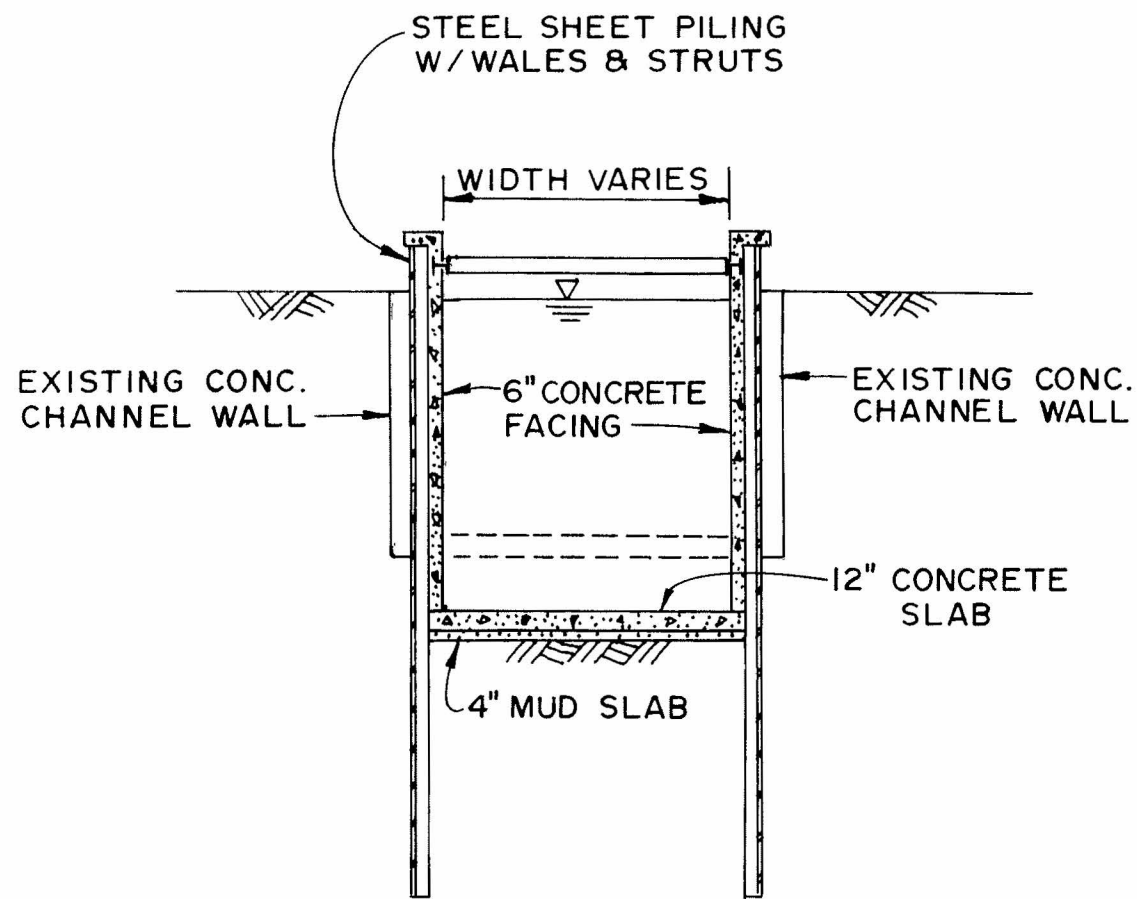
STEEL SHEET PILE WALL FOR DEWATERING AND BYPASS
TEE CHANNEL WALL
 STA. 147+40 TO STA. 150+78.52
 STA. 184+48.51 TO STA. 338+92.13
 STA. 0+00 TO STA. 34+36.72

NOTE:

FOUNDATION IMPROVEMENTS MAY BE REQUIRED FOR PORTIONS OF PROPOSED CHANNEL SECTION (E) AND (F). REFER TO TEXT SECTION "GEOLOGY AND SOILS".

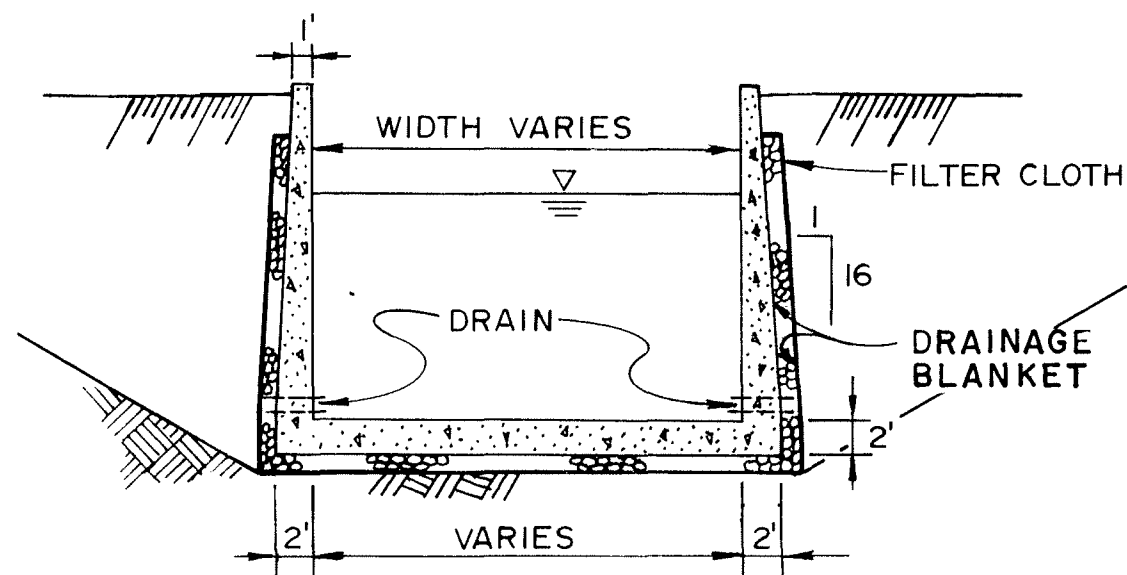
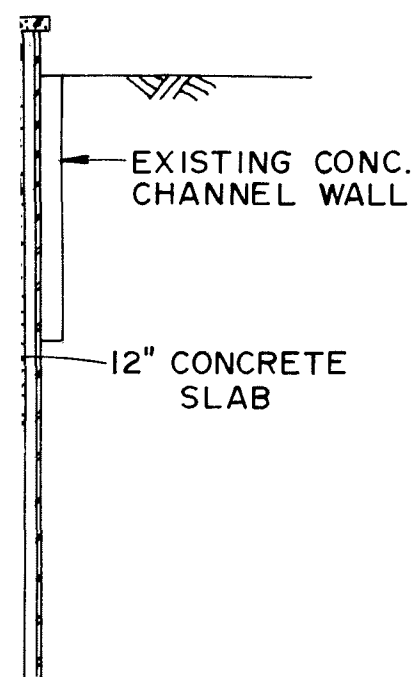
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL & TRIBUTARIES
 RECOMMENDED PLAN OF IMPROVEMENTS
 PROPOSED CHANNEL SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,678
 DECEMBER 1990

NOTE:
FOUNDATION
FOR PORTIC
REFER TO



(H) SHEET PILE WALL CHANNEL	WIDTH	(G) CONCRETE U-FRAME CHANNEL	WIDTH	CHANNEL
STA. 36+78.52 — 77+28.84	VARIES 17'—22'	STA. 34+36.72—36+78.52	22'	JOSEFINA
STA. 5+30.83 — 32+80	22'	STA. 0+00 — 5+30.83	22'	DONA ANA
		STA. 0+00 — 8+19	26'	GUARA CANAL
		STA. 0+00 — 4+50	16'	BUENA VISTA
		STA. 4+50 — 42+37.79	VARIES 16'—36'	
		STA. 54+10 — 89+60	30'	MARGARITA

NG
TS



NOTE:

FOUNDATION IMPROVEMENTS MAY BE REQUIRED FOR PORTIONS OF PROPOSED CHANNEL SECTION (G). REFER TO TEXT SECTION "GEOLOGY AND SOILS".

L	WIDTH	(G) CONCRETE U-FRAME CHANNEL	WIDTH	CHANNEL
	VARIES 17'-22'	STA. 34+36.72-36+78.52	22'	JOSEFINA
	22'	STA. 0+00 — 5+30.83	22'	DONA ANA
		STA. 0+00 — 8+19	26'	GUARA CANAL
		STA. 0+00 — 4+50	16'	BUENA VISTA
		STA. 4+50 — 42+37.79	VARIES 16'-36'	
		STA. 54+10 — 89+60	30'	MARGARITA

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL & TRIBUTARIES
RECOMMENDED PLAN OF IMPROVEMENTS

PROPOSED CHANNEL SECTIONS

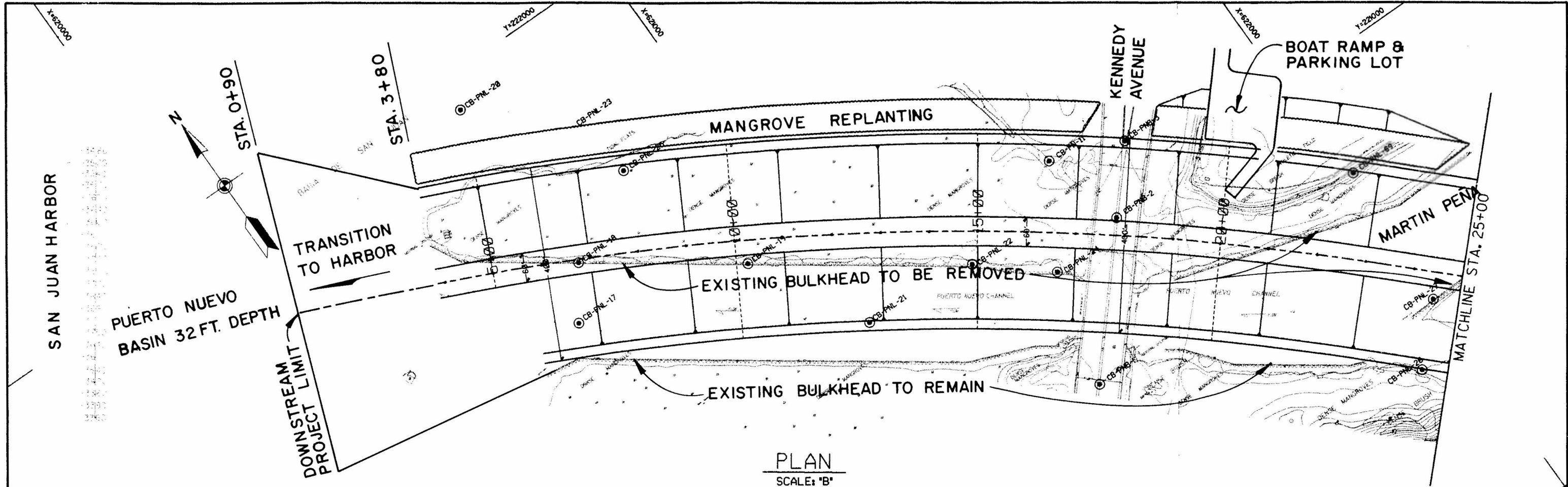
STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

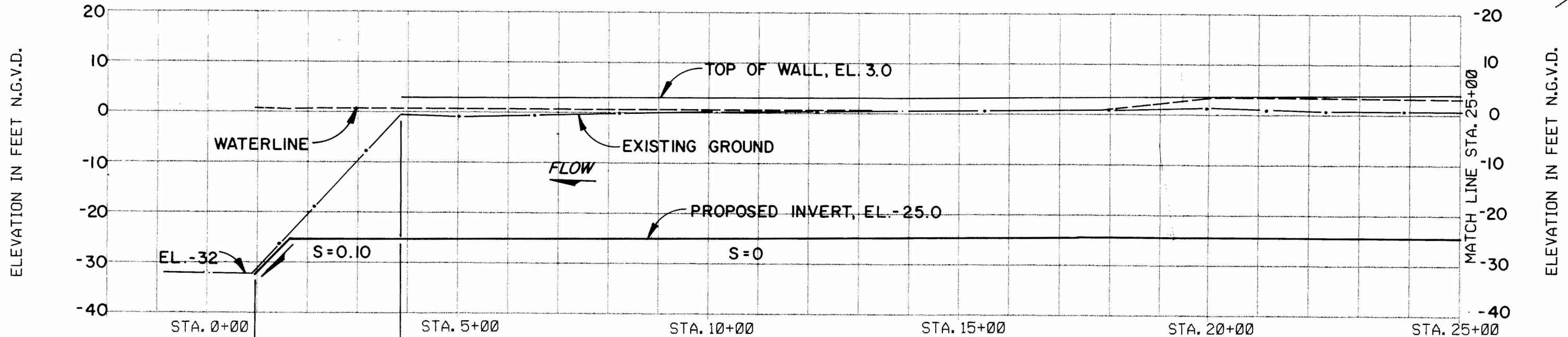
D.O. FILE NO. 102-36,578

DECEMBER 1990

DI. ATE 6-24



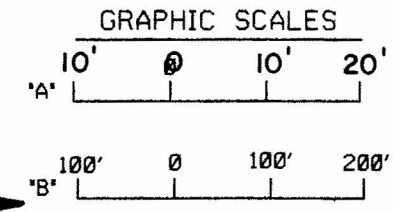
PLAN
SCALE: "B"



KING PILE CHANNEL WALL

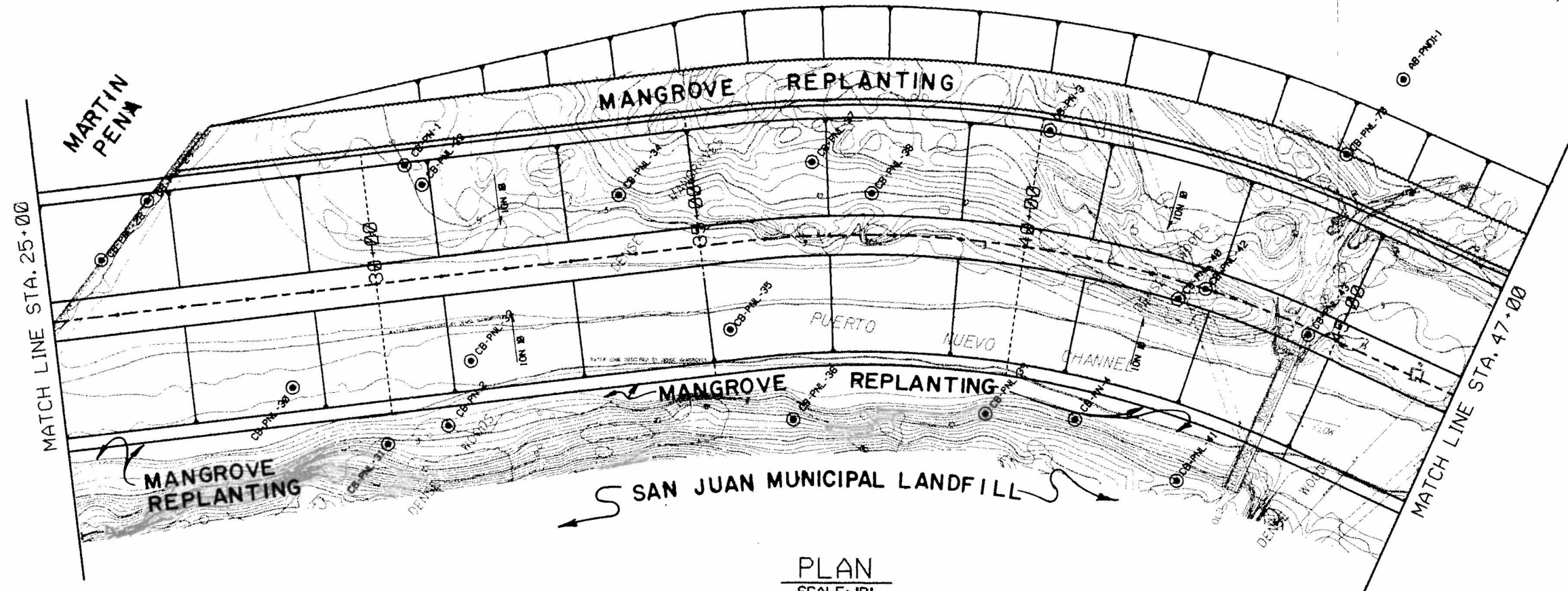
CHANNEL PROFILE

SCALE: HORIZ. "B"
VERT. "A"

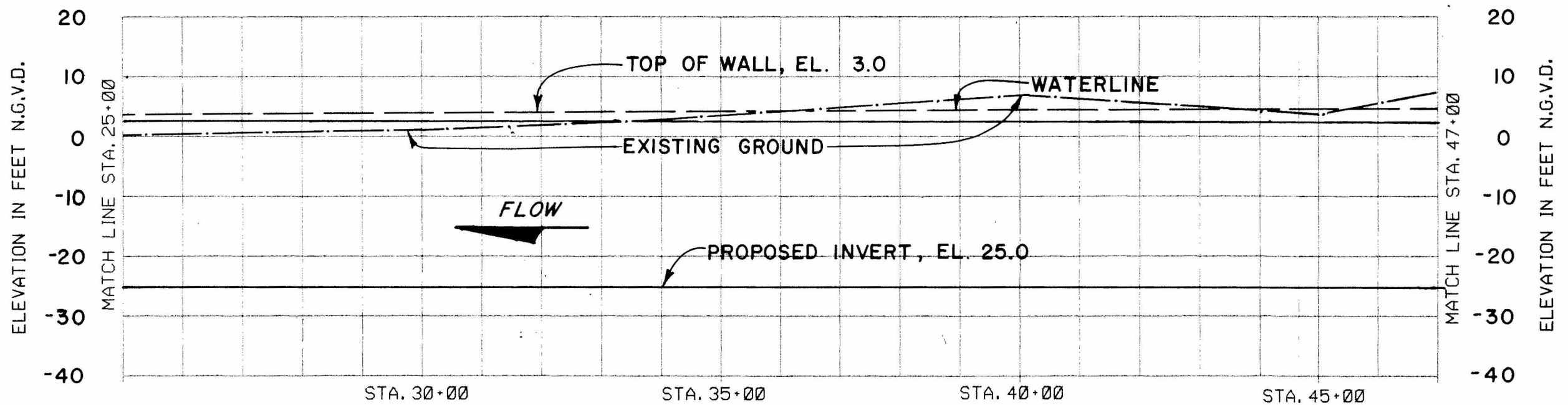


REACH 1

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 0+90 TO STA 25+00
 PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-96.678
 DECEMBER 1990



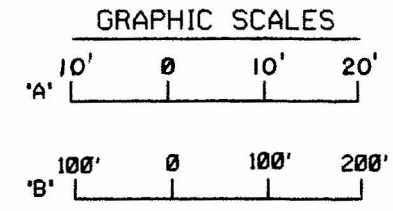
PLAN
SCALE: 'B'



KING PILE CHANNEL WALL
REACH 1

CHANNEL PROFILE

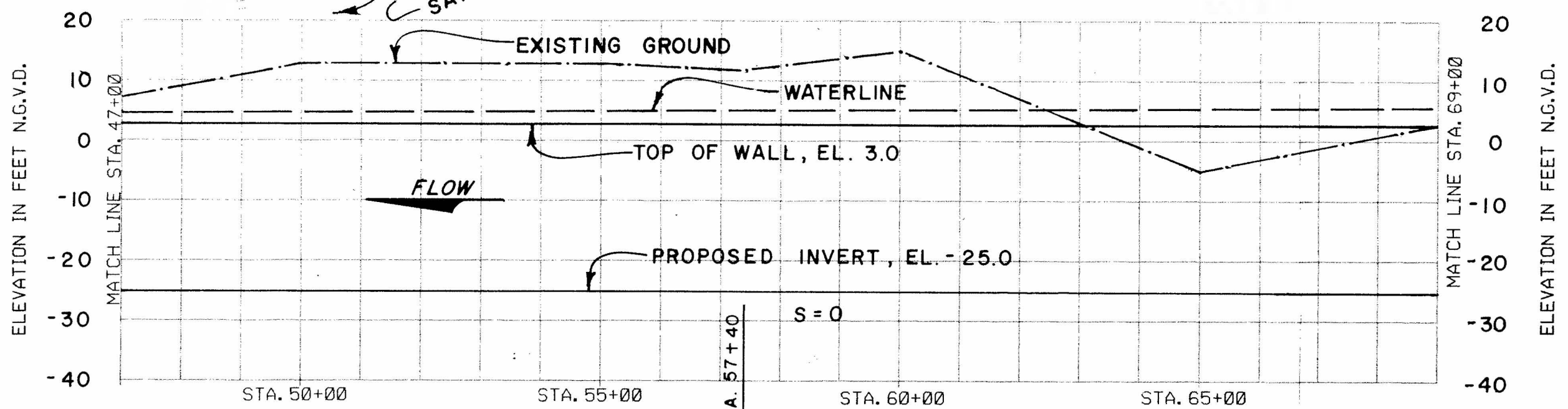
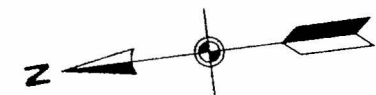
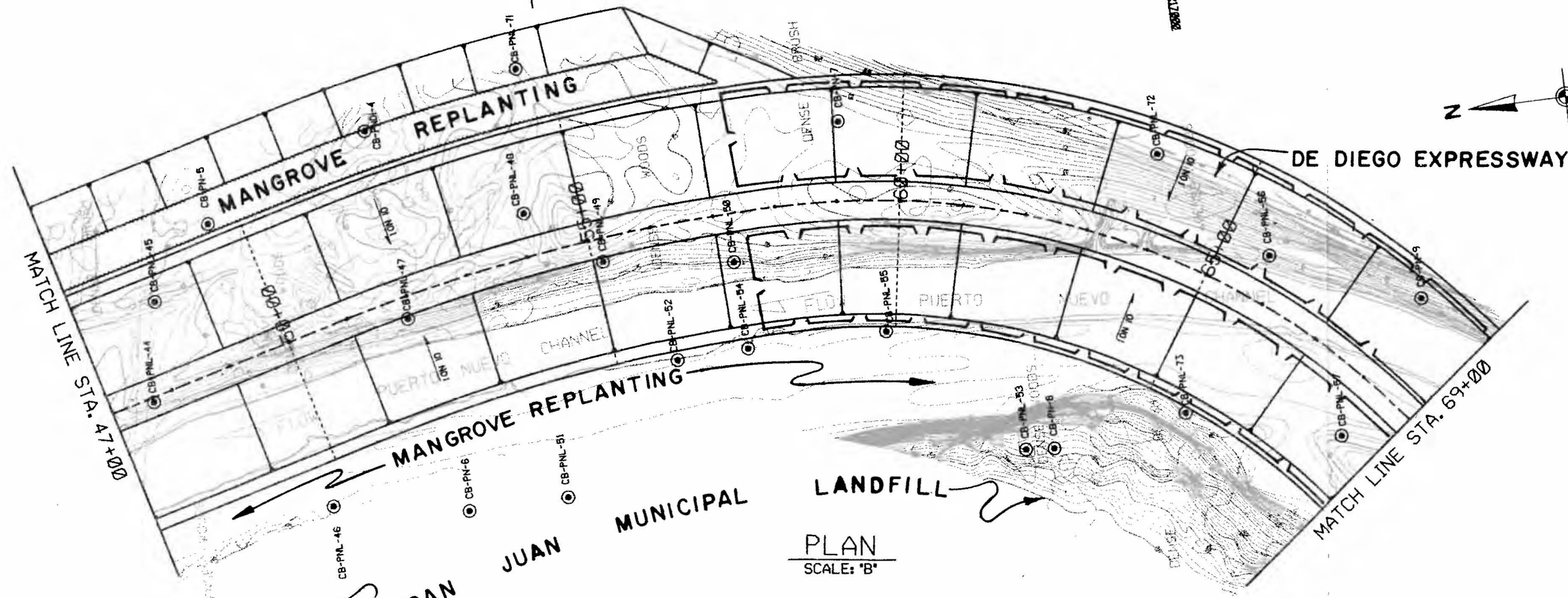
SCALE: HORIZ. 'B'
VERT. 'A'



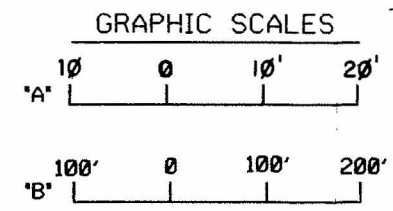
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
PUERTO NUEVO CHANNEL - REACH 1
STA 25+00 TO STA 47+00
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-36.678 DECEMBER 1990

x=624000

00081271



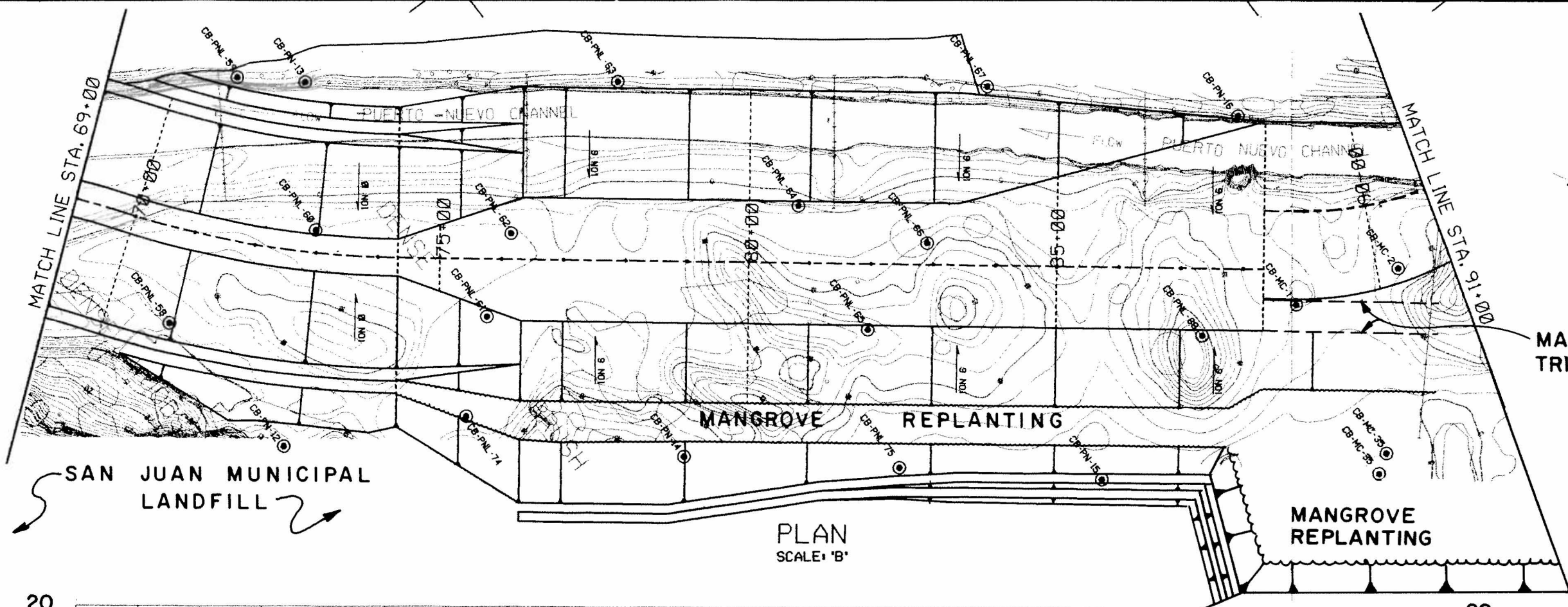
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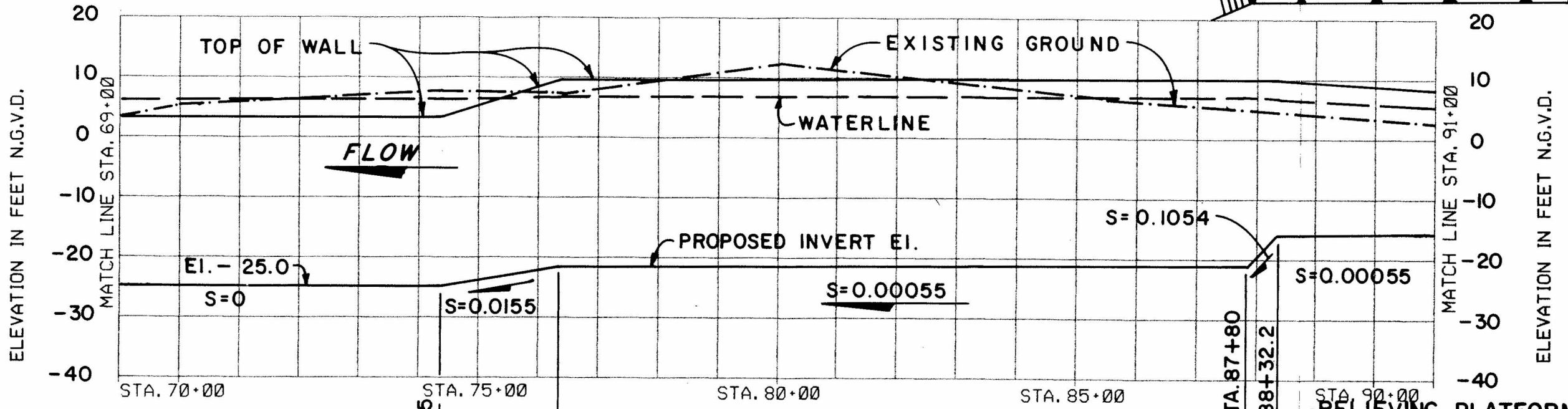
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 47+00 TO STA 69+00
PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990

x=622000

00081271



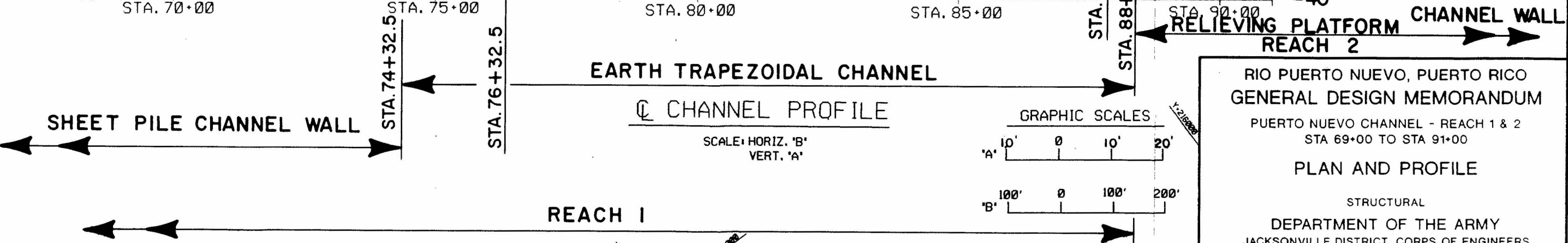
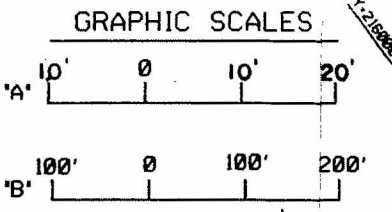
PLAN
SCALE: 'B'



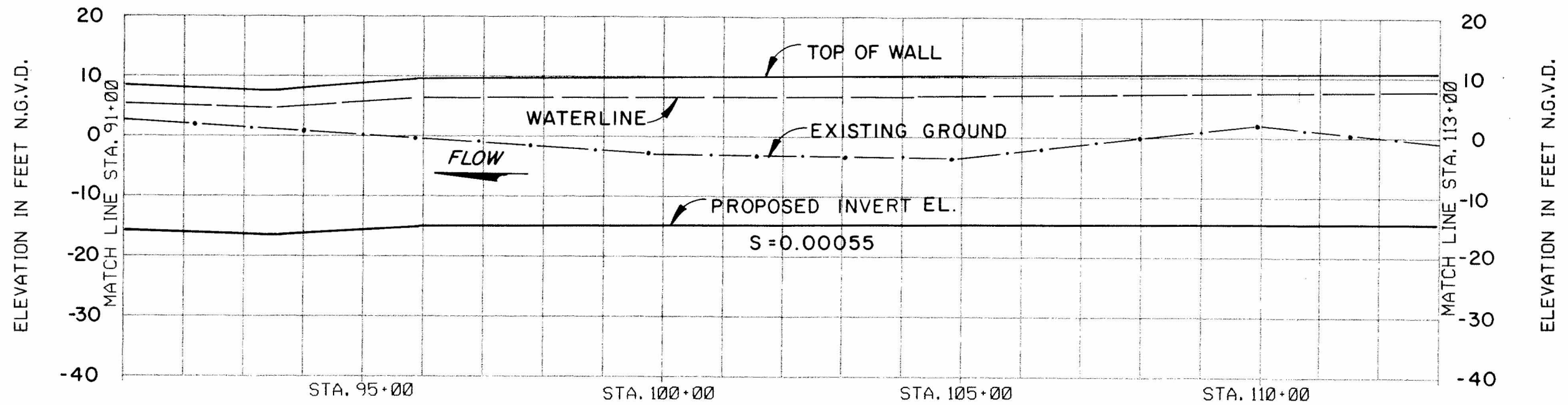
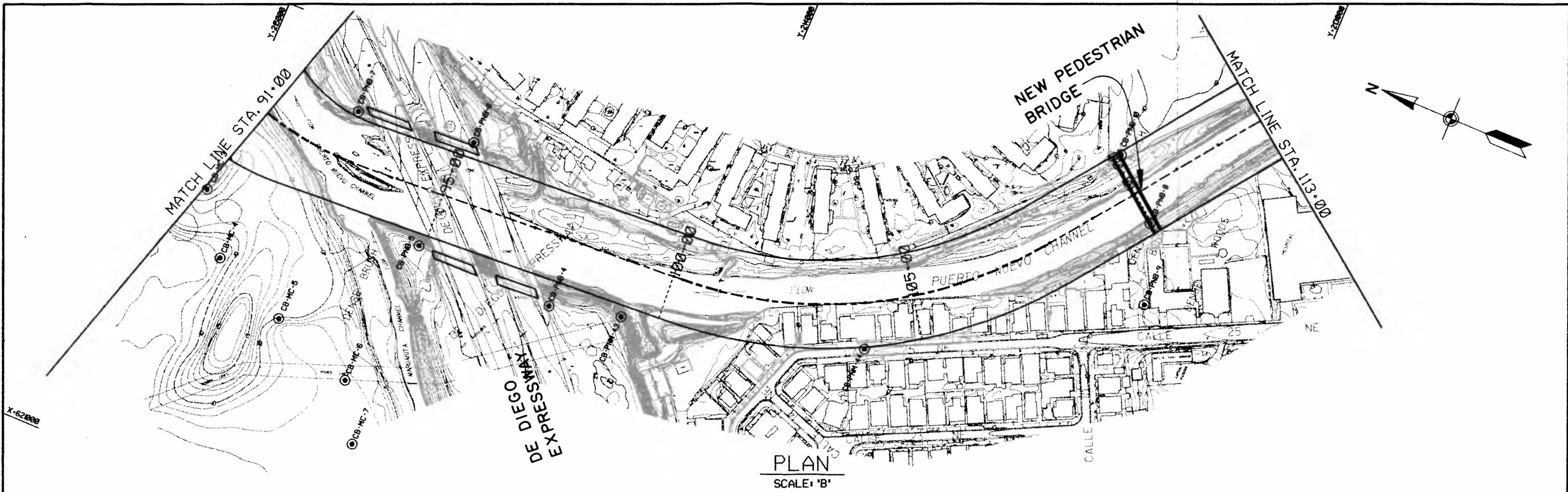
EARTH TRAPEZOIDAL CHANNEL

CHANNEL PROFILE

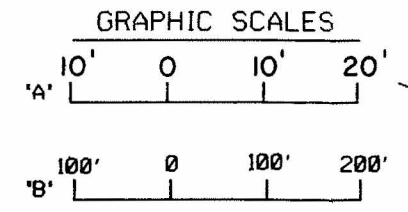
SCALE: HORIZ. 'B'
VERT. 'A'



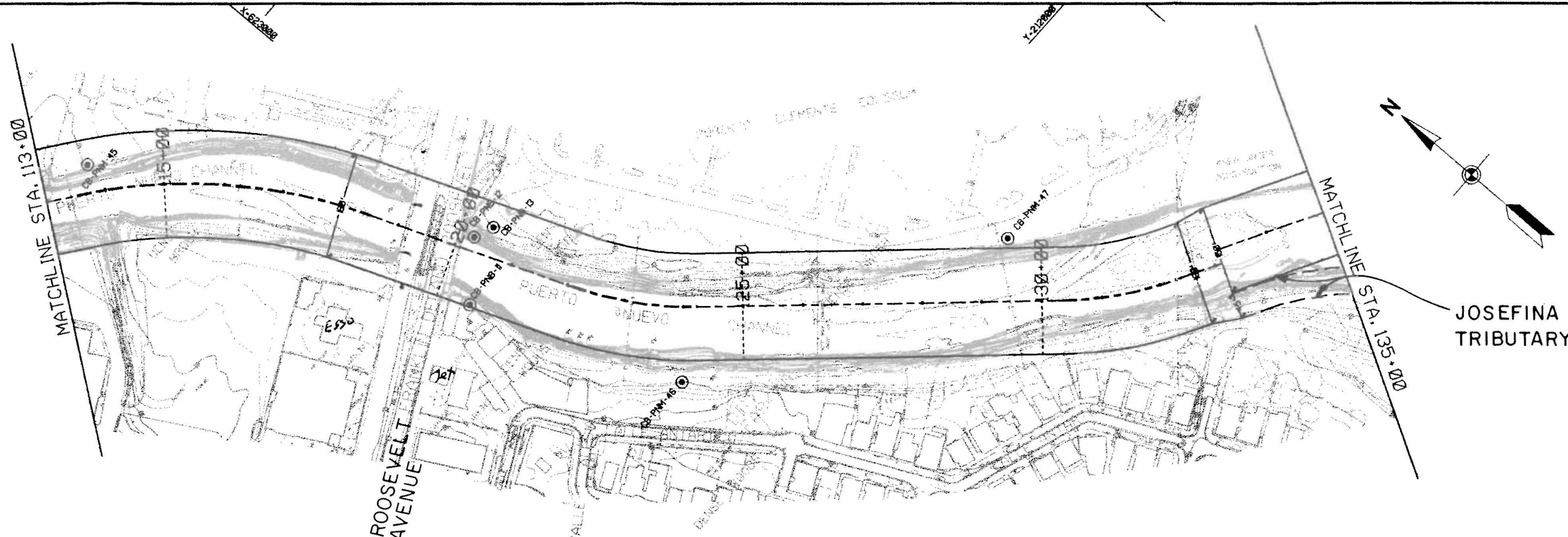
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1 & 2
 STA 69+00 TO STA 91+00
PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35.578
 DECEMBER 1990



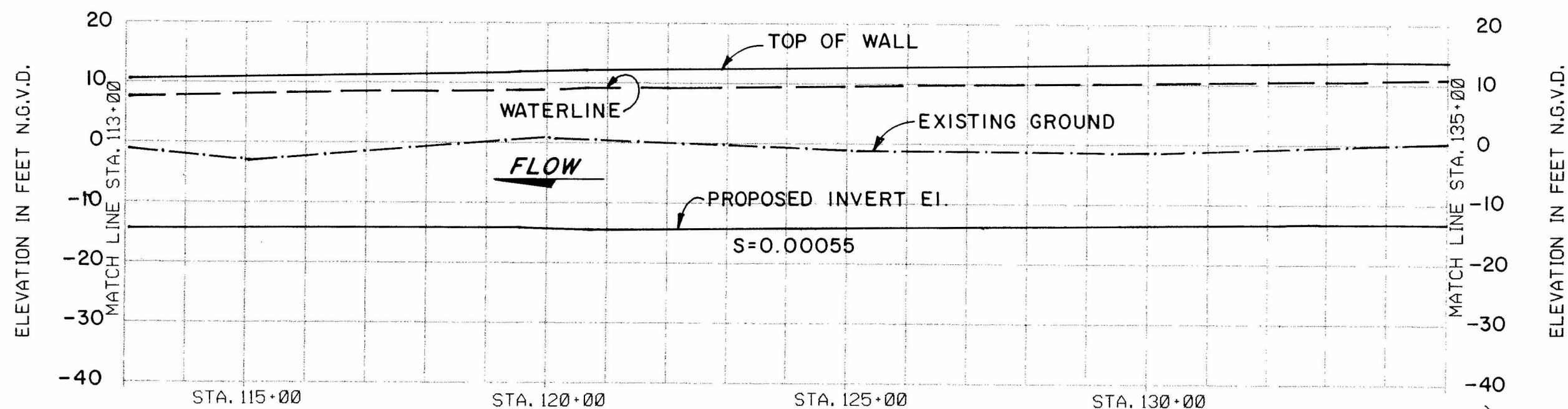
← RELIEVING PLATFORM CHANNEL WALL →
REACH 2



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
PUERTO NUEVO CHANNEL - REACH 2
STA 91+00 TO STA 113+00
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35.578 DECEMBER 1990



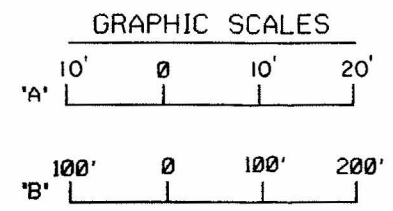
PLAN
SCALE: 'B'



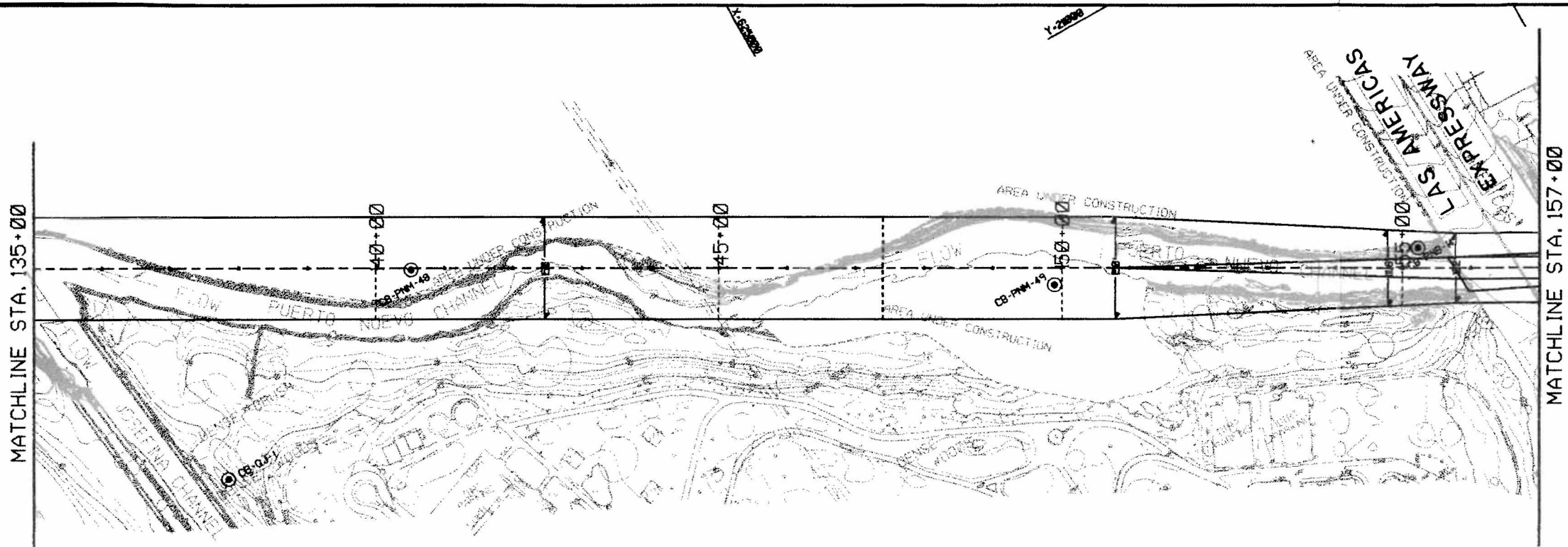
RELIEVING PLATFORM CHANNEL WALL

CHANNEL PROFILE

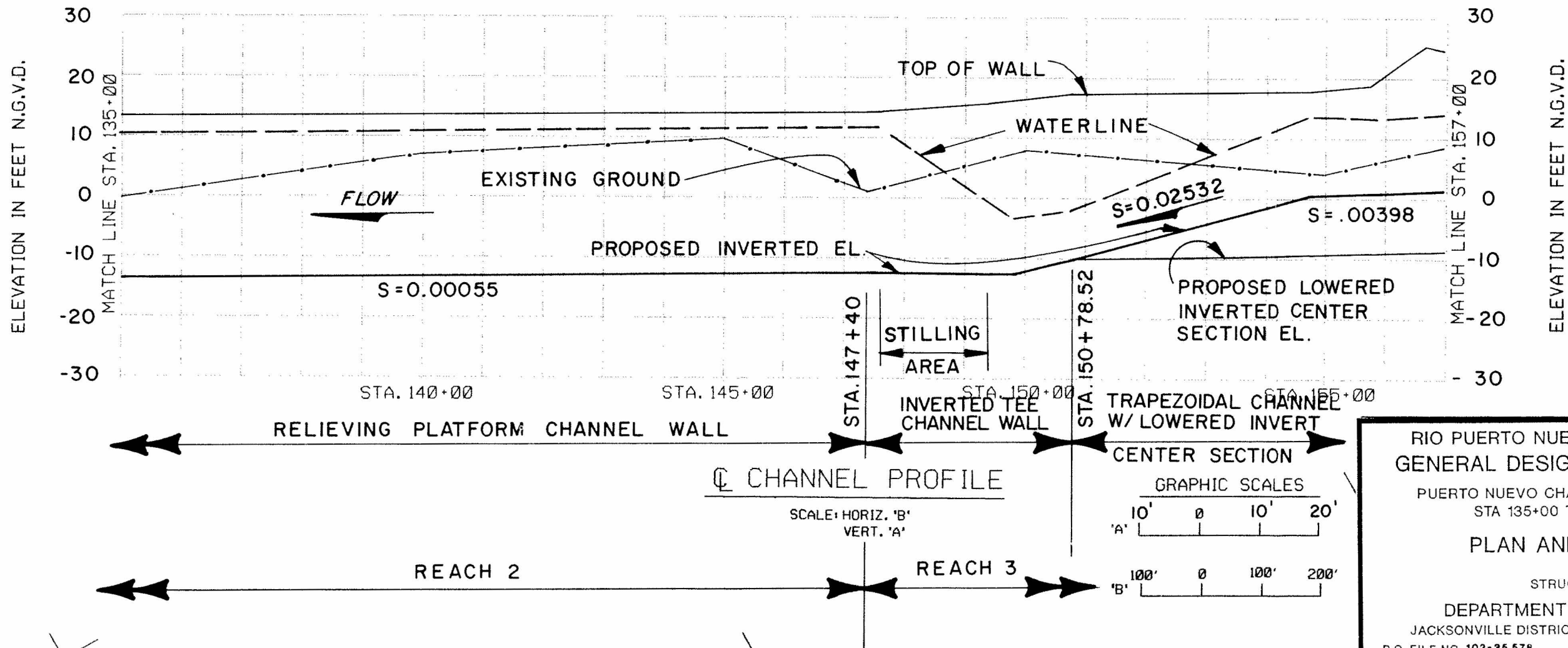
SCALE: HORIZ. 'B'
VERT. 'A'



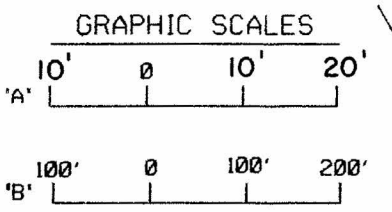
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 2
 STA 113+00 TO STA 135+00
PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,578
 DECEMBER 1990



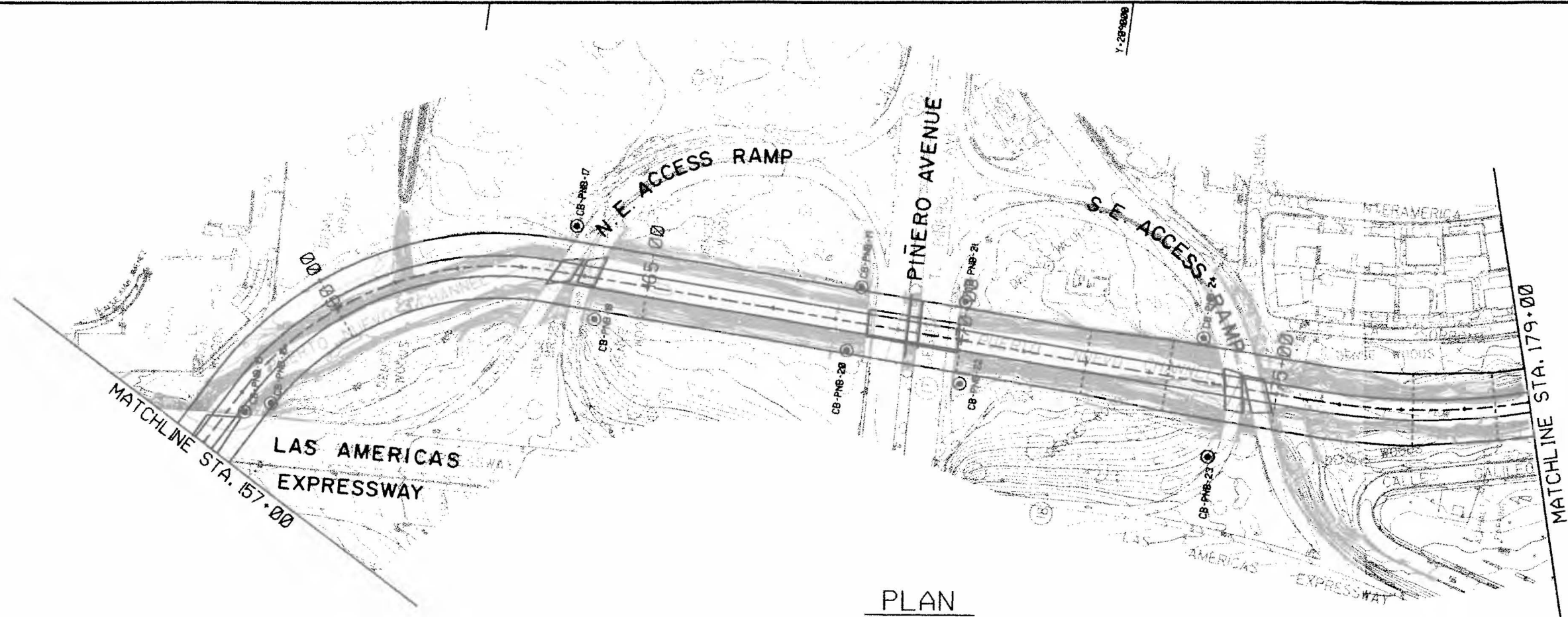
PLAN
SCALE: 'B'



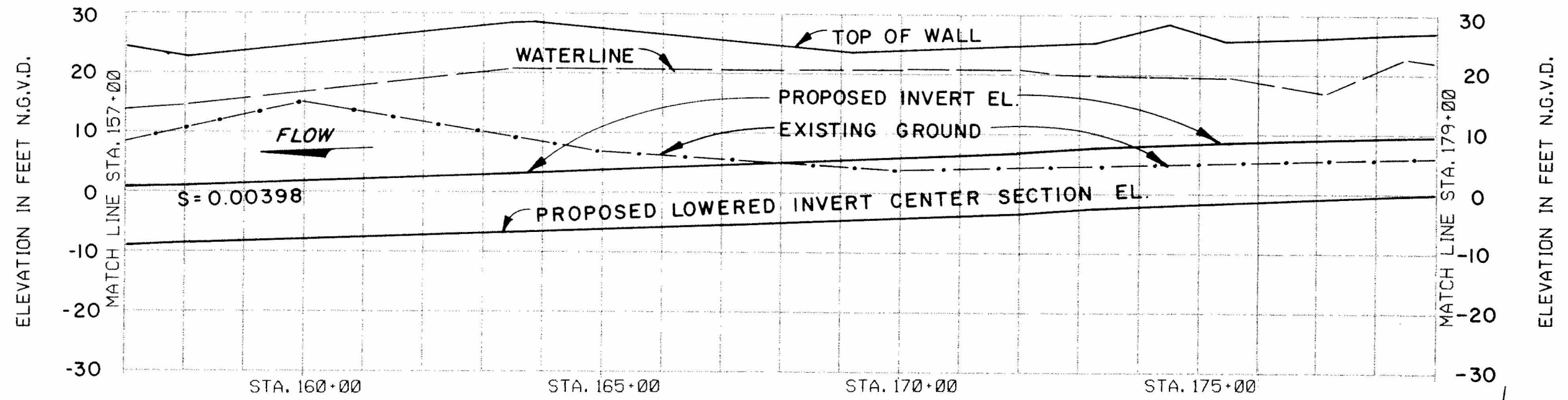
CHANNEL PROFILE
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
PUERTO NUEVO CHANNEL - REACH 2 & 3
STA 135+00 TO STA 157+00
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35.578
DECEMBER 1990



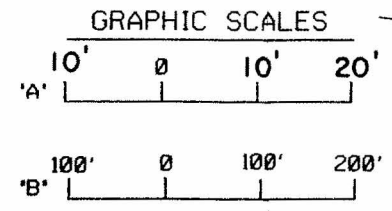
PLAN
SCALE: 'B'



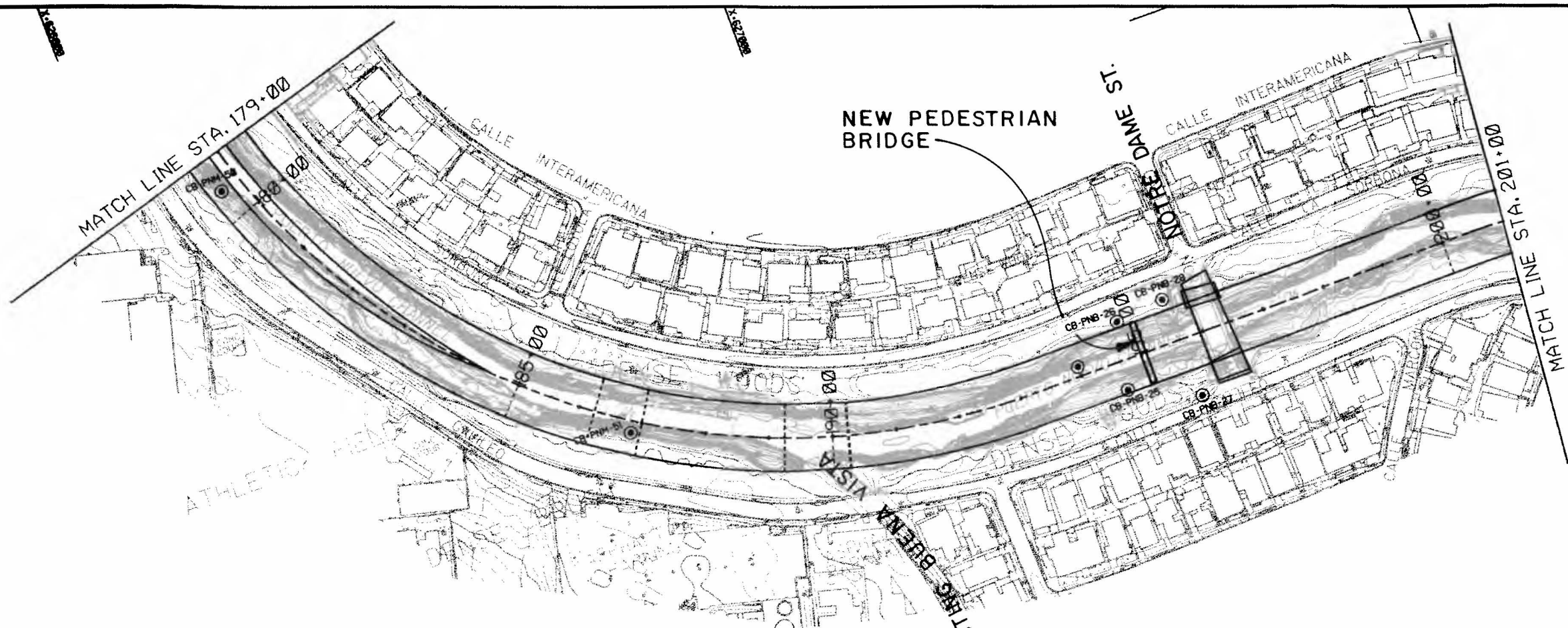
TRAPEZOIDAL CHANNEL WITH LOWERED INVERTED CENTER SECTION
REACH 3

CHANNEL PROFILE

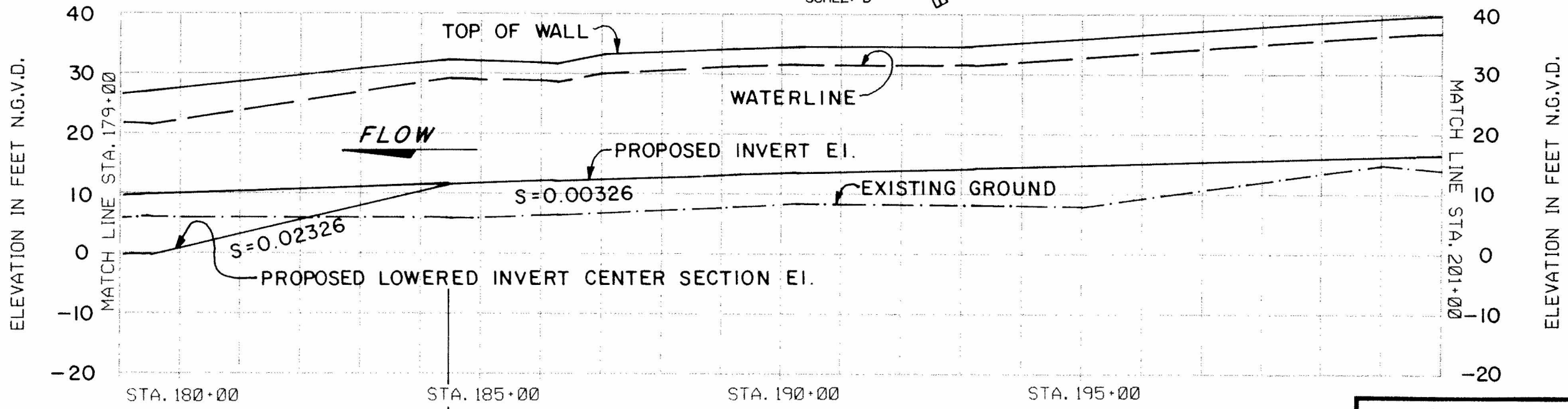
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 3
 STA 157+00 TO STA 179+00
 PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1994



PLAN
SCALE: 'B'



TRAPEZOIDAL CHANNEL
WITH LOWERED INVERT
CENTER SECTION

REACH 3

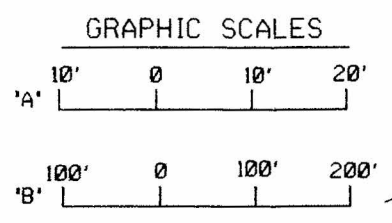
STA. 184+48.51

INVERTED TEE CHANNEL WALL

REACH 4

CHANNEL PROFILE

SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL - REACH 3
STA 179+00 TO STA 201+00

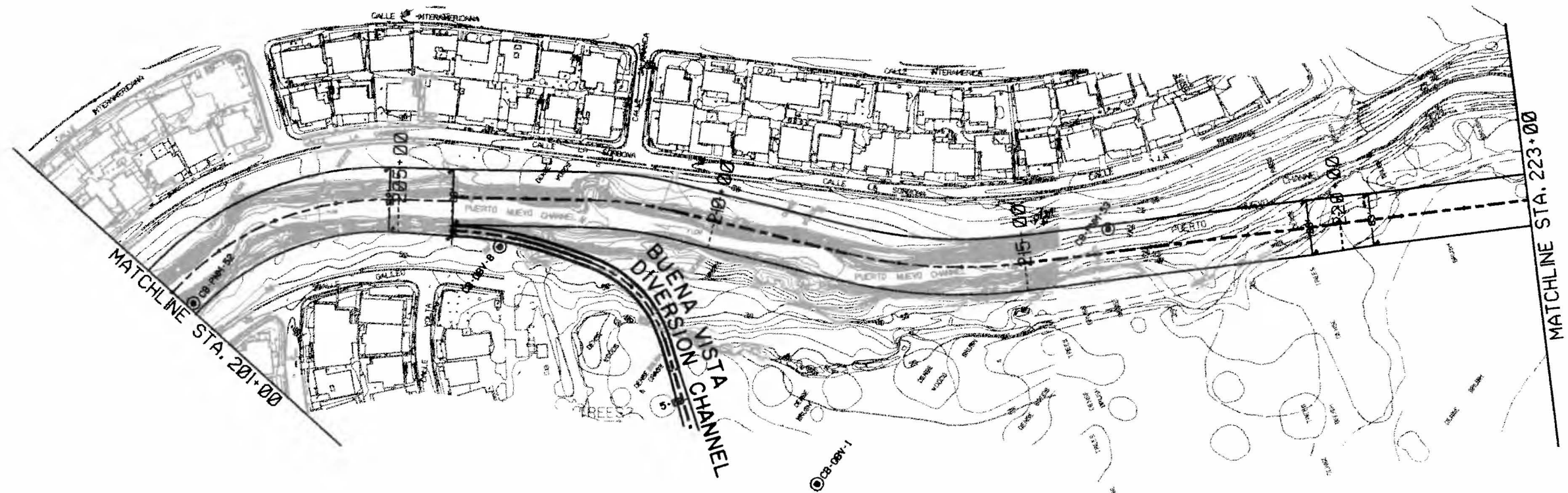
PLAN AND PROFILE

STRUCTURAL

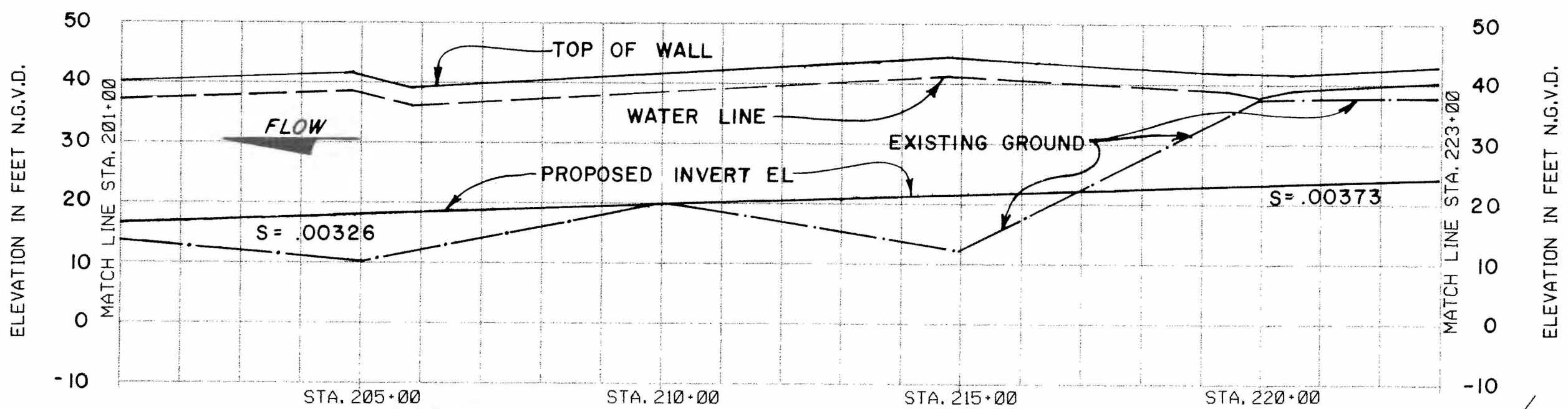
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35.578
DECEMBER 1990



PLAN
SCALE: 'B'

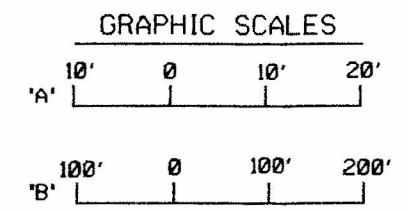


INVERTED TEE CHANNEL WALL

REACH 4

CHANNEL PROFILE

SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL - REACH 4
STA 201+00 TO STA 223+00

PLAN AND PROFILE

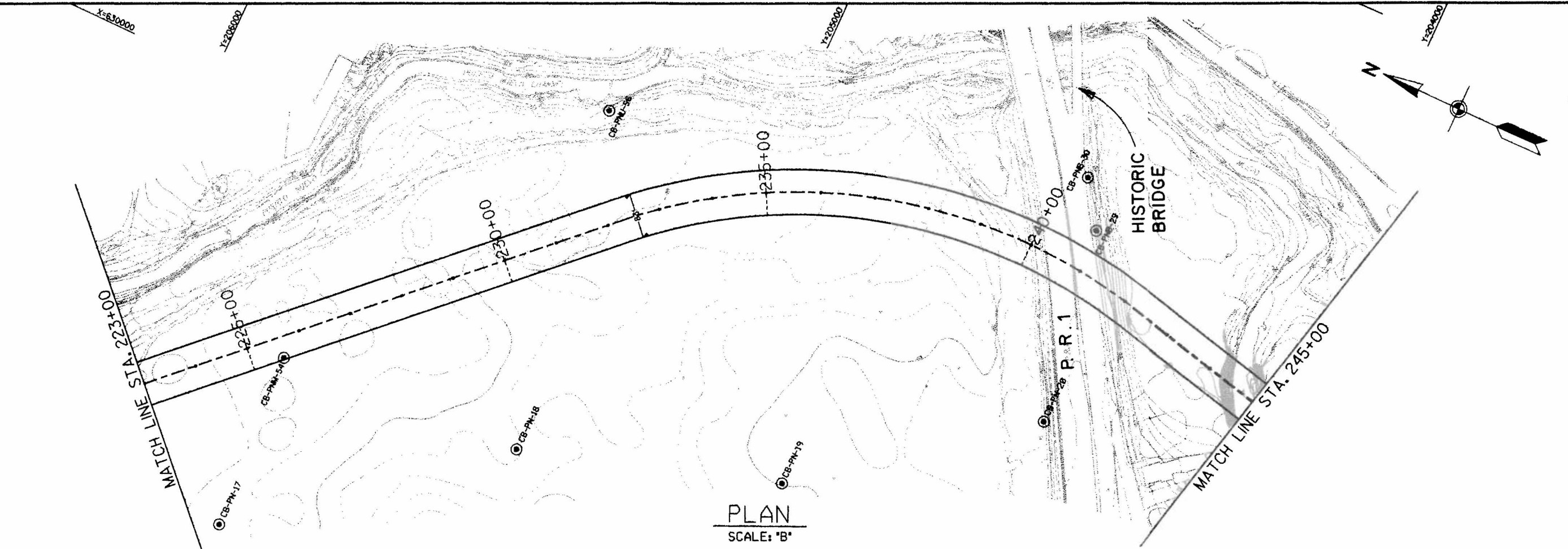
STRUCTURAL

DEPARTMENT OF THE ARMY

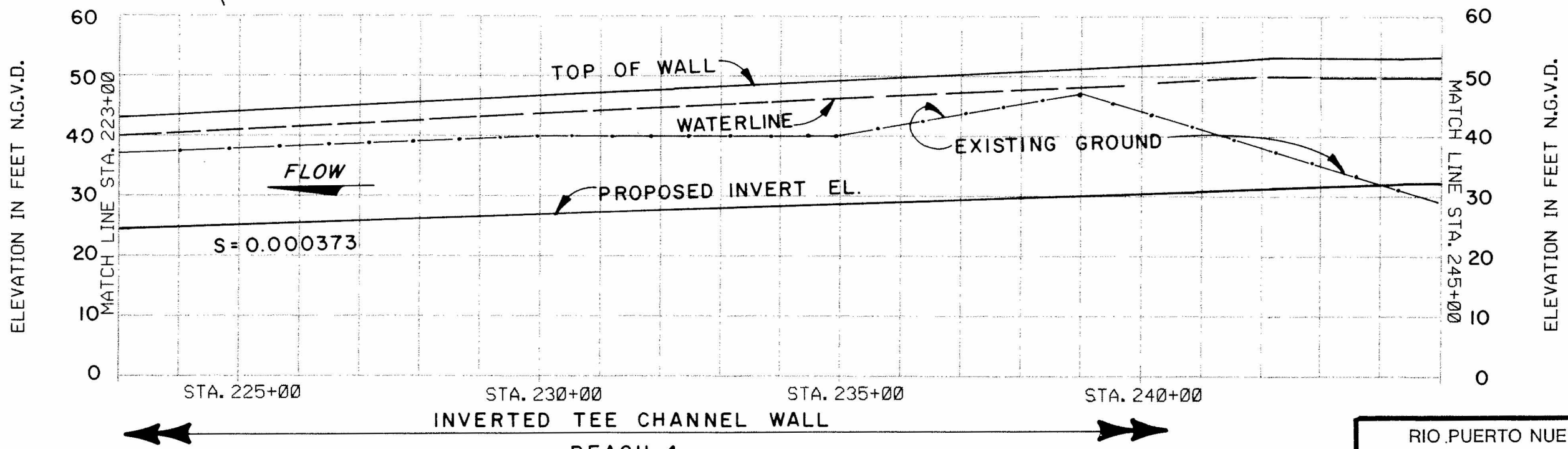
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990



PLAN
SCALE: 'B'

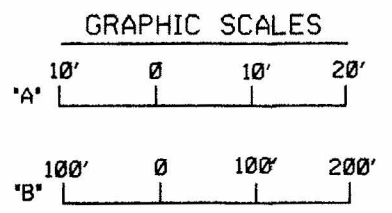


INVERTED TEE CHANNEL WALL

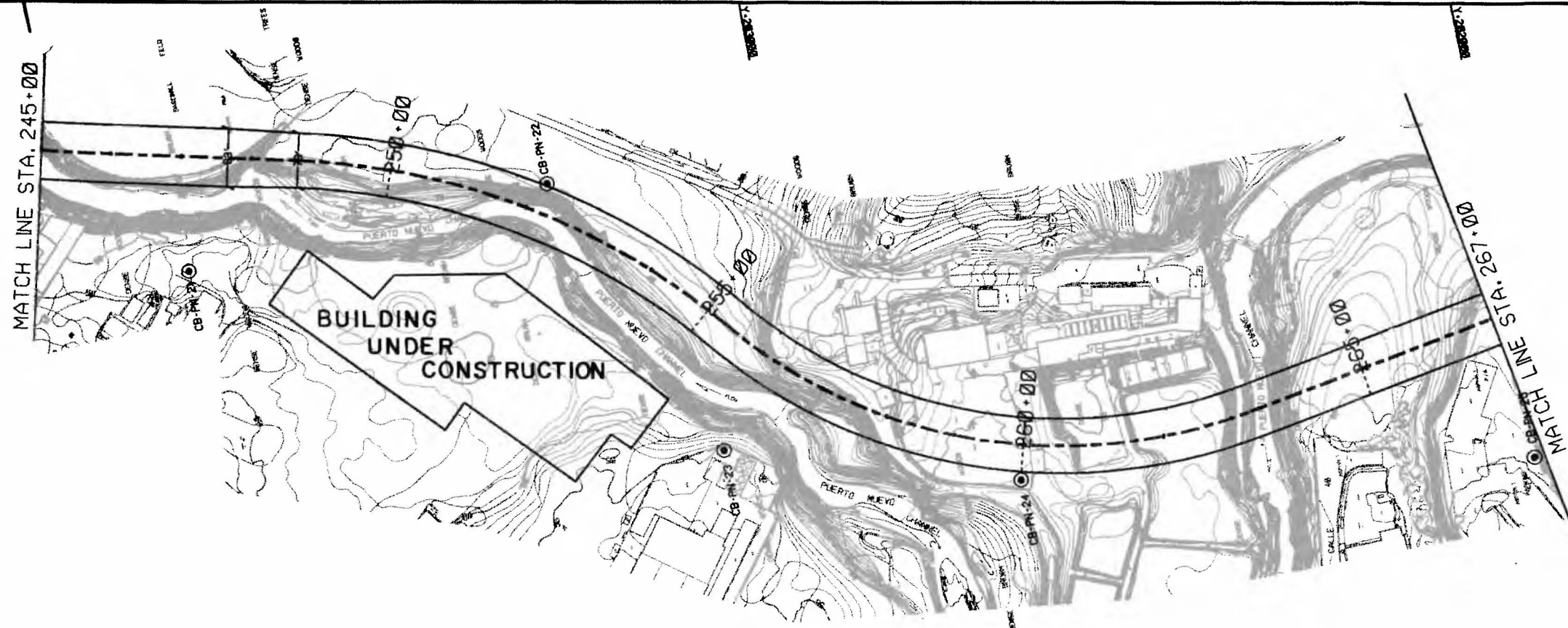
REACH 4

CHANNEL PROFILE

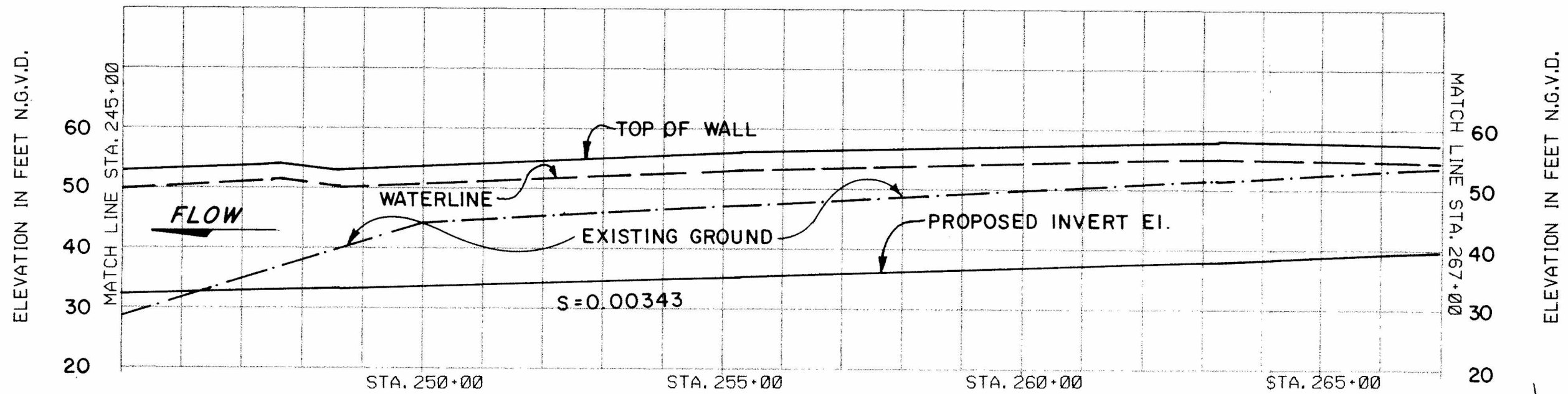
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 4
 STA 223+00 TO STA 245+00
 PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35.578
 DECEMBER 1990



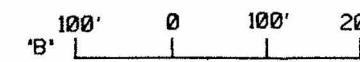
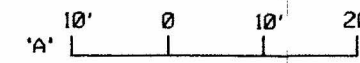
PLAN
SCALE: 'B'



INVERTED TEE CHANNEL WALL
REACH 4
Q CHANNEL PROFILE

SCALE: HORIZ. 'B'
VERT. 'A'

GRAPHIC SCALES



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

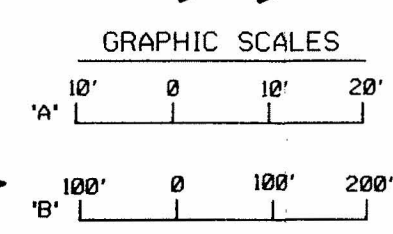
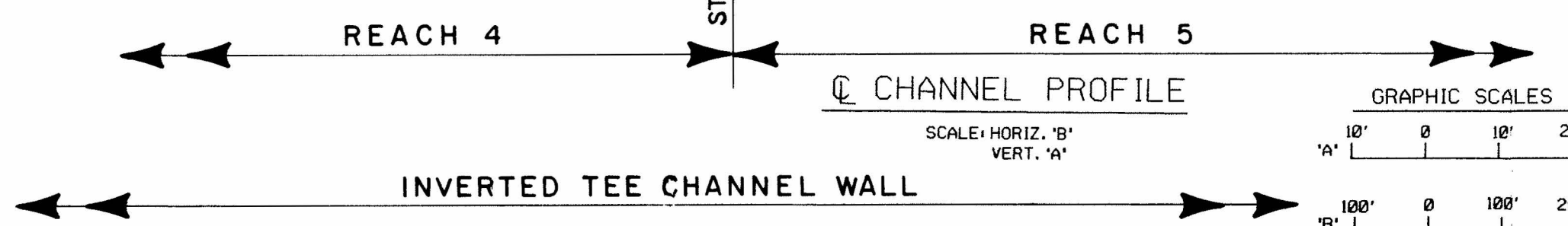
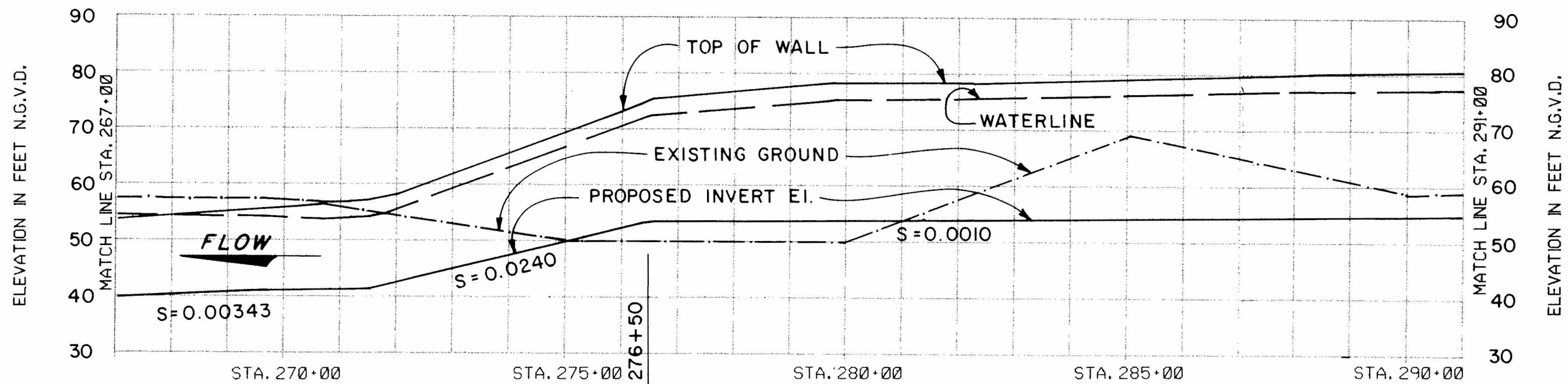
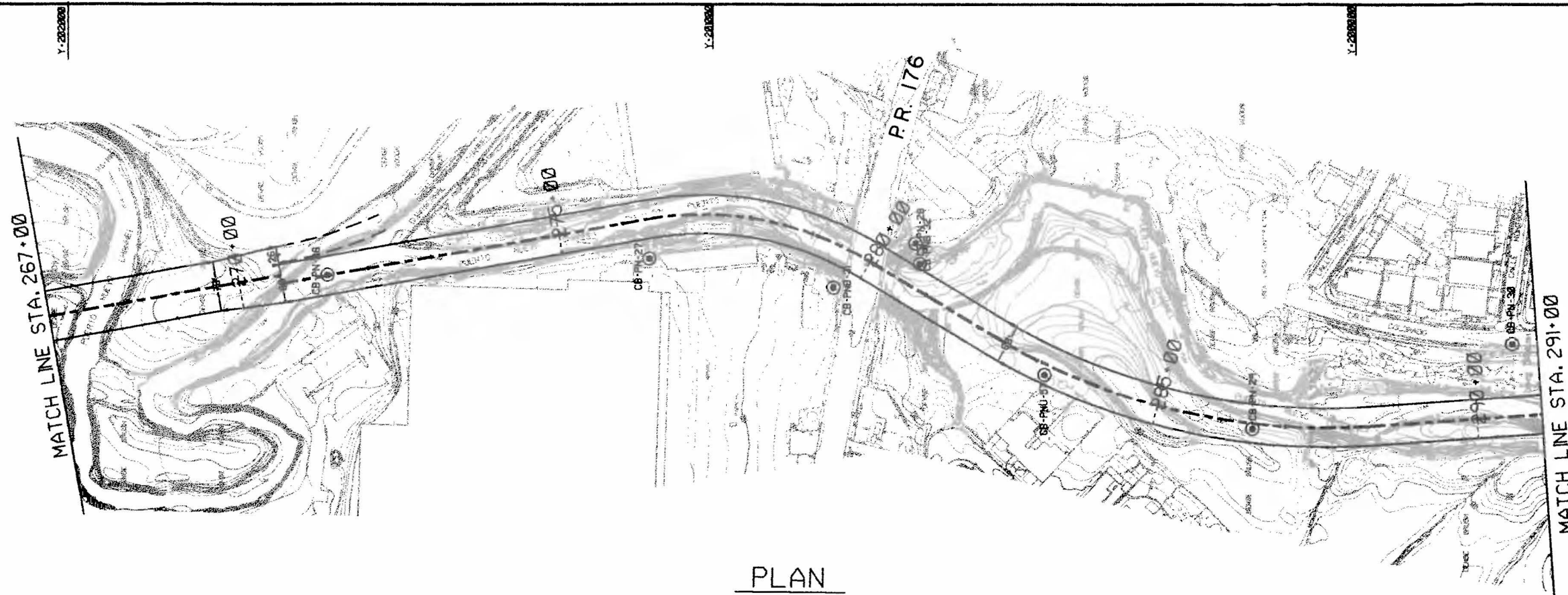
PUERTO NUEVO CHANNEL - REACH 4
STA 245+00 TO STA 267+00

PLAN AND PROFILE

STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578

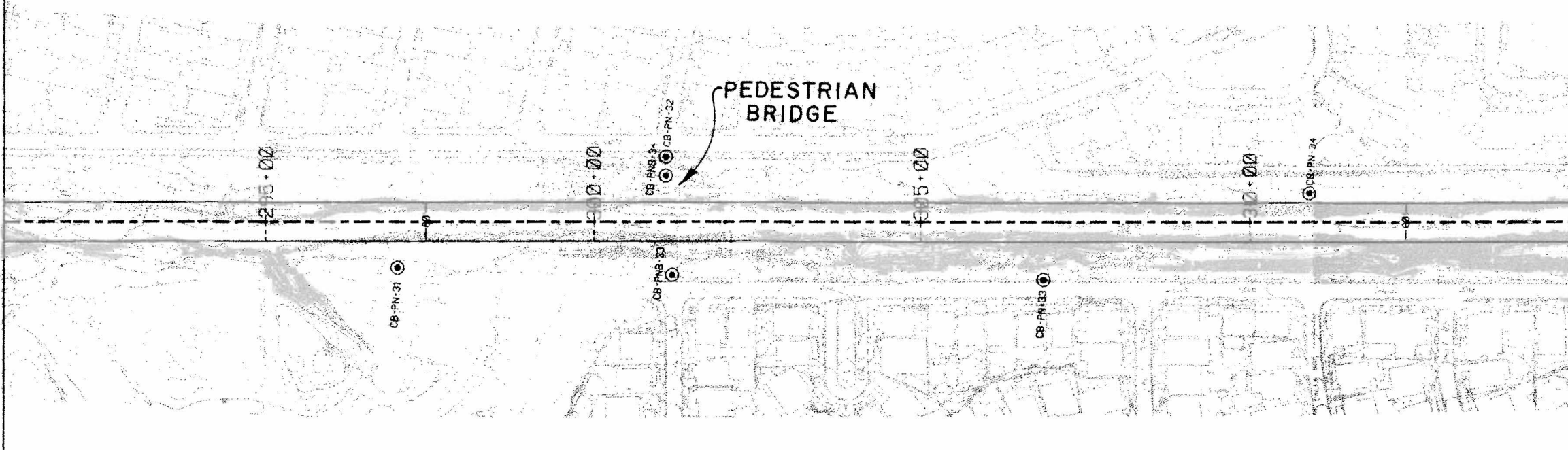
DECEMBER 1990



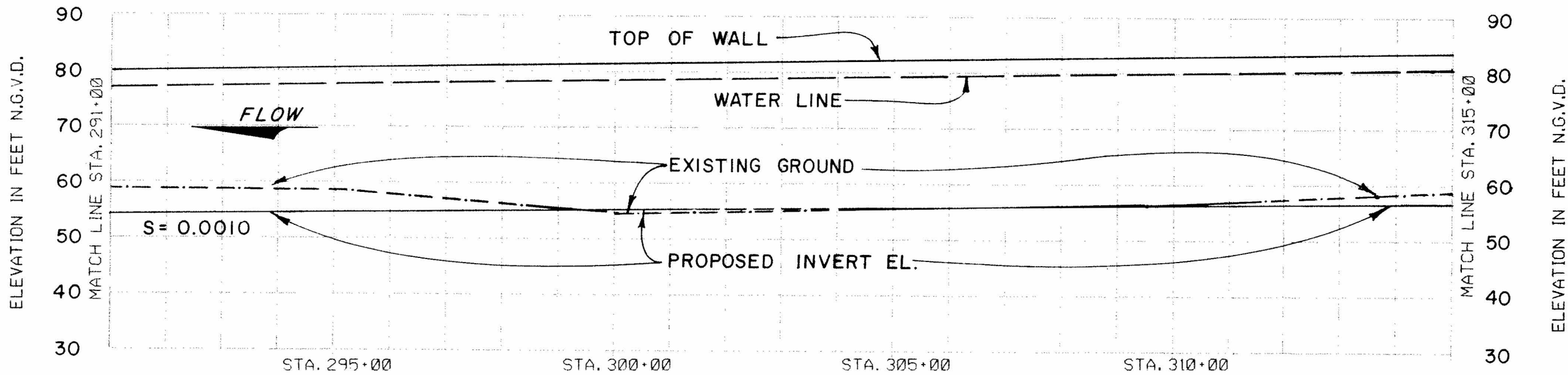
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 4 & 5
 STA 267+00 TO STA 291+00
 PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990

MATCH LINE STA. 291+00

MATCH LINE STA. 315+00



PLAN
SCALE: 'B'

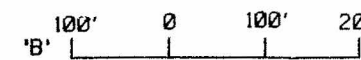
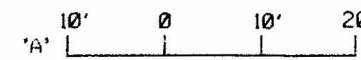


INVERTED TEE CHANNEL WALL
REACH 5

CHANNEL PROFILE

SCALE: HORIZ. 'B'
VERT. 'A'

GRAPHIC SCALES



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL - REACH 5
STA 291+00 TO STA 315+00

PLAN AND PROFILE

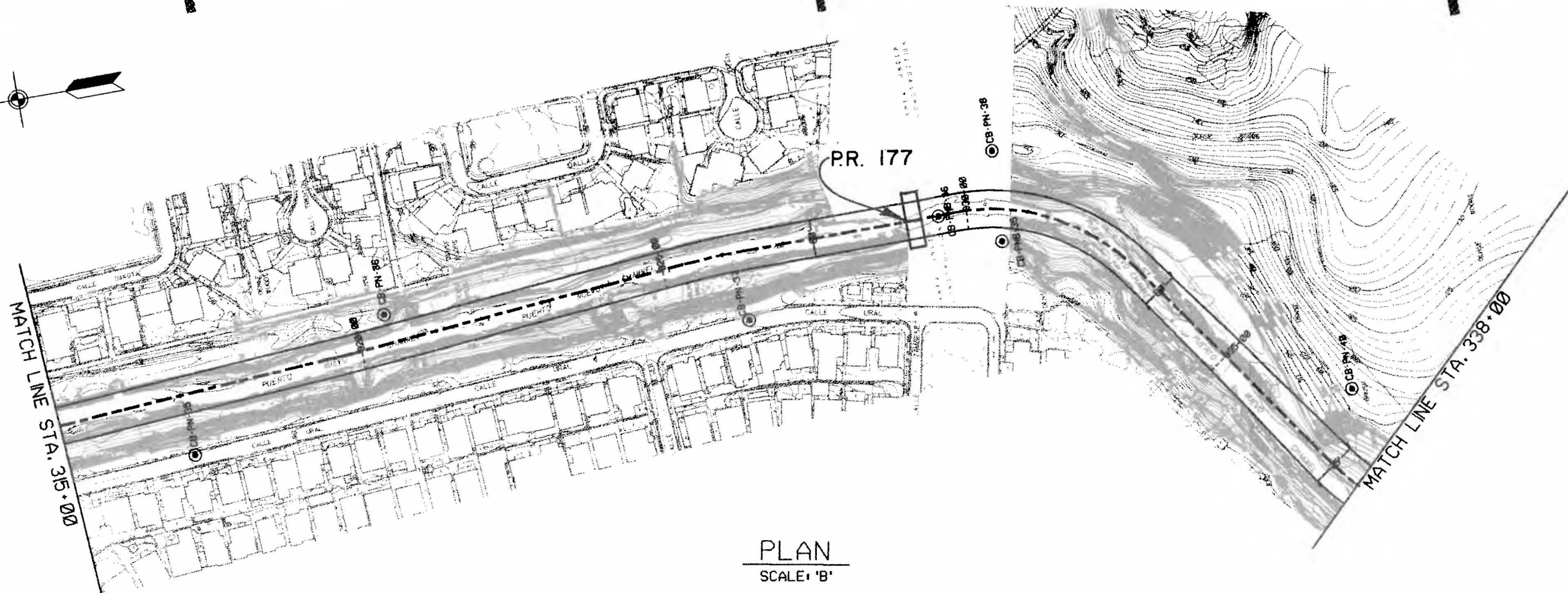
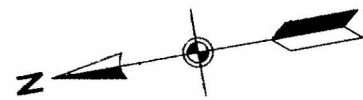
STRUCTURAL

DEPARTMENT OF THE ARMY

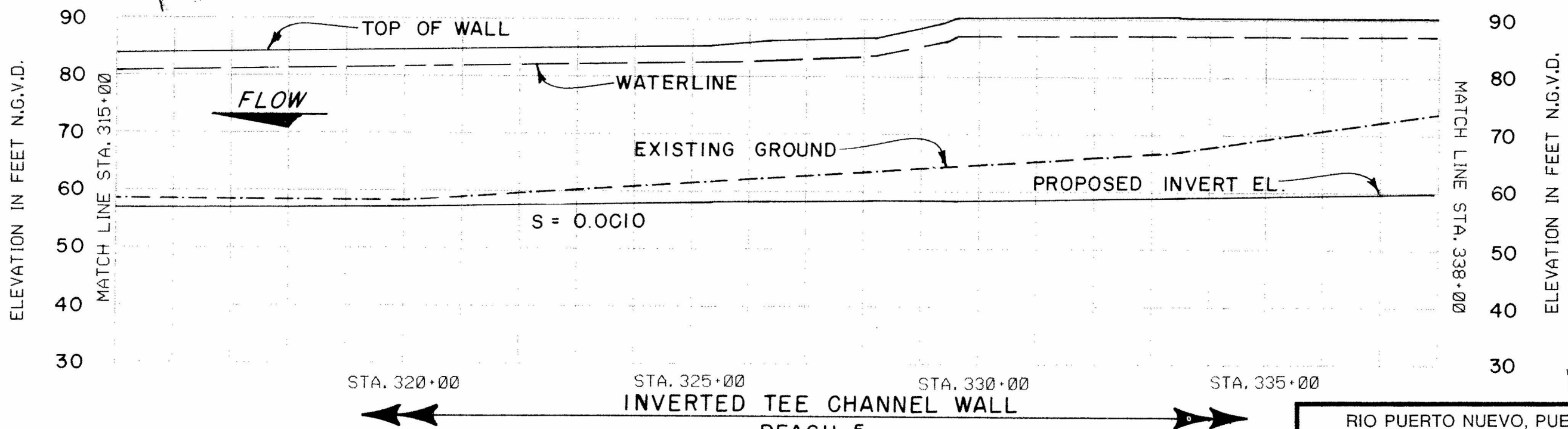
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO 102-35.578

DECEMBER 1990



PLAN
SCALE: 'B'



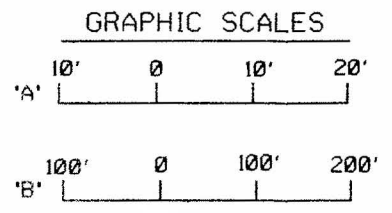
STA. 320+00 STA. 325+00 STA. 330+00 STA. 335+00

INVERTED TEE CHANNEL WALL

REACH 5

CHANNEL PROFILE

SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL - REACH 5
STA 315+00 TO STA 338+00

PLAN AND PROFILE

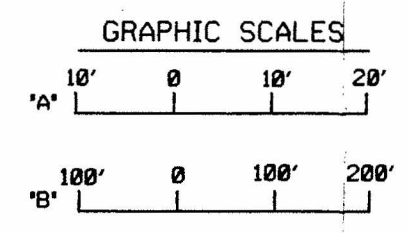
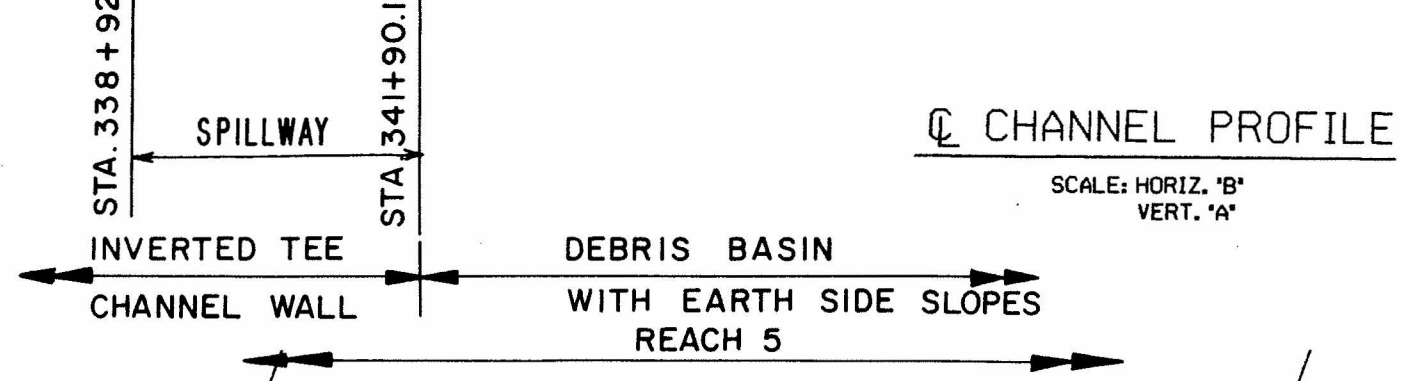
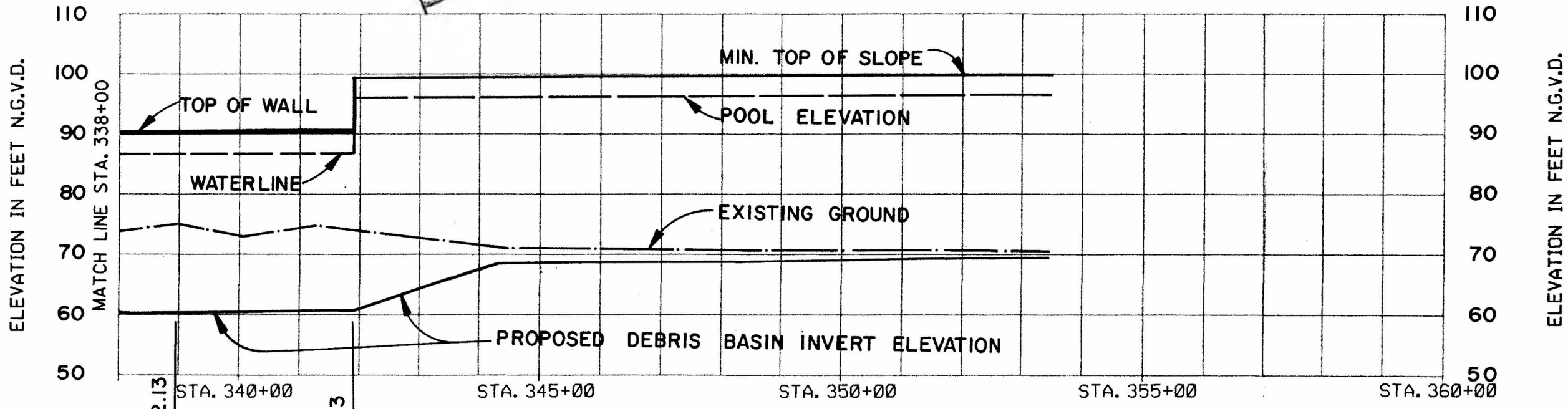
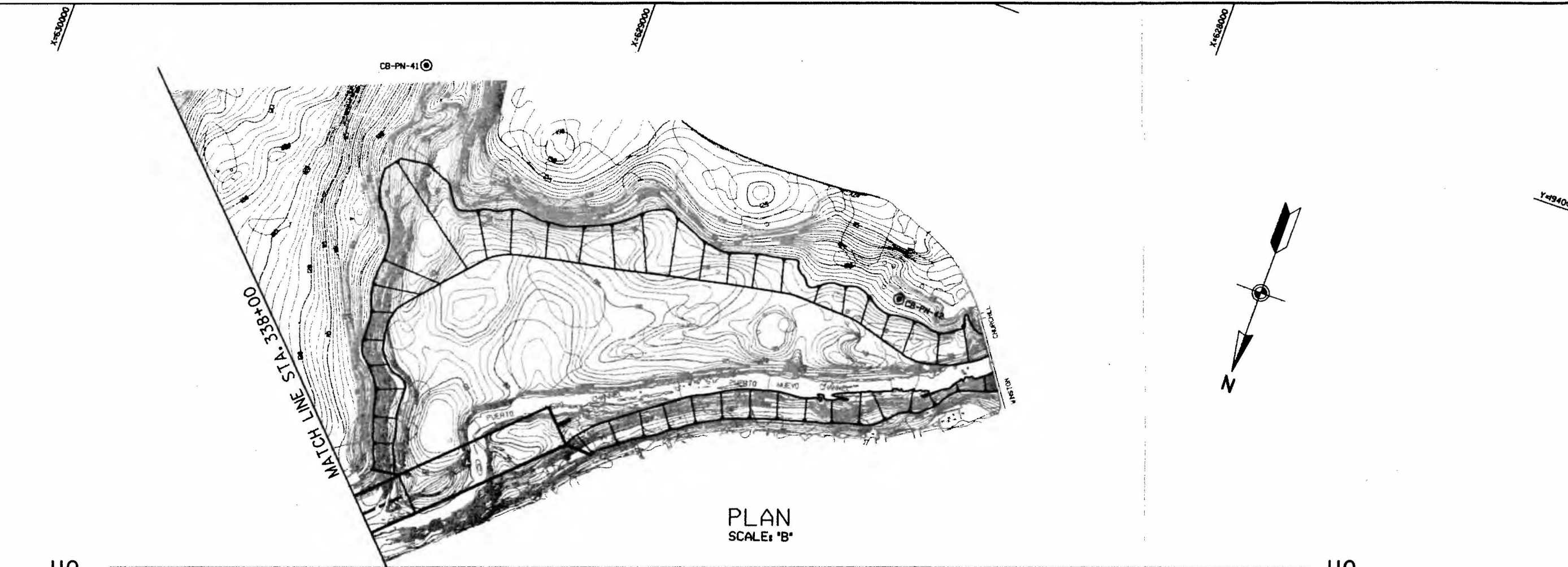
STRUCTURAL

DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990

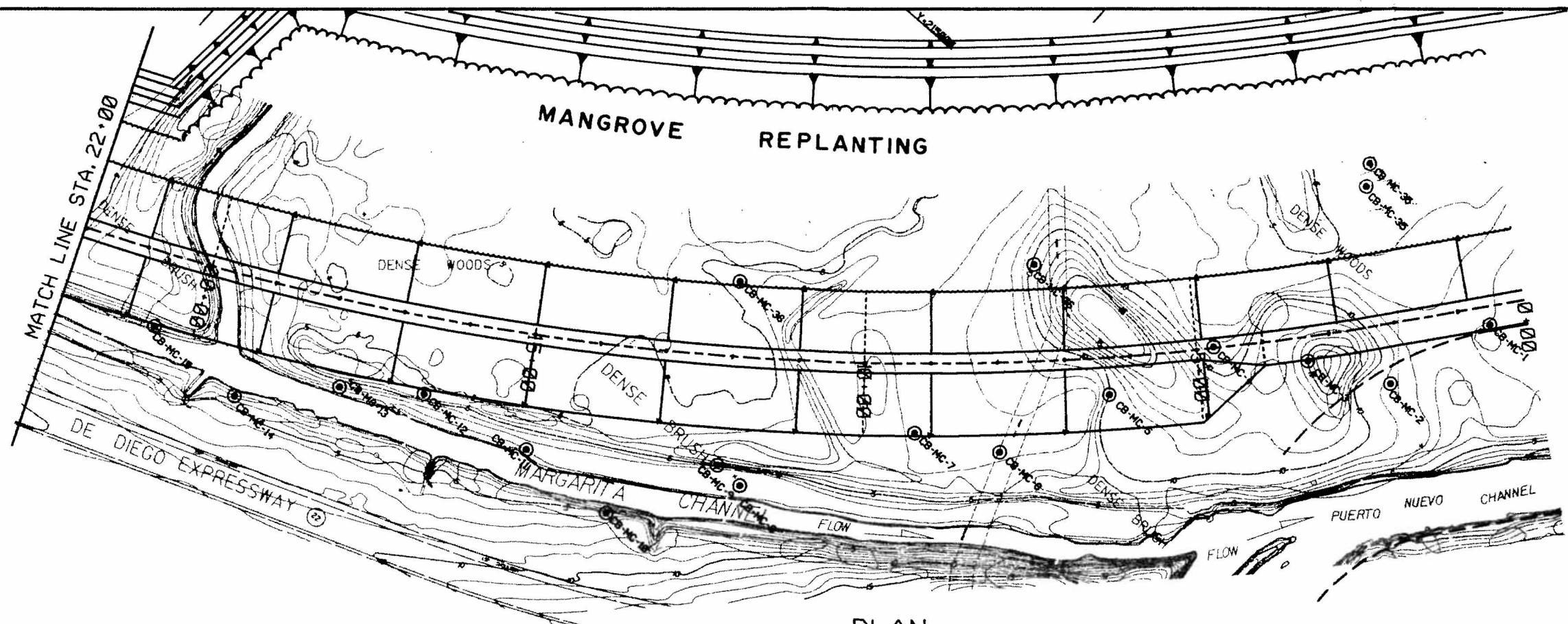


RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

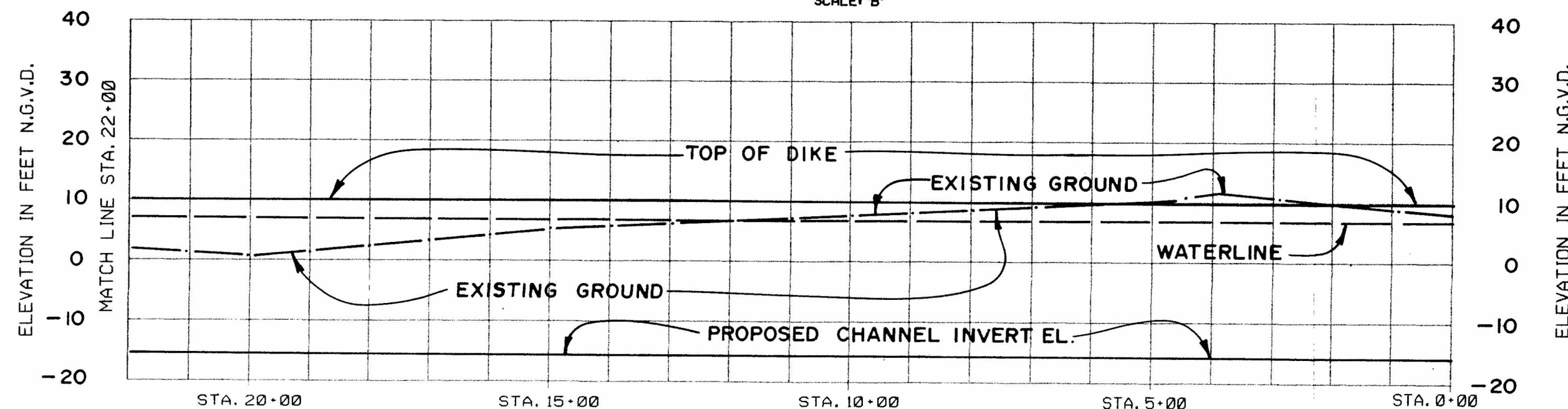
PUERTO NUEVO CHANNEL - REACH 5
STA 338+00 TO UPSTREAM END OF DEBRIS BASIN

PLAN AND PROFILE

STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578 DECEMBER 1990

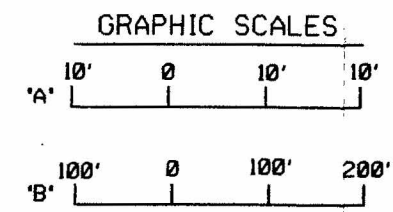


PLAN
SCALE: 'B'

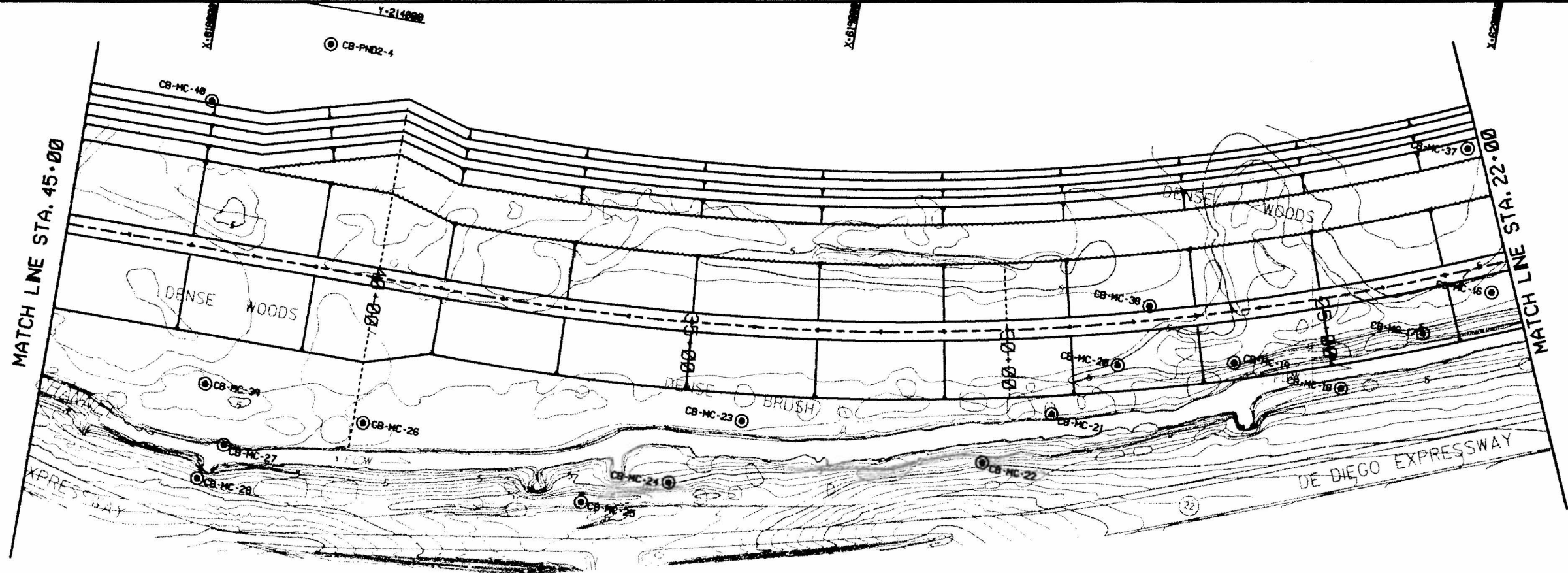


CHANNEL PROFILE

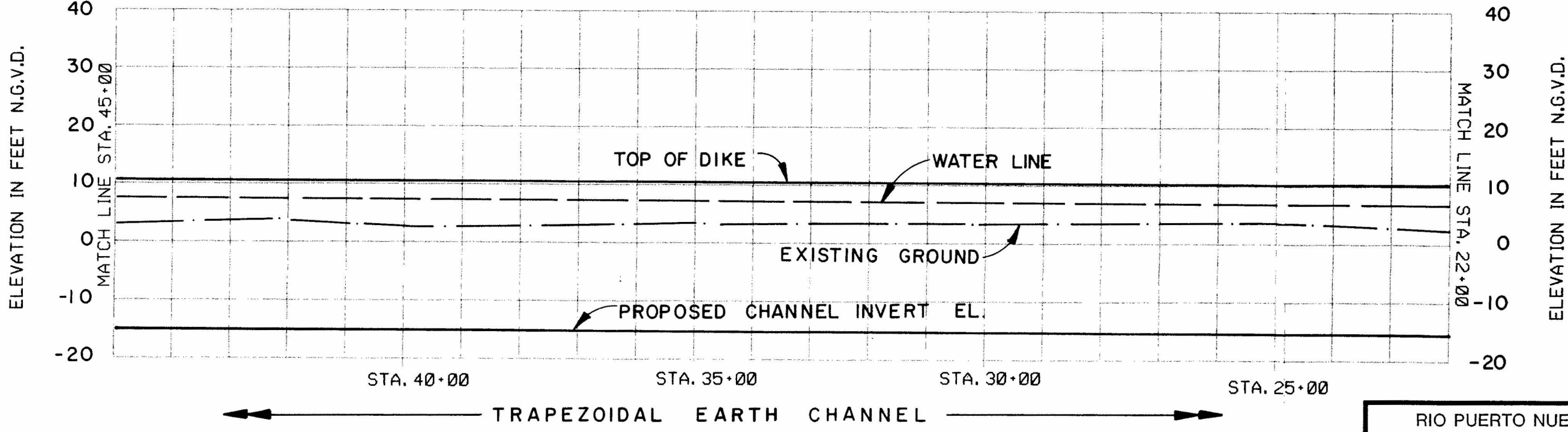
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
MARGARITA TRIBUTARY
STA 0+00 TO STA 22+00
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578
DECEMBER 1990



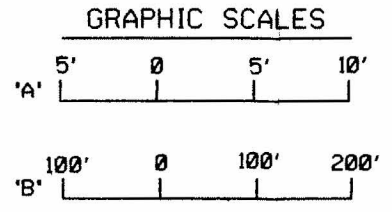
PLAN
SCALE: 'B'



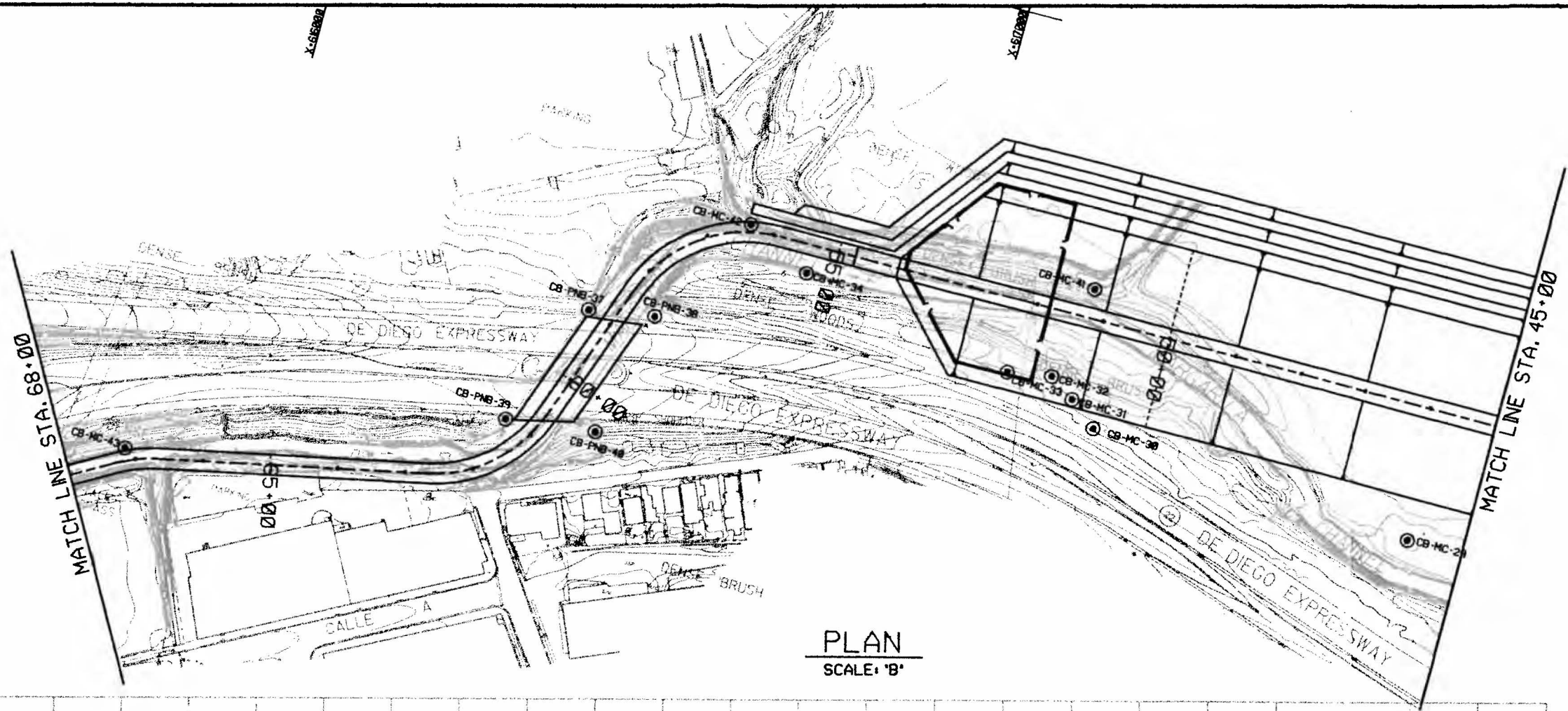
← TRAPEZOIDAL EARTH CHANNEL →

CHANNEL PROFILE

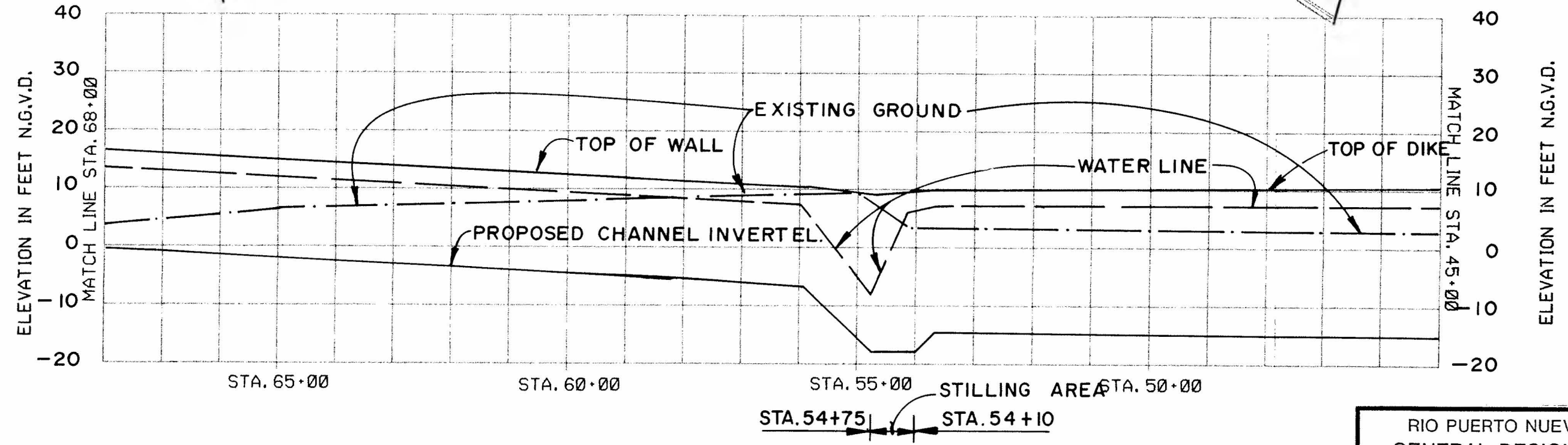
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
MARGARITA TRIBUTARY
STA 22+00 TO STA 45+00
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578
DECEMBER 1993

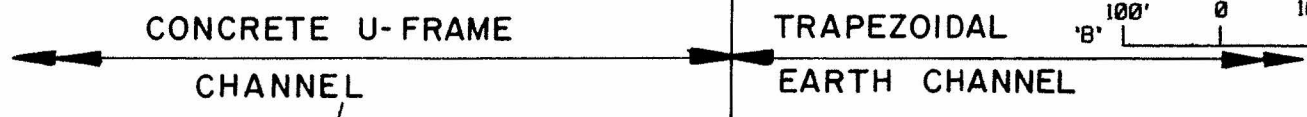
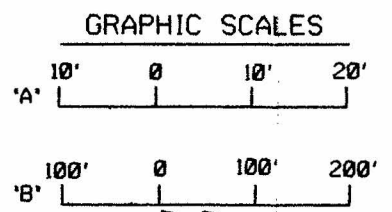


PLAN
SCALE: 'B'

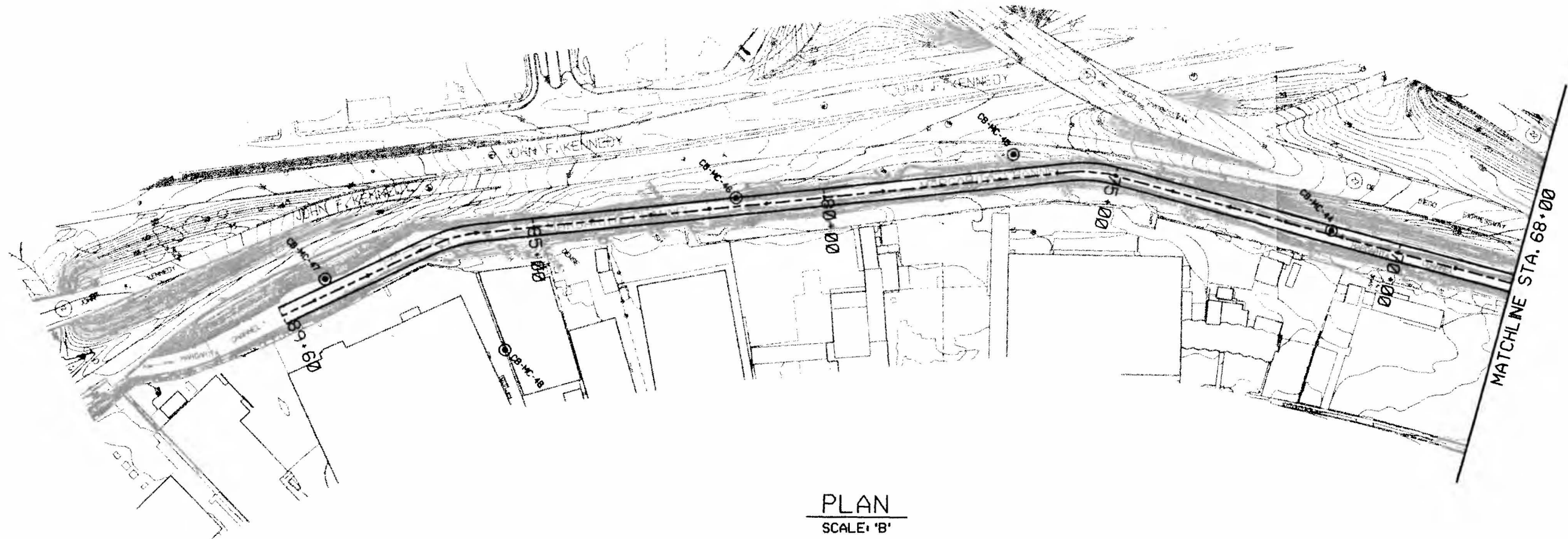


CHANNEL PROFILE

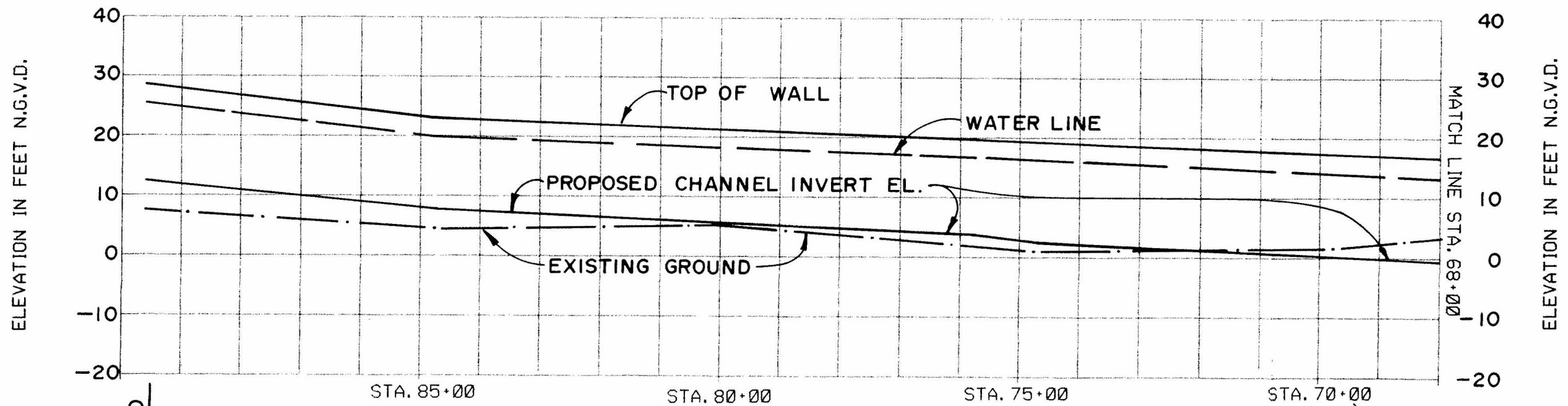
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
MARGARITA TRIBUTARY
STA 45+00 TO STA 68+00
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578
DECEMBER 199



PLAN
SCALE: 'B'



ELEVATION IN FEET N.G.V.D.

ELEVATION IN FEET N.G.V.D.

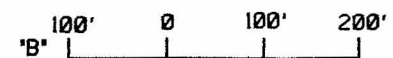
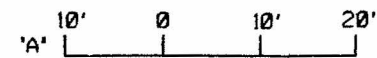
STA. 89+60

CONCRETE U-FRAME CHANNEL

CHANNEL PROFILE

SCALE: HORIZ. 'B'
VERT. 'A'

GRAPHIC SCALES



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

MARGARITA TRIBUTARY
STA 68+00 TO STA 89+60

PLAN AND PROFILE

STRUCTURAL

DEPARTMENT OF THE ARMY

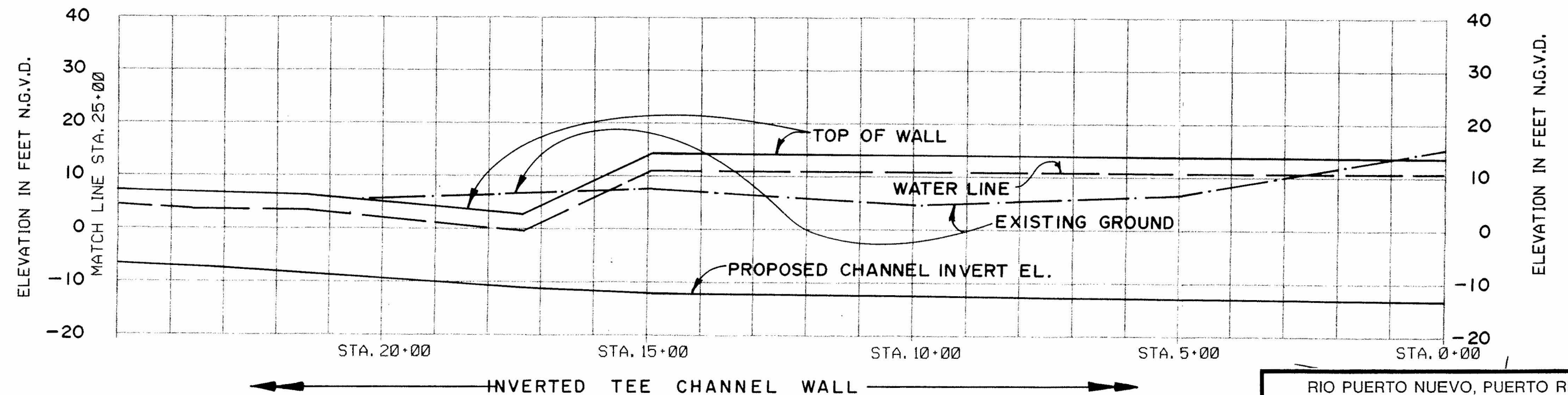
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1991

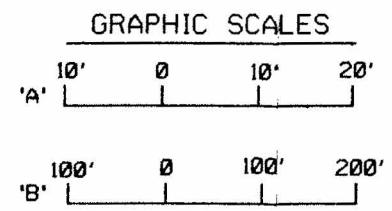


PLAN
SCALE: 'B'



CHANNEL PROFILE

SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

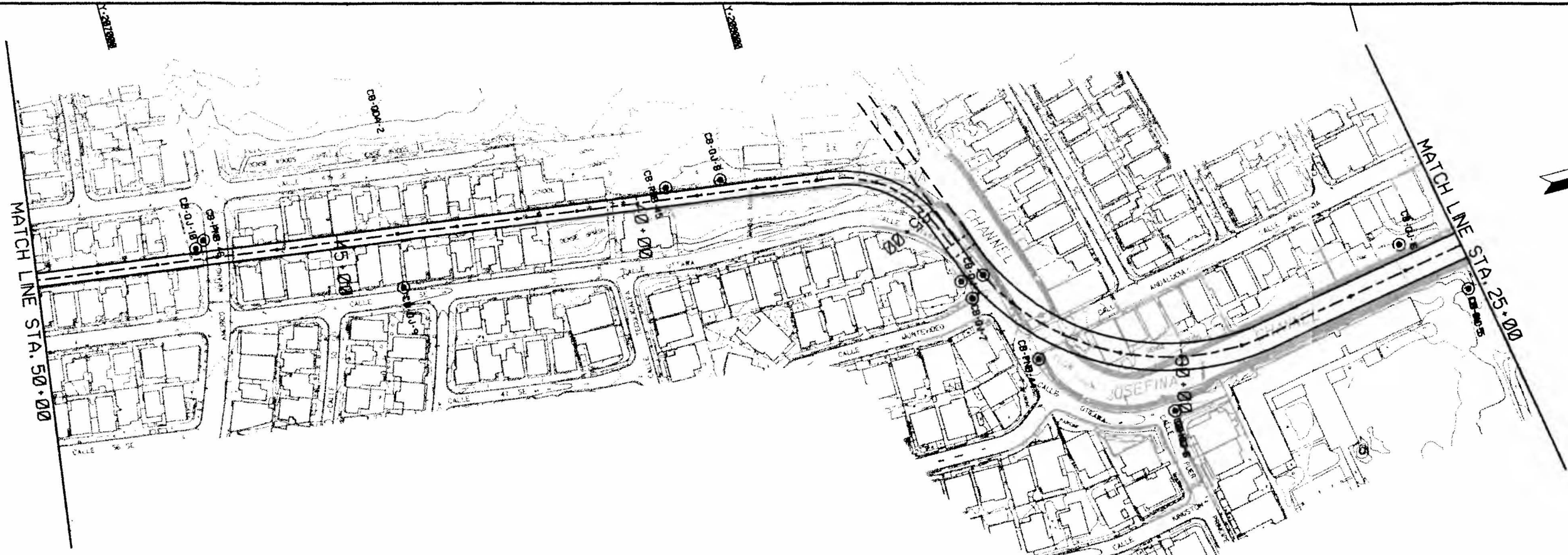
JOSEFINA TRIBUTARY
STA 0+00 TO STA 25+00

PLAN AND PROFILE

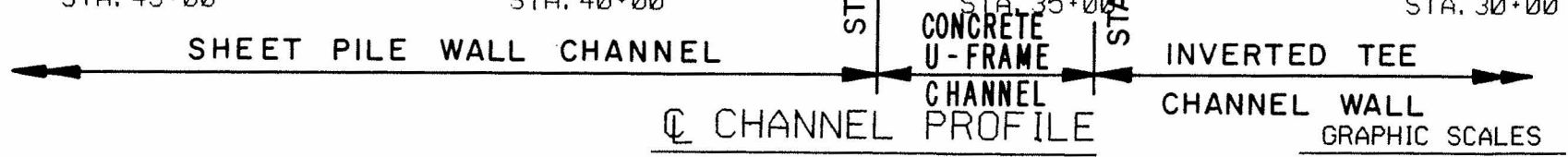
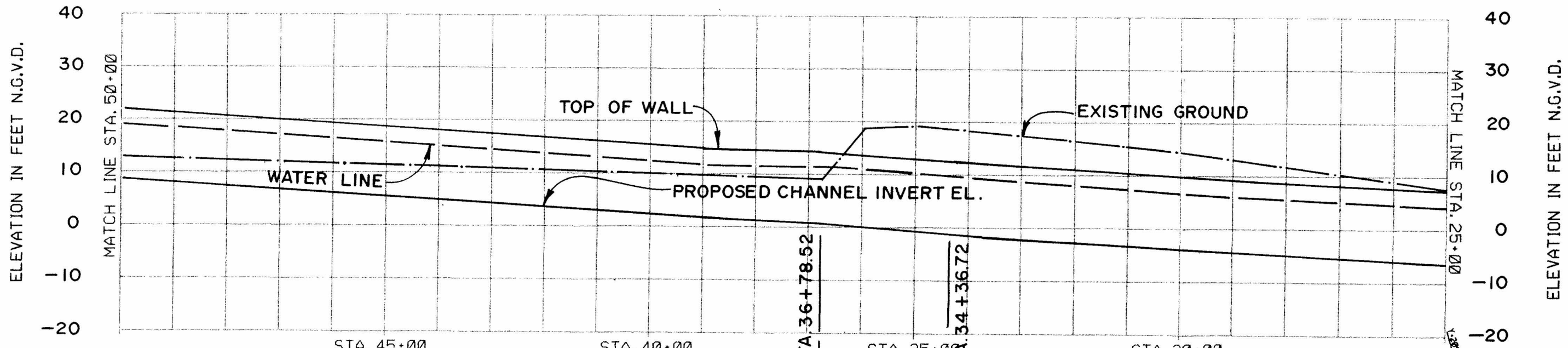
STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578

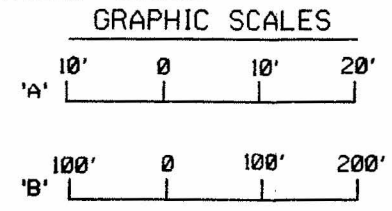
DECEMBER 1954



PLAN
SCALE: 'B'



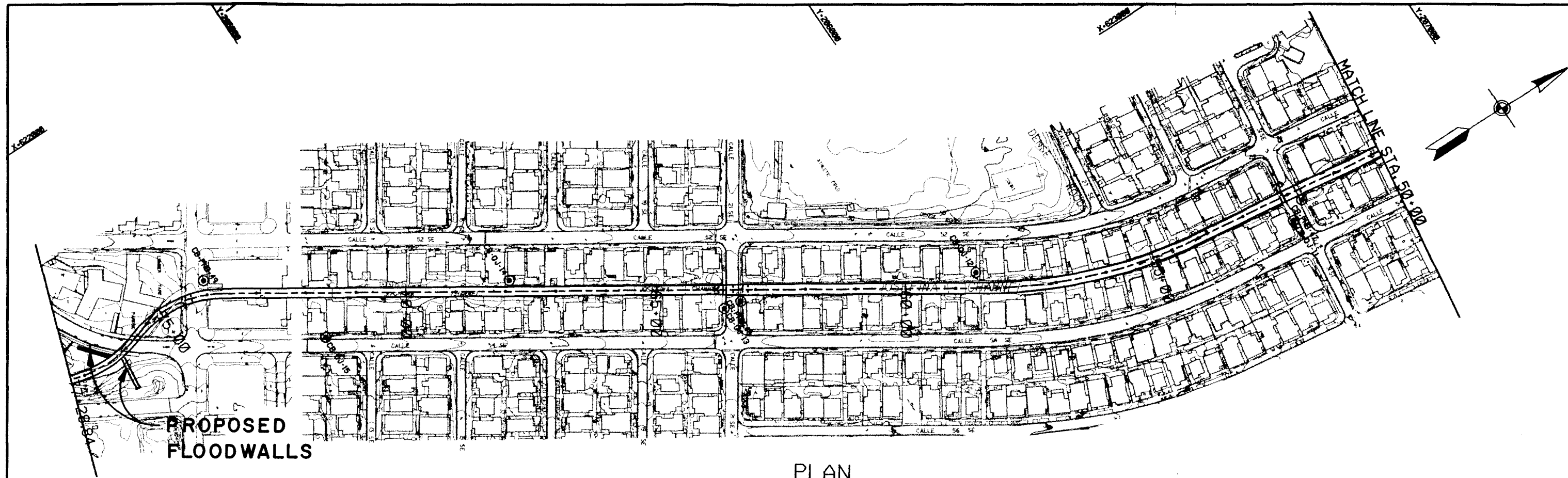
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 STA 25+00 TO STA 50+00
PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1998

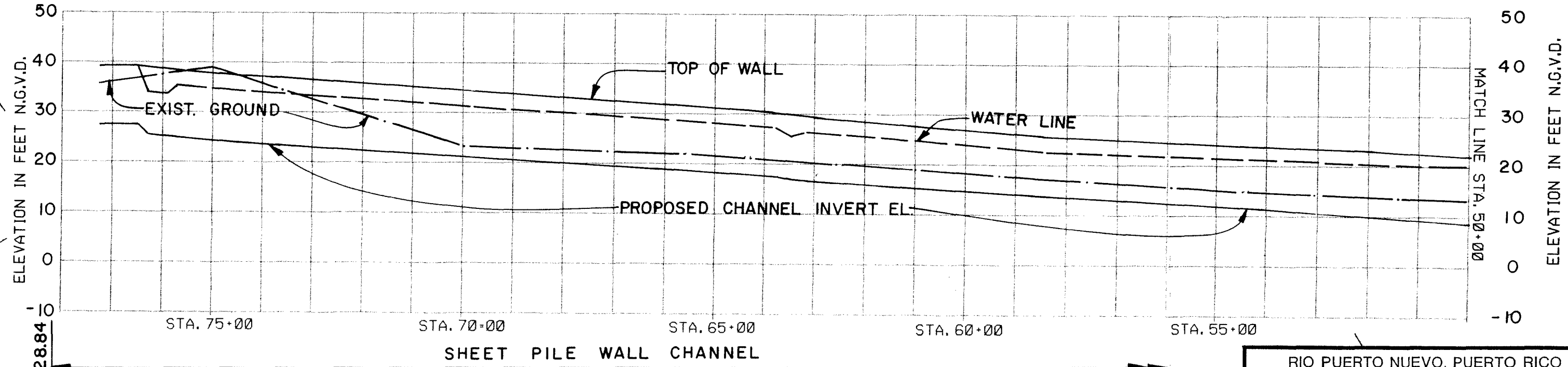
X-624800

X-625000



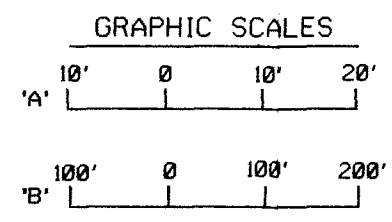
PROPOSED FLOODWALLS

PLAN
SCALE: 'B'

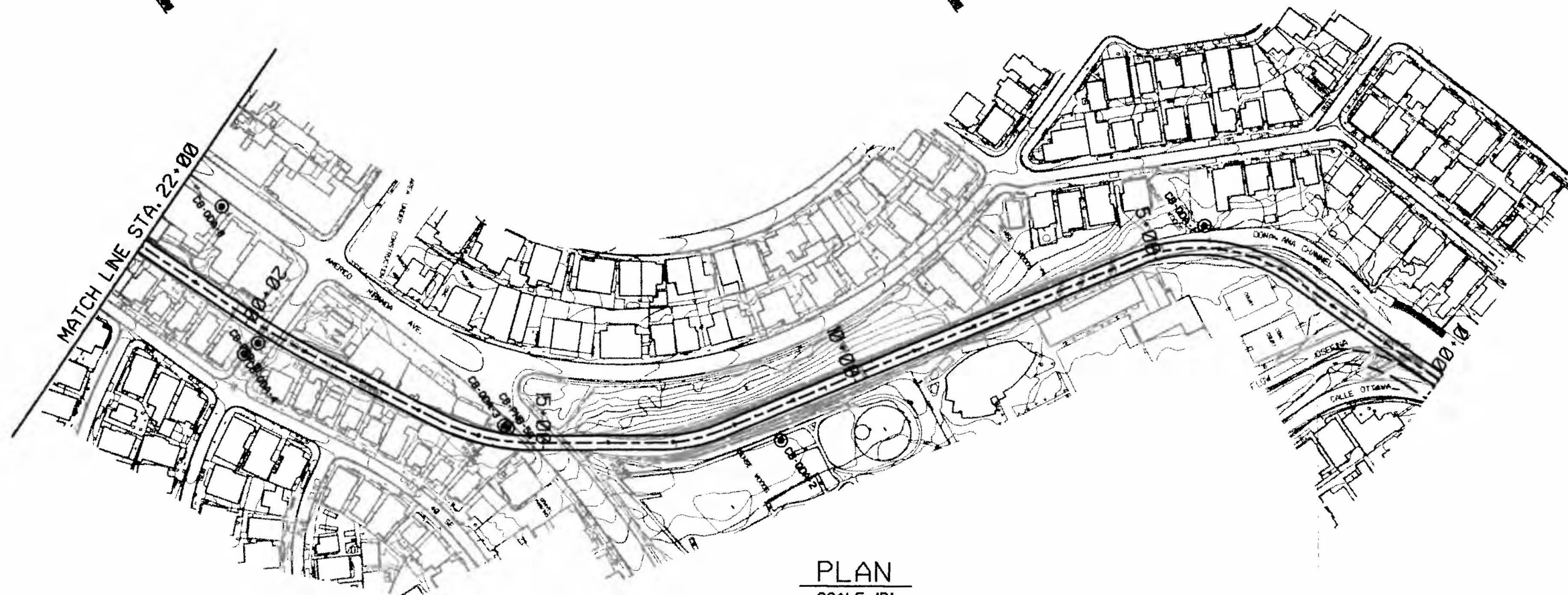


CHANNEL PROFILE

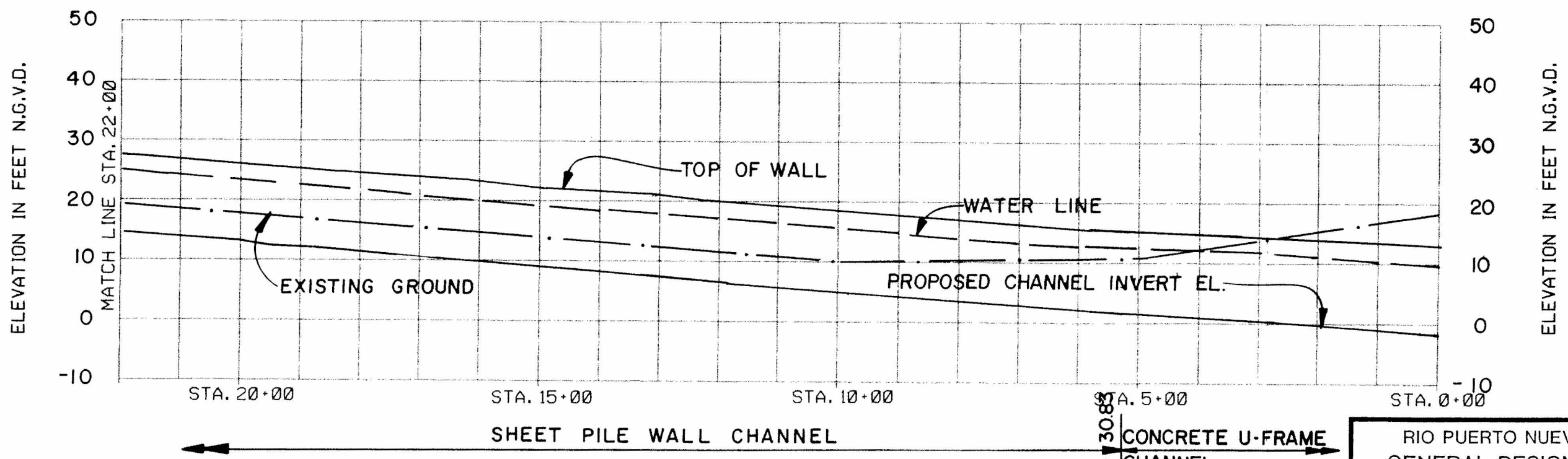
SCALE: HORIZ. 'B'
VERT. 'A'



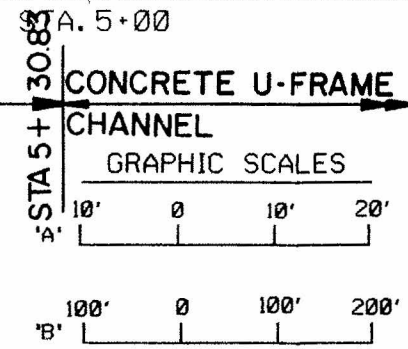
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 STA 50+00 TO STA 77+28.84
PLAN AND PROFILE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1951



PLAN
SCALE: 'B'



CHANNEL PROFILE
SCALE: HORIZ. 'B'
VERT. 'A'



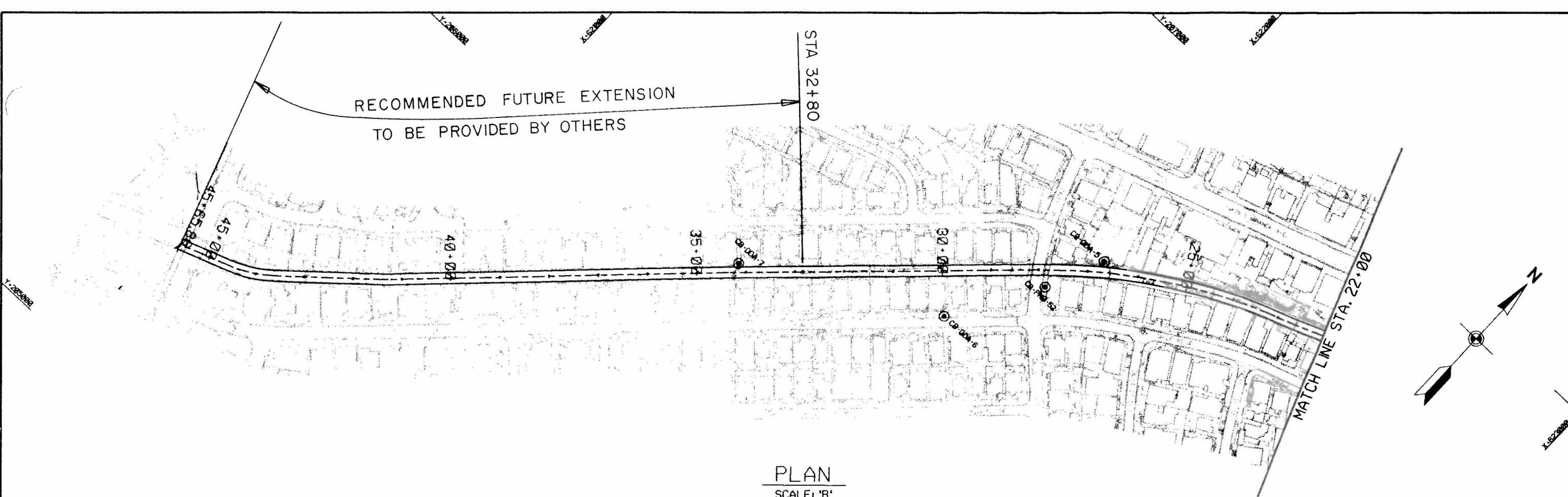
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

DONA ANA TRIBUTARY
STA 0+00 TO STA 22+00

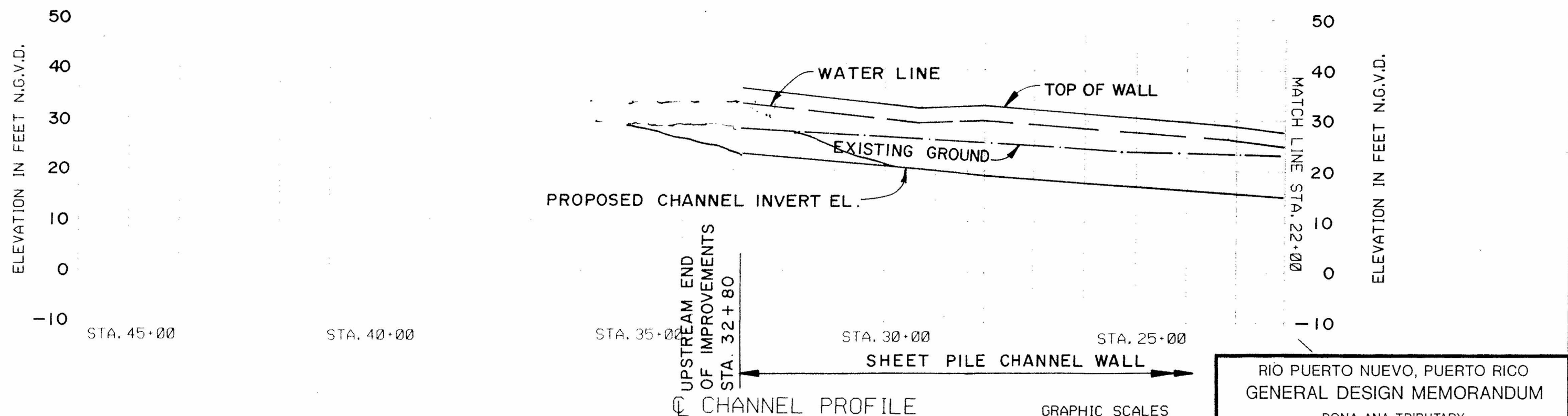
PLAN AND PROFILE

STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578
DECEMBER 1999

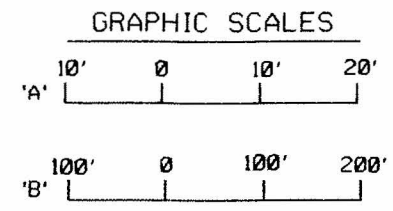


PLAN
SCALE: 'B'

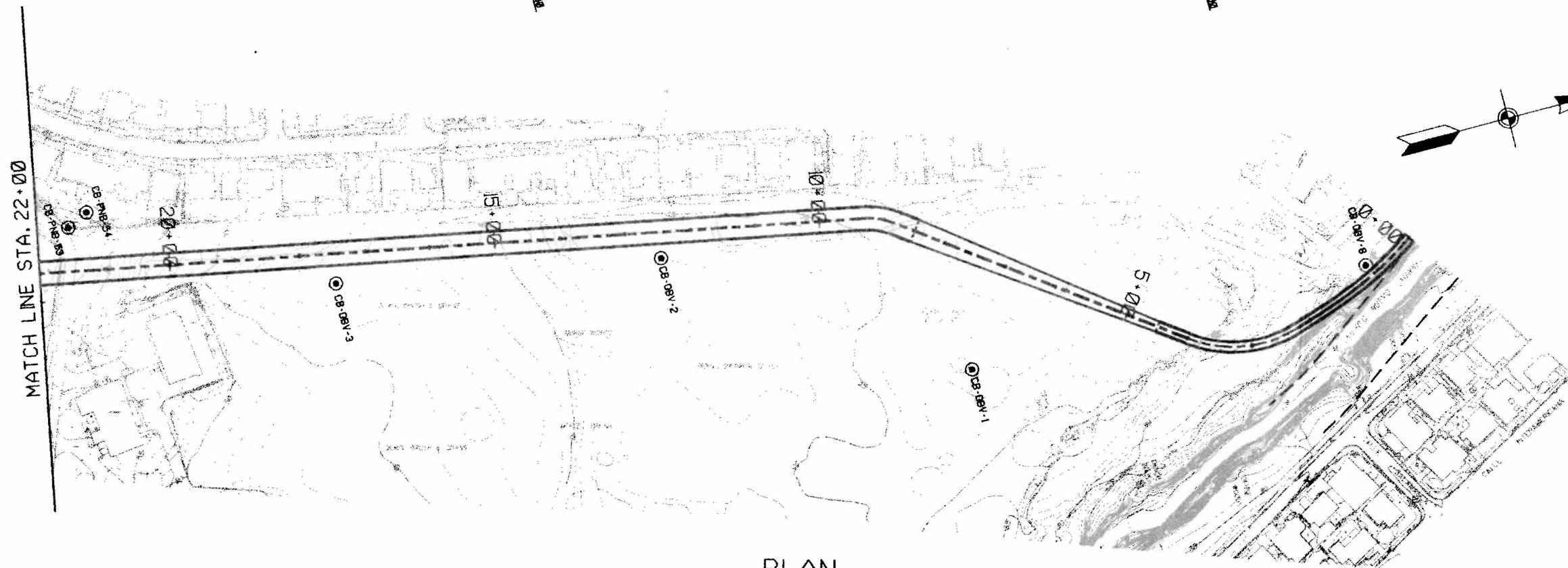


CHANNEL PROFILE

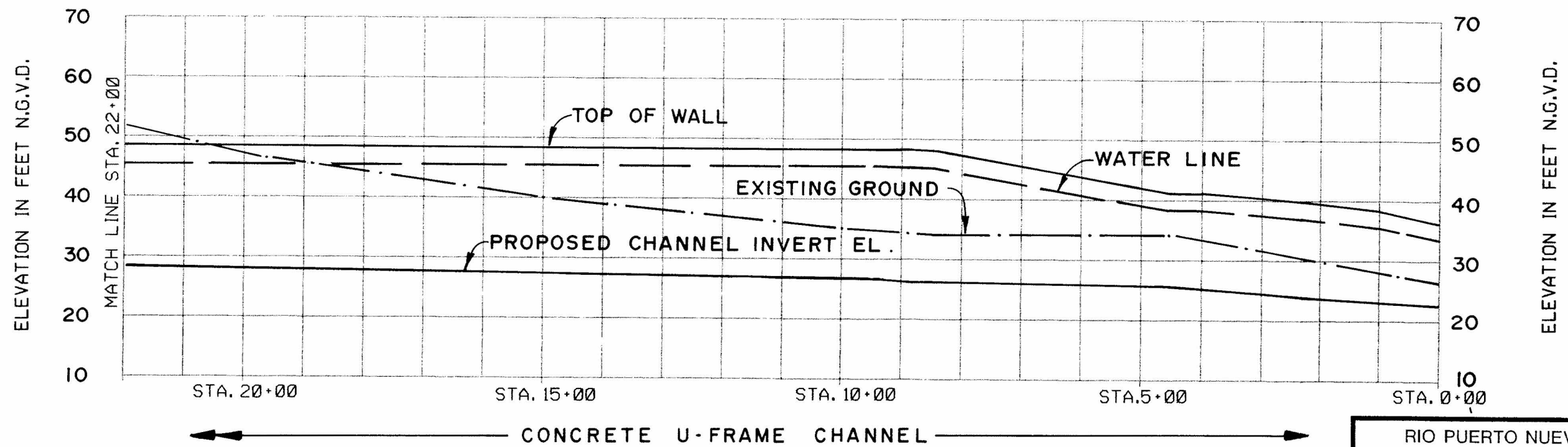
SCALE: HORIZ. 'B'
VERT. 'A'



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
DONA ANA TRIBUTARY
STA 22+00 TO STA 32+80
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 12-35,578 DECEMBER 1990

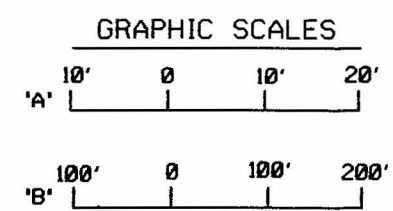


PLAN
SCALE: 'B'



CHANNEL PROFILE

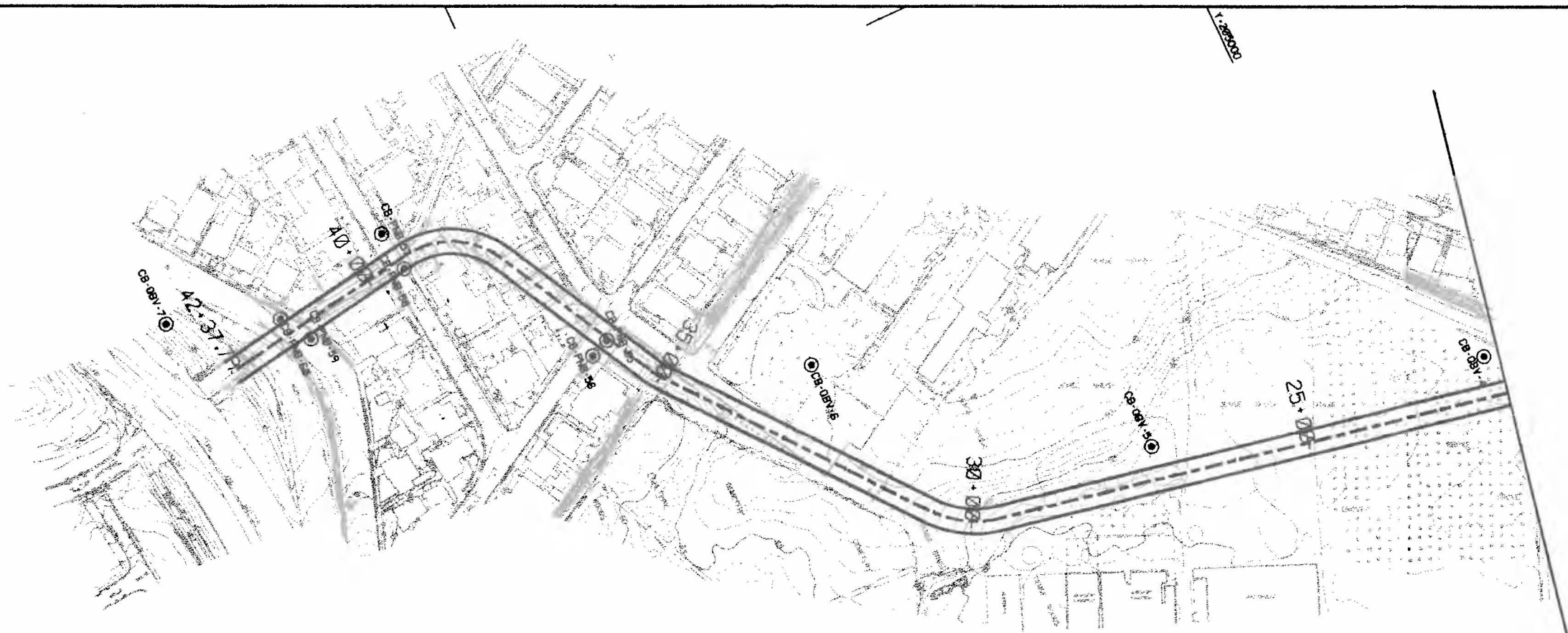
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VERT. 'A'



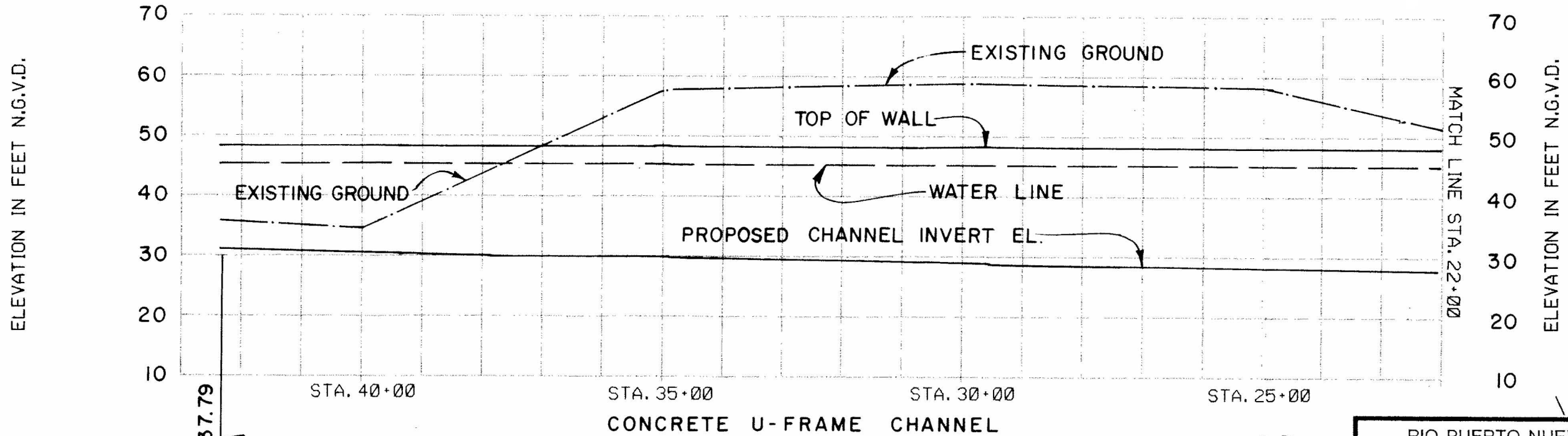
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 BUENA VISTA DIVERSION CHANNEL
 STA 0+00 TO STA 22+00

 PLAN AND PROFILE

 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990



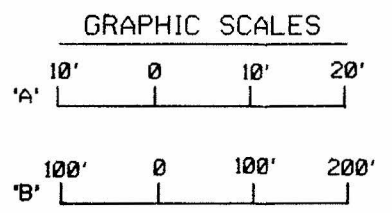
PLAN
SCALE: 'B'



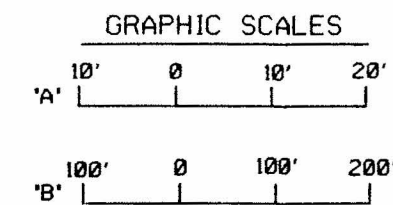
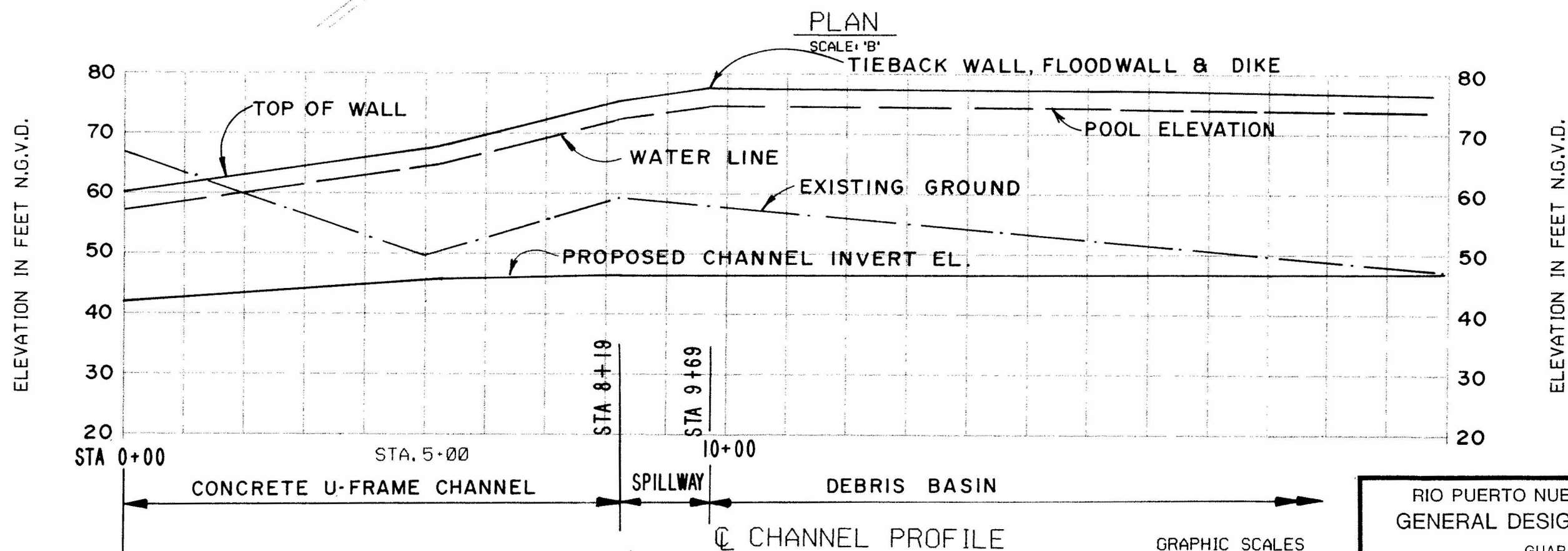
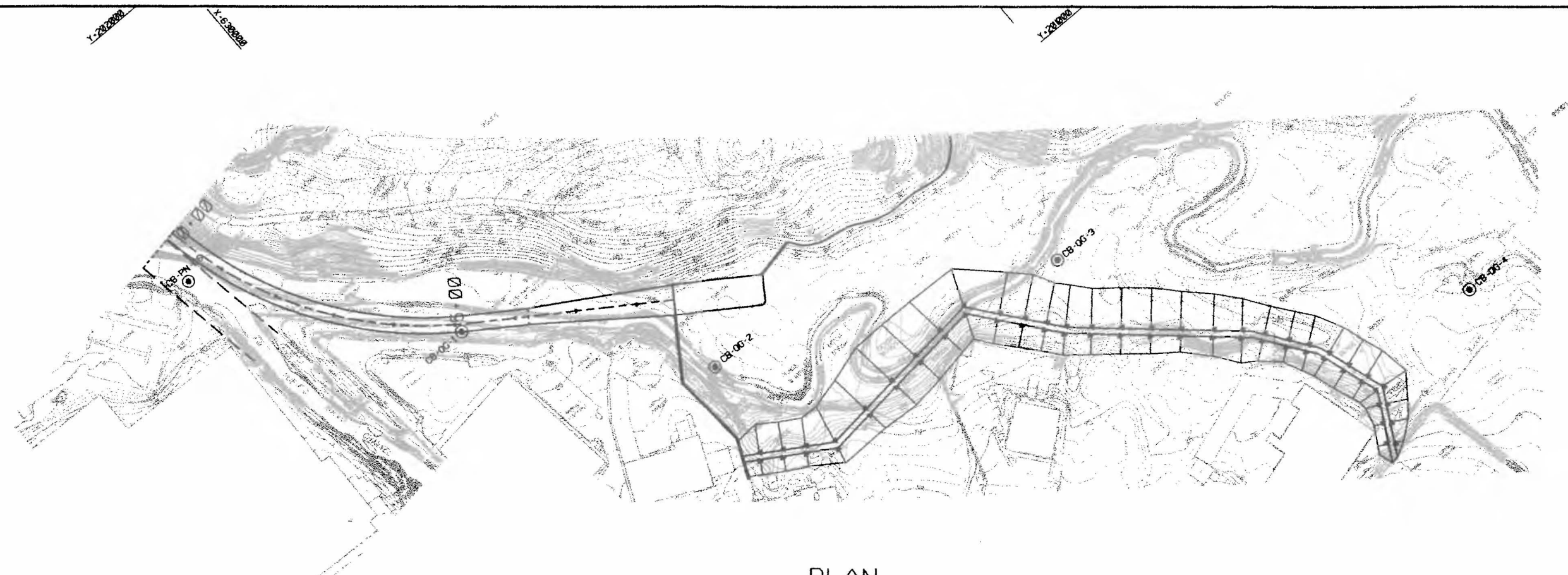
CONCRETE U-FRAME CHANNEL

CHANNEL PROFILE

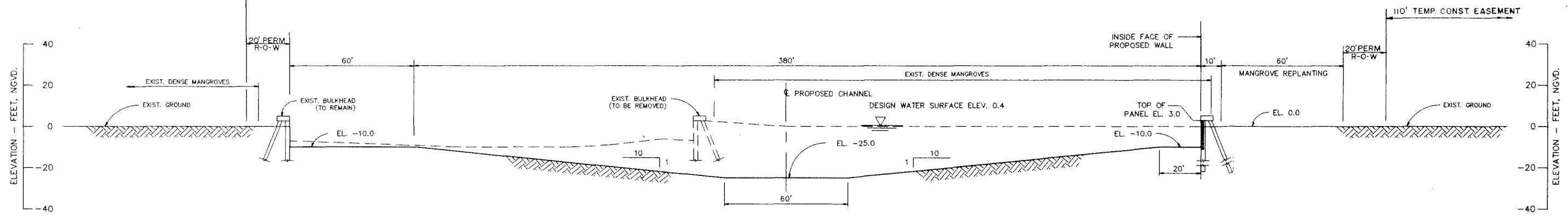
SCALE: HORIZ. 'B'
VERT. 'A'



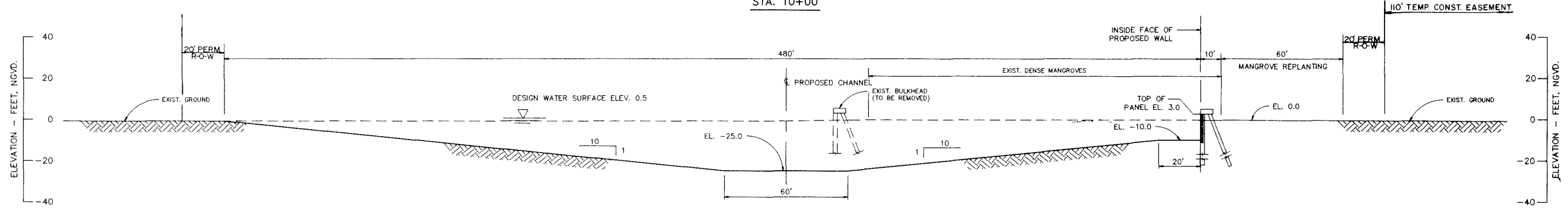
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
BUENA VISTA DIVERSION CHANNEL
STA 22+00 TO STA 42+37.79
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578
DECEMBER 1990



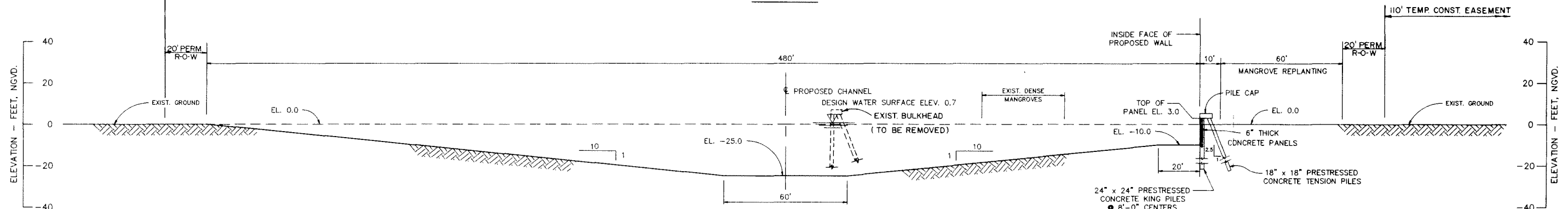
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
GUARACANAL
STA 0+00 TO UPSTREAM END OF DEBRIS BASIN
PLAN AND PROFILE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578
DECEMBER 1991



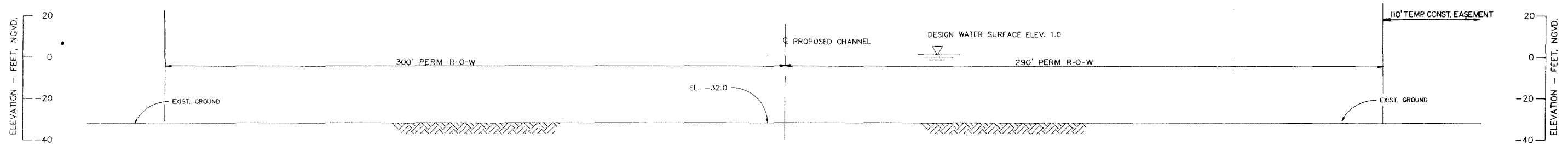
STA. 10+00



STA. 5+00



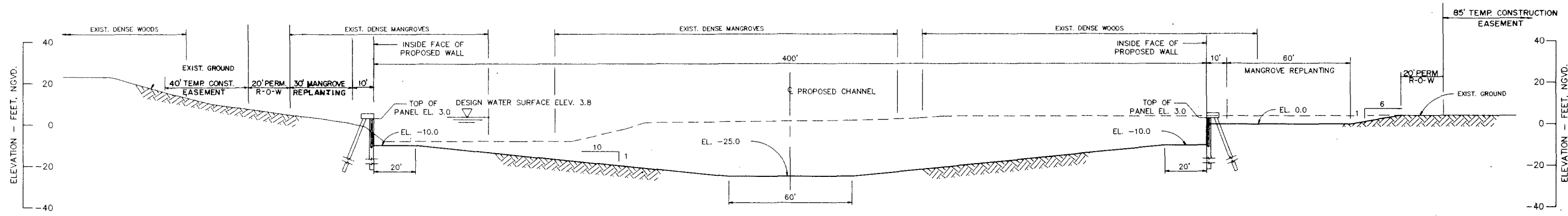
STA. 3+80



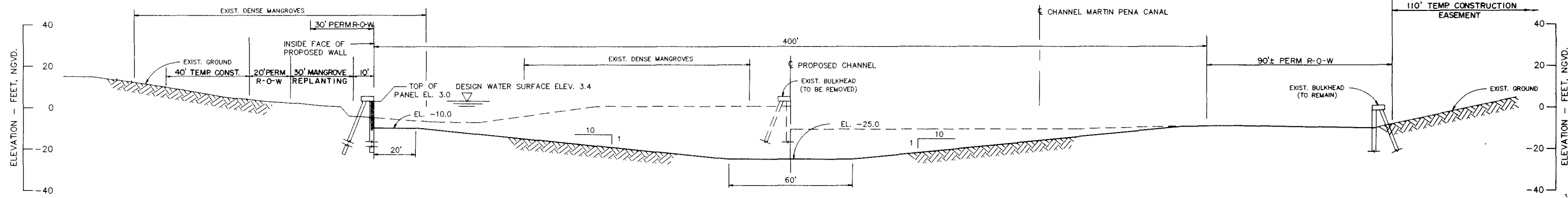
STA. 0+90

PUERTO NUEVO CHANNEL

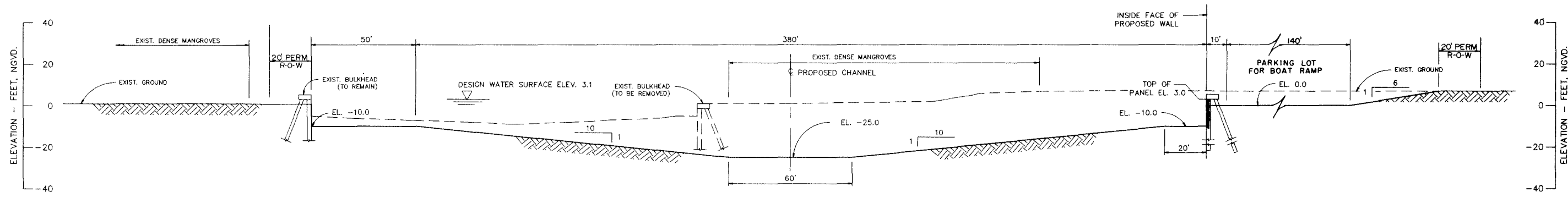
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 0+90 TO STA 10+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,578
 DECEMBER 1990



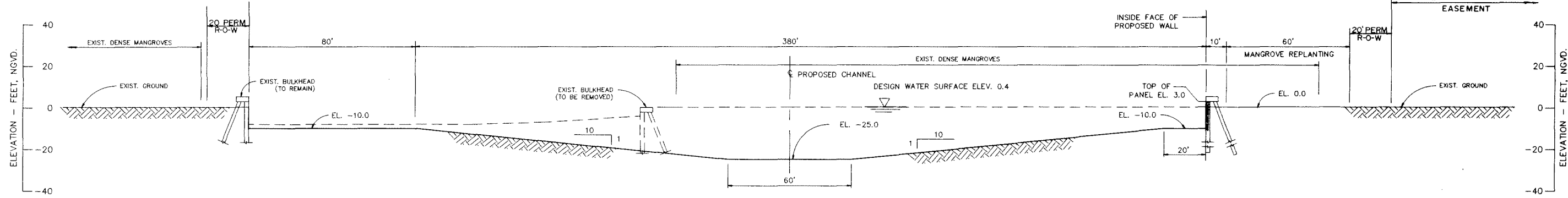
STA. 30+00



STA. 25+00



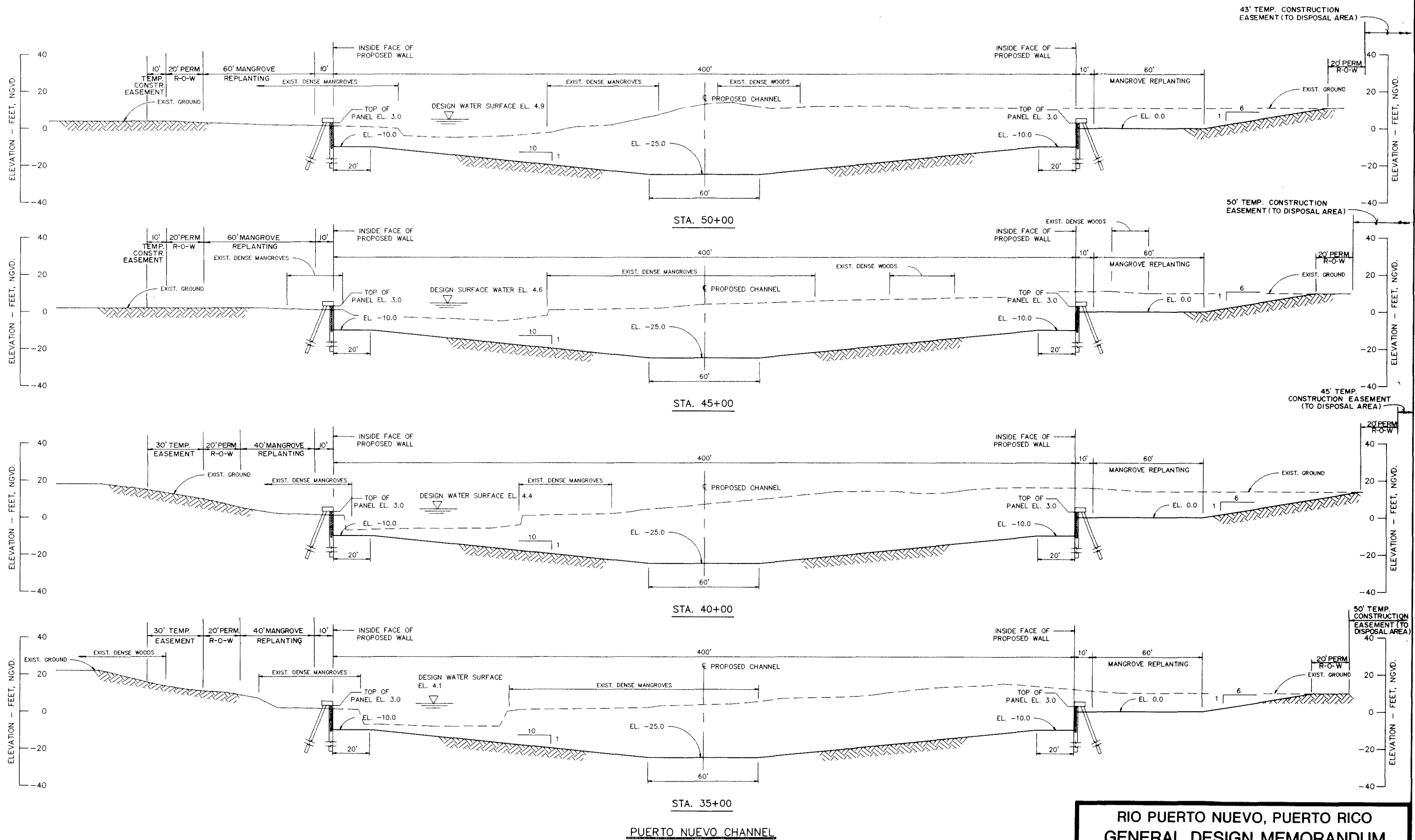
STA. 20+00



STA. 15+00

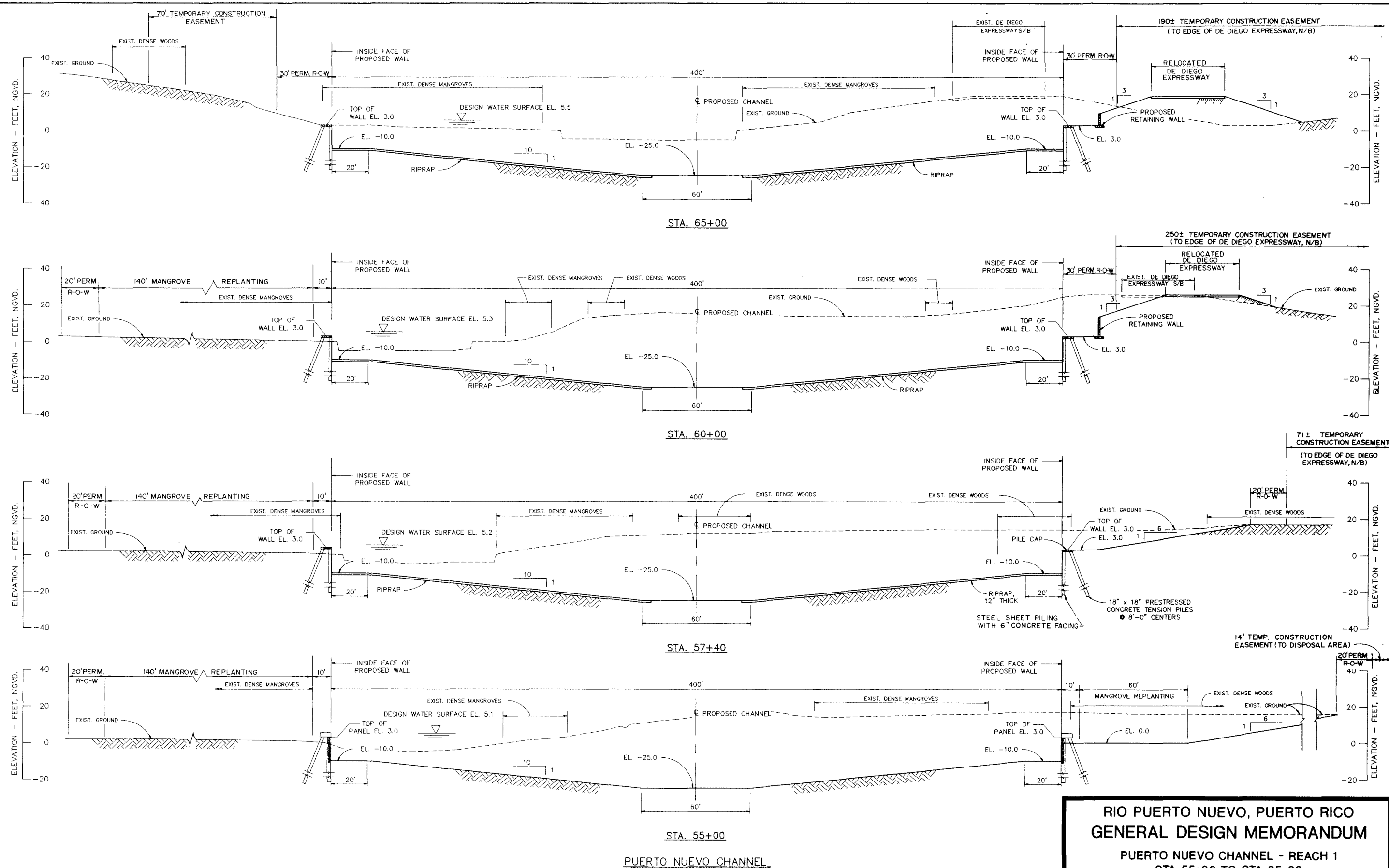
PUERTO NUEVO CHANNEL

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 15+00 TO STA 30+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,678 DECEMBER 1990



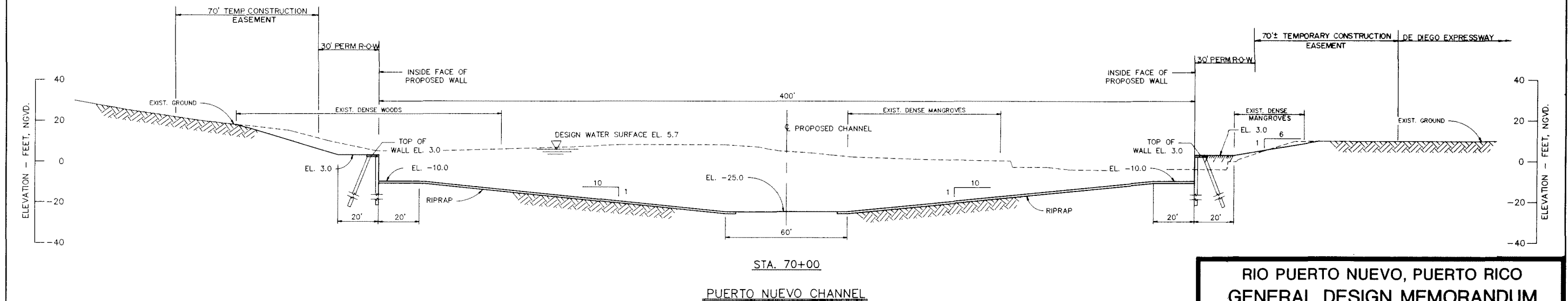
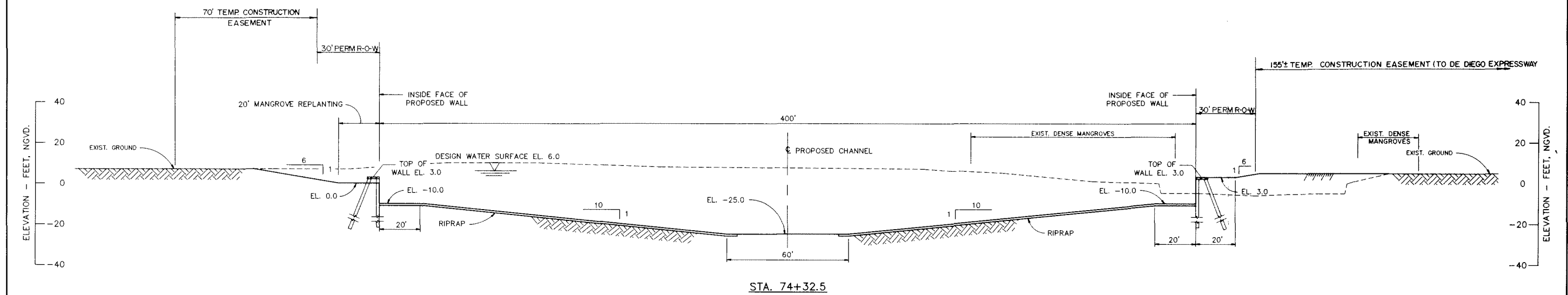
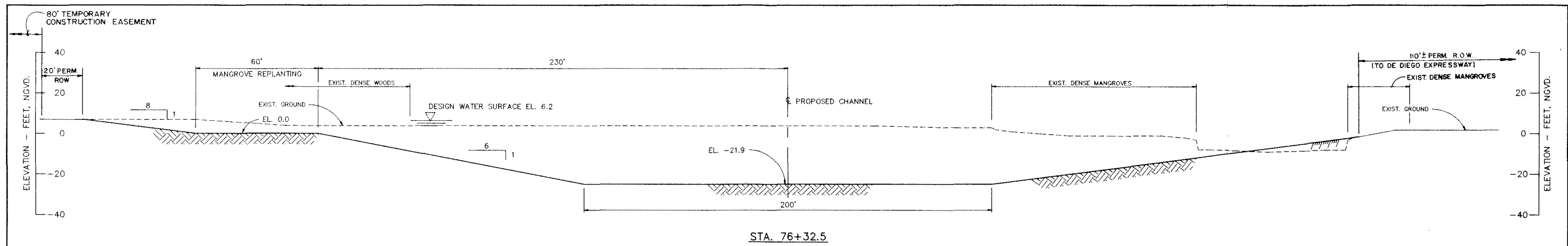
PUERTO NUEVO CHANNEL

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 35+00 TO STA 50+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

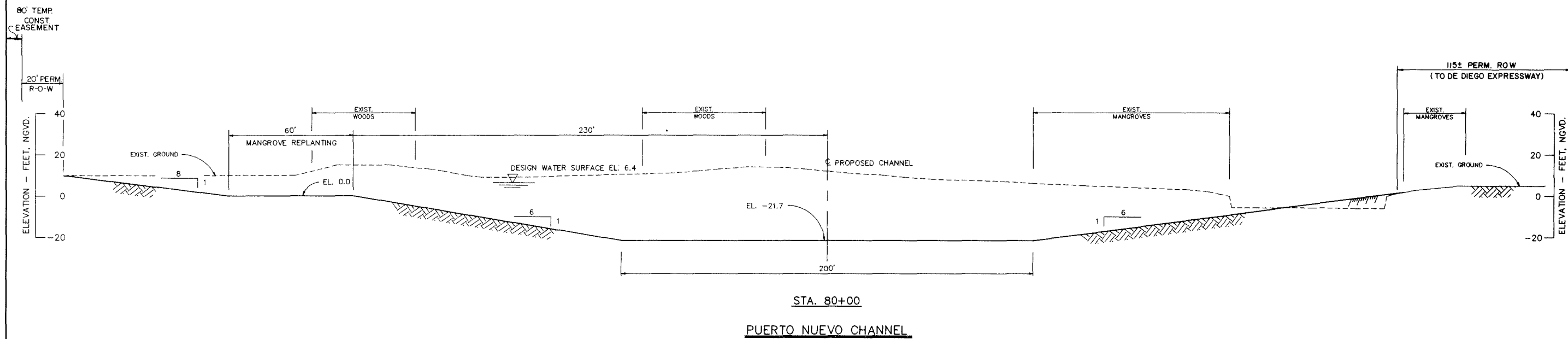
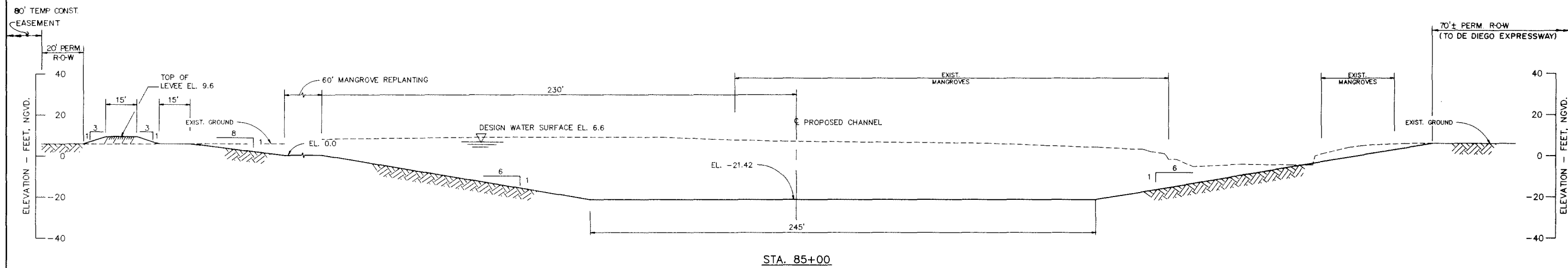


STA. 55+00
PUERTO NUEVO CHANNEL

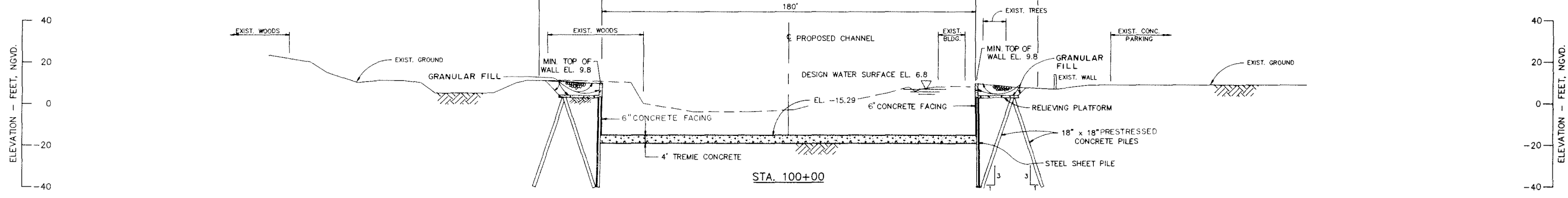
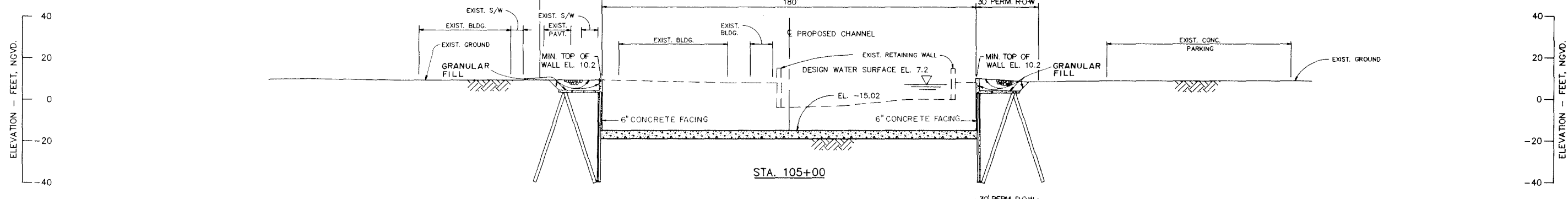
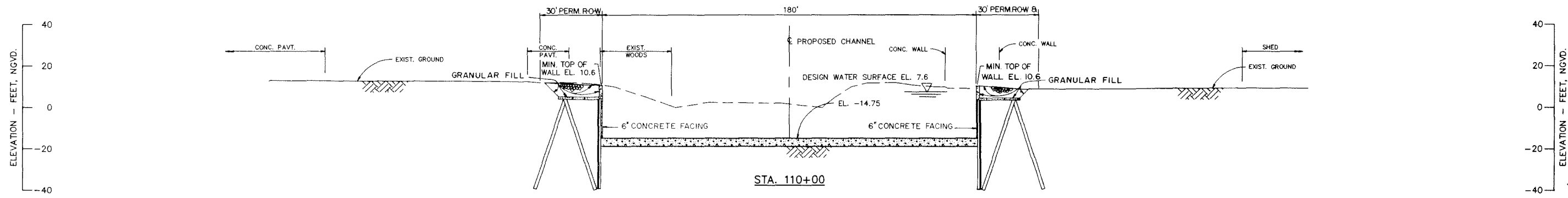
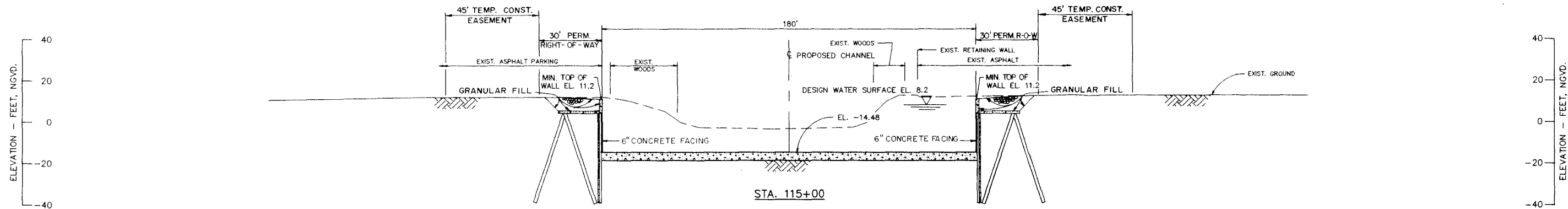
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 55+00 TO STA 65+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 70+00 TO STA 76+32.5
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,678
 DECEMBER 1990

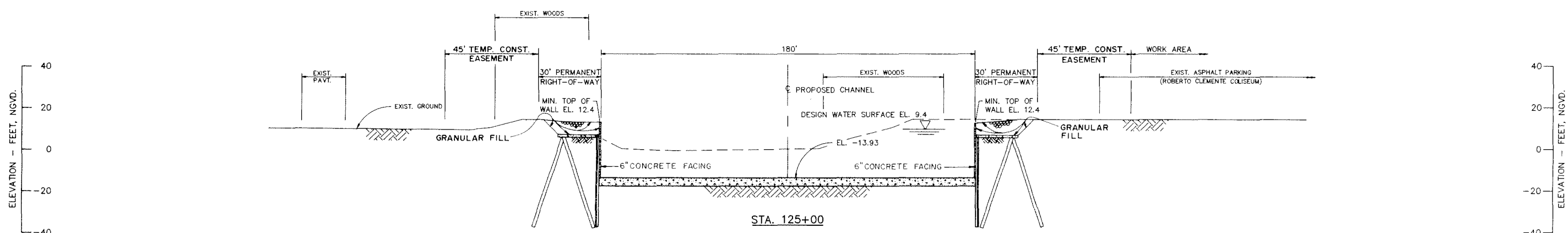
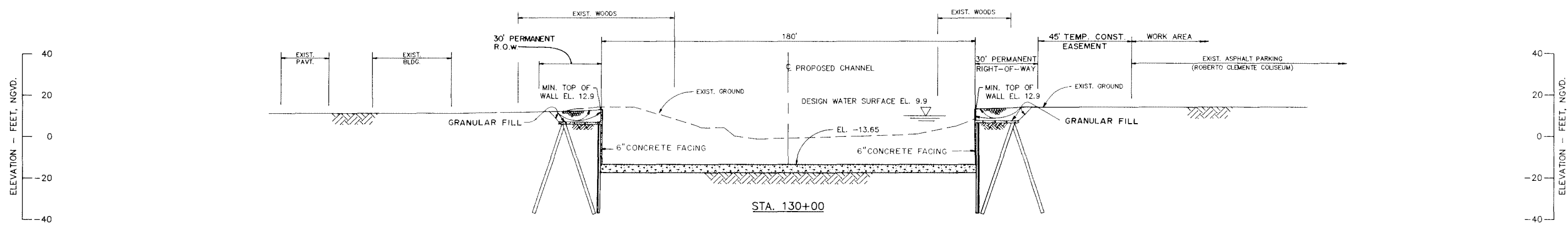
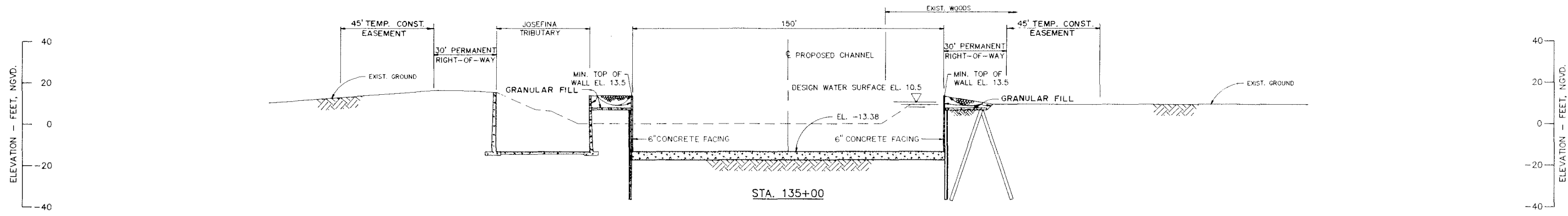


RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 1
 STA 80+00 TO STA 85+00
 CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,678
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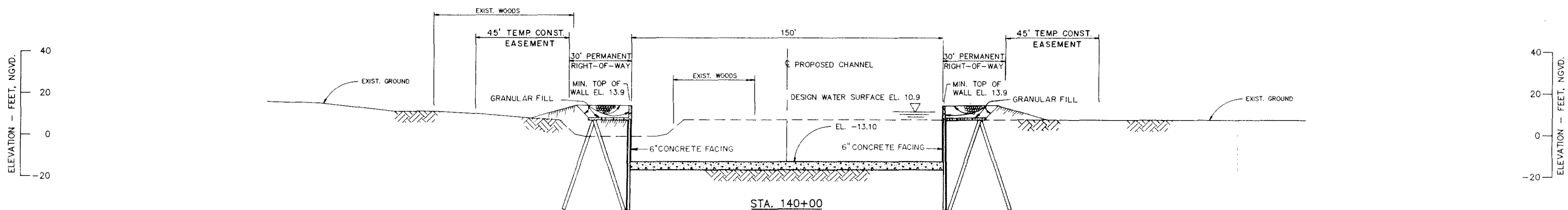
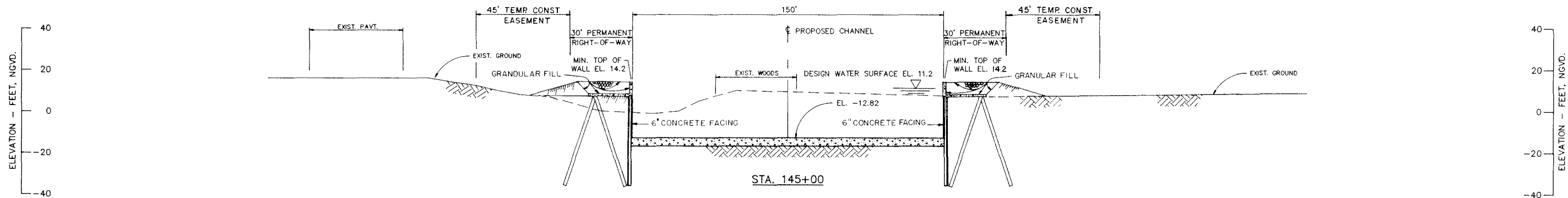
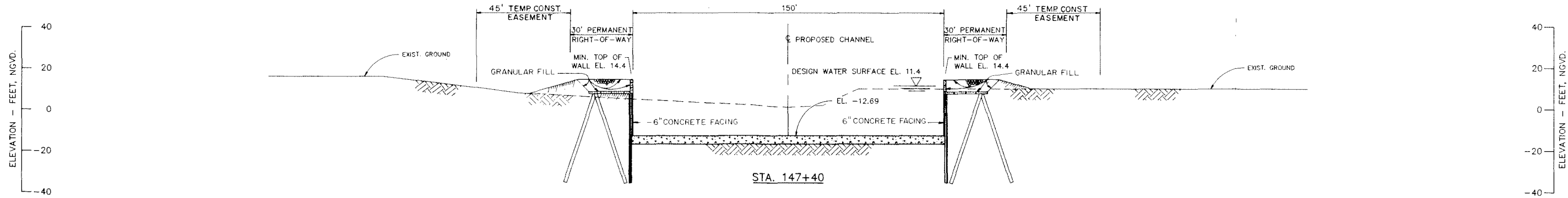
PUERTO NUEVO CHANNEL

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 2
 STA 100+00 TO STA 115+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



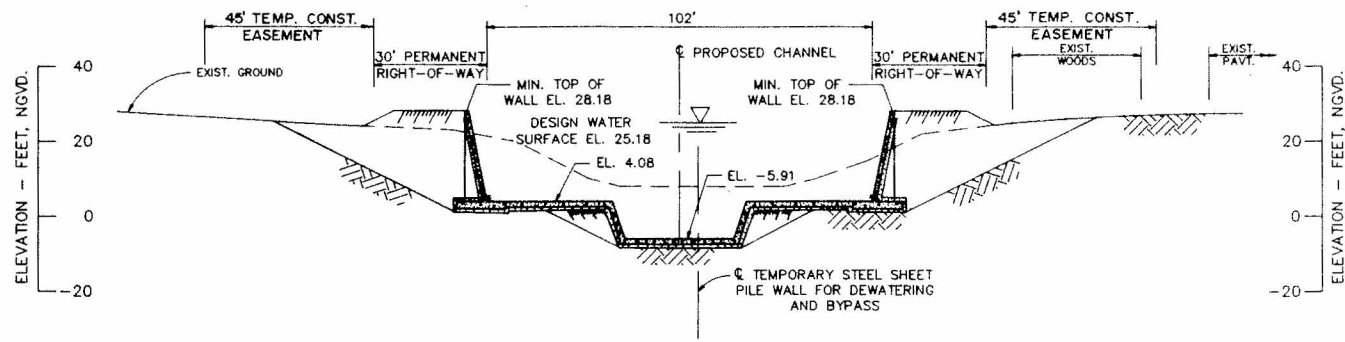
STA. 125+00
PUERTO NUEVO CHANNEL

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 2
 STA 125+00 TO STA 135+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990

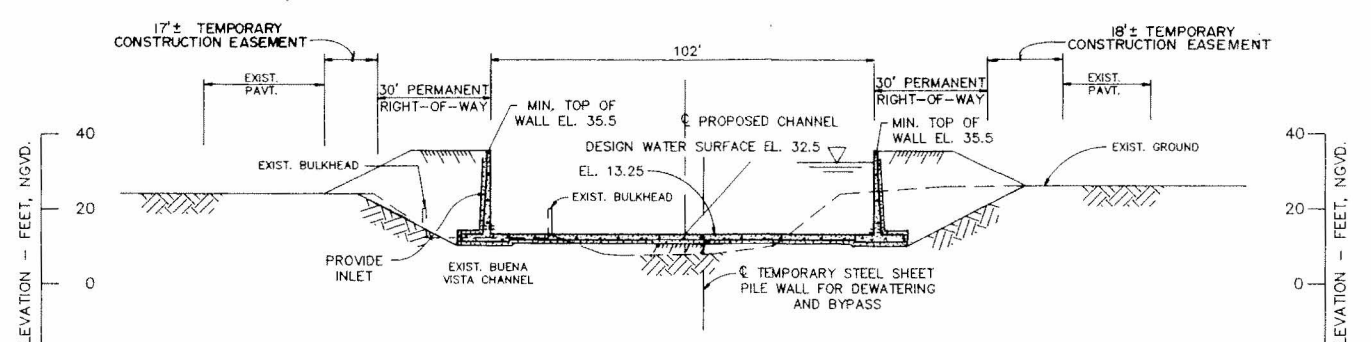


PUERTO NUEVO CHANNEL

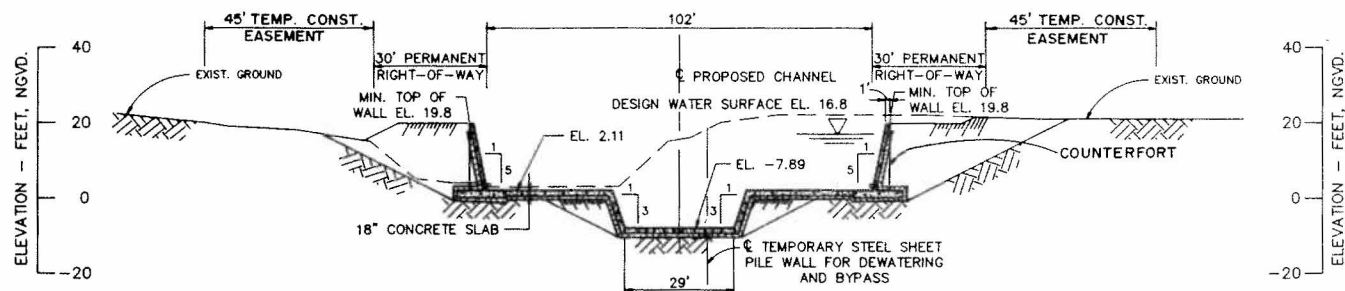
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 2
 STA 140+00 TO STA 147+40
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



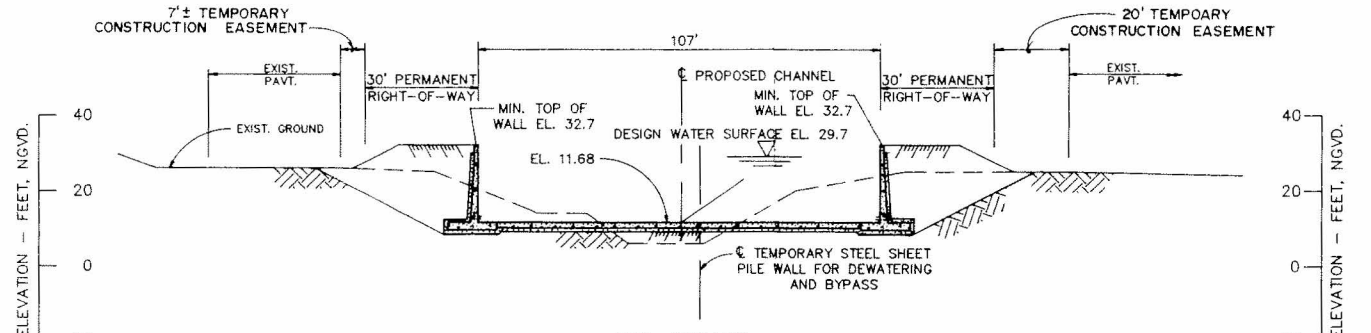
STA. 165+00



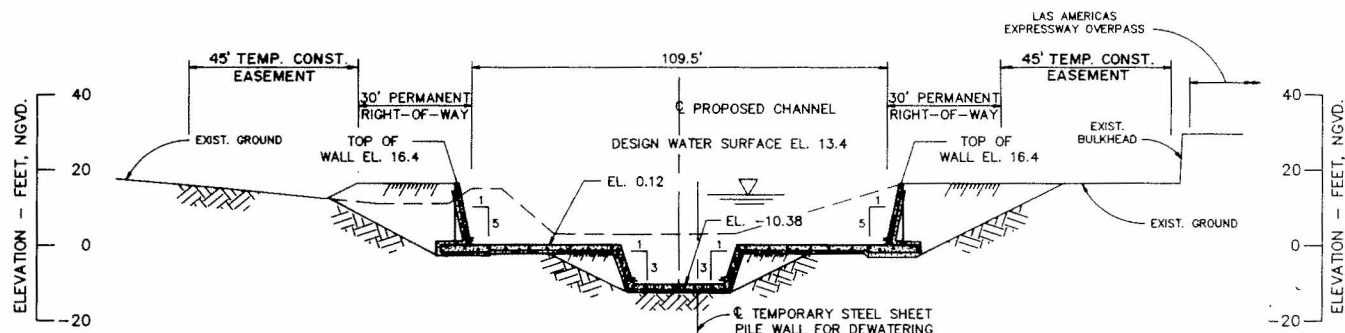
STA. 190+00



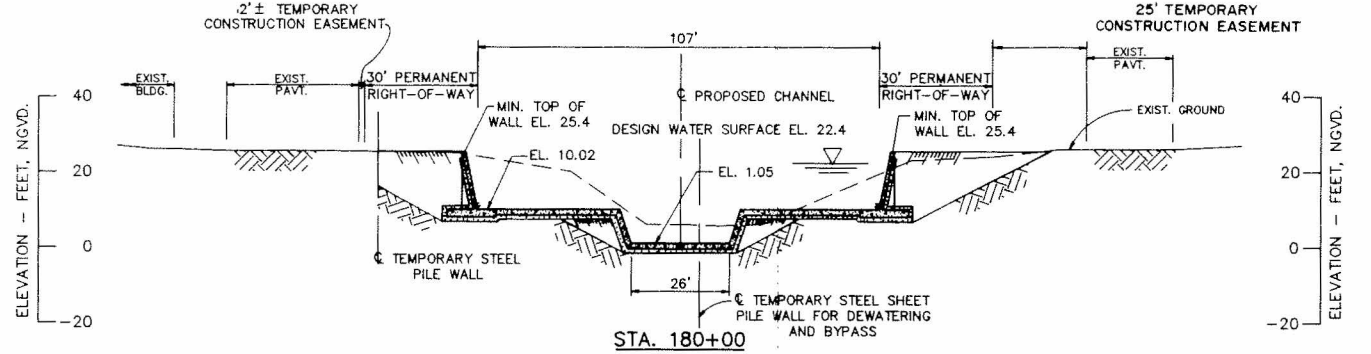
STA. 160+00



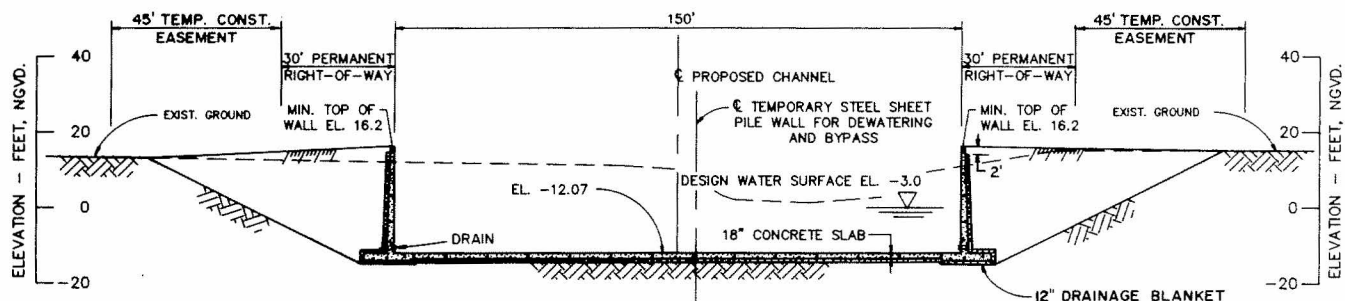
STA. 185+00



STA. 155+00

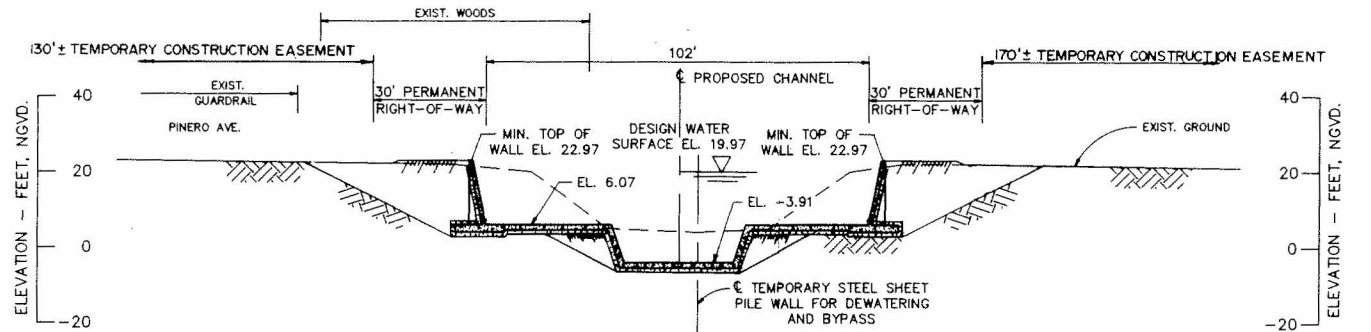


STA. 180+00



STA. 150+00

PUERTO NUEVO CHANNEL



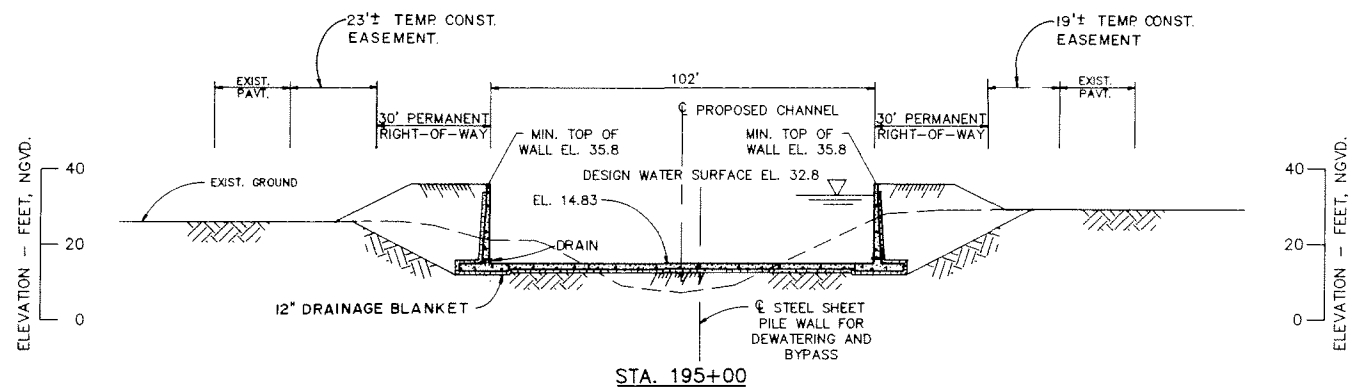
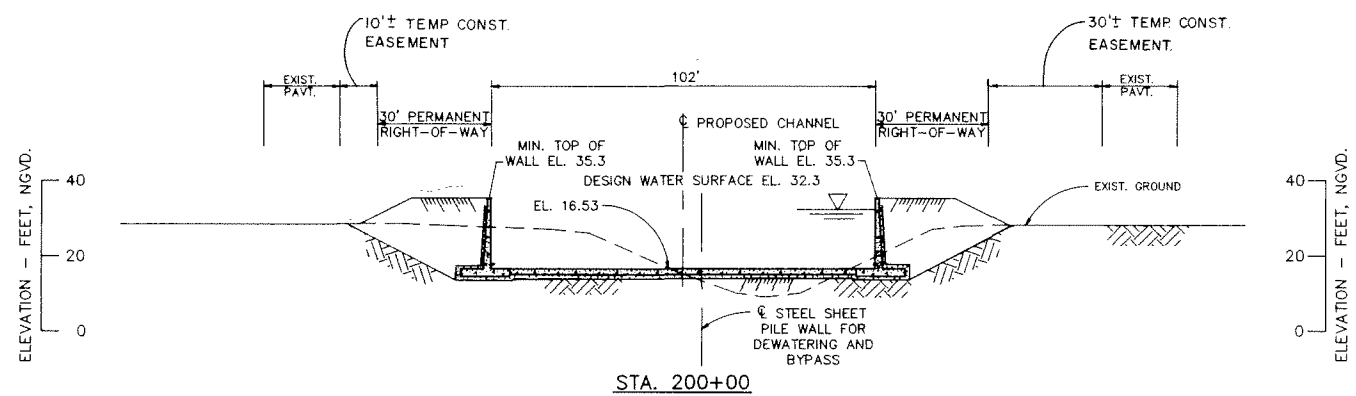
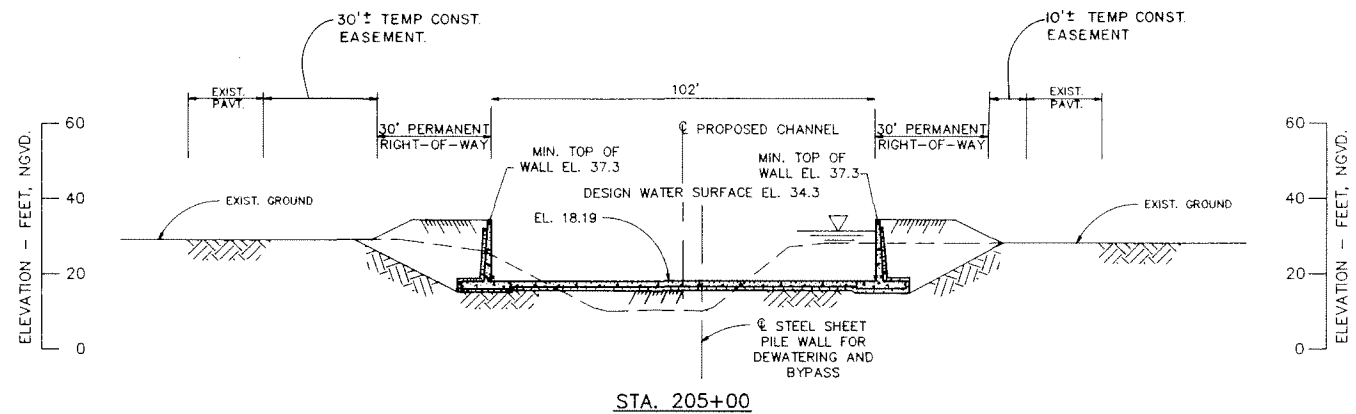
STA. 170+00

PUERTO NUEVO CHANNEL

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 3 & 4
 STA 150+00 TO STA 190+00

CHANNEL CROSS SECTIONS

STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,578
 DECEMBER 1990



PUERTO NUEVO CHANNEL

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL - REACH 4
STA 195+00 TO STA 205+00

CHANNEL CROSS SECTIONS

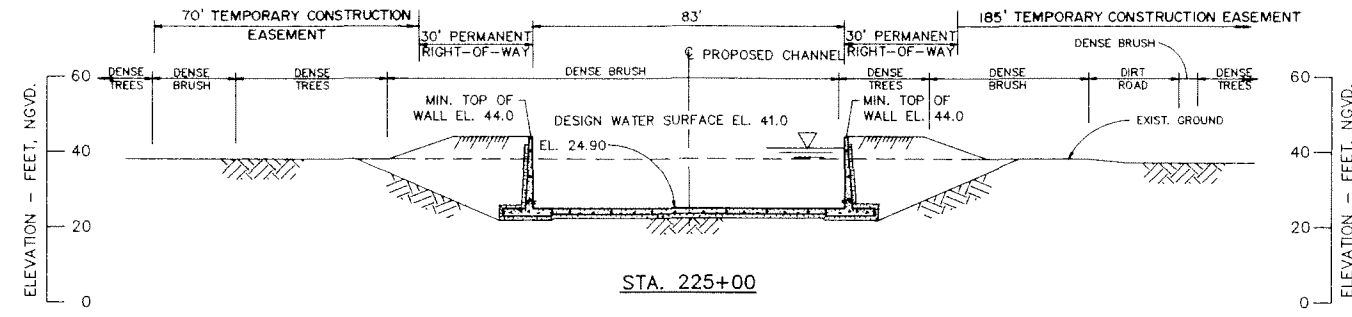
STRUCTURAL

DEPARTMENT OF THE ARMY

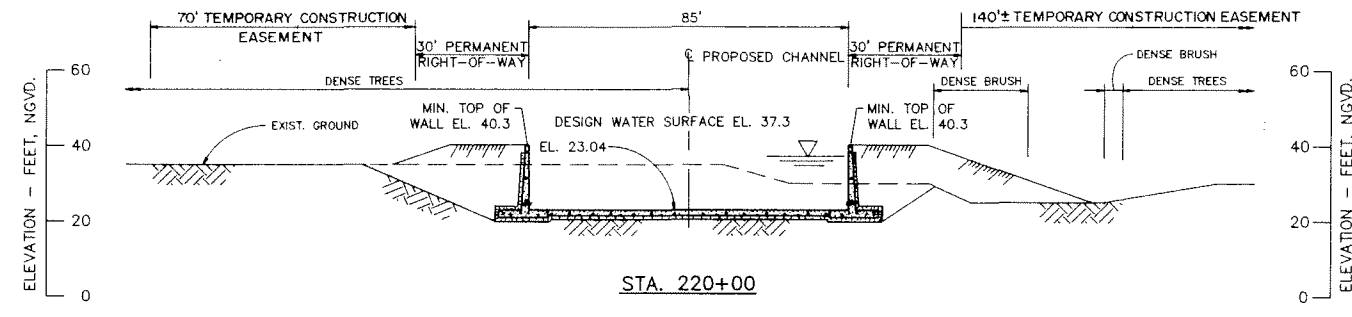
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

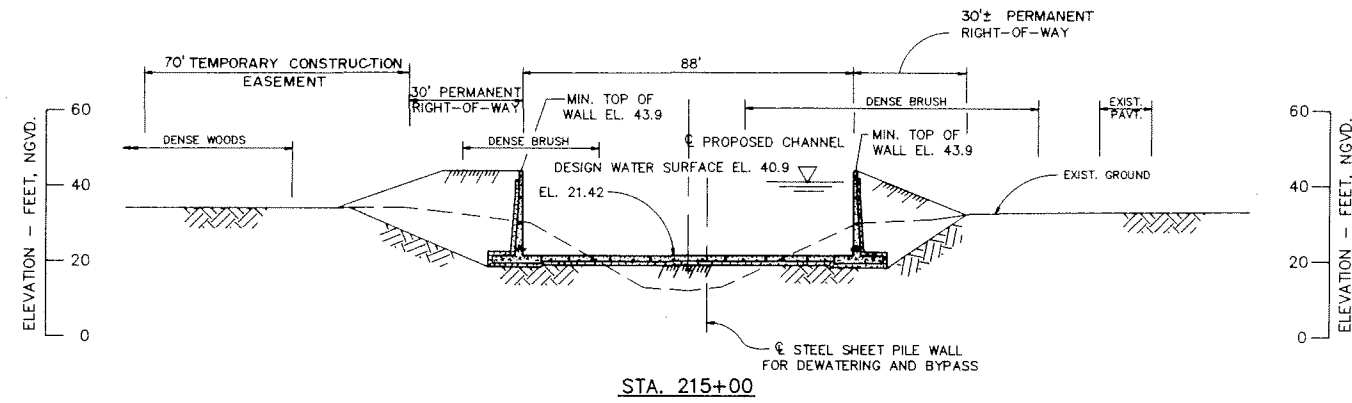
DECEMBER 1990



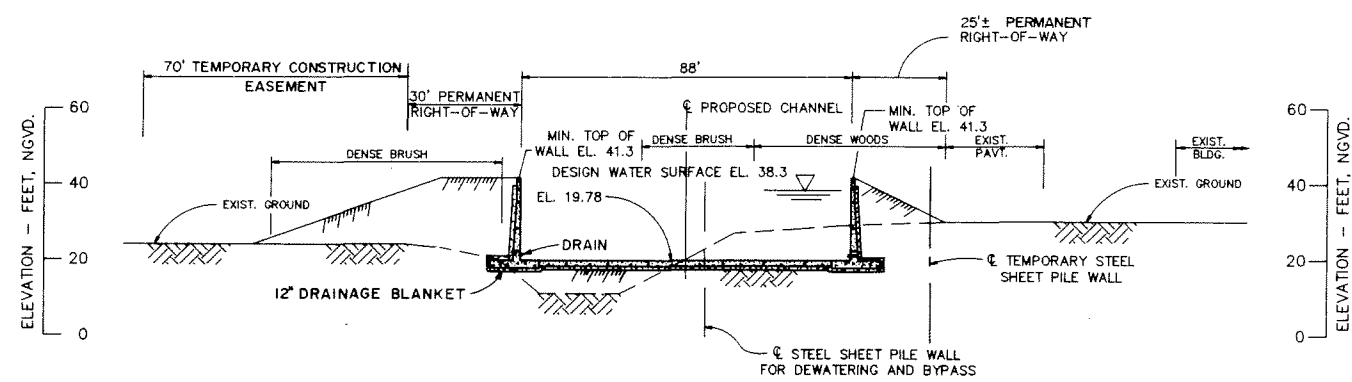
STA. 225+00



STA. 220+00



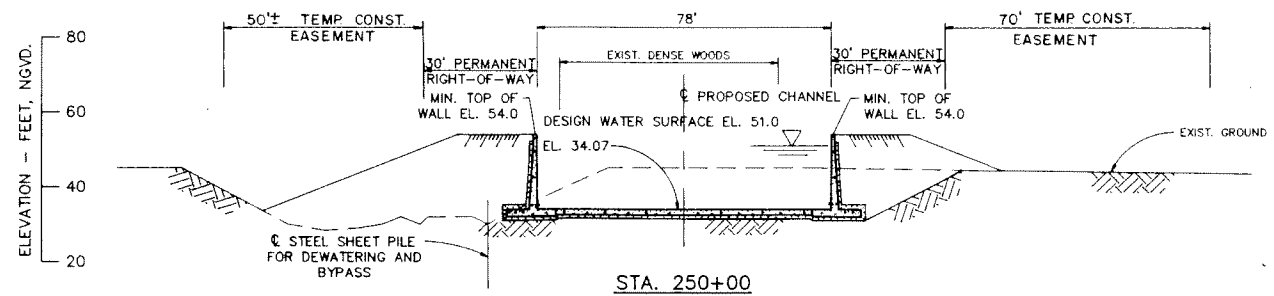
STA. 215+00



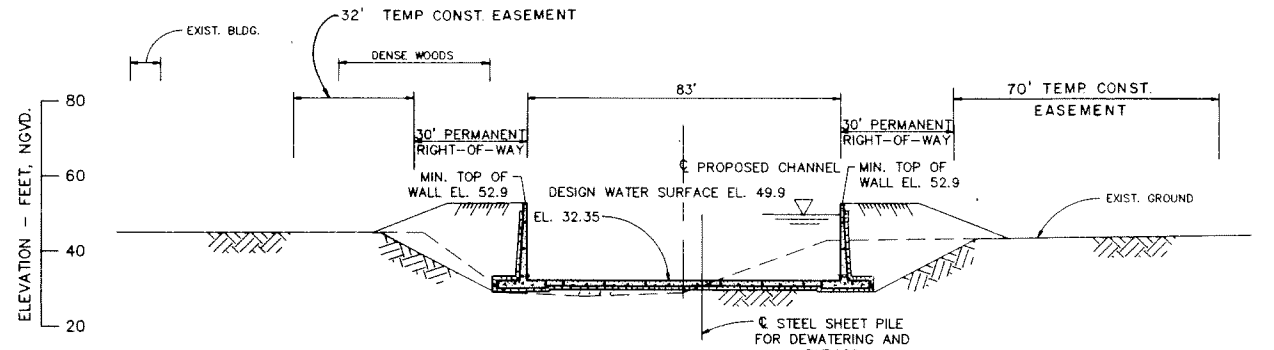
STA. 210+00

PUERTO NUEVO CHANNEL

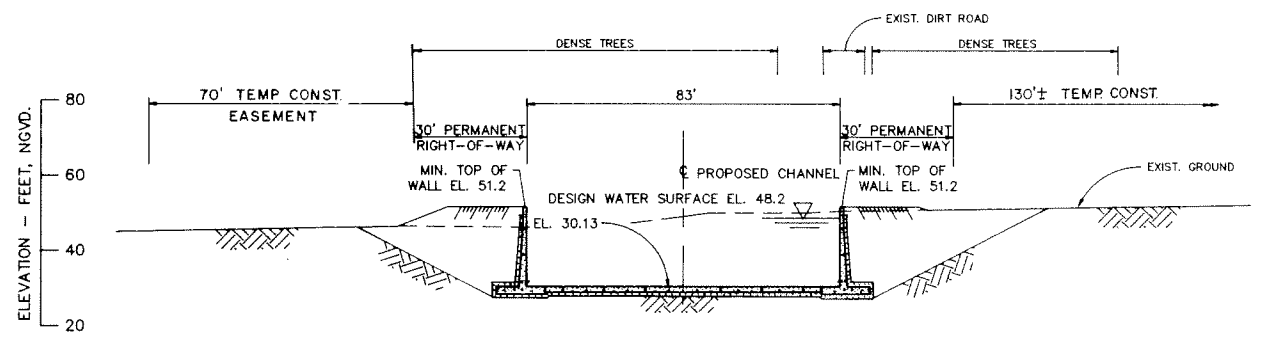
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 4
 STA 210+00 TO STA 225+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



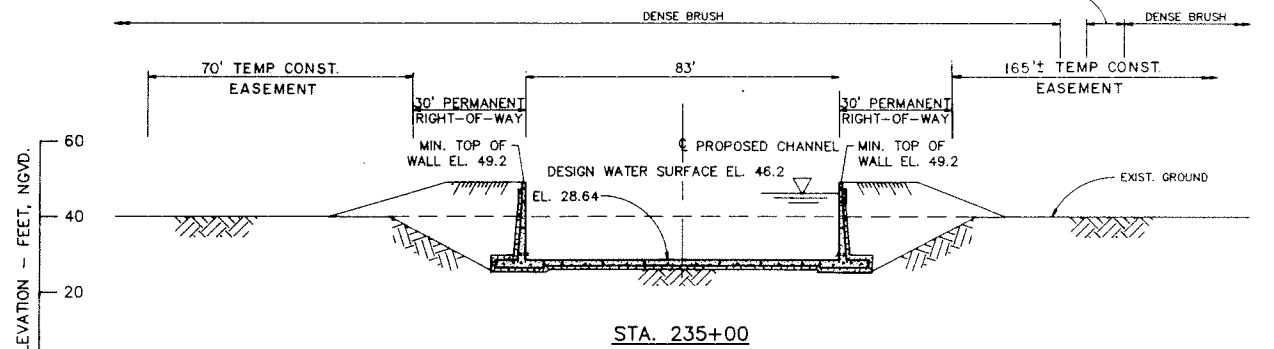
STA. 250+00



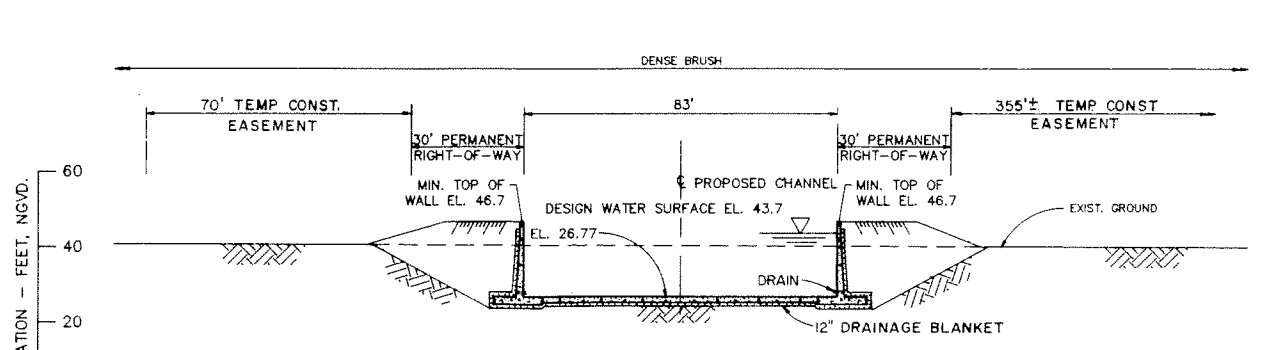
STA. 245+00



STA. 239+00

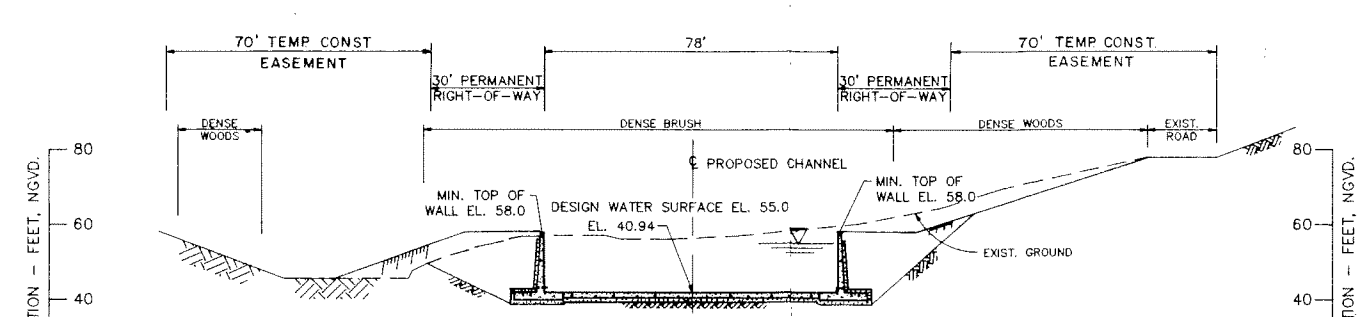


STA. 235+00

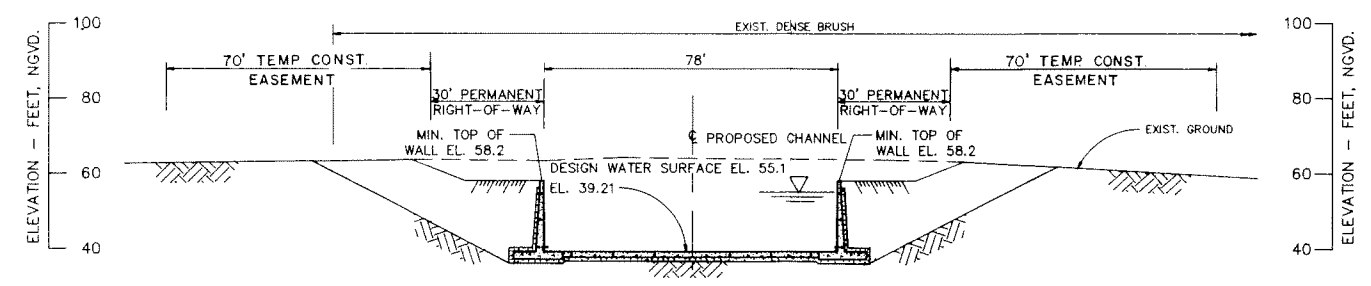


STA. 230+00

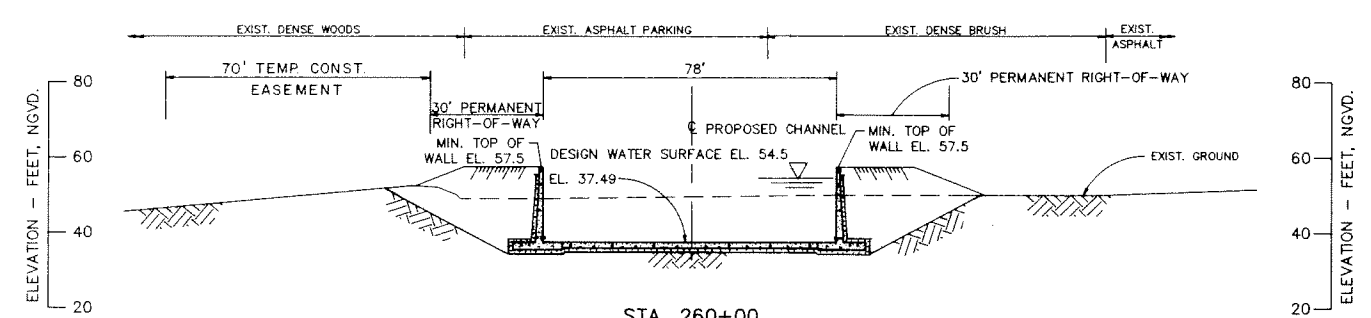
PUERTO NUEVO CHANNEL



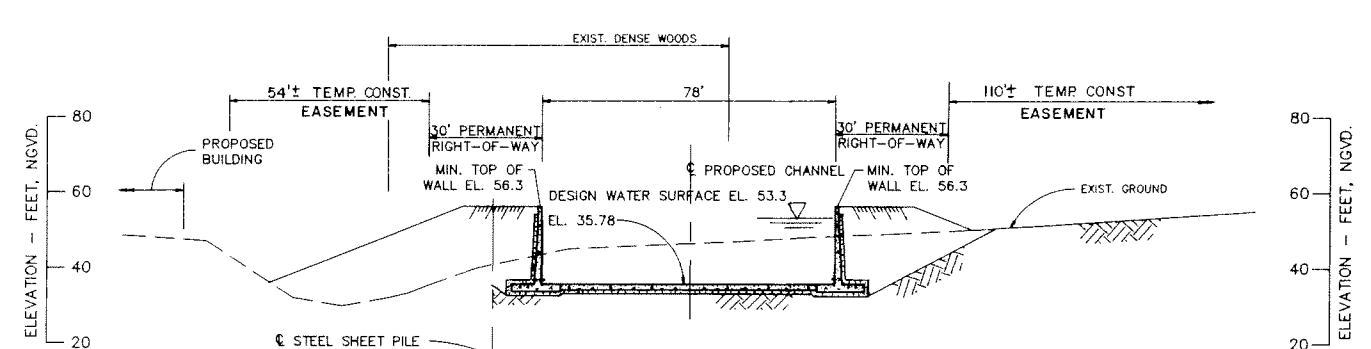
STA. 270+00



STA. 265+00



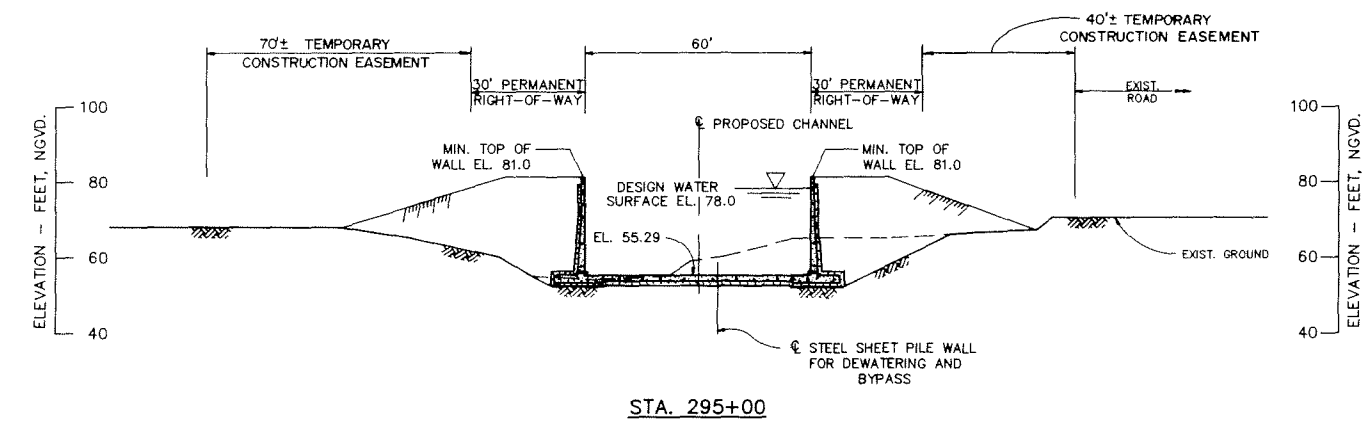
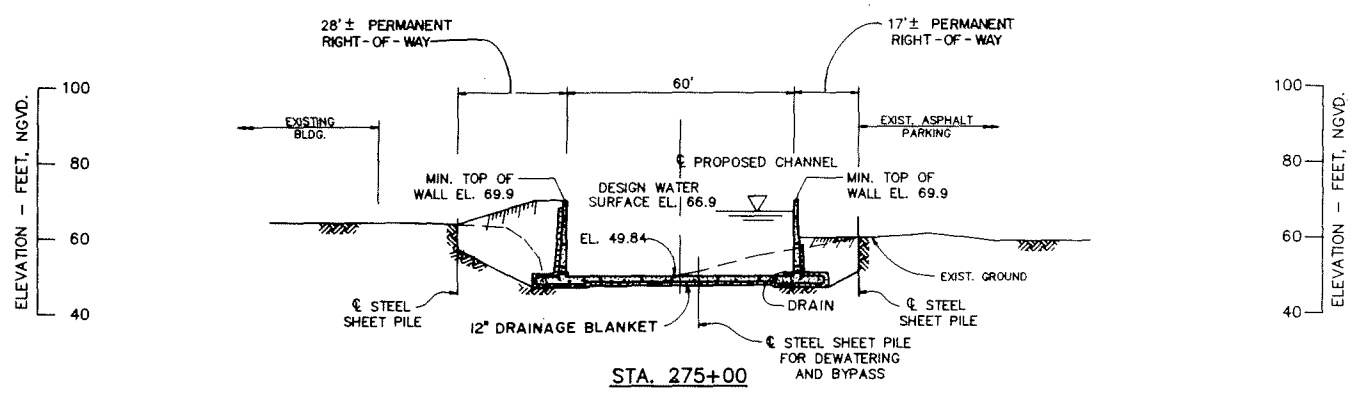
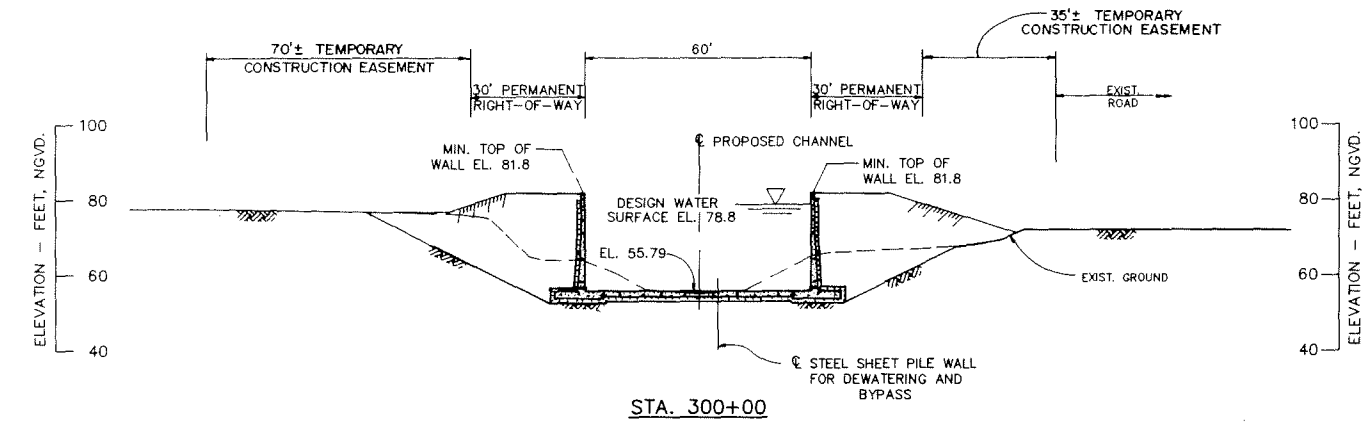
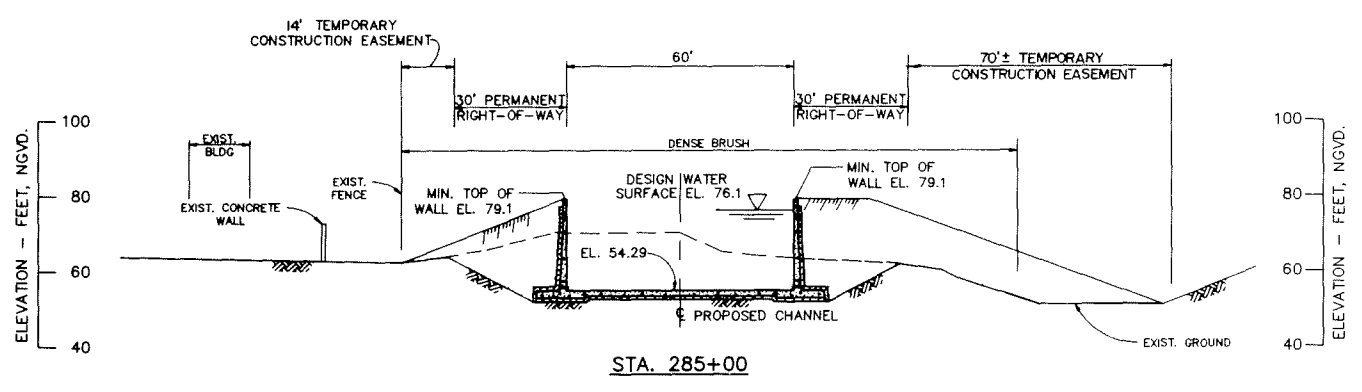
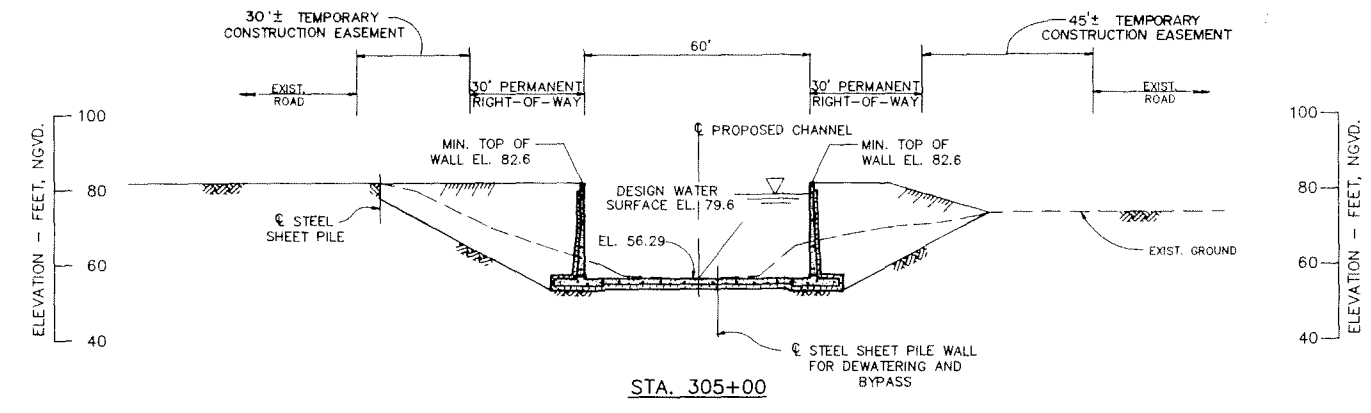
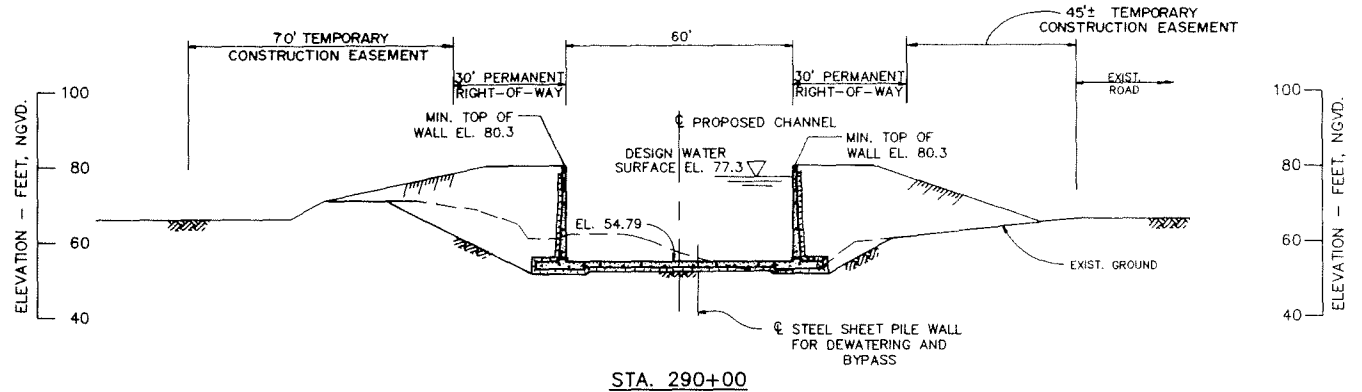
STA. 260+00



STA. 255+00

PUERTO NUEVO CHANNEL

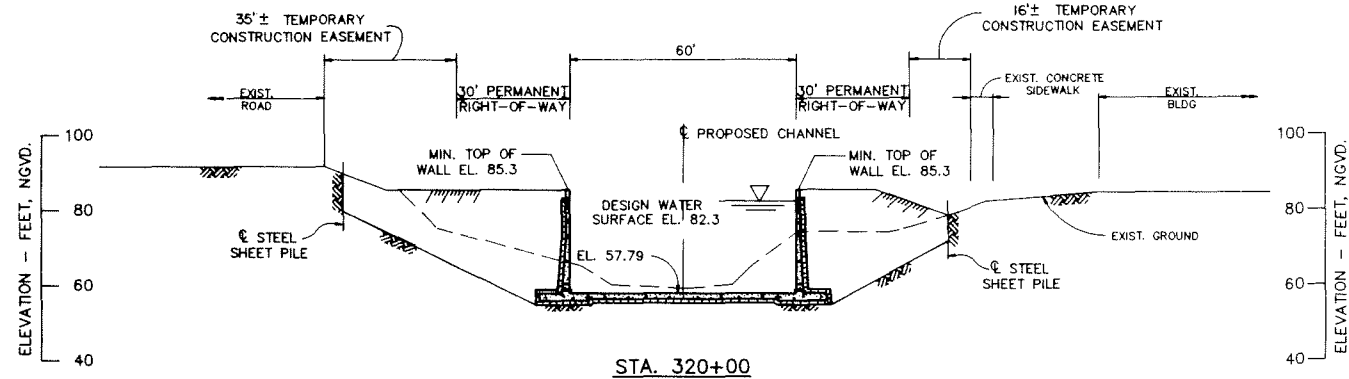
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 4
 STA 230+00 TO STA 270+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,678 DECEMBER 1990



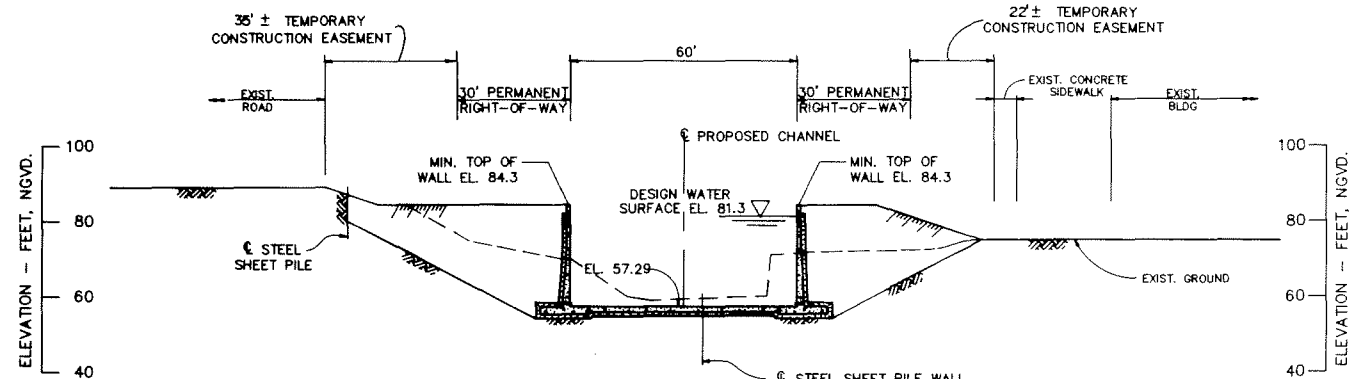
PUERTO NUEVO CHANNEL

PUERTO NUEVO CHANNEL

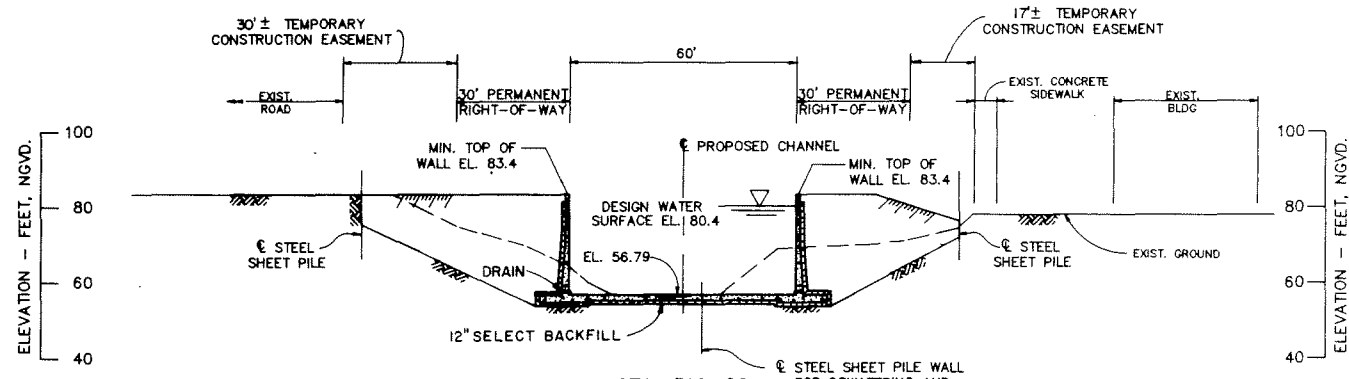
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 4 & 5
 STA 275+00 TO STA 305+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990



STA. 320+00

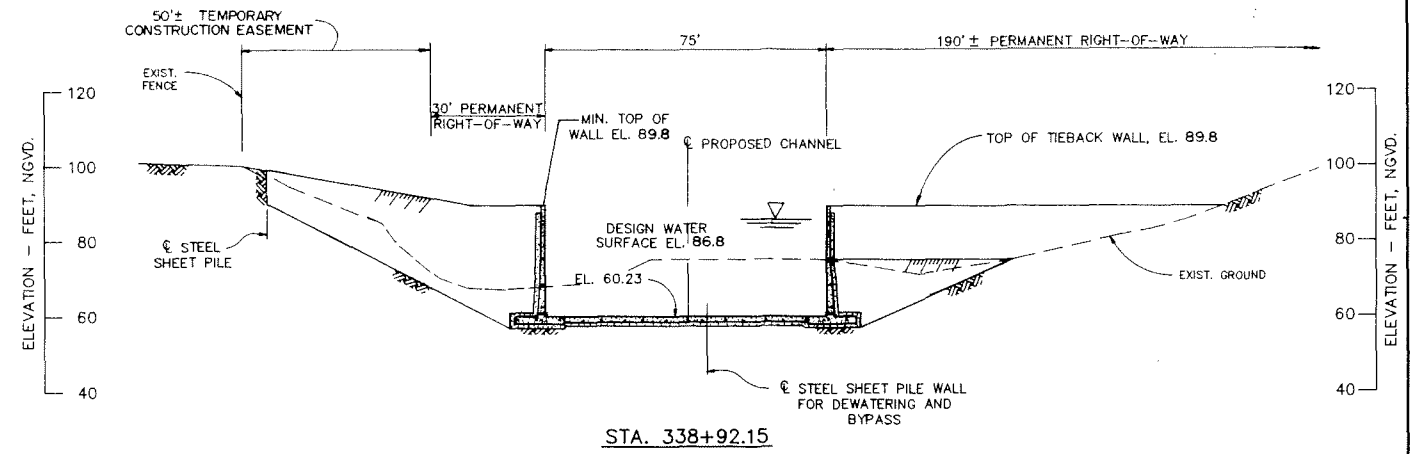


STA. 315+00

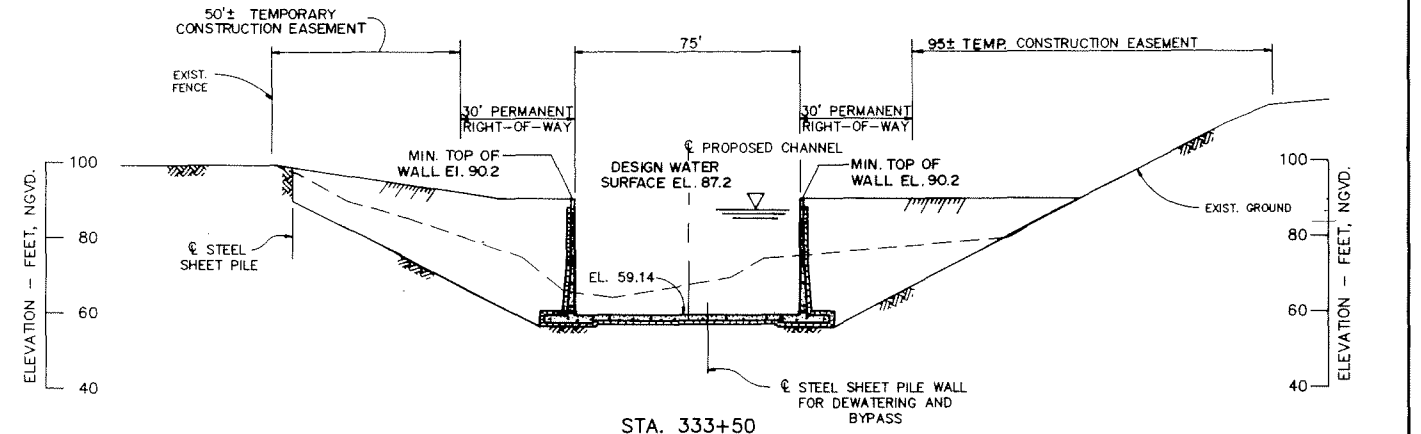


STA. 310+00

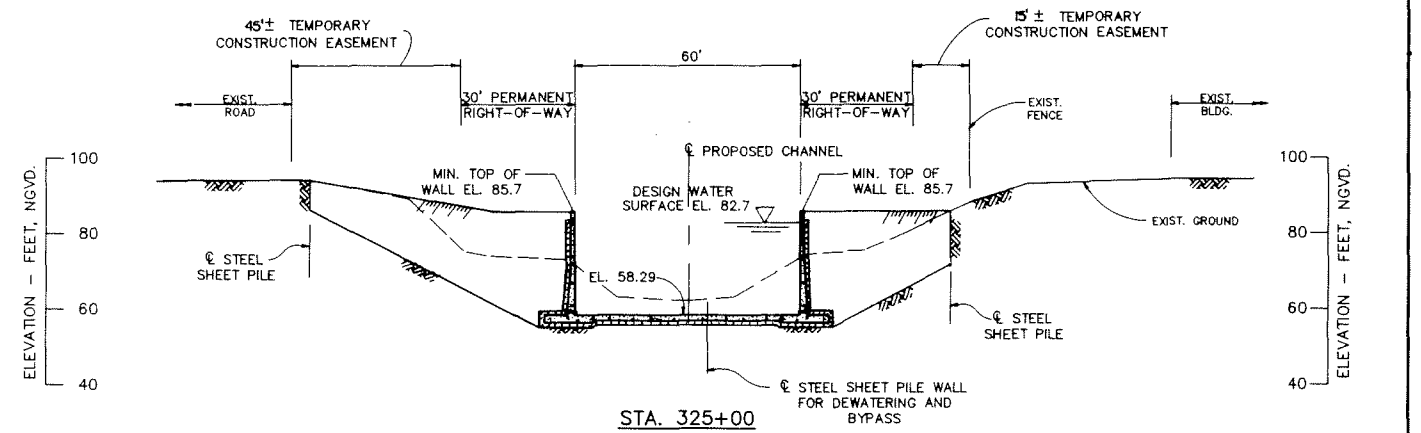
PUERTO NUEVO CHANNEL



STA. 338+92.15



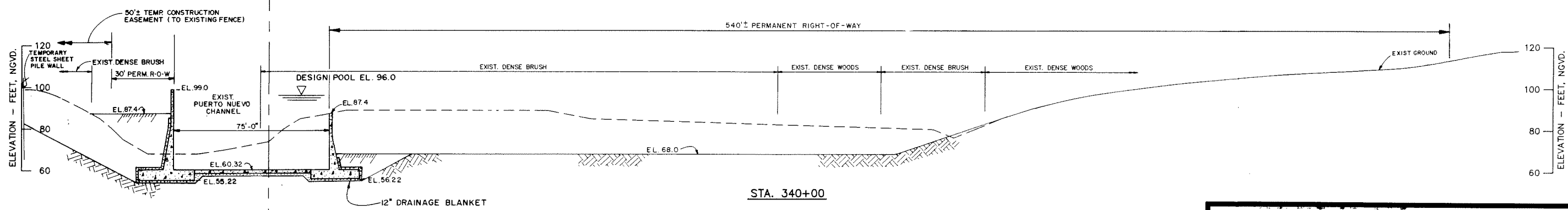
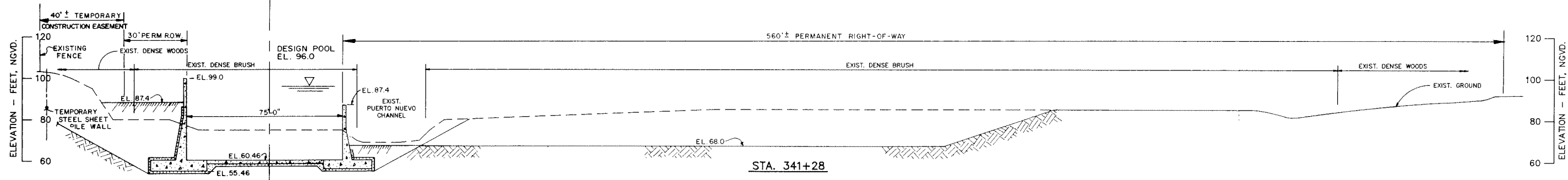
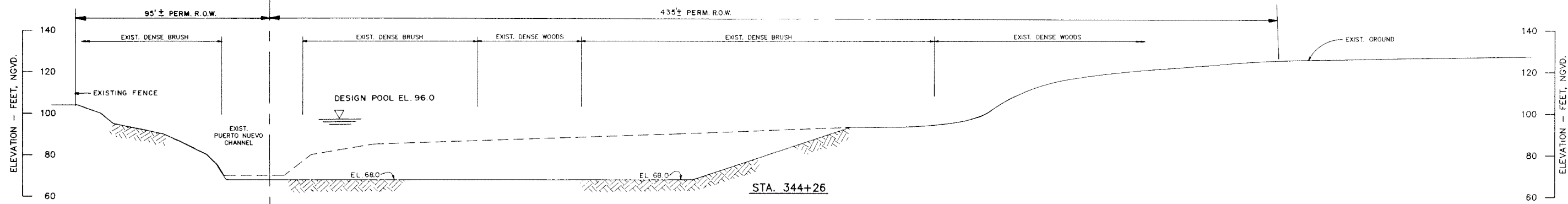
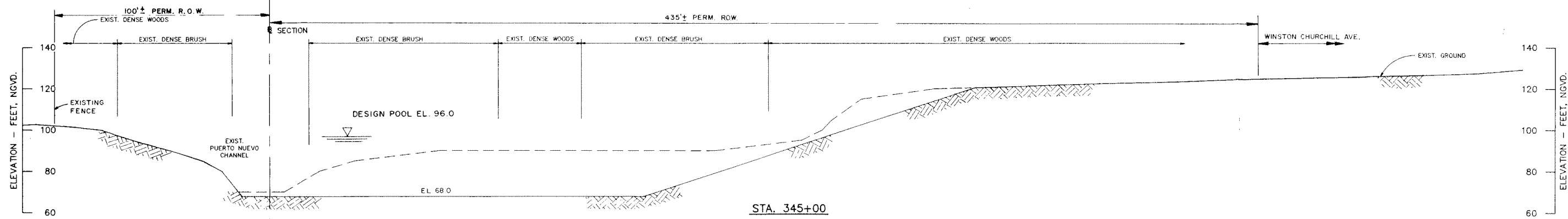
STA. 333+50



STA. 325+00

PUERTO NUEVO CHANNEL

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL - REACH 5
 STA 310+00 TO STA 338+92.15
CHANNEL CROSS SECTIONS
 STRUCTURAL
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



**PUERTO NUEVO CHANNEL
DEBRIS BASIN**

**RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM**

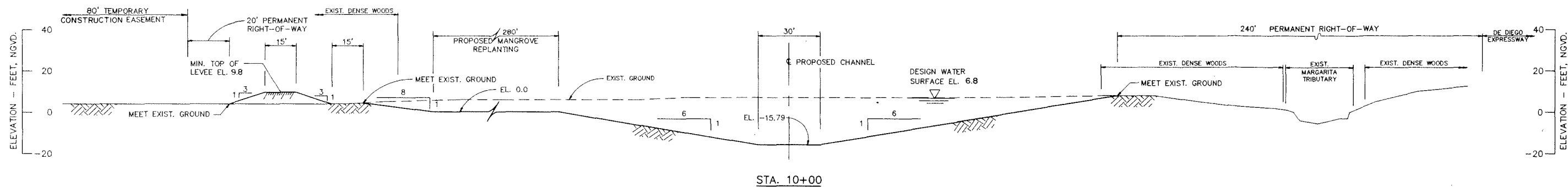
PUERTO NUEVO CHANNEL - REACH 5
STA 340+00 TO STA 345+00

CHANNEL CROSS SECTIONS

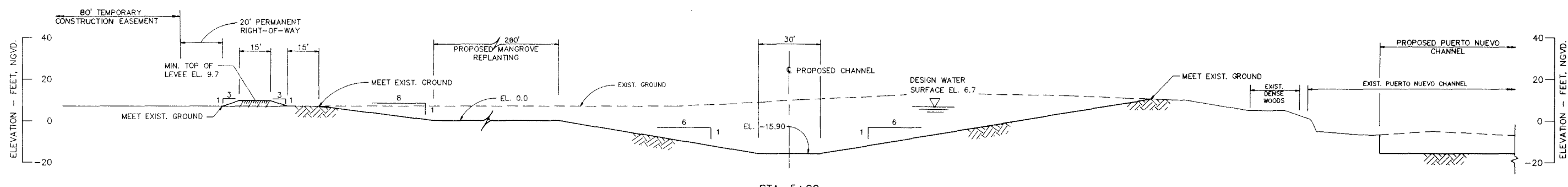
STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

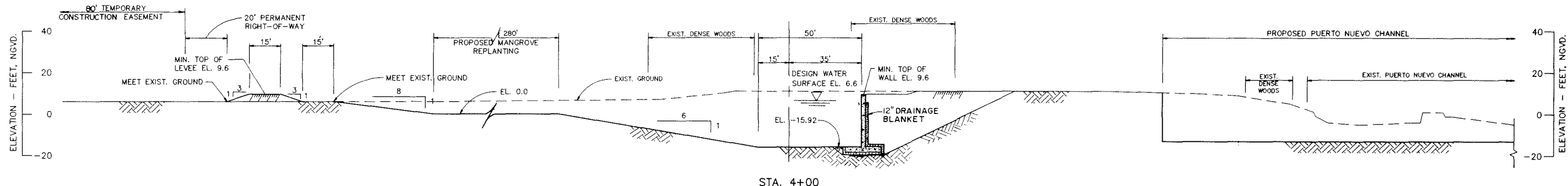
D.D. FILE NO. 102-35,578 DECEMBER 1990



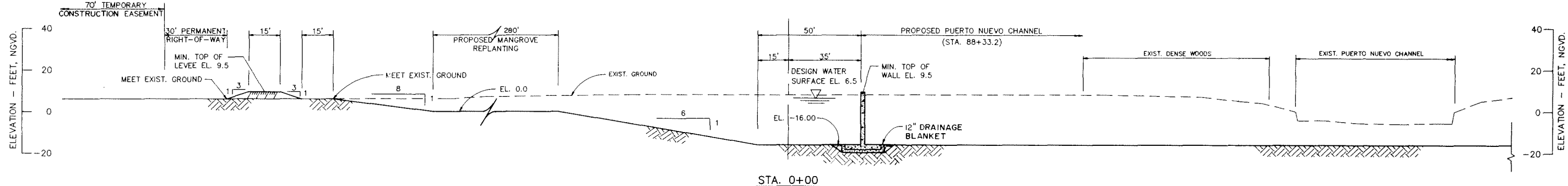
STA. 10+00



STA. 5+00



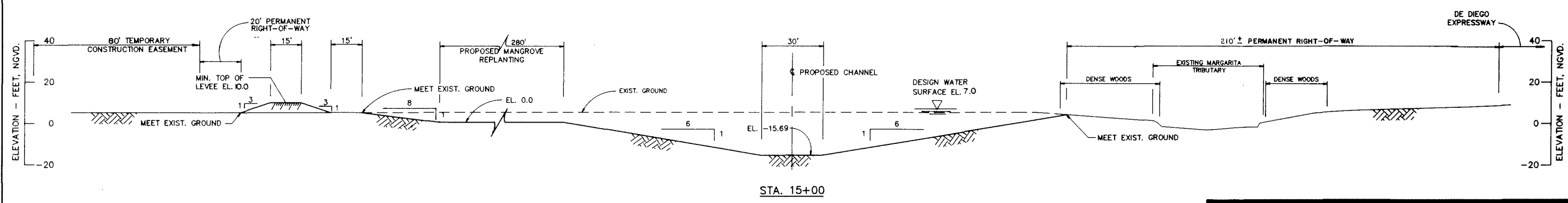
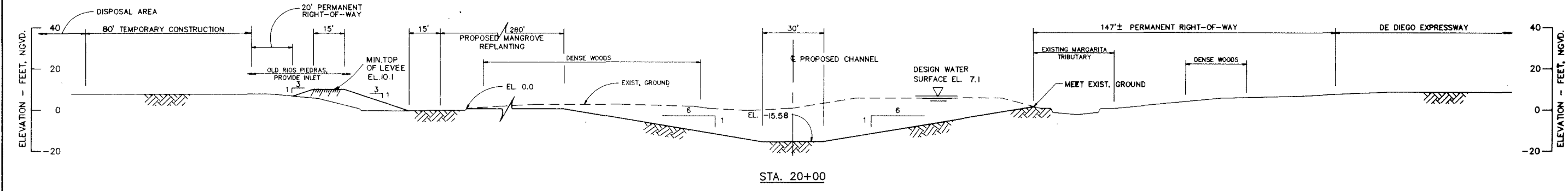
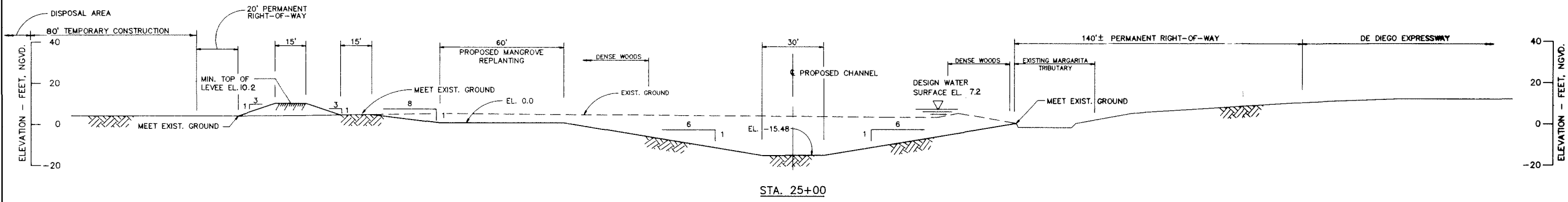
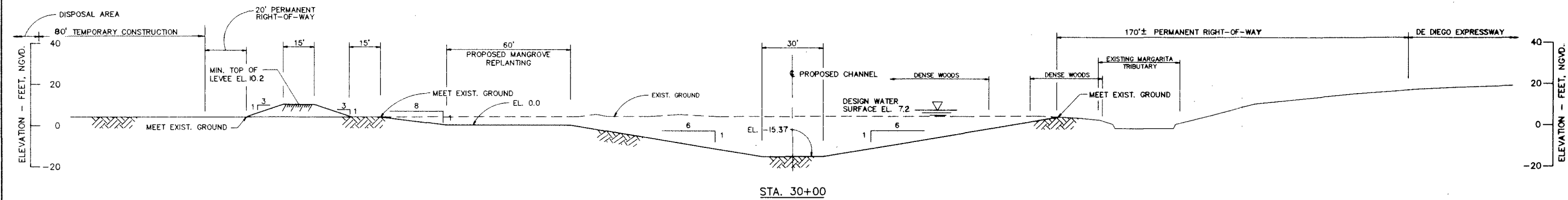
STA. 4+00



STA. 0+00

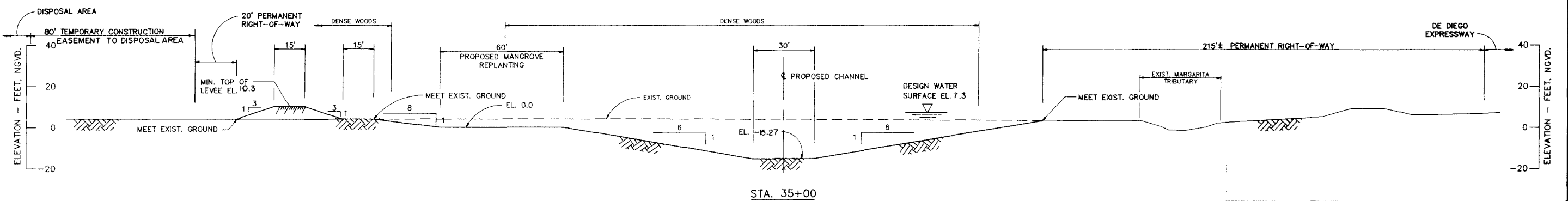
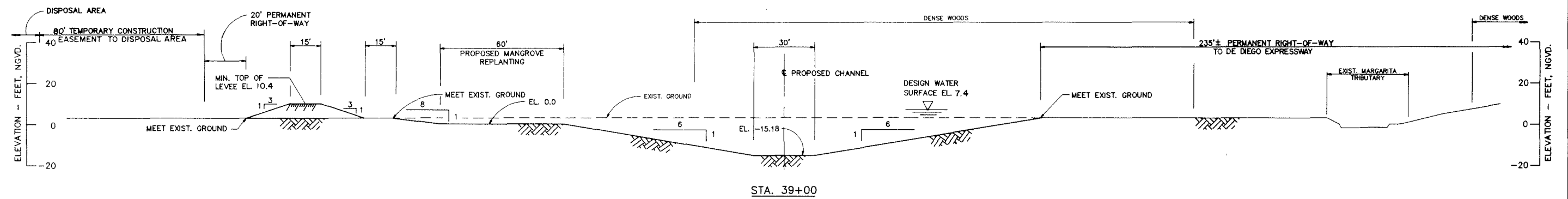
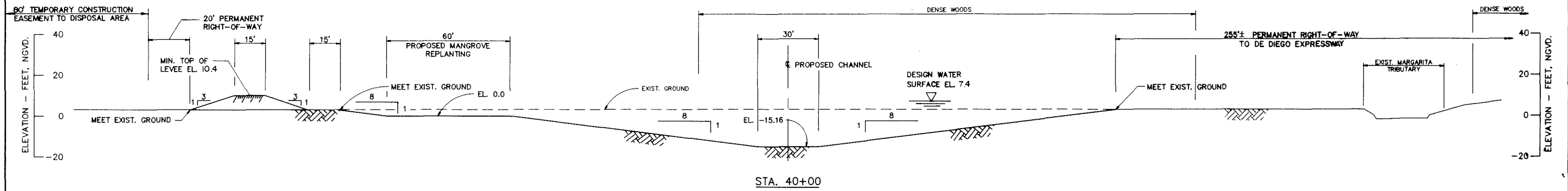
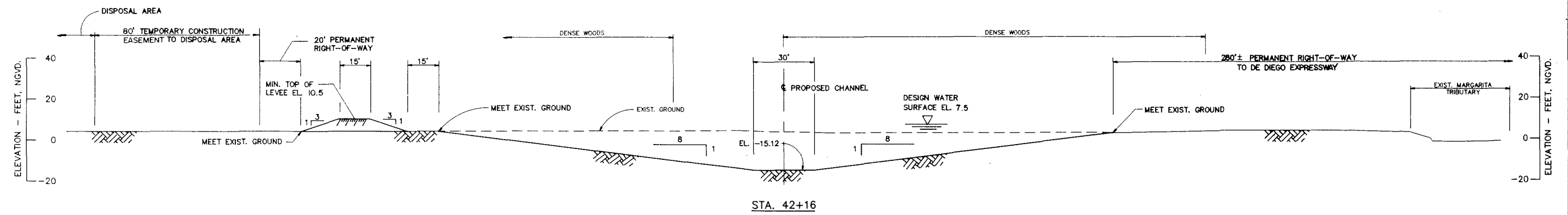
MARGARITA TRIBUTARY

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 MARGARITA TRIBUTARY
 STA 0+00 TO STA 10+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



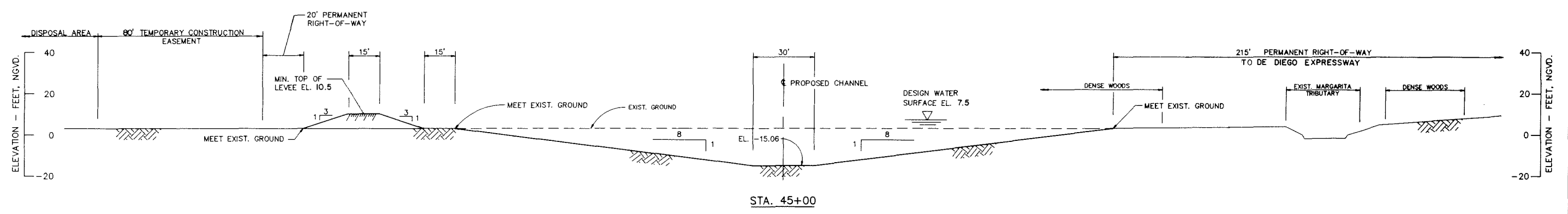
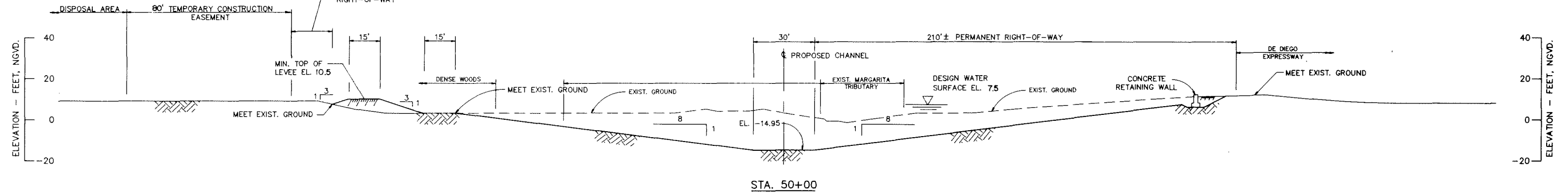
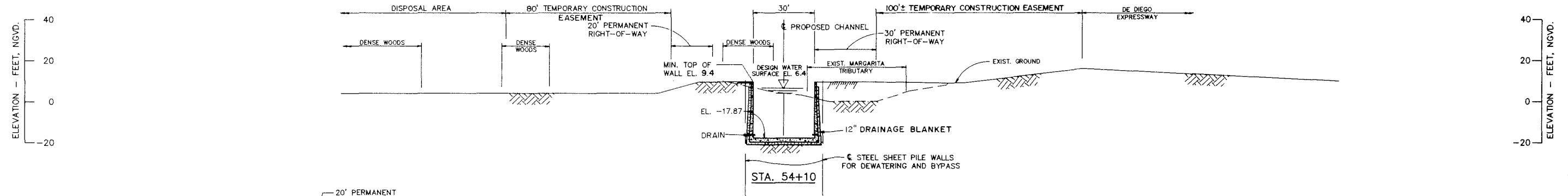
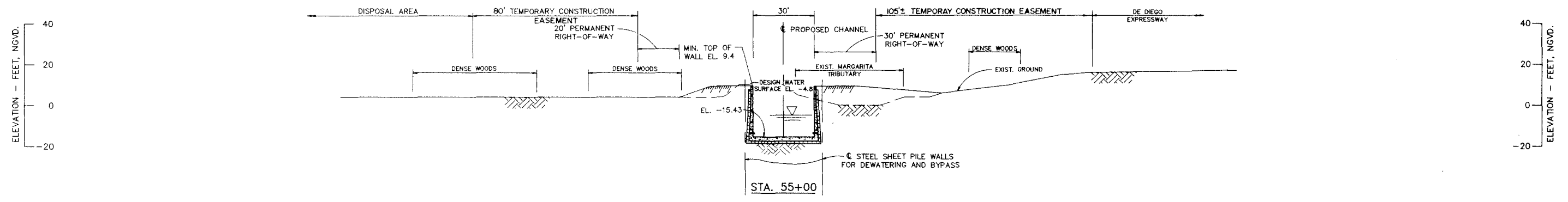
MARGARITA TRIBUTARY

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
MARGARITA TRIBUTARY
STA 15+00 TO STA 30+00
CHANNEL CROSS SECTIONS
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,678
DECEMBER 1990



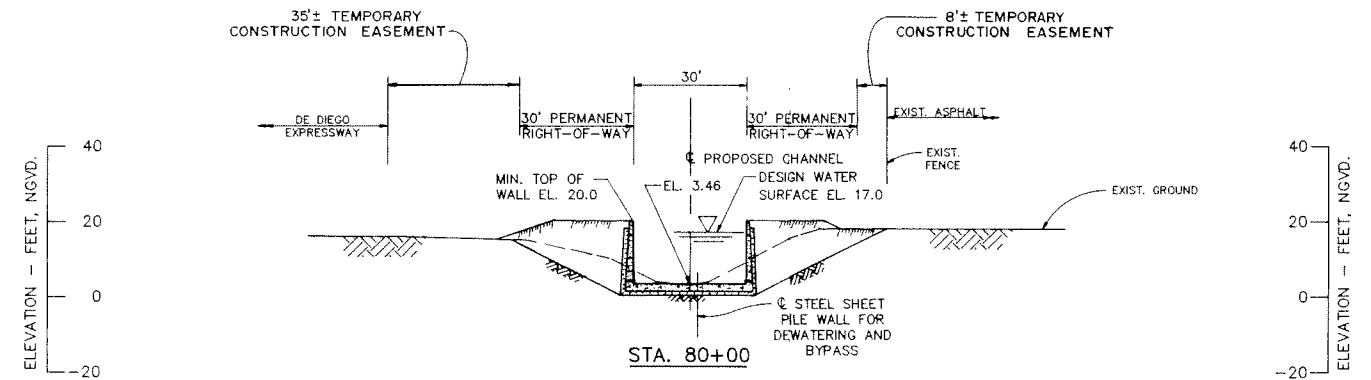
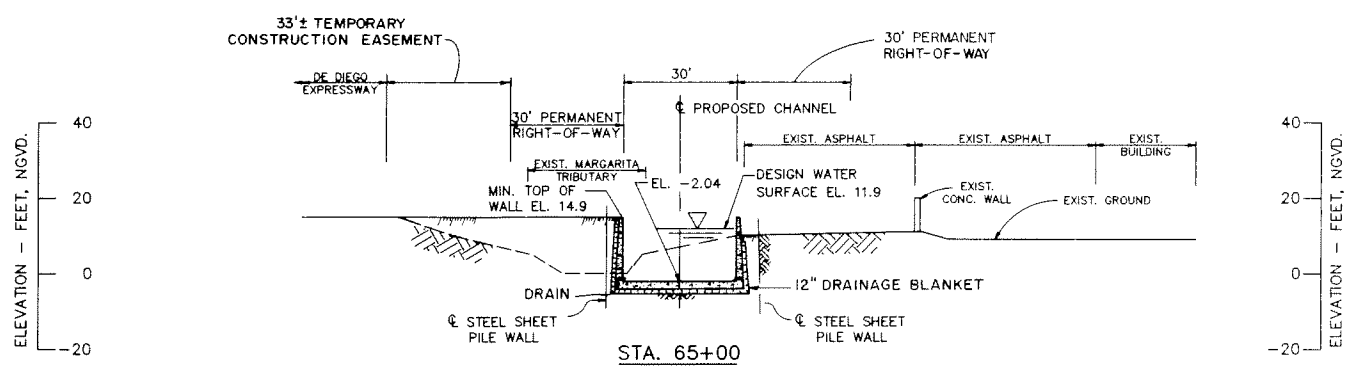
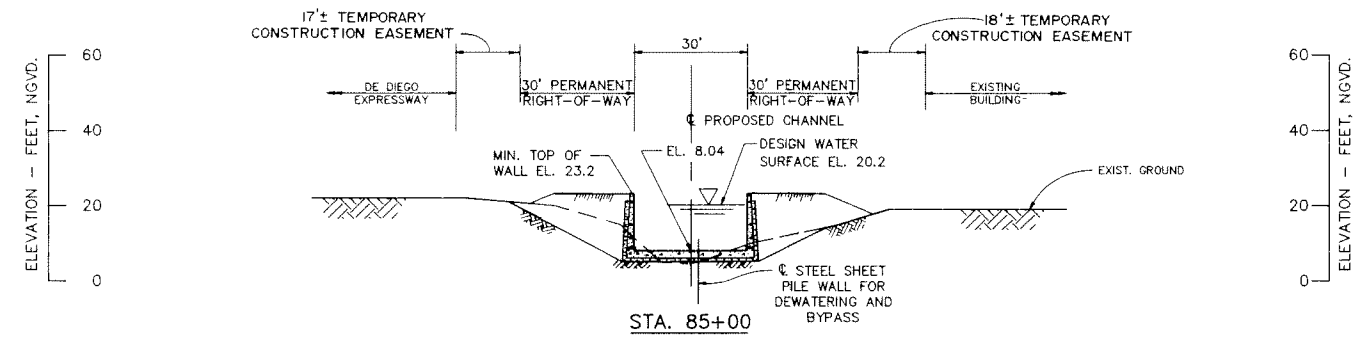
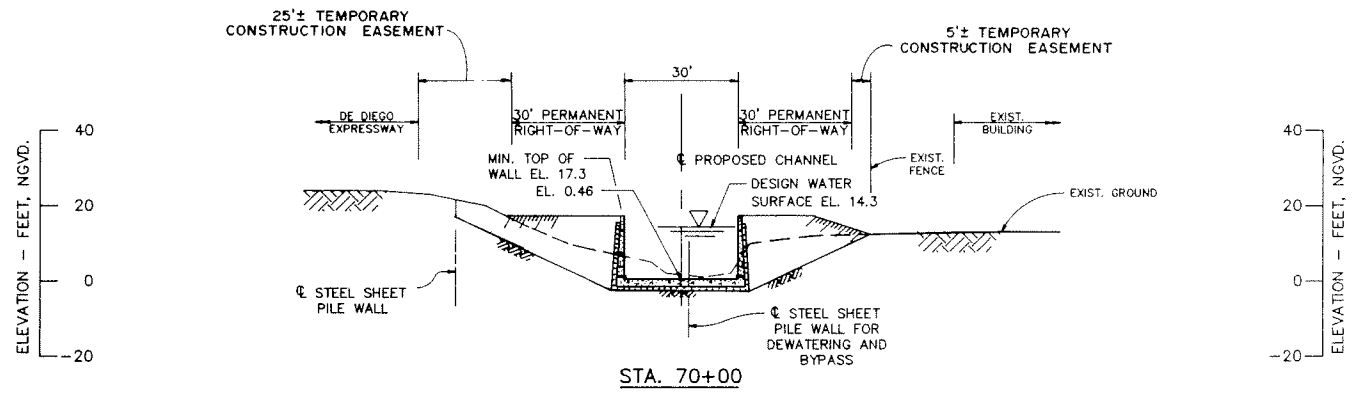
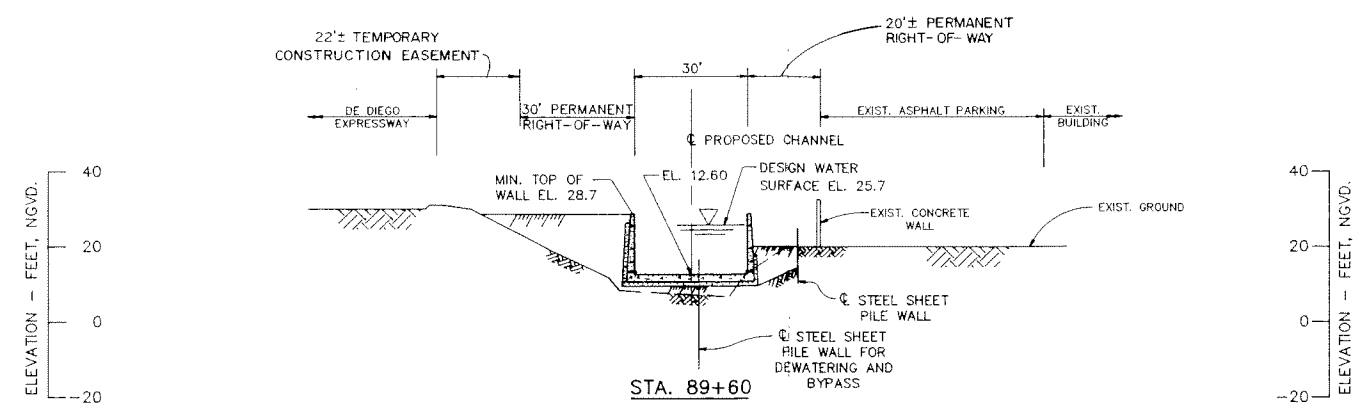
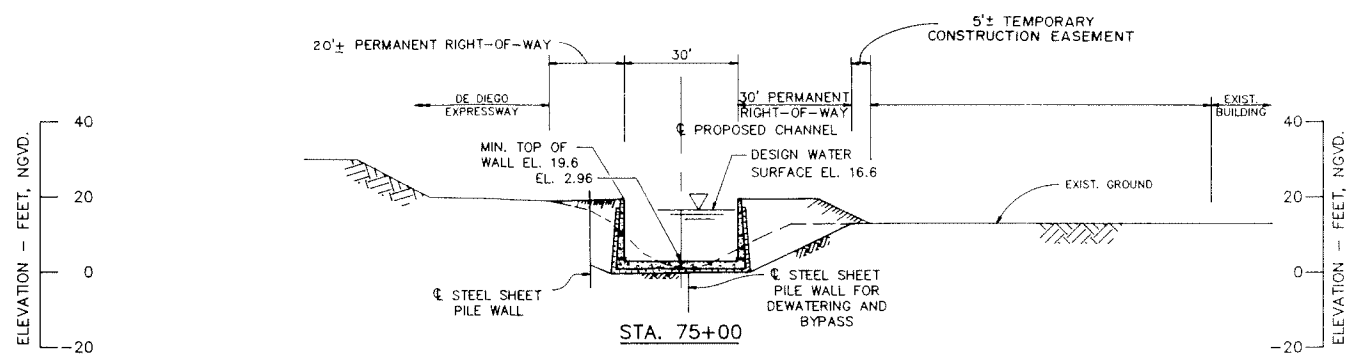
MARGARITA TRIBUTARY

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
MARGARITA TRIBUTARY
STA 35+00 TO STA 42+16
CHANNEL CROSS SECTIONS
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-36,678
DECEMBER 1990



MARGARITA TRIBUTARY

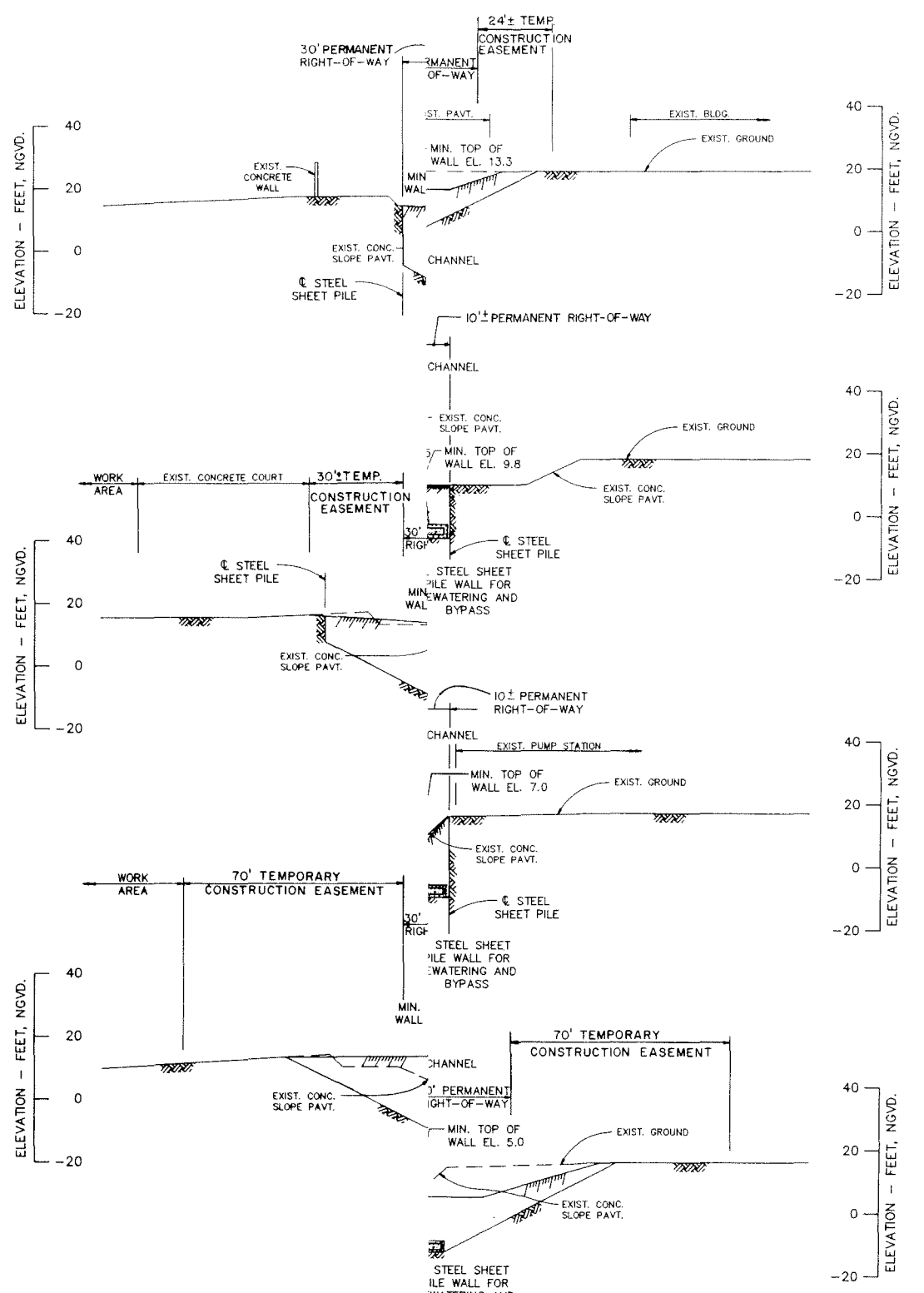
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 MARGARITA TRIBUTARY
 STA 45+00 TO STA 55+00
 CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,678 DECEMBER 1990



MARGARITA TRIBUTARY

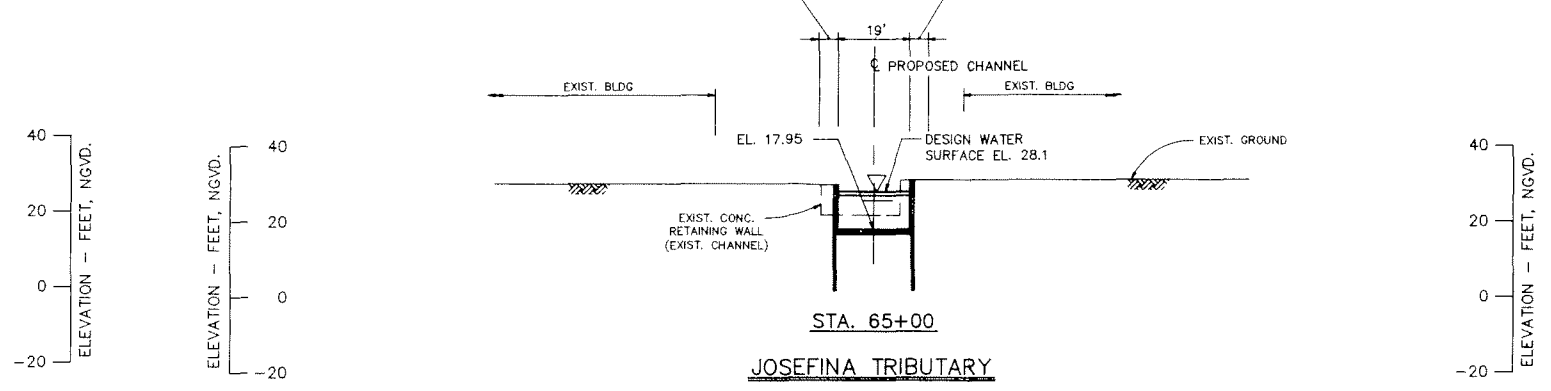
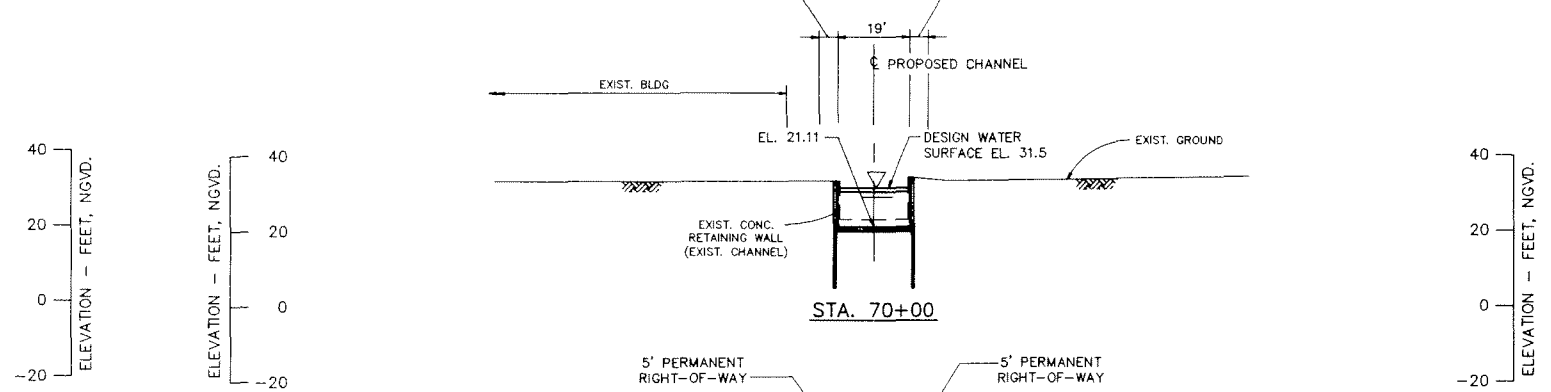
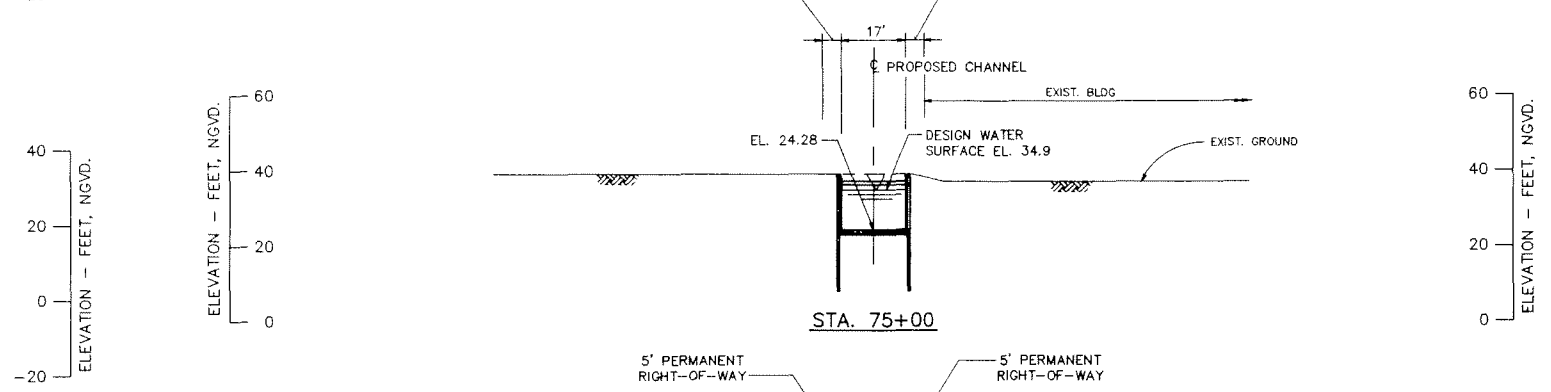
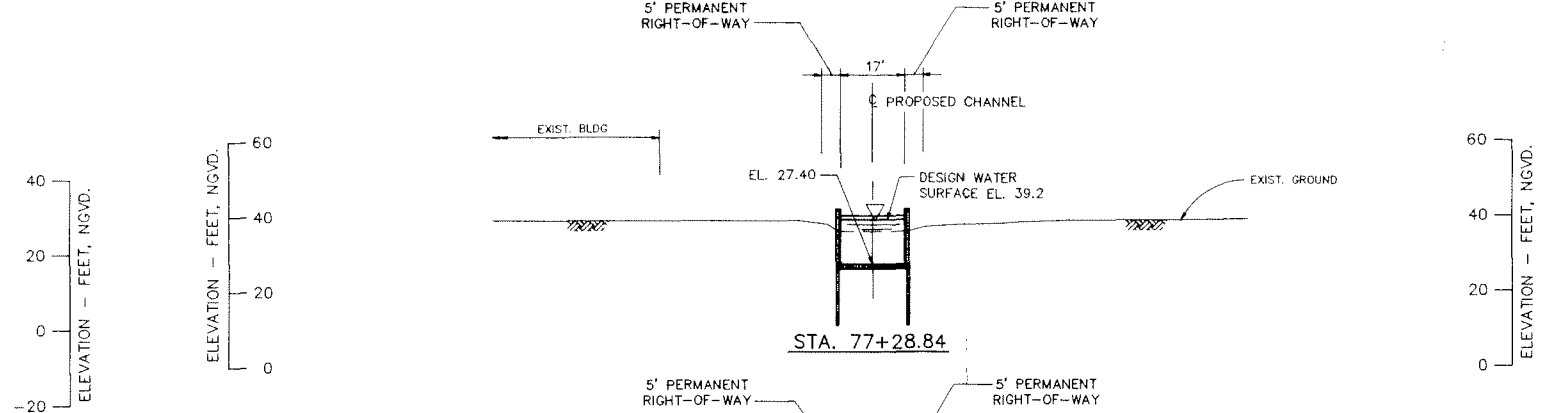
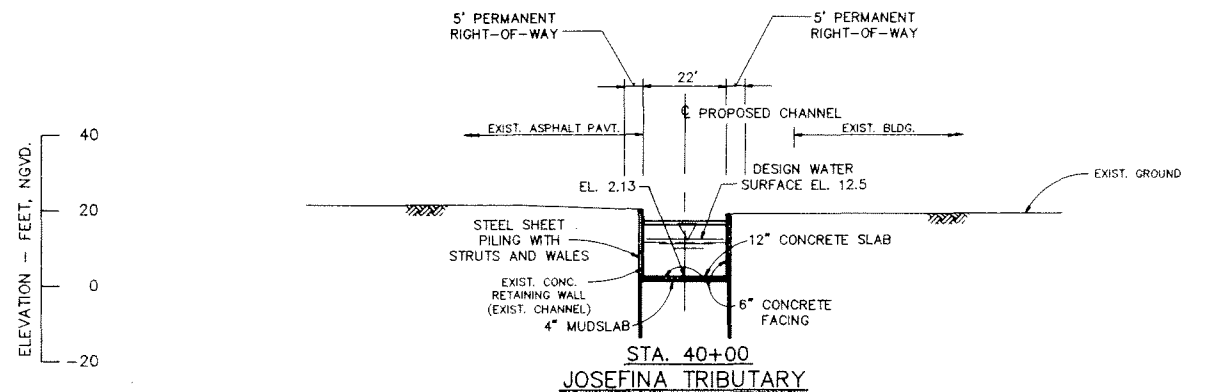
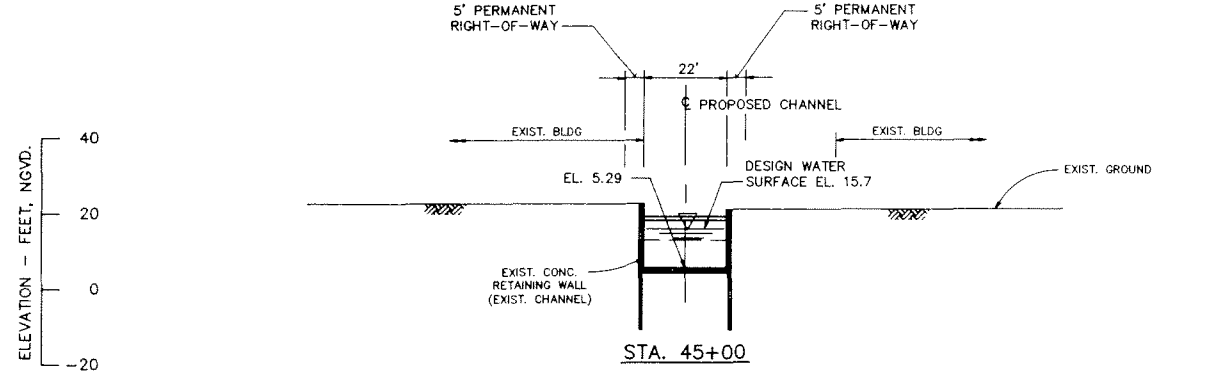
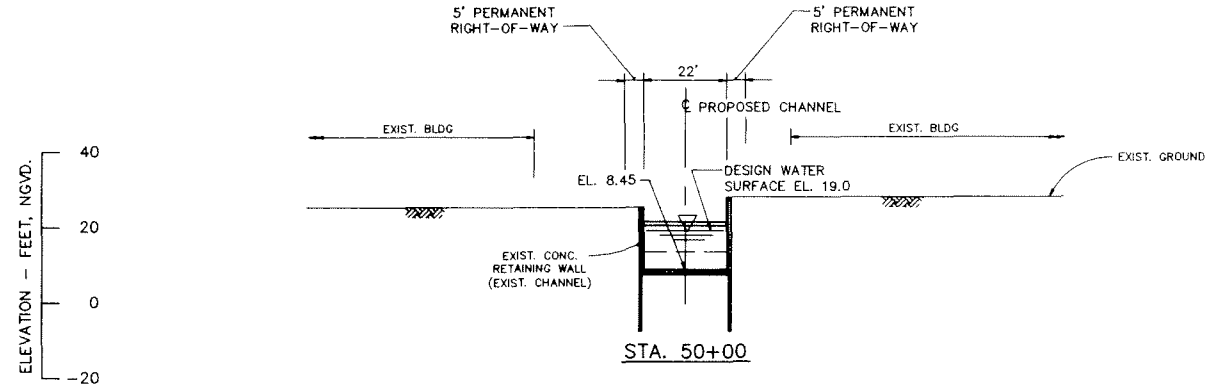
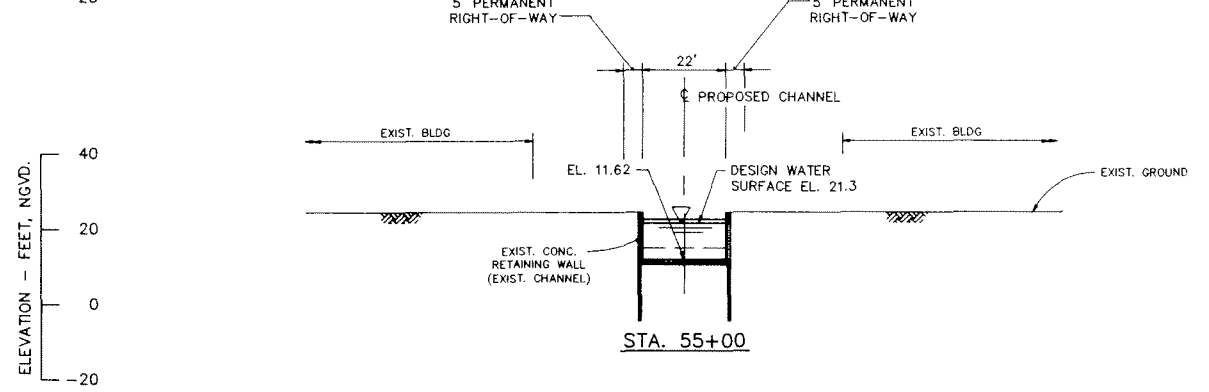
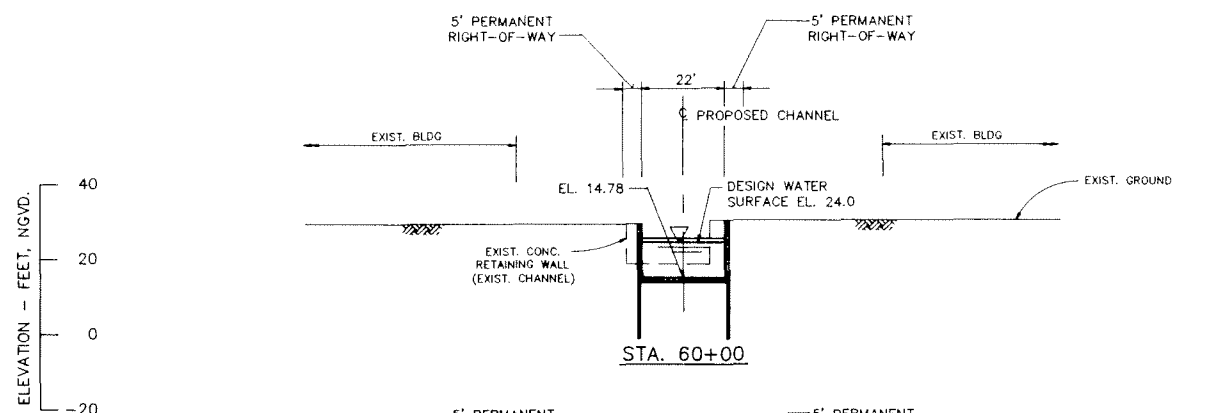
MARGARITA TRIBUTARY

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 MARGARITA TRIBUTARY
 STA 65+00 TO STA 89+60
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

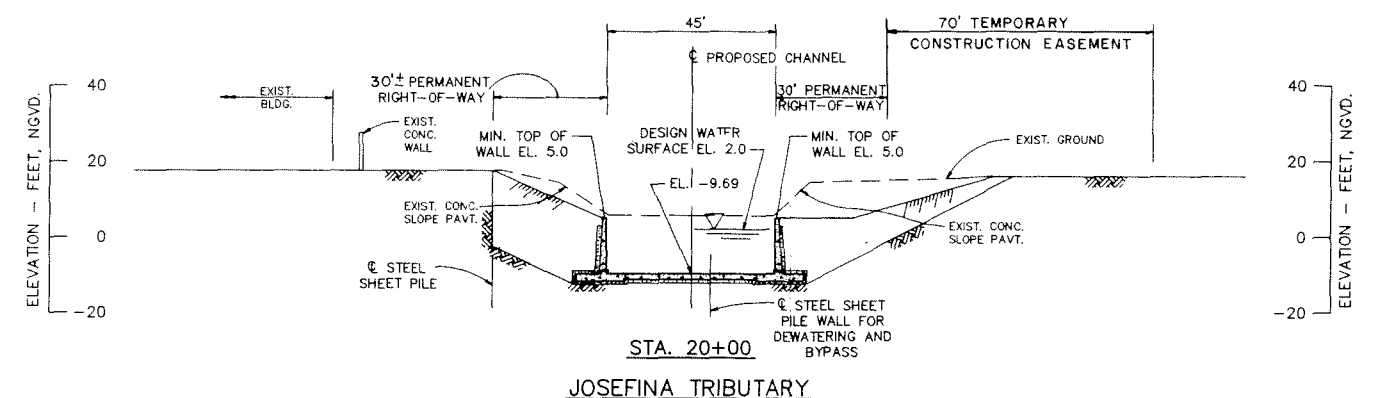
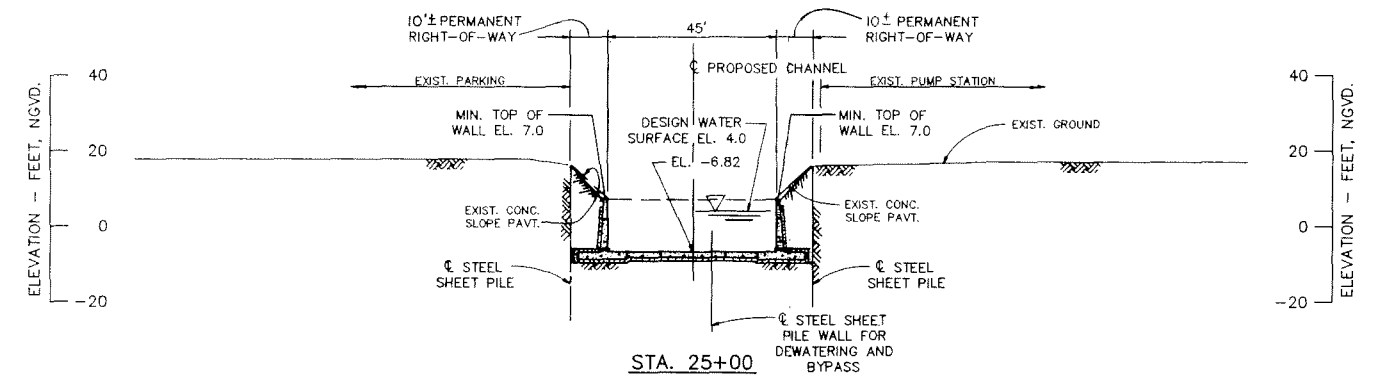
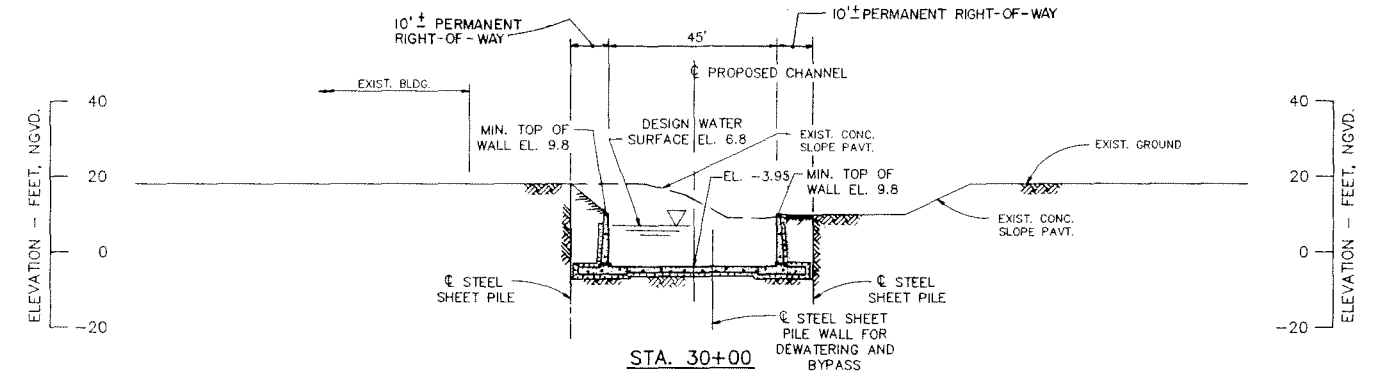
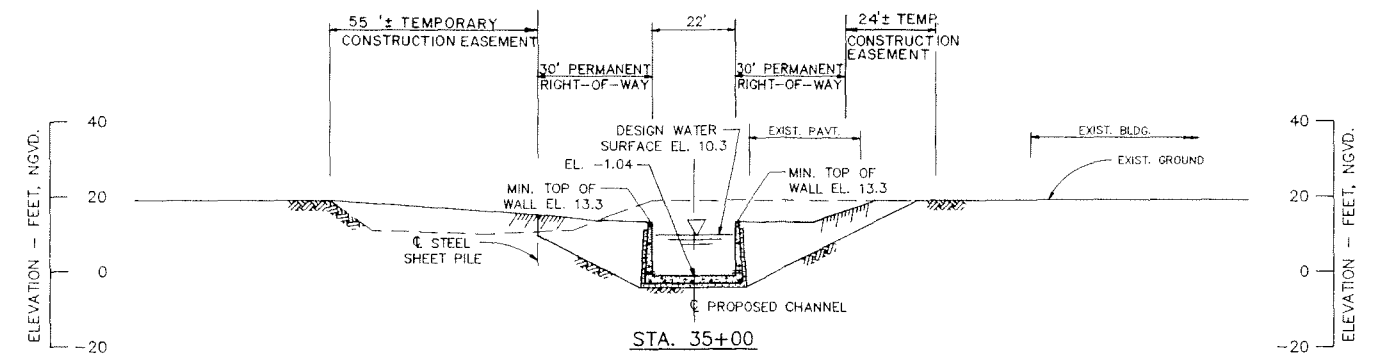
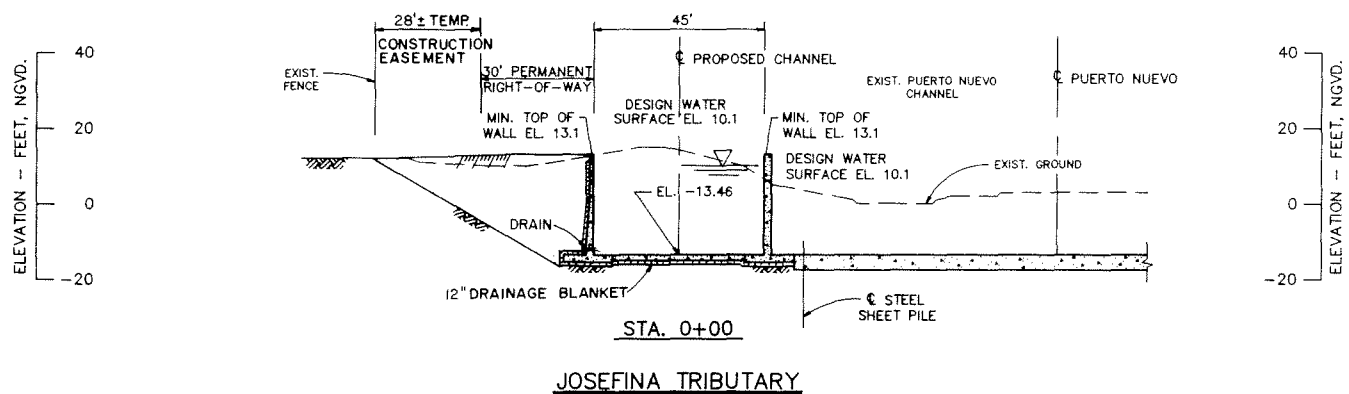
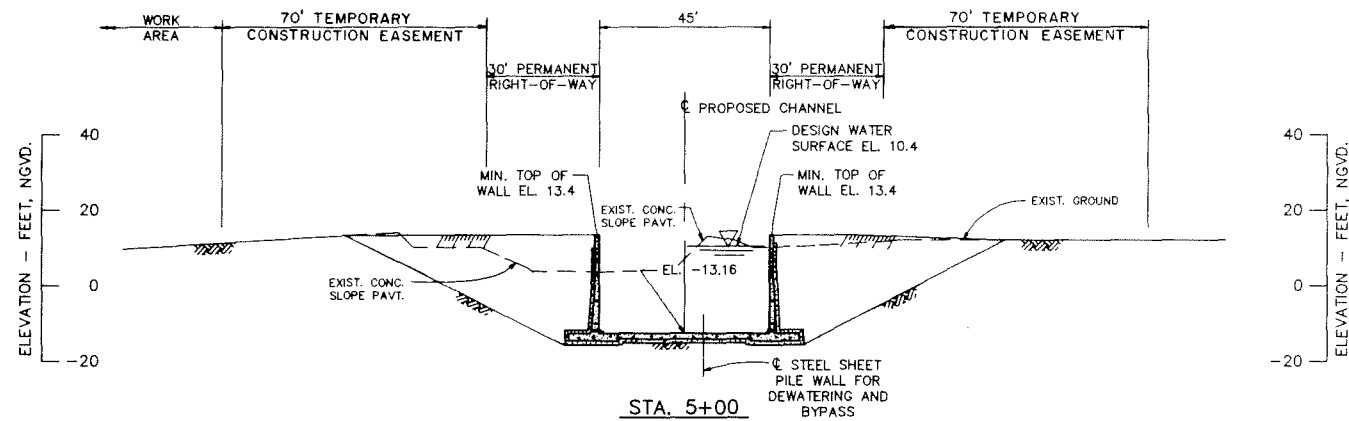
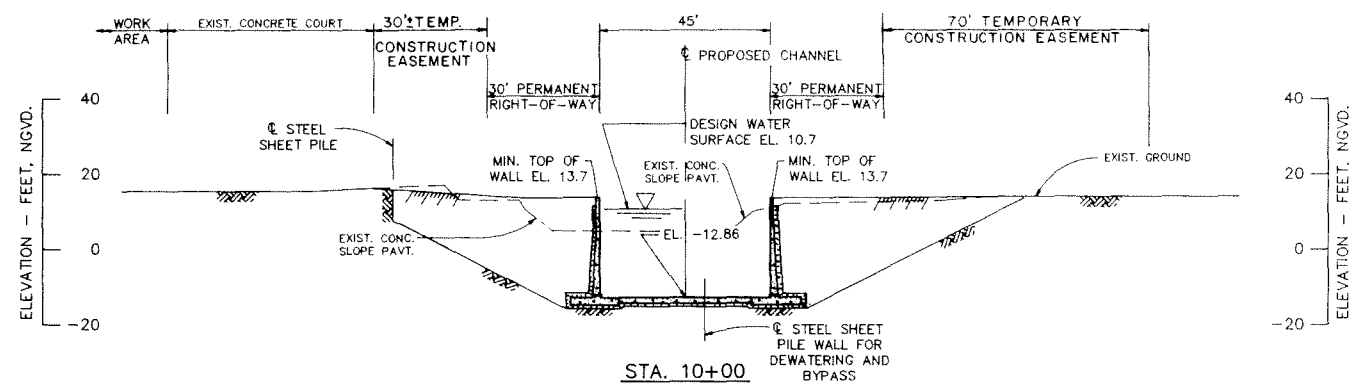
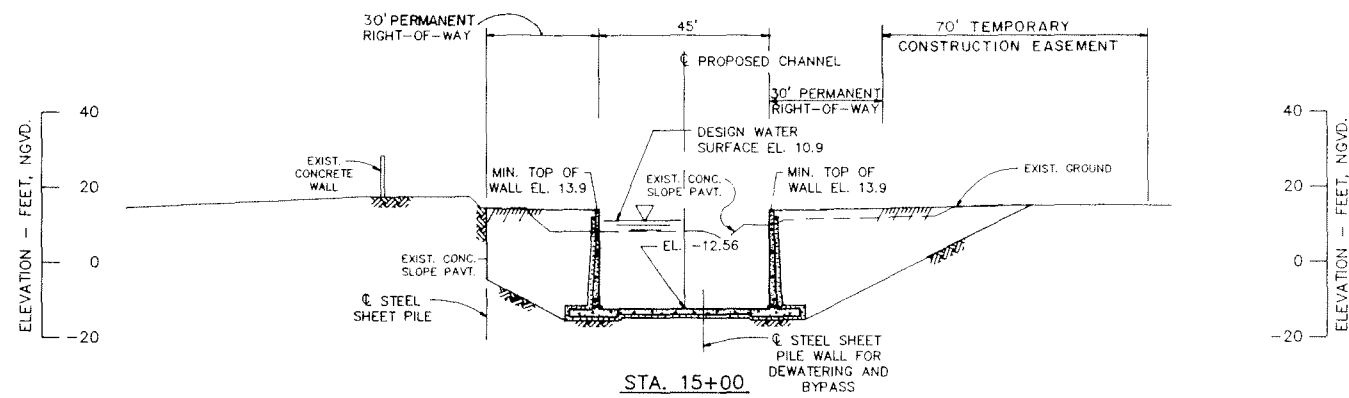


RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 STA 0+00 TO STA 35+00
CHANNEL CROSS SECTIONS

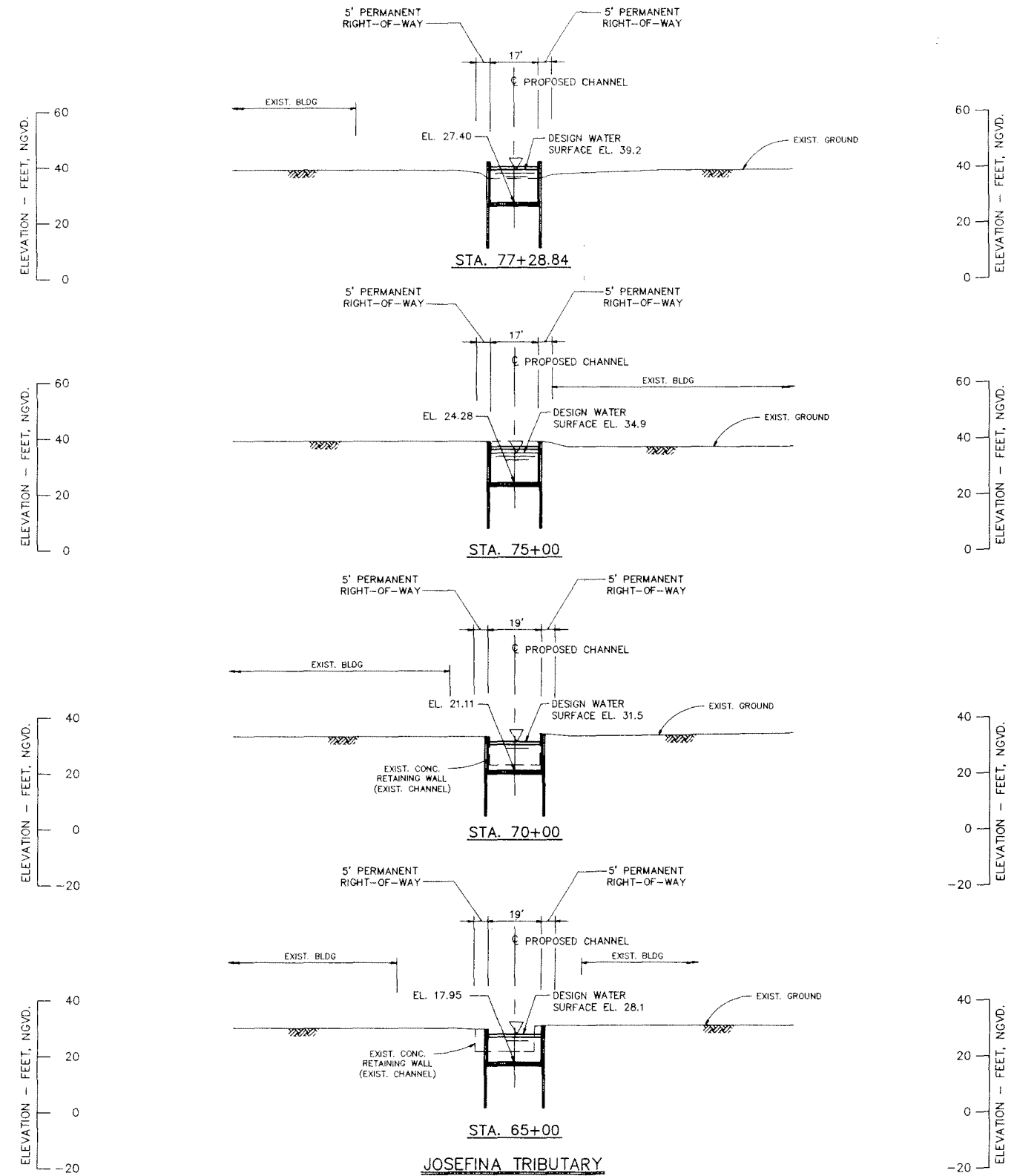
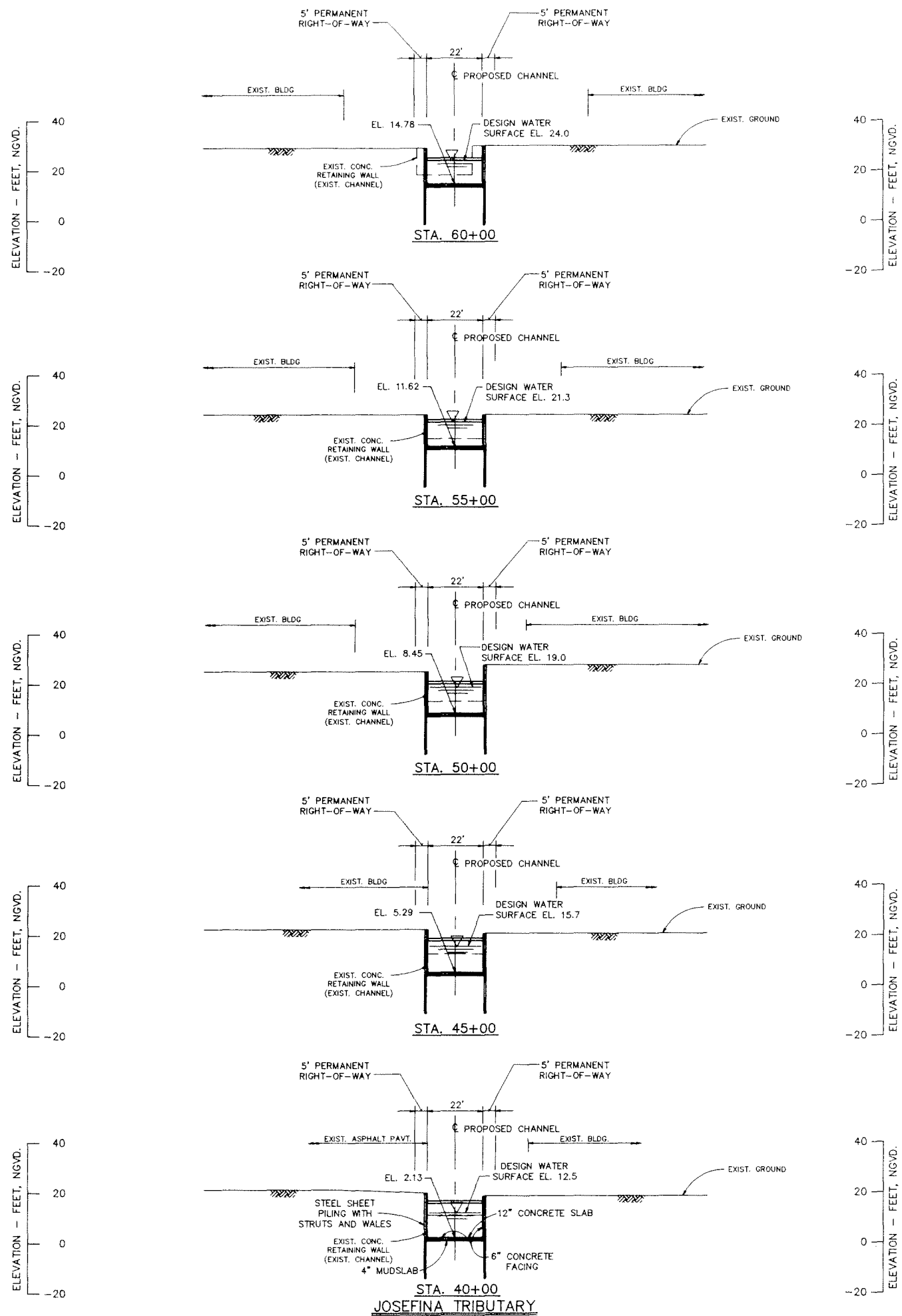
STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 FILE NO. 102-35,578 DECEMBER 1990



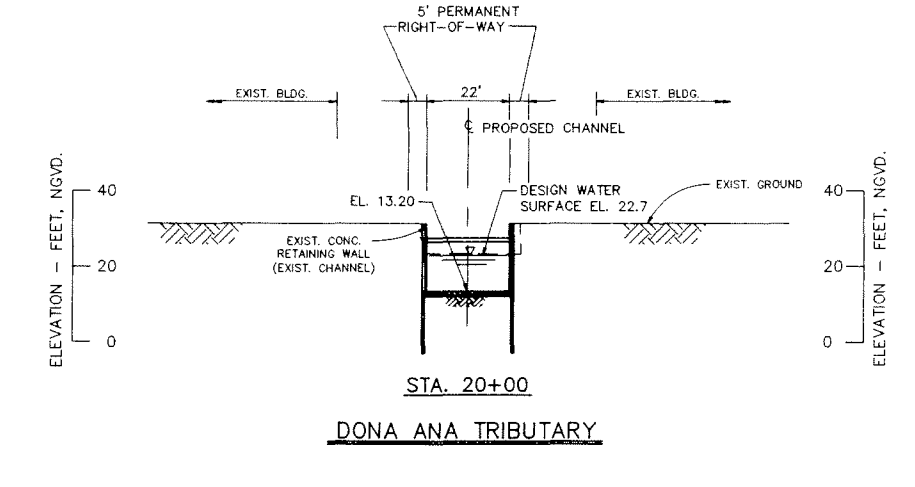
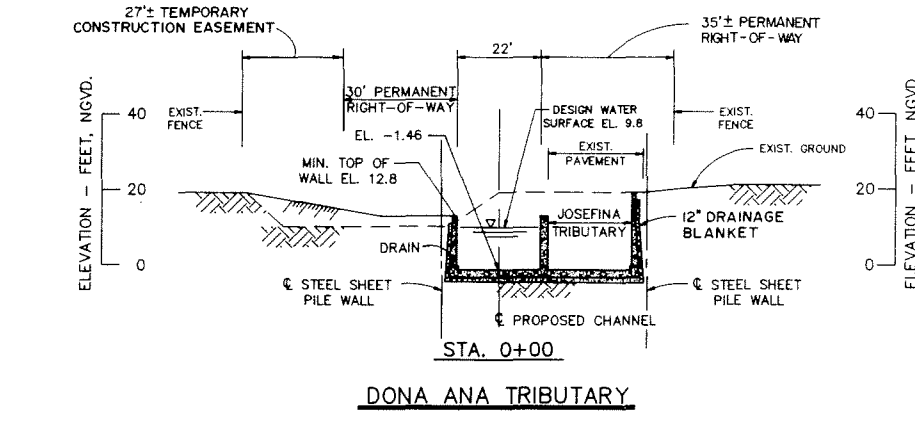
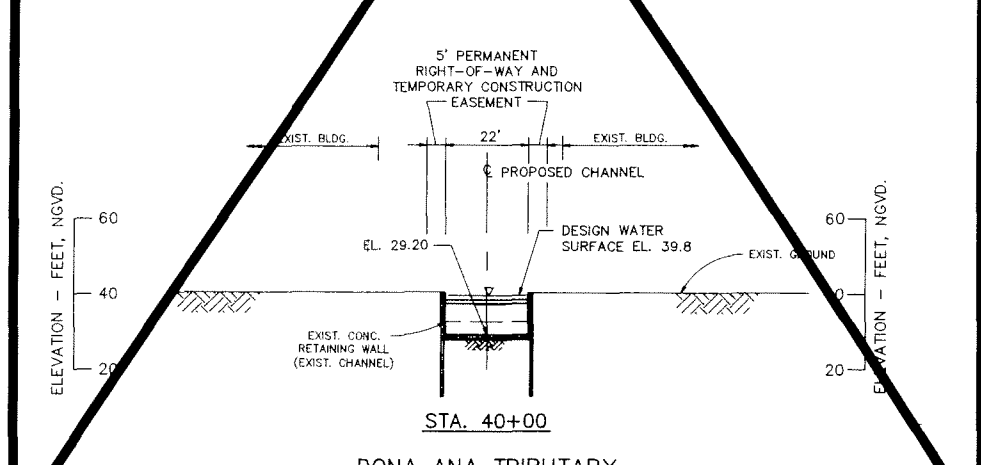
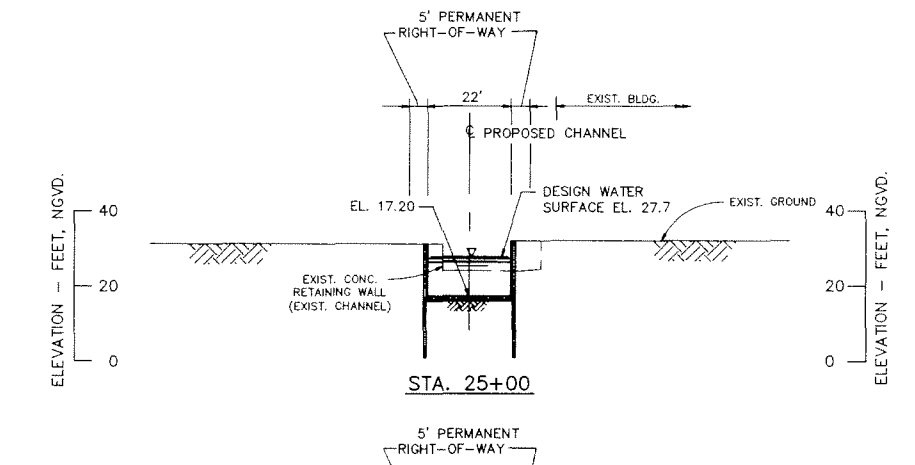
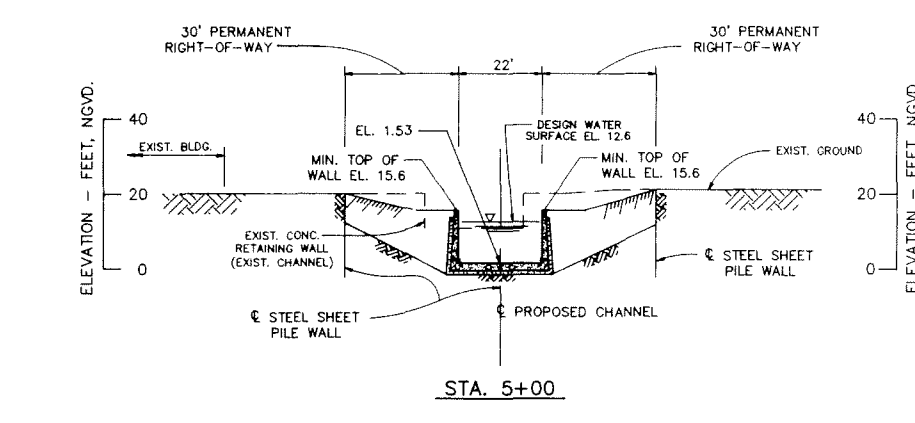
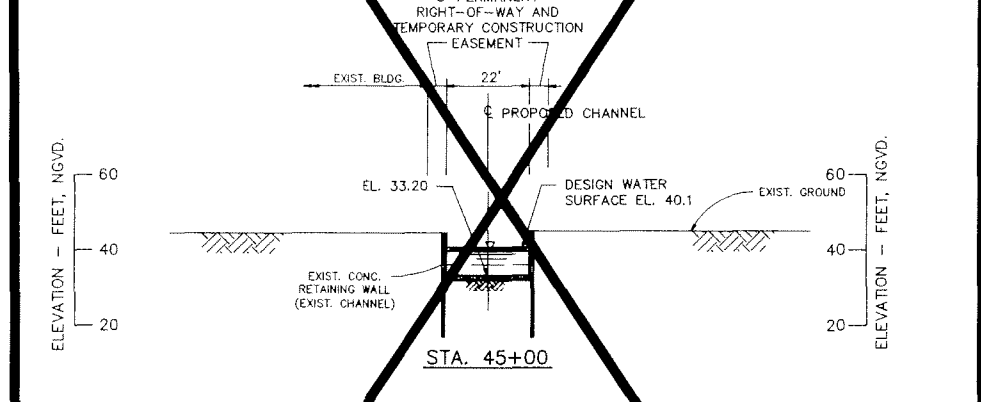
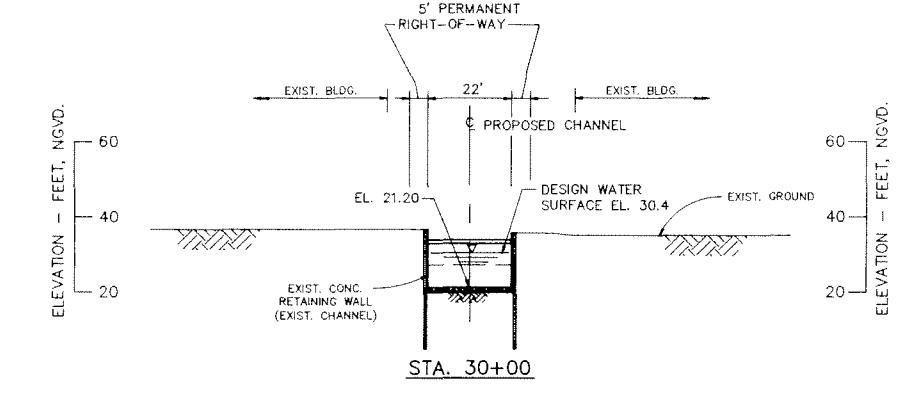
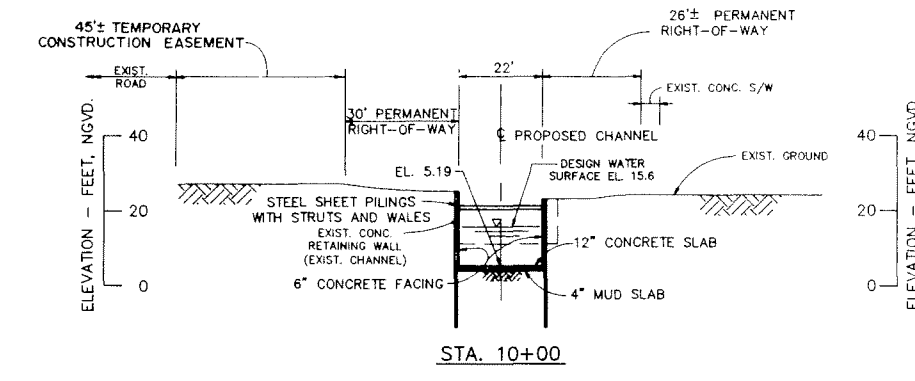
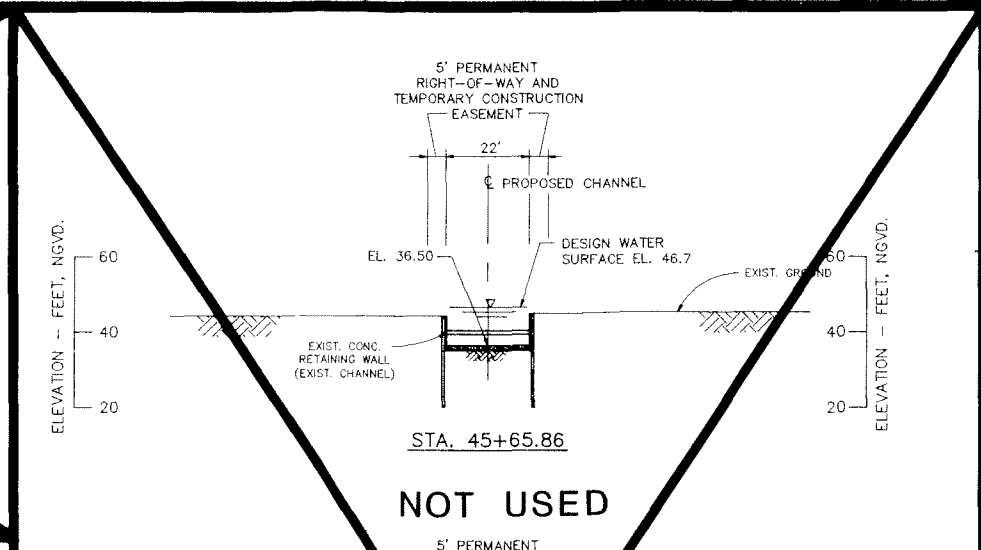
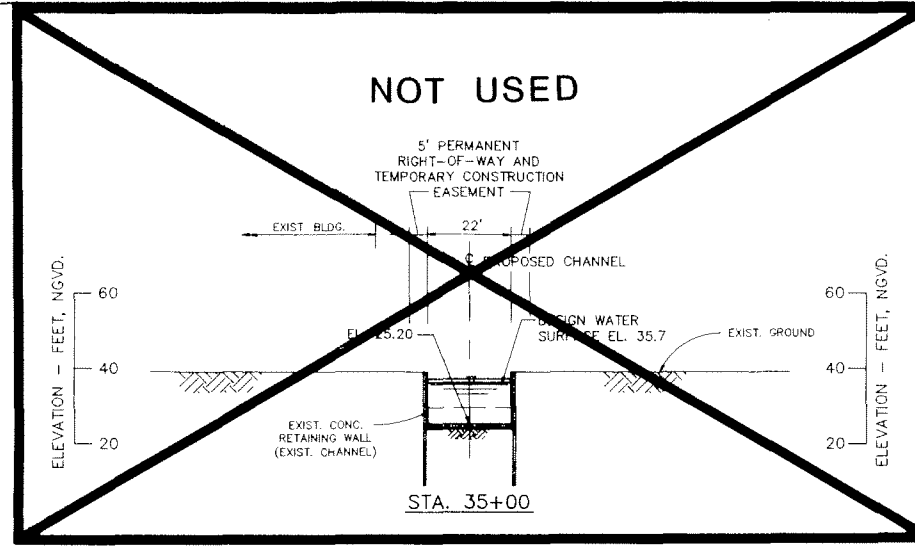
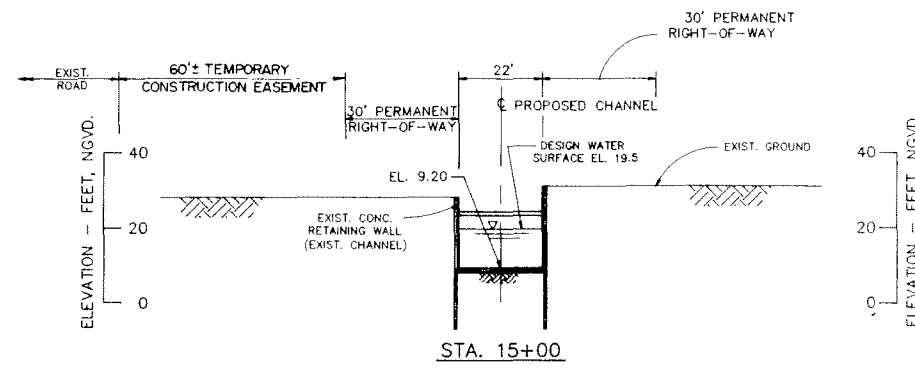
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 STA 40+00 TO STA 77+28.84
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



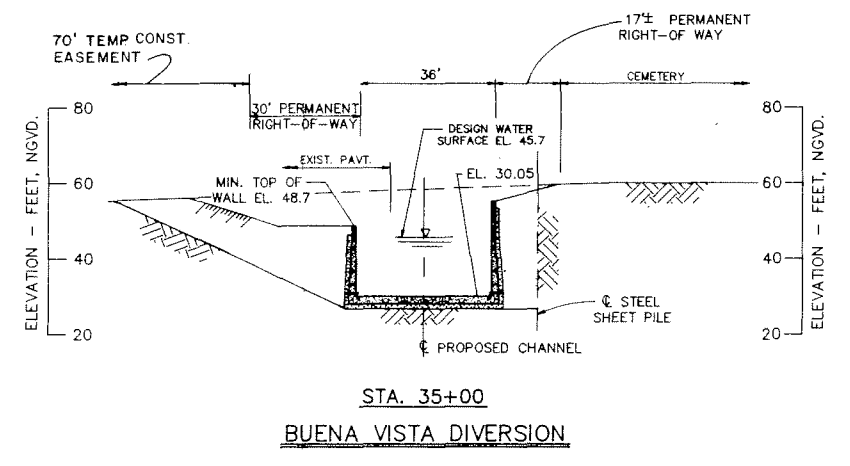
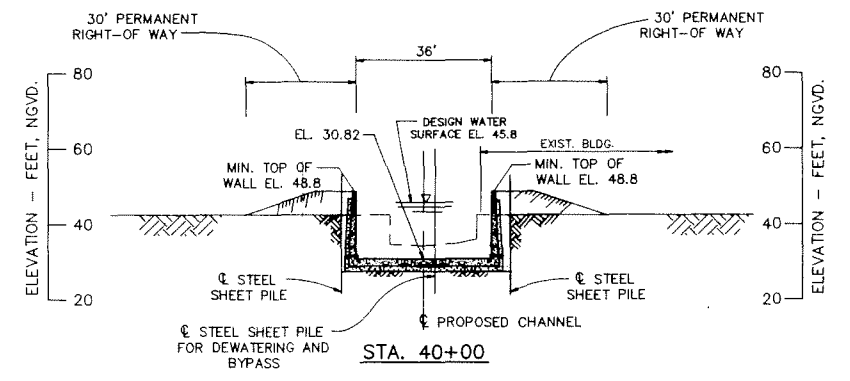
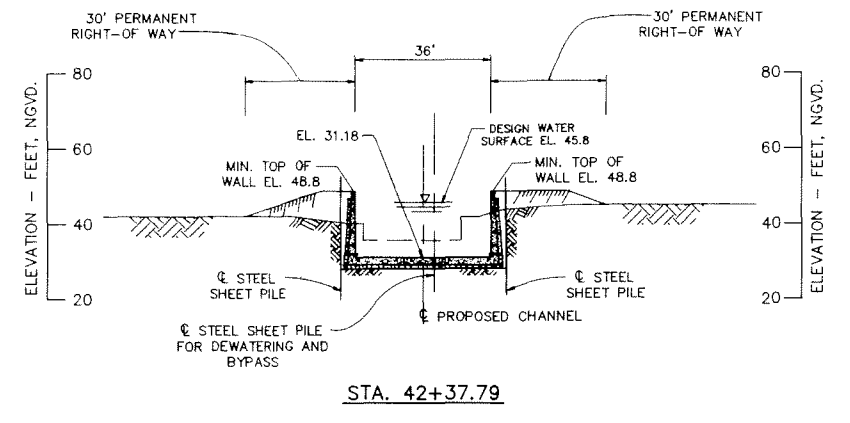
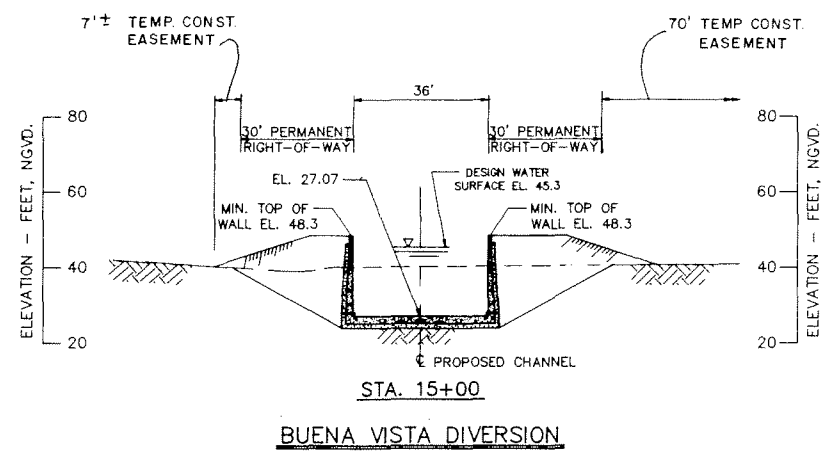
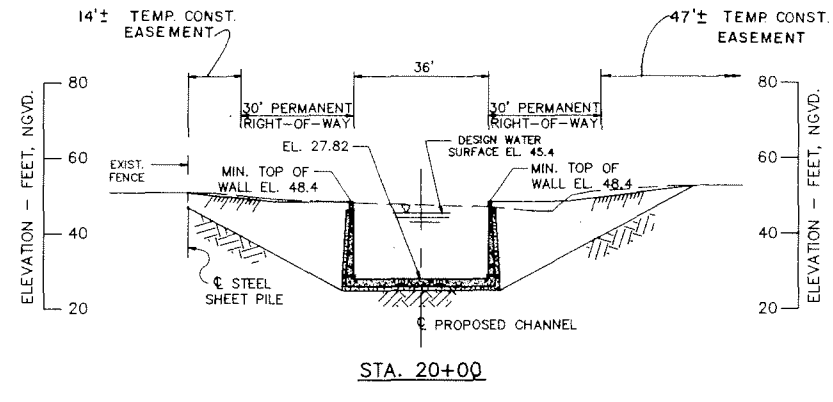
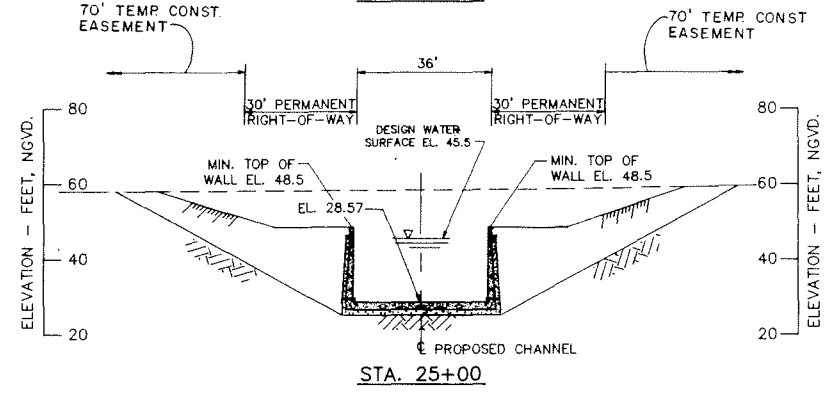
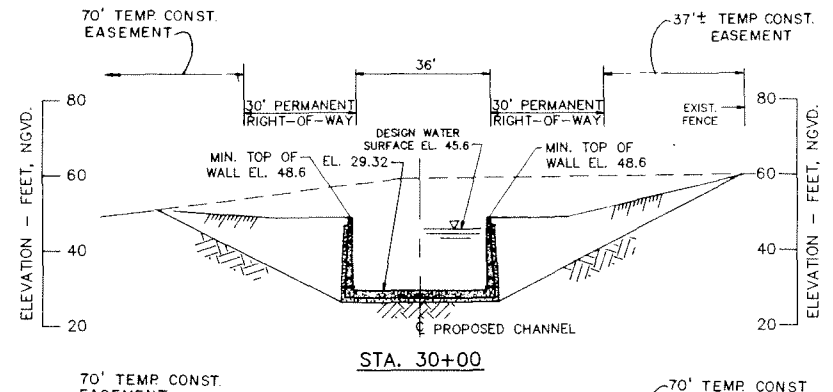
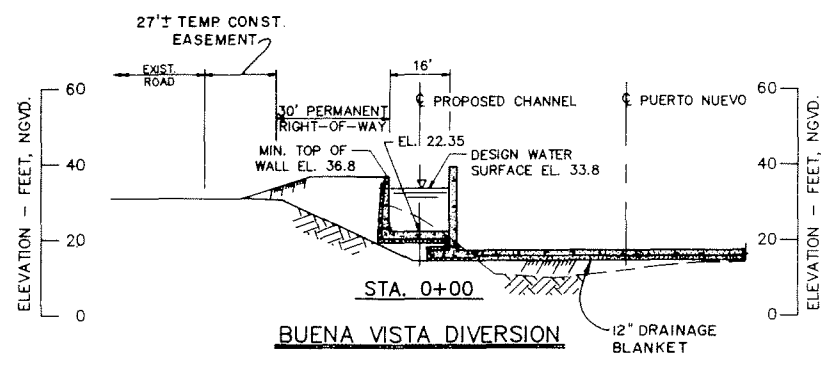
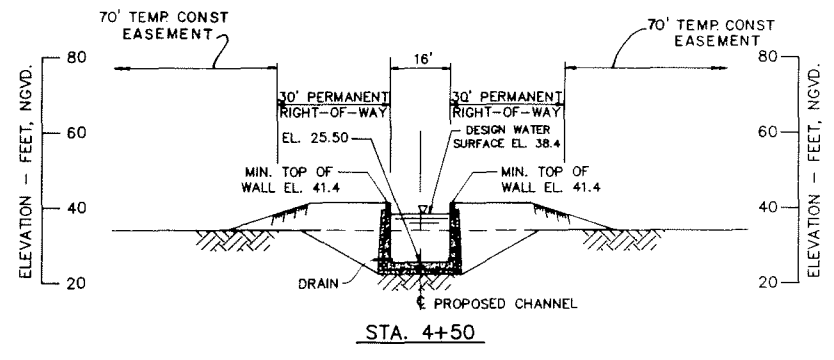
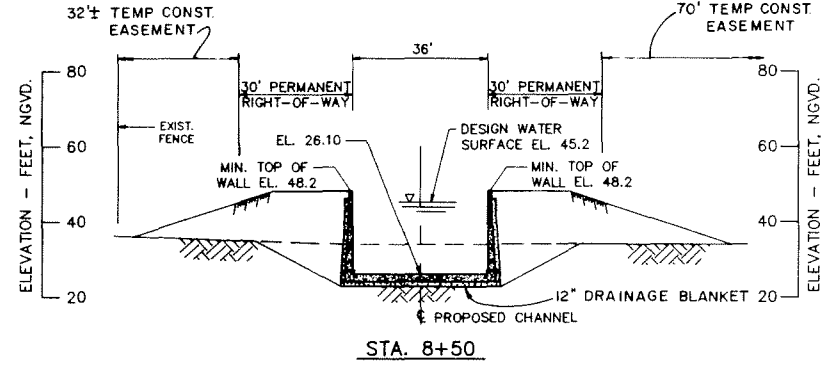
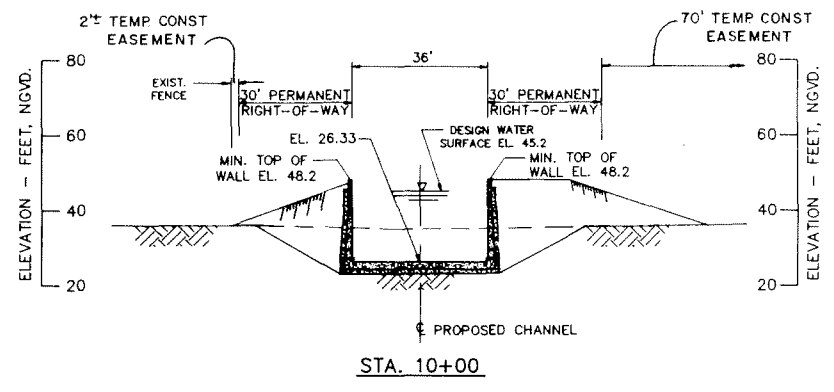
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 STA 0+00 TO STA 35+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



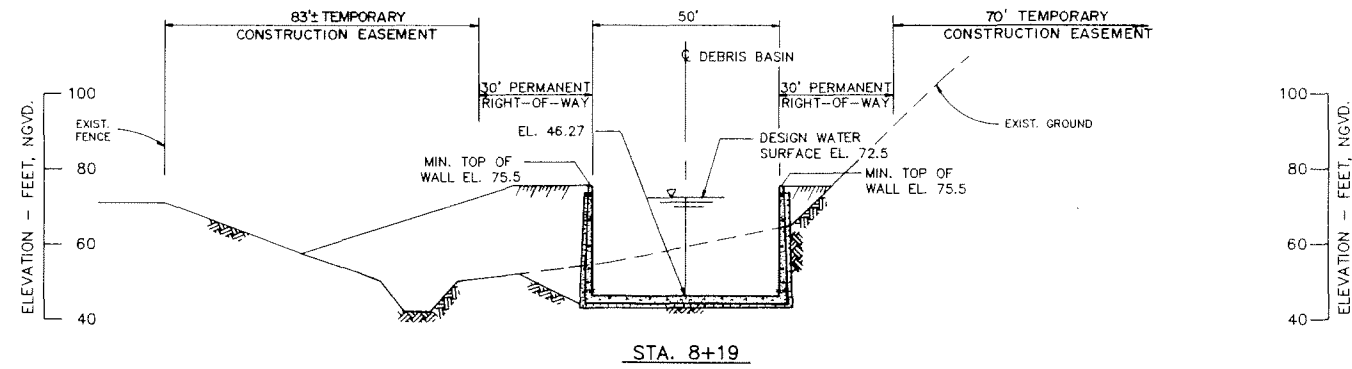
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 STA 40+00 TO STA 77+28.84
CHANNEL CROSS SECTIONS
 STRUCTURAL
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,678 DECEMBER 1990



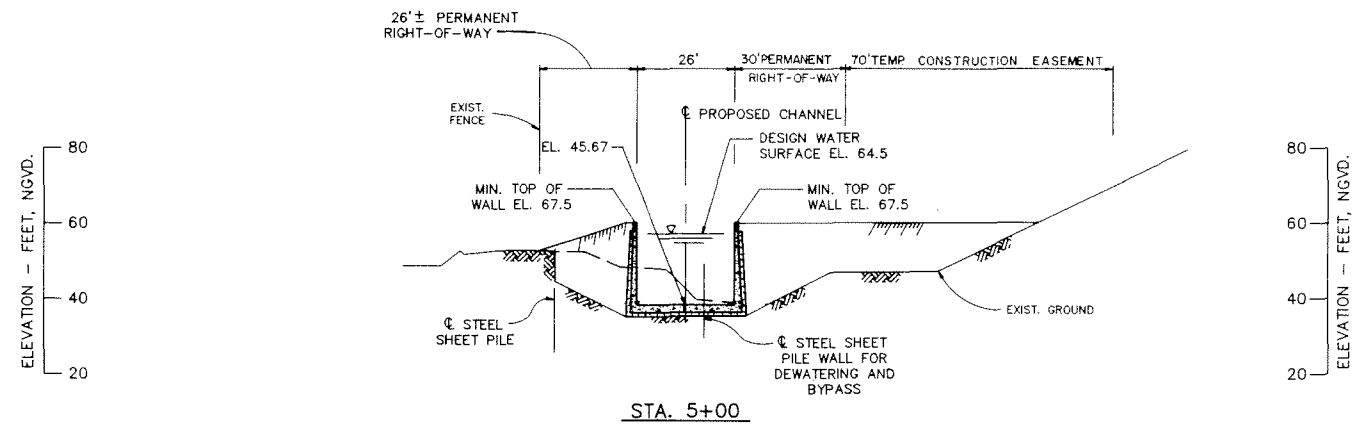
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 DONA ANA TRIBUTARY
 STA 0+00 TO STA 30+00
CHANNEL CROSS SECTIONS
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



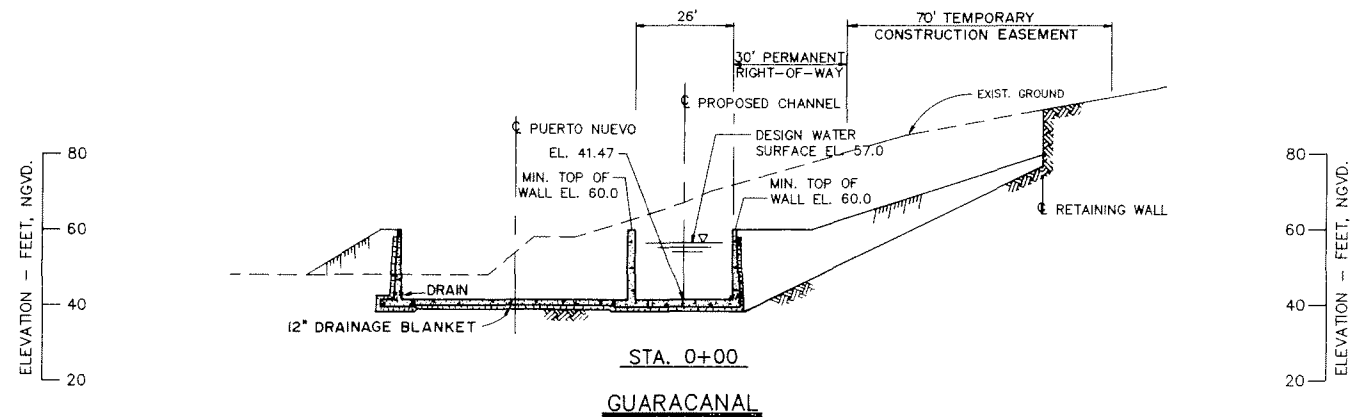
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 BUENA VISTA DIVERSION CHANNEL
 STA 0+00 TO STA 42+37.79
CHANNEL CROSS SECTIONS
 STRUCTURAL
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



STA. 8+19

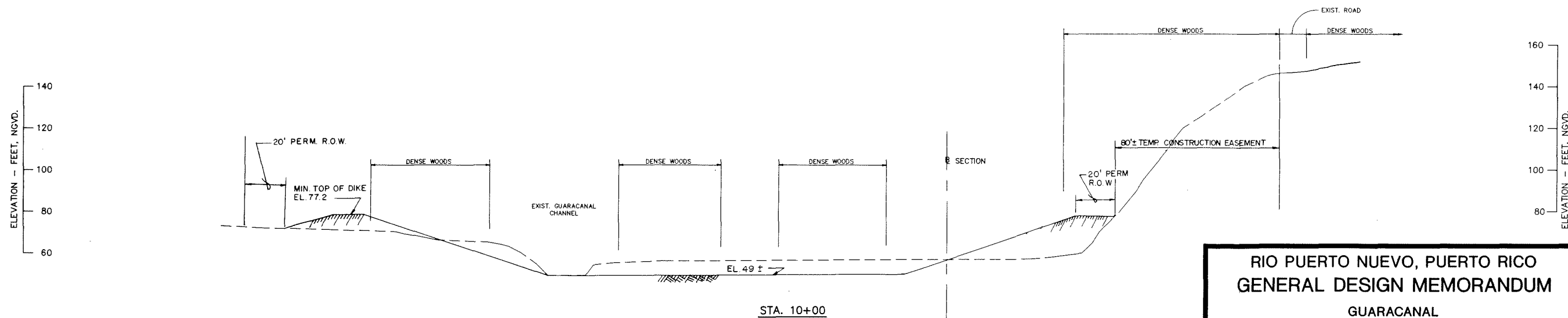
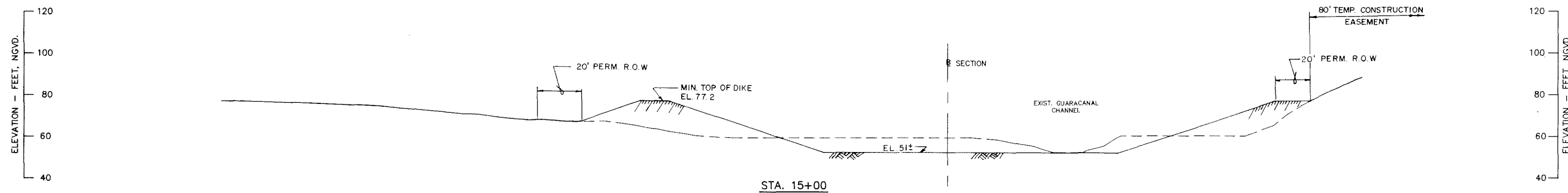
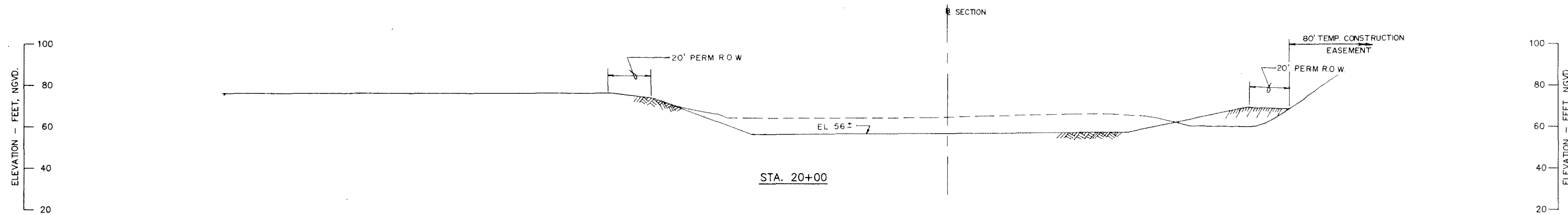


STA. 5+00



STA. 0+00
GUARACANAL

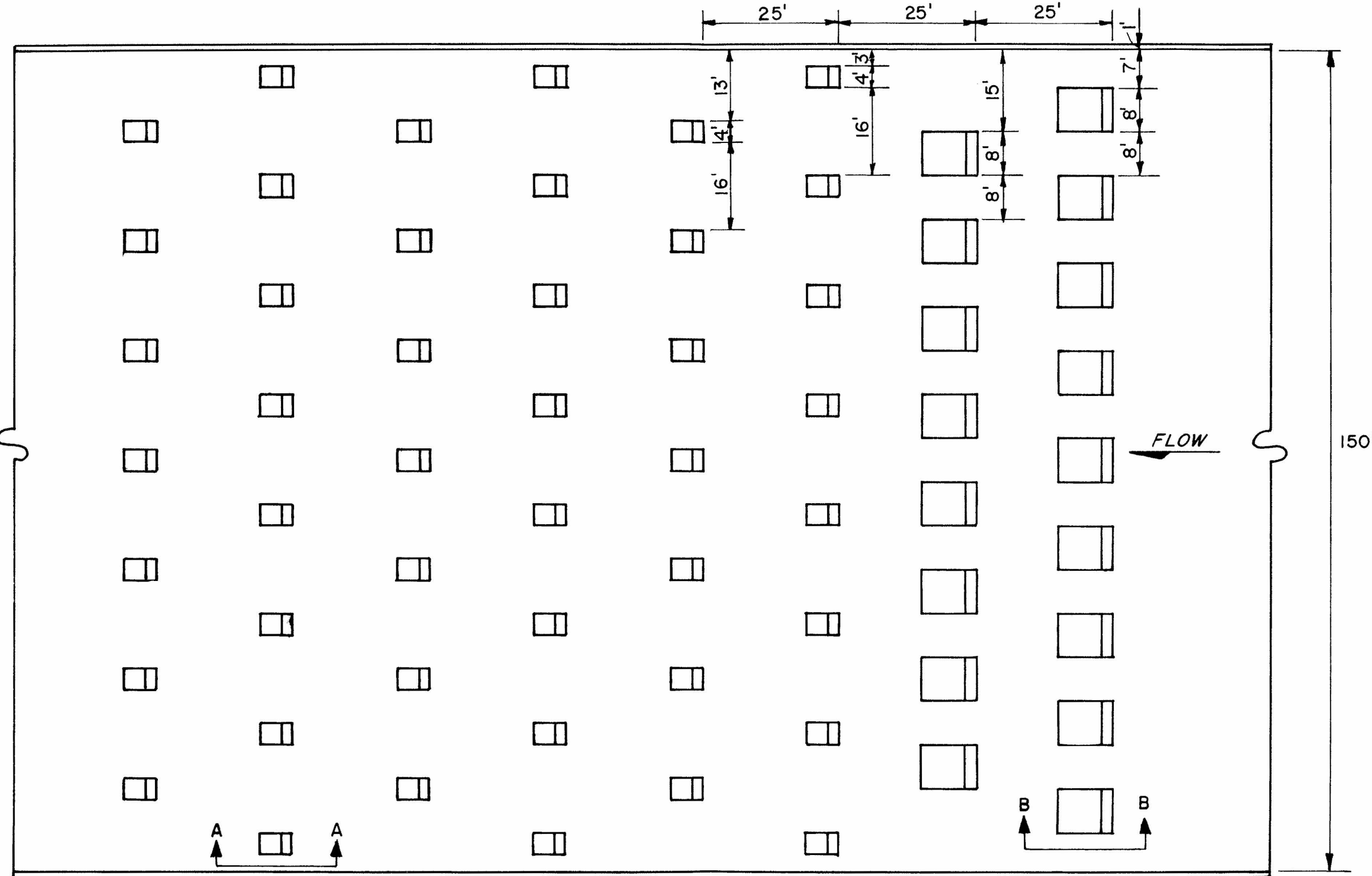
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 GUARACANAL
 STA 0+00 TO STA 8+19
CHANNEL CROSS SECTIONS
 STRUCTURAL
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



GUARACANAL CHANNEL
DEBRIS BASIN

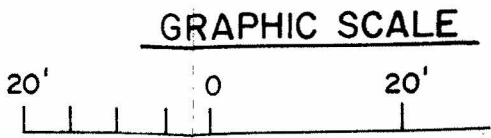
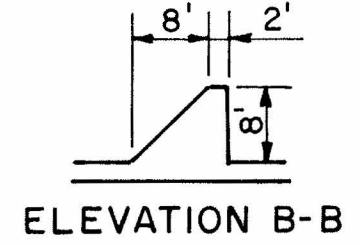
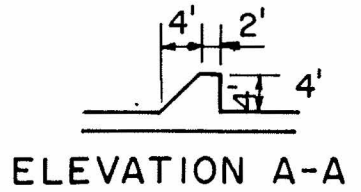
RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
GUARACANAL
STA 10+00 TO STA 20+00
CHANNEL CROSS SECTIONS
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578
DECEMBER 1990

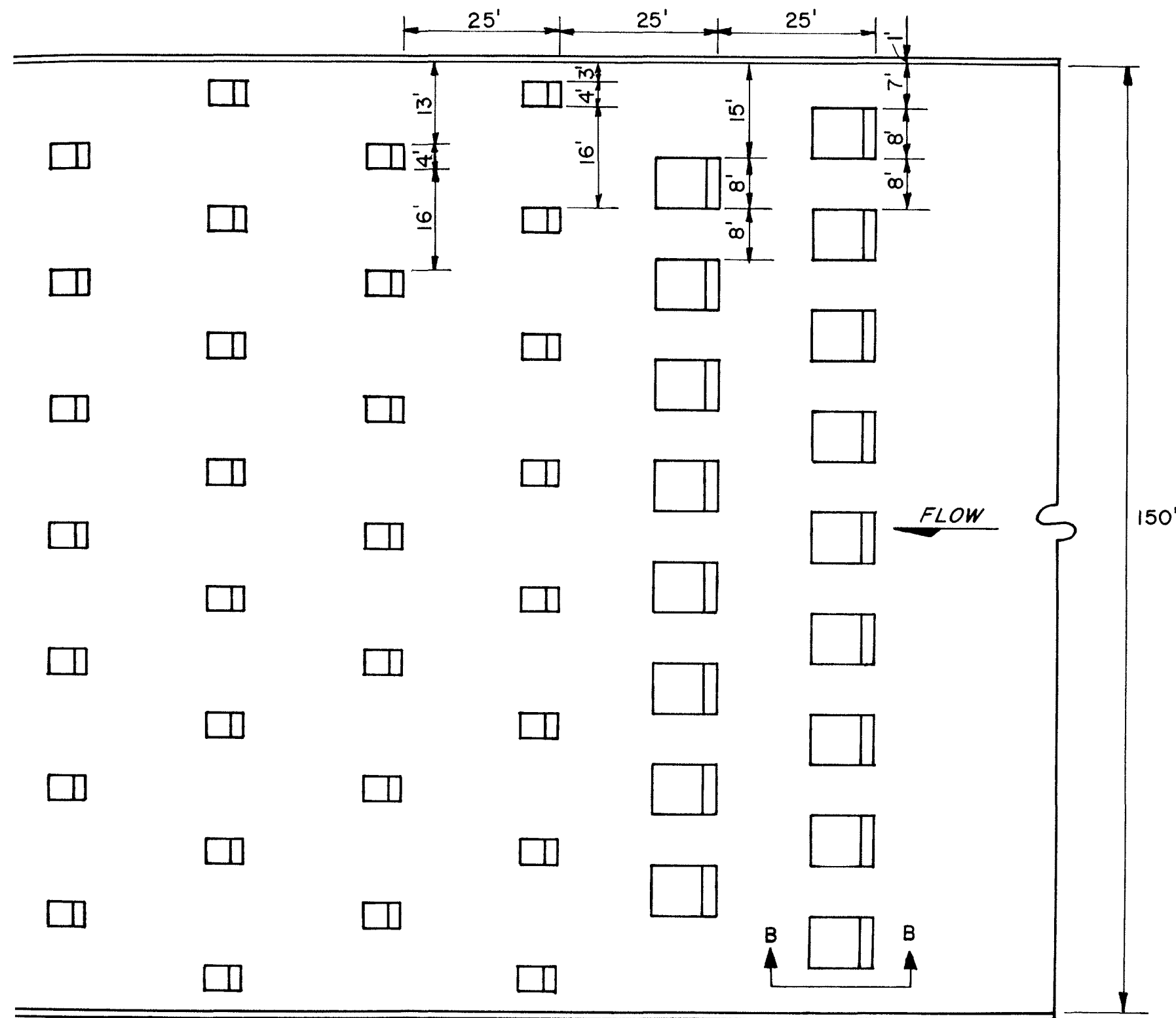
NOTES:
 1. UPSTR
 BEGIN



147+50 148+00 148+50 149+00 149+50

PLAN





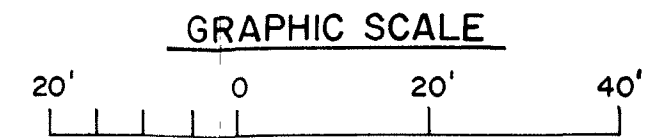
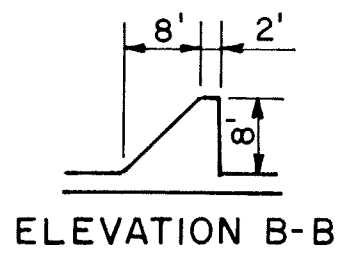
NOTES:
 1. UPSTREAM ROW OF BAFFLES
 BEGIN STA. 149+41.18

148+50

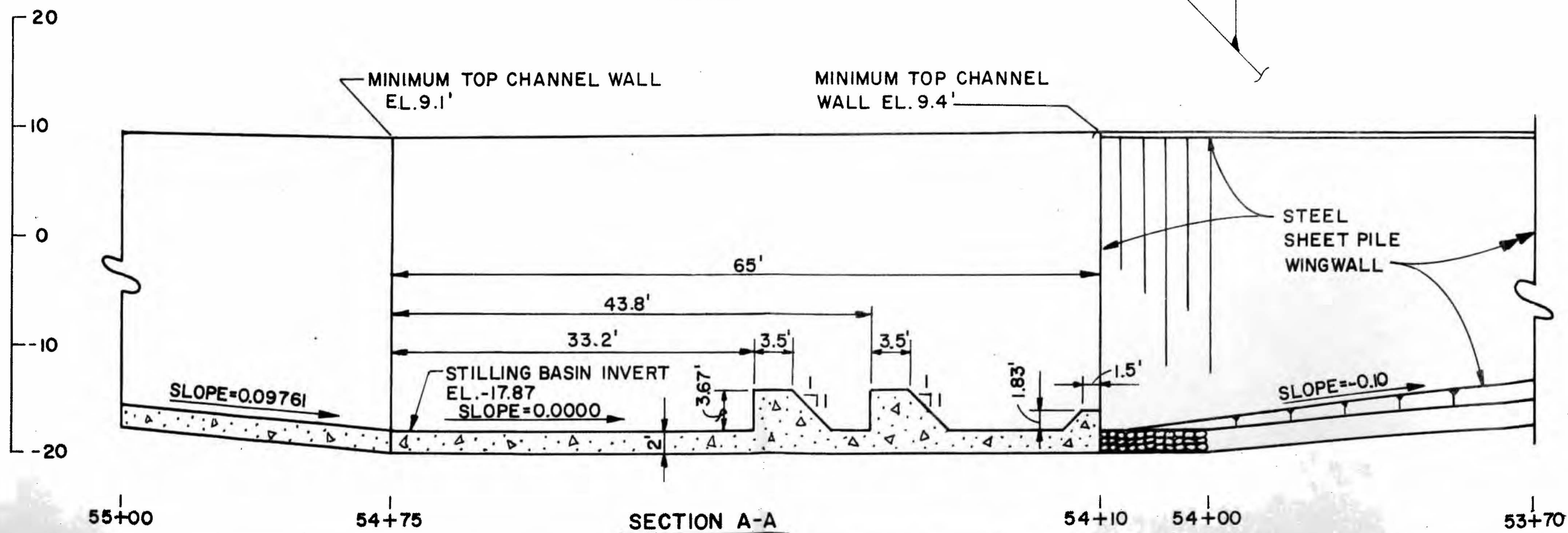
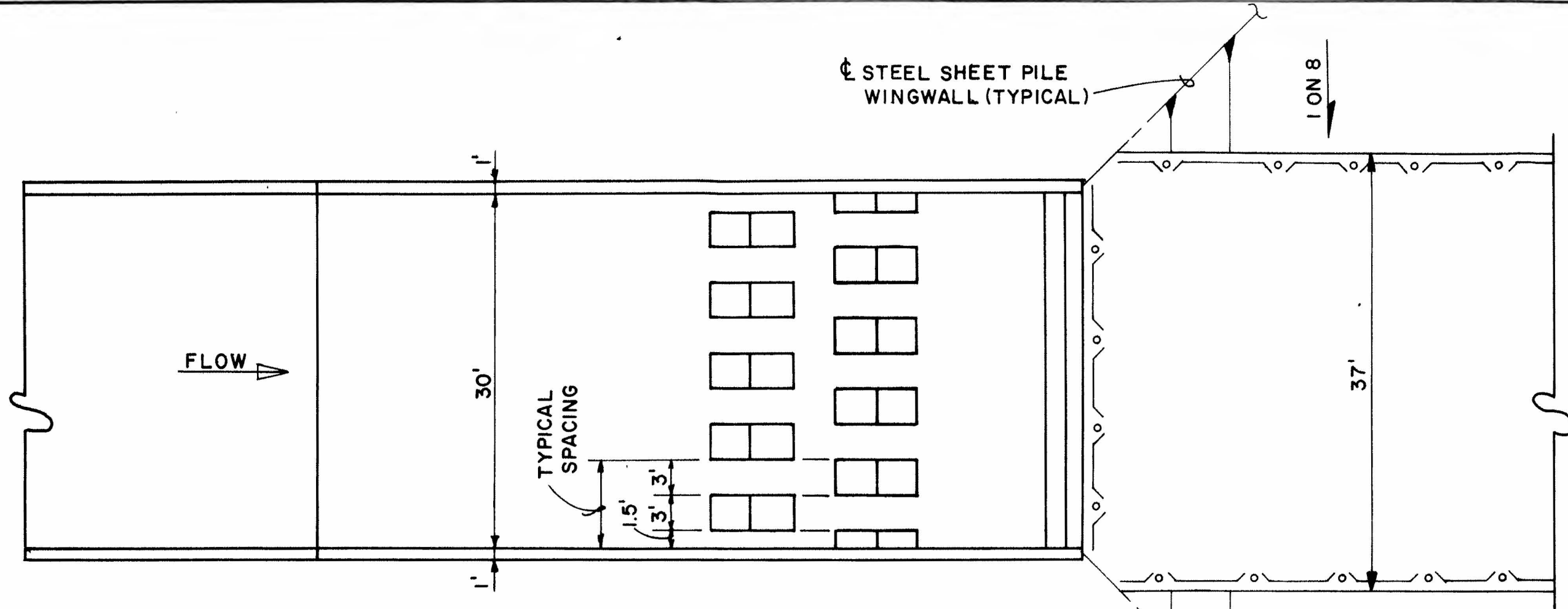
149+00

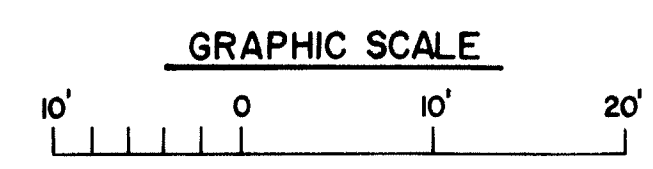
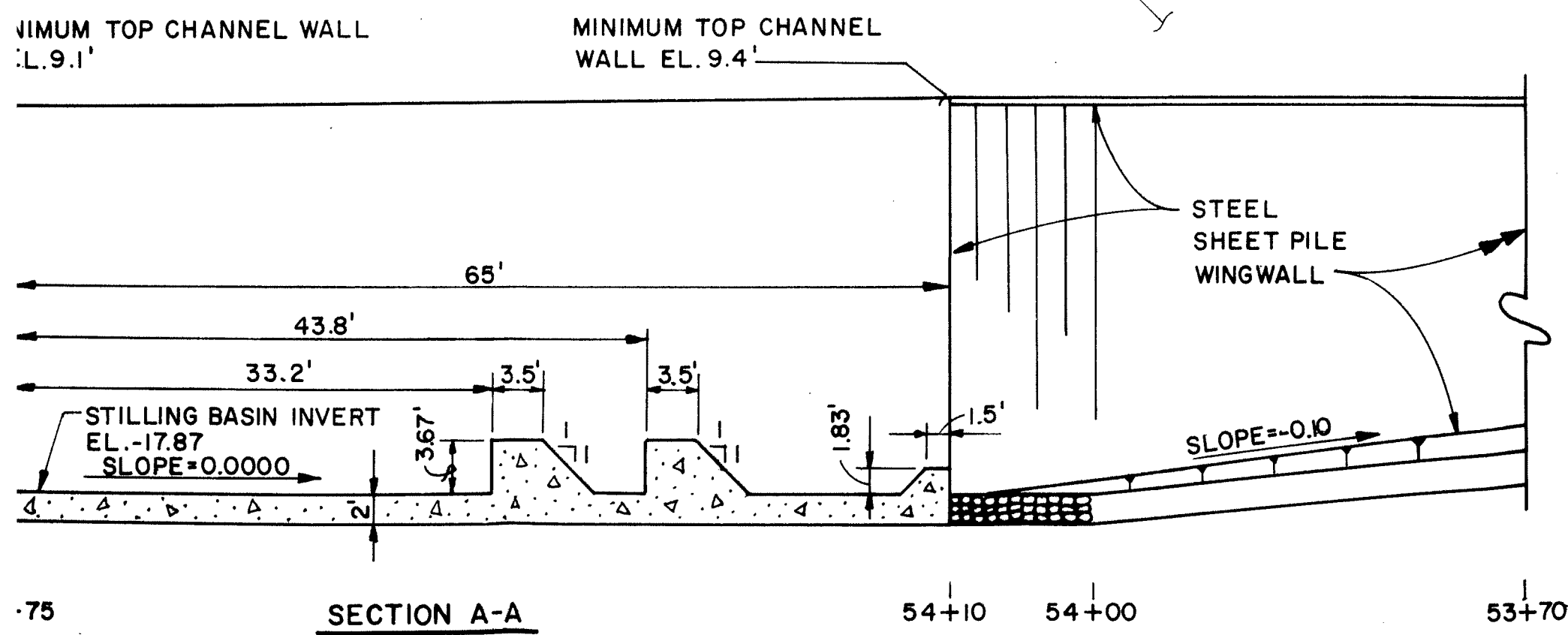
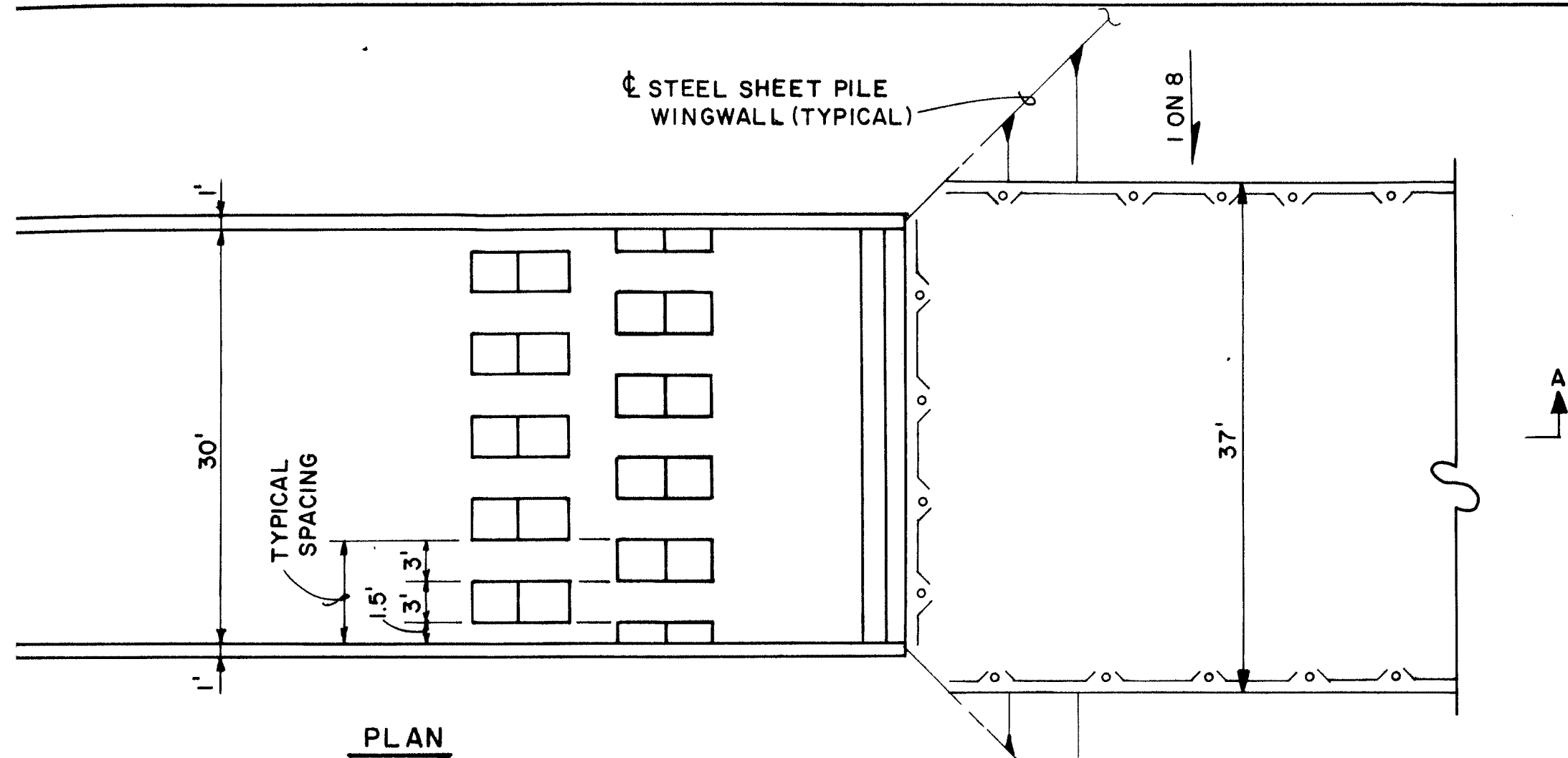
149+50

PLAN



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL
 STILLING AREA
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-38,578
 DECEMBER 1990



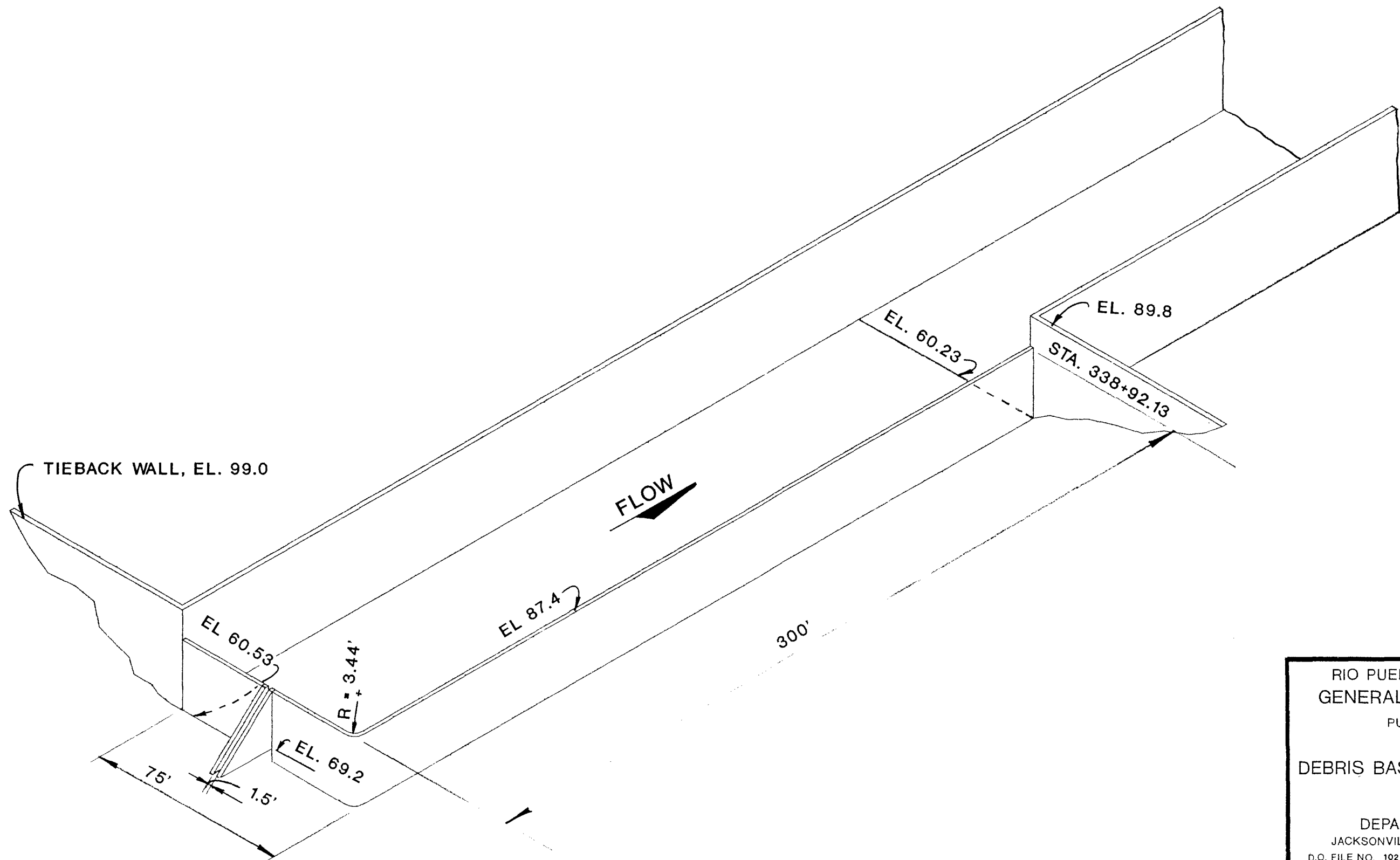


RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 MARGARITA TRIBUTARY

STILLING AREA

STRUCTURAL

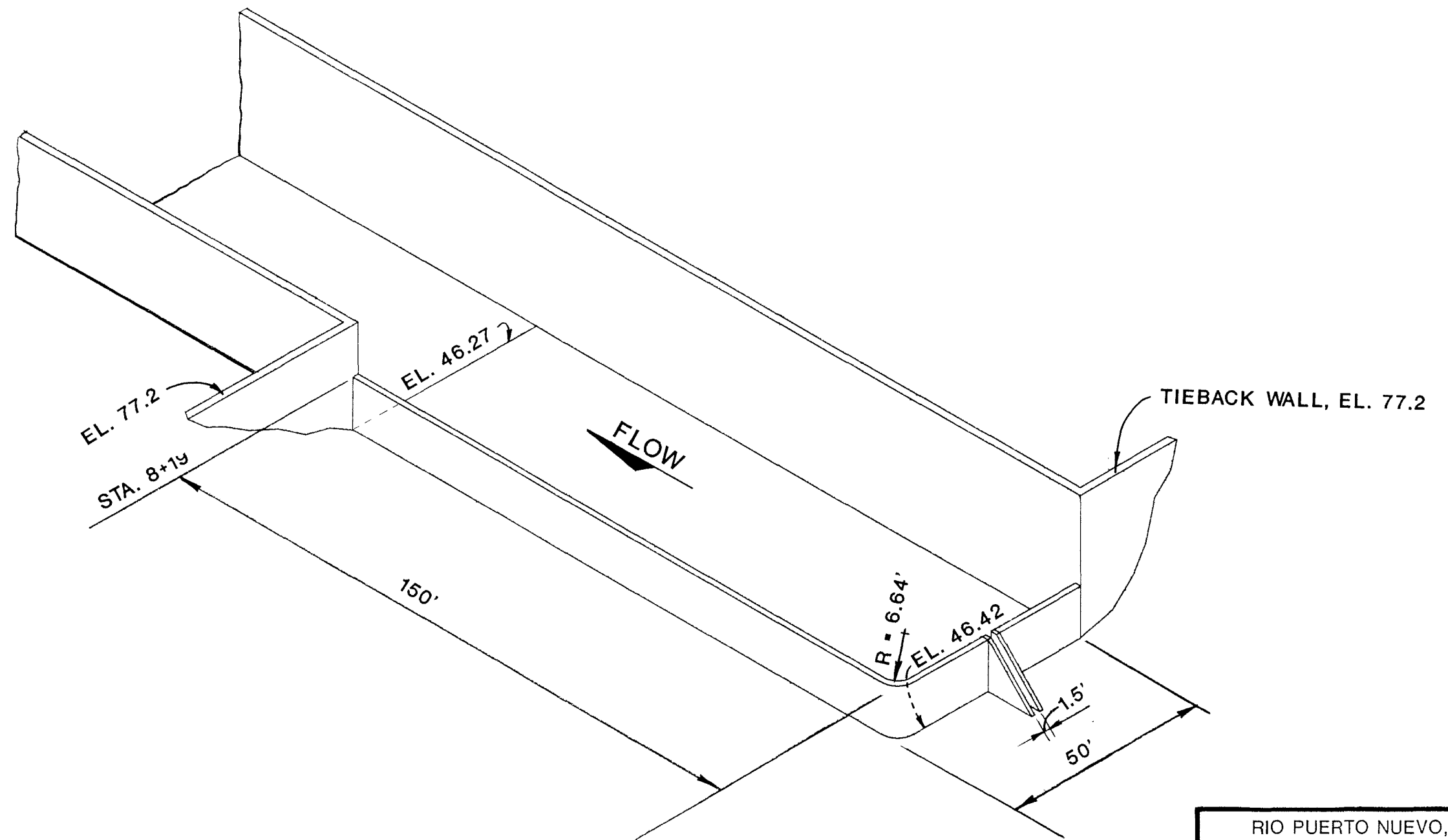
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL

 DEBRIS BASIN OVER-FLOW SPILLWAY

 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 GUARACANAL

DEBRIS BASIN OVER-FLOW SPILLWA

STRUCTURAL

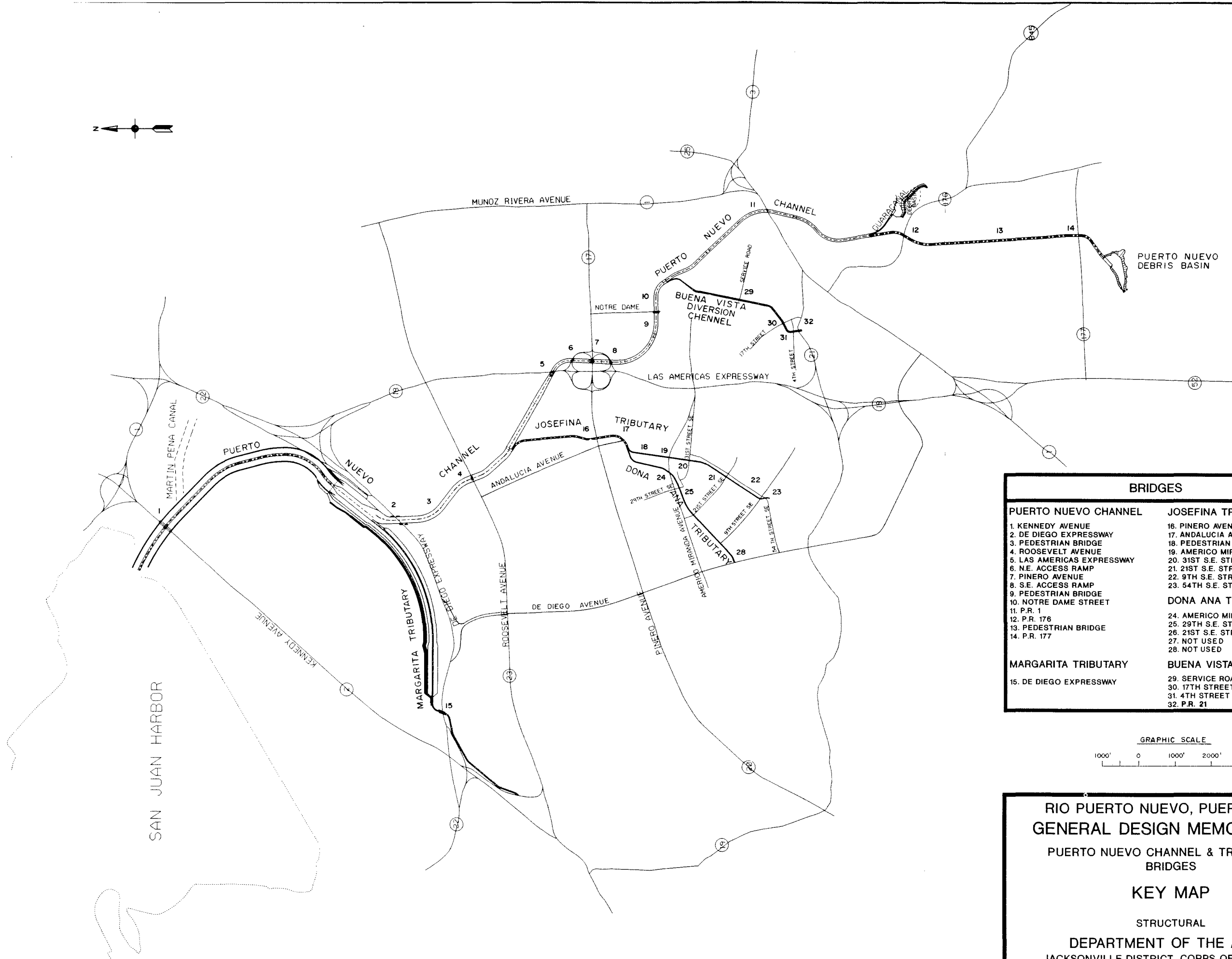
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

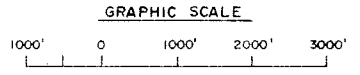
DECEMBER 1990

PLATE S-8C



BRIDGES

PUERTO NUEVO CHANNEL	JOSEFINA TRIBUTARY
1. KENNEDY AVENUE	16. PINERO AVENUE
2. DE DIEGO EXPRESSWAY	17. ANDALUCIA AVENUE
3. PEDESTRIAN BRIDGE	18. PEDESTRIAN BRIDGE
4. ROOSEVELT AVENUE	19. AMERICO MIRANDA AVENUE
5. LAS AMERICAS EXPRESSWAY	20. 31ST S.E. STREET
6. N.E. ACCESS RAMP	21. 21ST S.E. STREET
7. PINERO AVENUE	22. 9TH S.E. STREET
8. S.E. ACCESS RAMP	23. 54TH S.E. STREET
9. PEDESTRIAN BRIDGE	
10. NOTRE DAME STREET	DONA ANA TRIBUTARY
11. P.R. 1	24. AMERICO MIRANDA AVENUE
12. P.R. 176	25. 29TH S.E. STREET
13. PEDESTRIAN BRIDGE	26. 21ST S.E. STREET
14. P.R. 177	27. NOT USED
	28. NOT USED
MARGARITA TRIBUTARY	BUENA VISTA DIVERSION
15. DE DIEGO EXPRESSWAY	29. SERVICE ROAD
	30. 17TH STREET
	31. 4TH STREET
	32. P.R. 21



**RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM**

PUERTO NUEVO CHANNEL & TRIBUTARIES
BRIDGES

KEY MAP

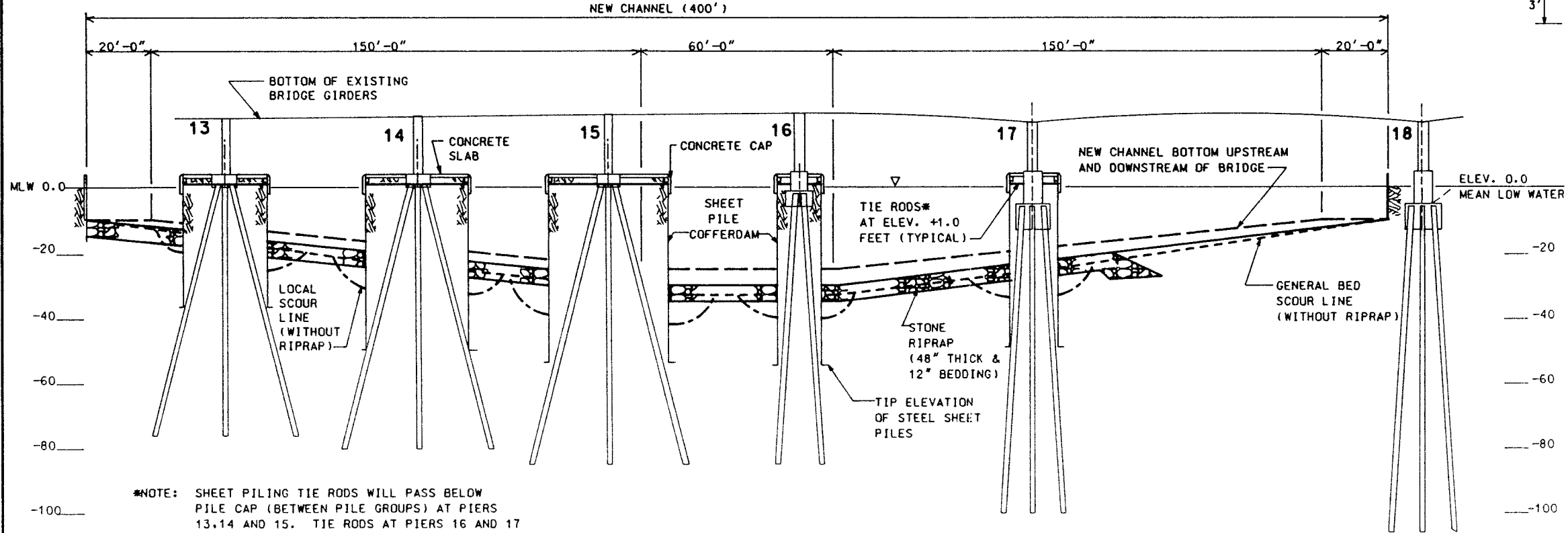
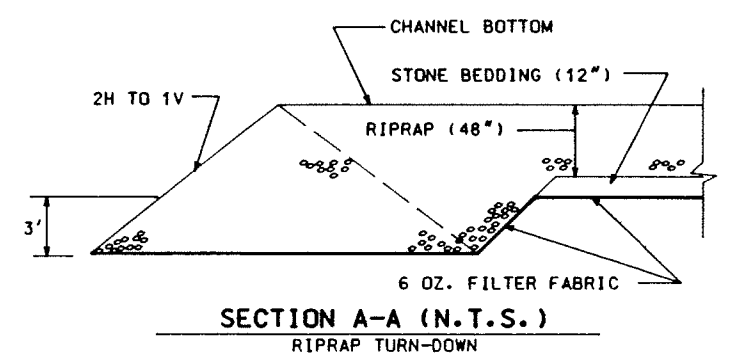
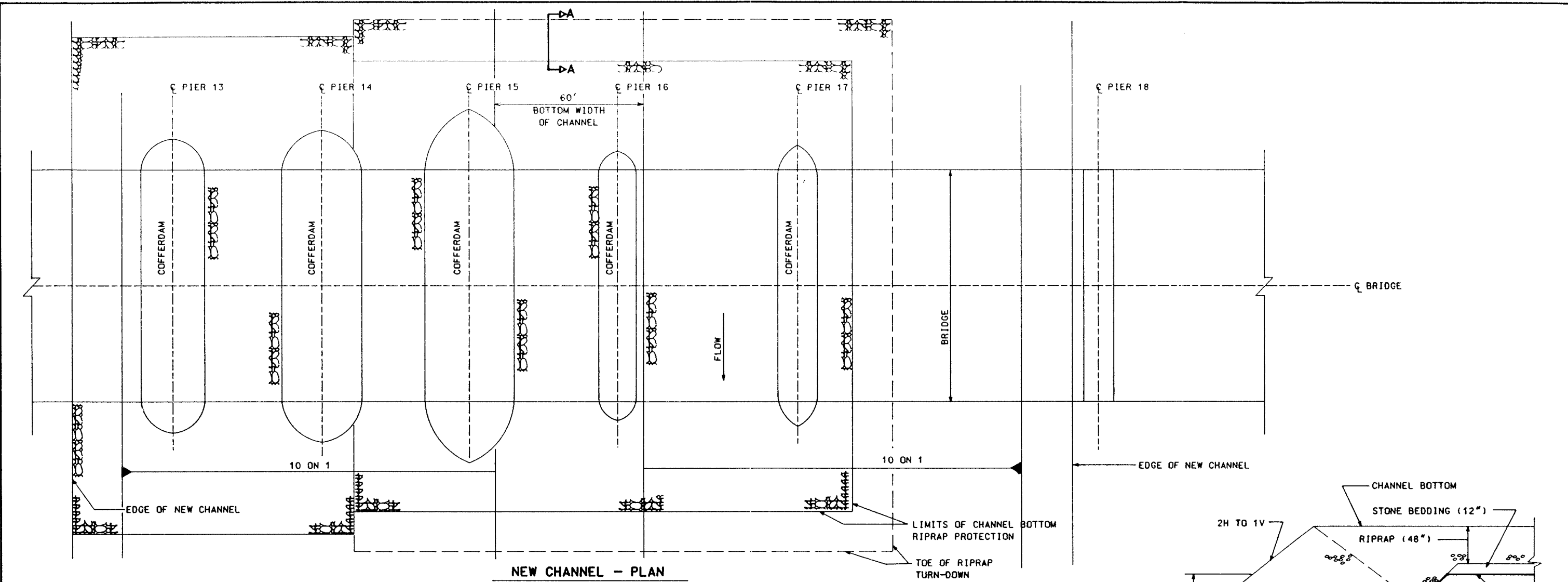
STRUCTURAL

DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990



*NOTE: SHEET PILING TIE RODS WILL PASS BELOW PILE CAP (BETWEEN PILE GROUPS) AT PIERS 13, 14 AND 15. TIE RODS AT PIERS 16 AND 17 WILL BE ANCHORED TO EXISTING PIER BASE.

LEGEND
13 BRIDGE PIER NUMBER DESIGNATION

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
BRIDGE MODIFICATIONS

KENNEDY AVENUE

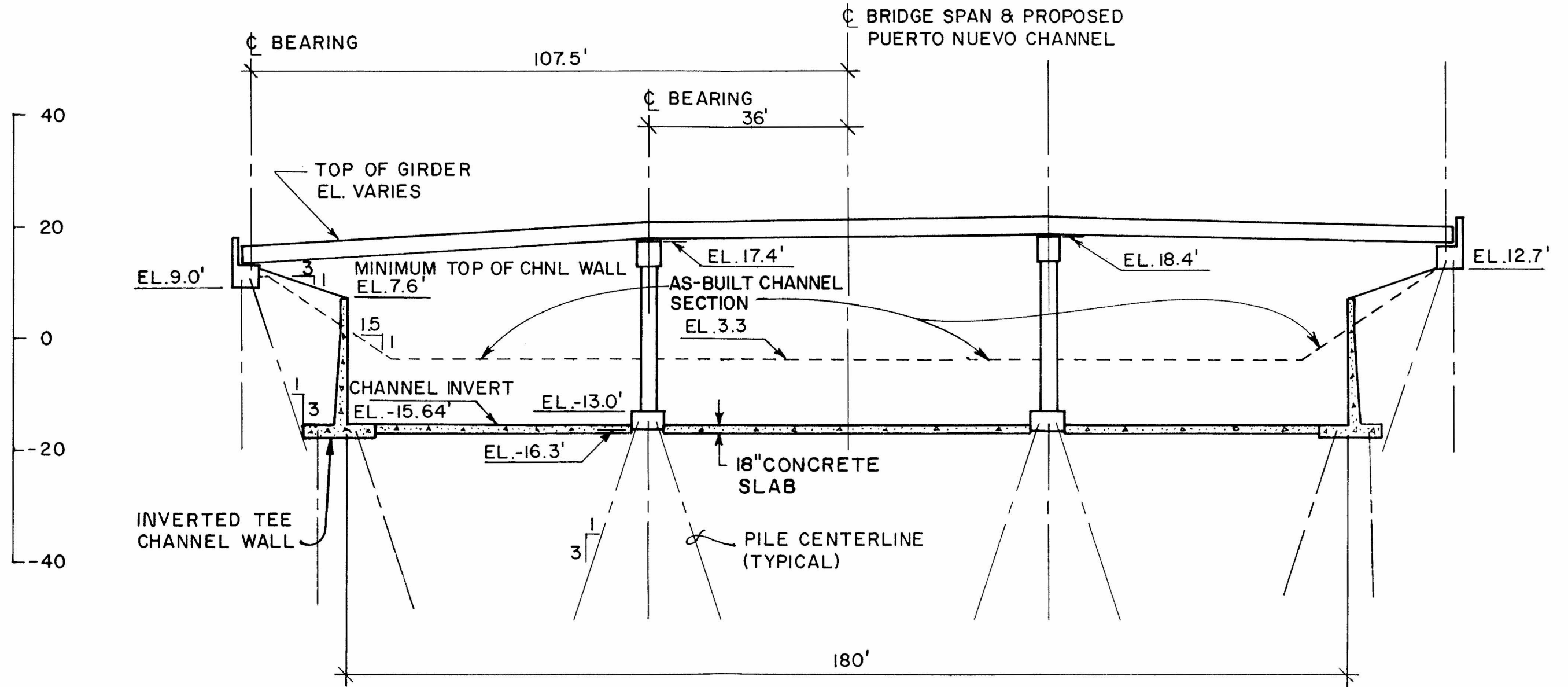
STRUCTURAL

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578

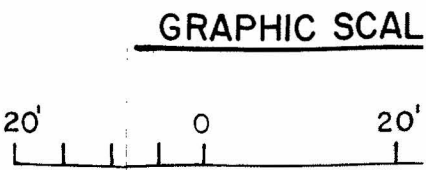
DECEMBER 1990

NOT

- 1.
- 2.
- 3.
- 4.
- 5.

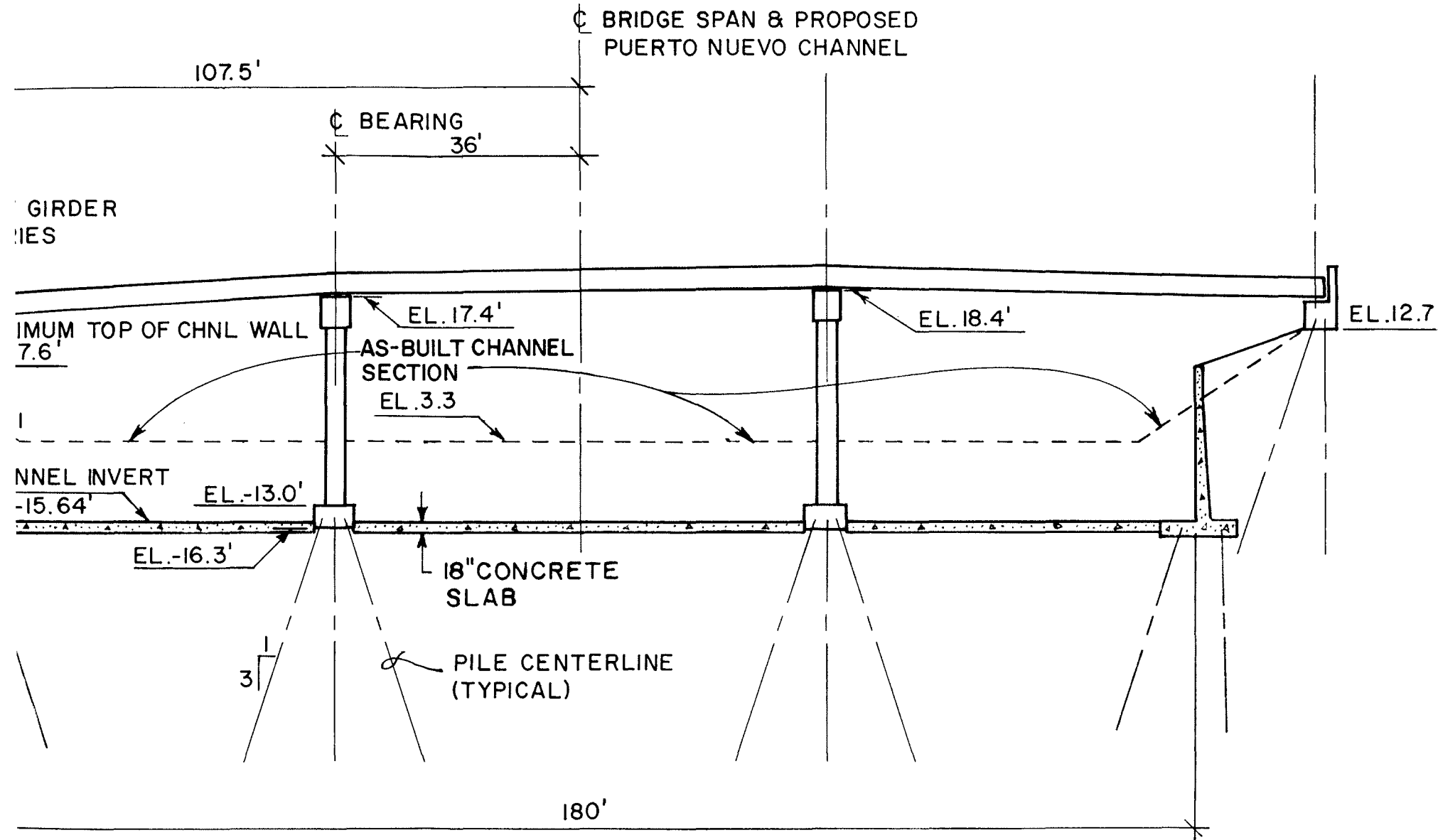


ELEVATION
PUERTO NUEVO STA. 93 + 58
VIEW: UPSTREAM



NOTES:

1. EXISTING REINFORCED CONCRETE BRIDGE TO REMAIN.
2. ALL BRIDGE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE, SCALED FROM PR DOT METRIC CONSTRUCTION DRAWINGS.
3. PILE BATTERS ARE TAKEN FROM PR DOT CONSTRUCTION DRAWINGS AND ARE ASSUMED TO REFLECT AS-BUILT CONDITIONS. ESTIMATED LENGTH OF PILES IS 65 FEET FOR EAST BOUND BRIDGE AND 75 FEET FOR WEST BOUND BRIDGE.
4. BRIDGE SPAN AND CHANNEL SECTION ARE SYMMETRICAL ABOUT CHANNEL CENTERLINE.
5. CHANNEL CENTERLINE INTERSECTS EXPRESSWAY CENTERLINE AT APPROXIMATELY 46 DEGREES. ELEVATION IS CUT PERPENDICULAR TO CHANNEL CENTERLINE.



ELEVATION
 PUERTO NUEVO STA. 93 + 58
 VIEW: UPSTREAM

GRAPHIC SCALE



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
 BRIDGE MODIFICATIONS

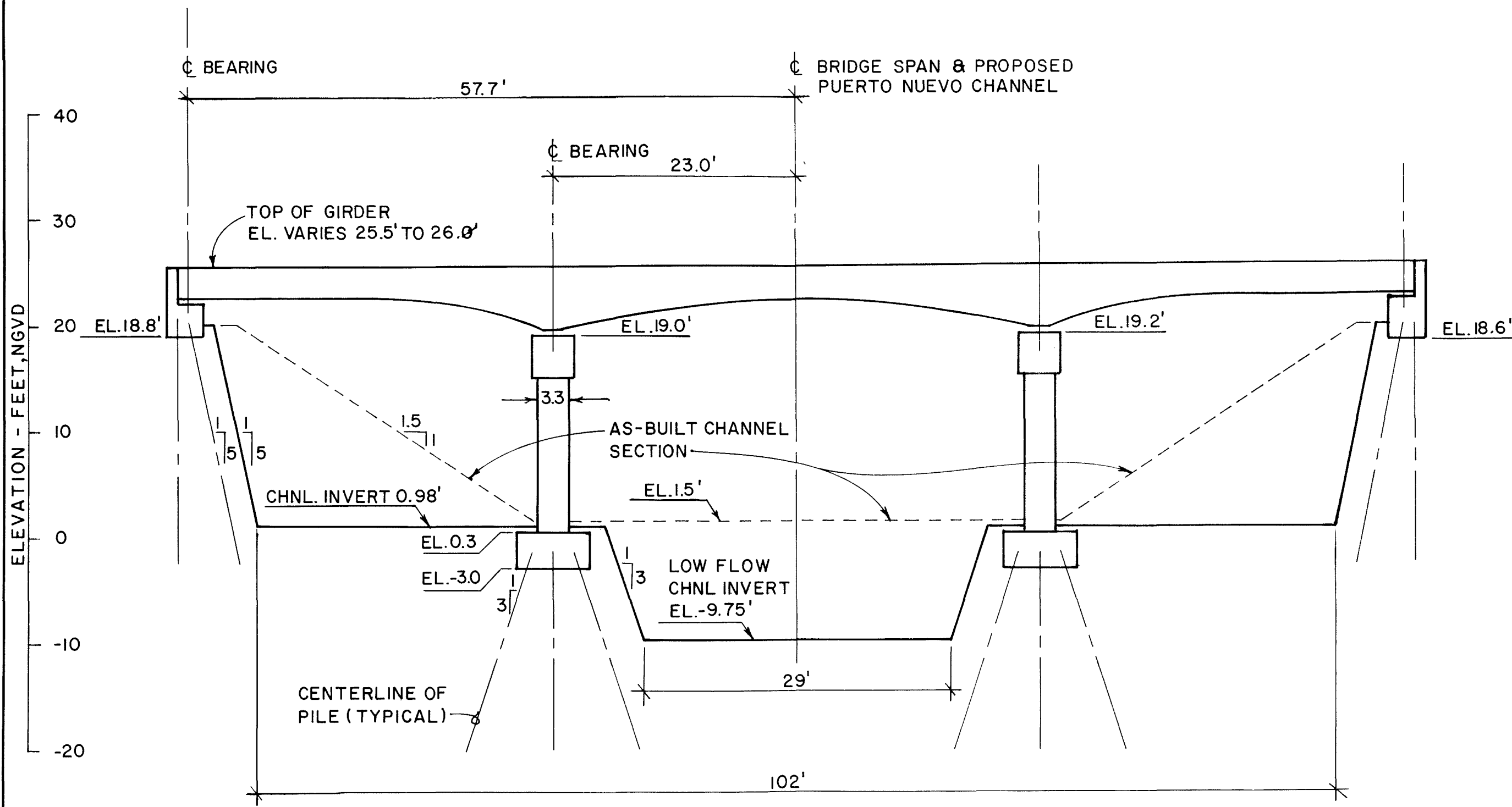
DE DIEGO EXPRESSWAY

STRUCTURAL

DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990

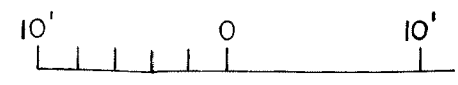


ELEVATION
 PUERTO NUEVO STA. 156 + 65

NOTES:

1. EXI REM
2. ALL APP CON
3. PIL DRA CON FEE
4. BRI ABC
5. CHA AT PER
6. REF CON

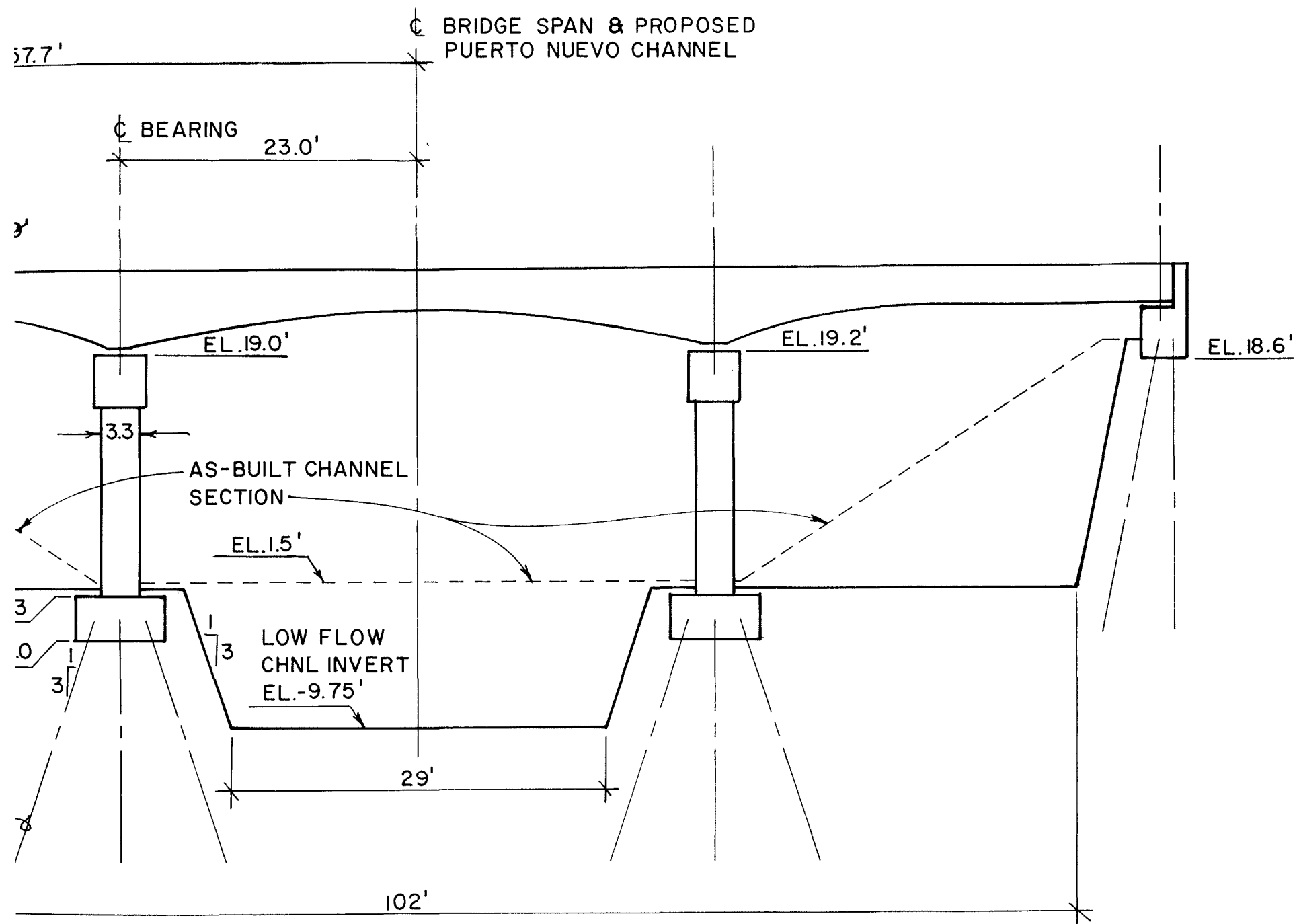
GRAPHIC SCAL



LAS AMERICAS EXPRESSWAY

NOTES:

1. EXISTING REINFORCED CONCRETE BRIDGE TO REMAIN.
2. ALL BRIDGE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE, SCALED FROM PR DOT METRIC CONSTRUCTION DRAWINGS.
3. PILE BATTERS ARE TAKEN FROM PR DOT CONSTRUCTION DRAWINGS AND ARE ASSUMED TO REFLECT AS-BUILT CONDITIONS. ESTIMATED LENGTH OF PILES IS 45 FEET FOR BRIDGE PIERS AND 50 FEET FOR ABUTMENTS.
4. BRIDGE SPAN AND CHANNEL SECTION ARE SYMMETRICAL ABOUT CHANNEL CENTERLINE.
5. CHANNEL CENTERLINE INTERSECTS EXPRESSWAY CENTERLINE AT APPROXIMATELY 58 DEGREES. ELEVATION IS CUT PERPENDICULAR TO CHANNEL CENTERLINE.
6. REFERENCE PLATE NO. S-88 FOR CHANNEL CONSTRUCTION METHOD.



ELEVATION
 PUERTO NUEVO STA. 156 + 65

GRAPHIC SCALE



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
 BRIDGE MODIFICATIONS

LAS AMERICAS EXPRESSWAY

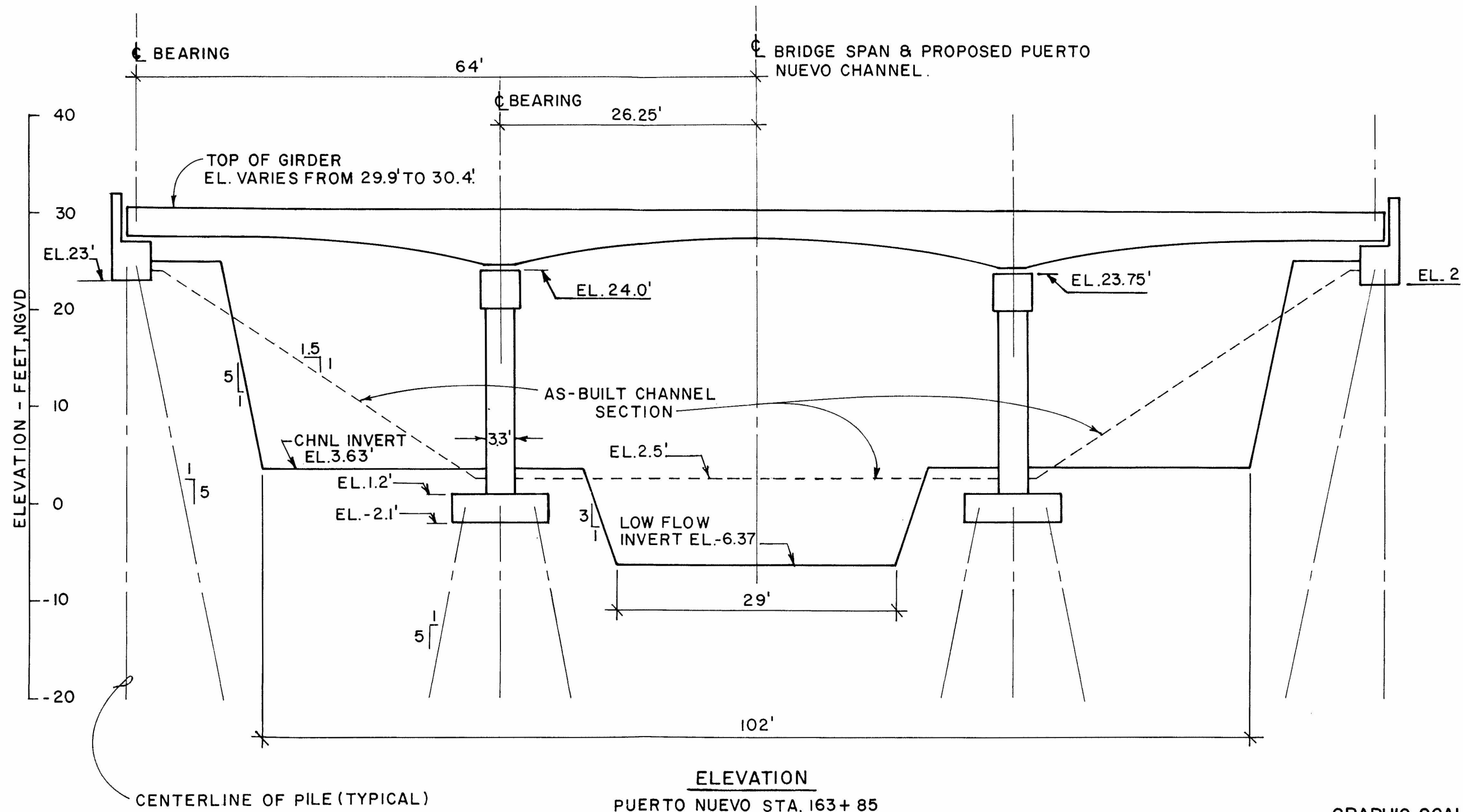
STRUCTURAL

DEPARTMENT OF THE ARMY

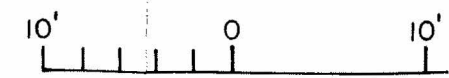
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

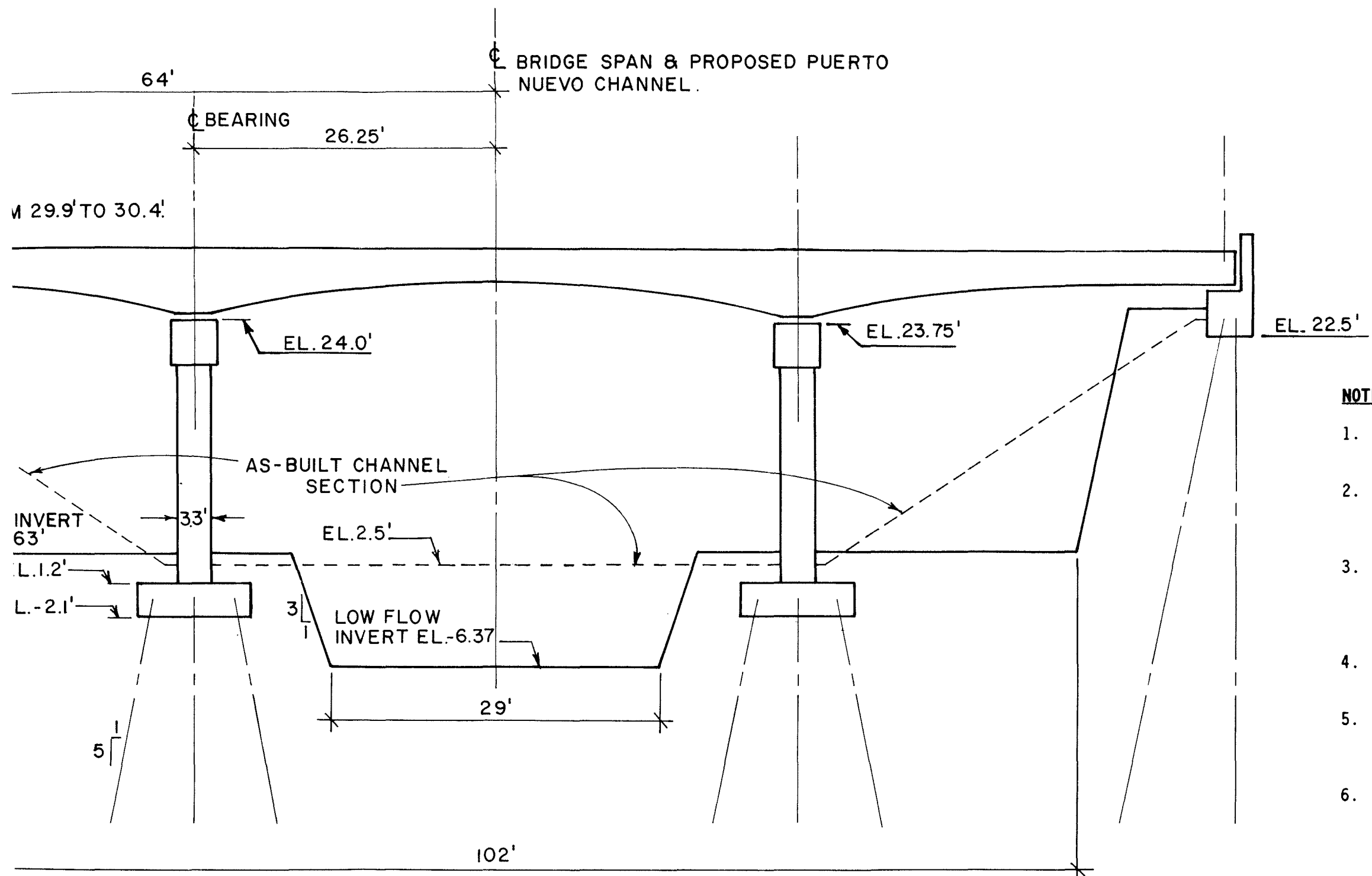
D.O. FILE NO. 102-35,578

DECEMBER 1990



GRAPHIC SCAL



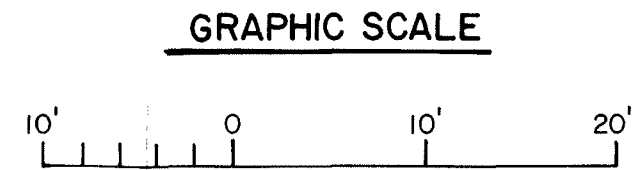


NORTH EAST ACCESS RAMP - LAS AMERICAS EXPRESSWAY

NOTES:

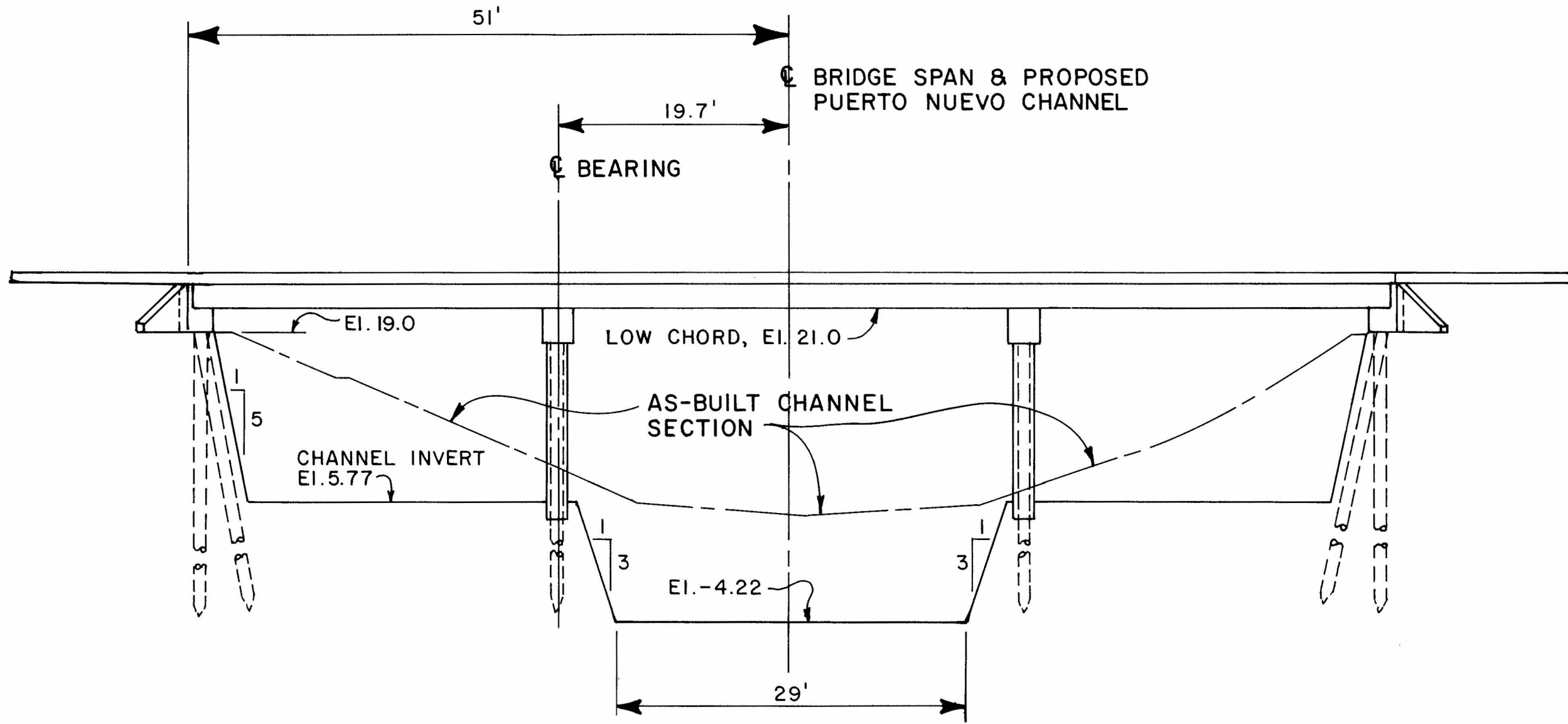
1. EXISTING REINFORCED CONCRETE BRIDGE TO REMAIN.
2. ALL BRIDGE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE, SCALED FROM PR DOT METRIC CONSTRUCTION DRAWINGS.
3. PILE BATTERS ARE TAKEN FROM PR DOT CONSTRUCTION DRAWINGS AND ARE ASSUMED TO REFLECT AS-BUILT CONDITIONS. ESTIMATED LENGTH OF PILES IS 50 FEET FOR BRIDGE PIERS AND 55 FEET FOR ABUTMENTS.
4. BRIDGE SPAN AND CHANNEL SECTION ARE SYMMETRICAL ABOUT CHANNEL CENTERLINE.
5. CHANNEL CENTERLINE INTERSECTS EXPRESSWAY CENTERLINE AT APPROXIMATELY 58 DEGREES. ELEVATION IS CUT PERPENDICULAR TO CHANNEL CENTERLINE.
6. REFERENCE PLATE NO. S-88 FOR CHANNEL CONSTRUCTION METHOD.

TYPICAL) ELEVATION
 PUERTO NUEVO STA. 163+85



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL
 BRIDGE MODIFICATIONS
 N. E. ACCESS RAMP
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990

ELEVATION — FEET, N.G.V.D.
30
20
10
0
-10

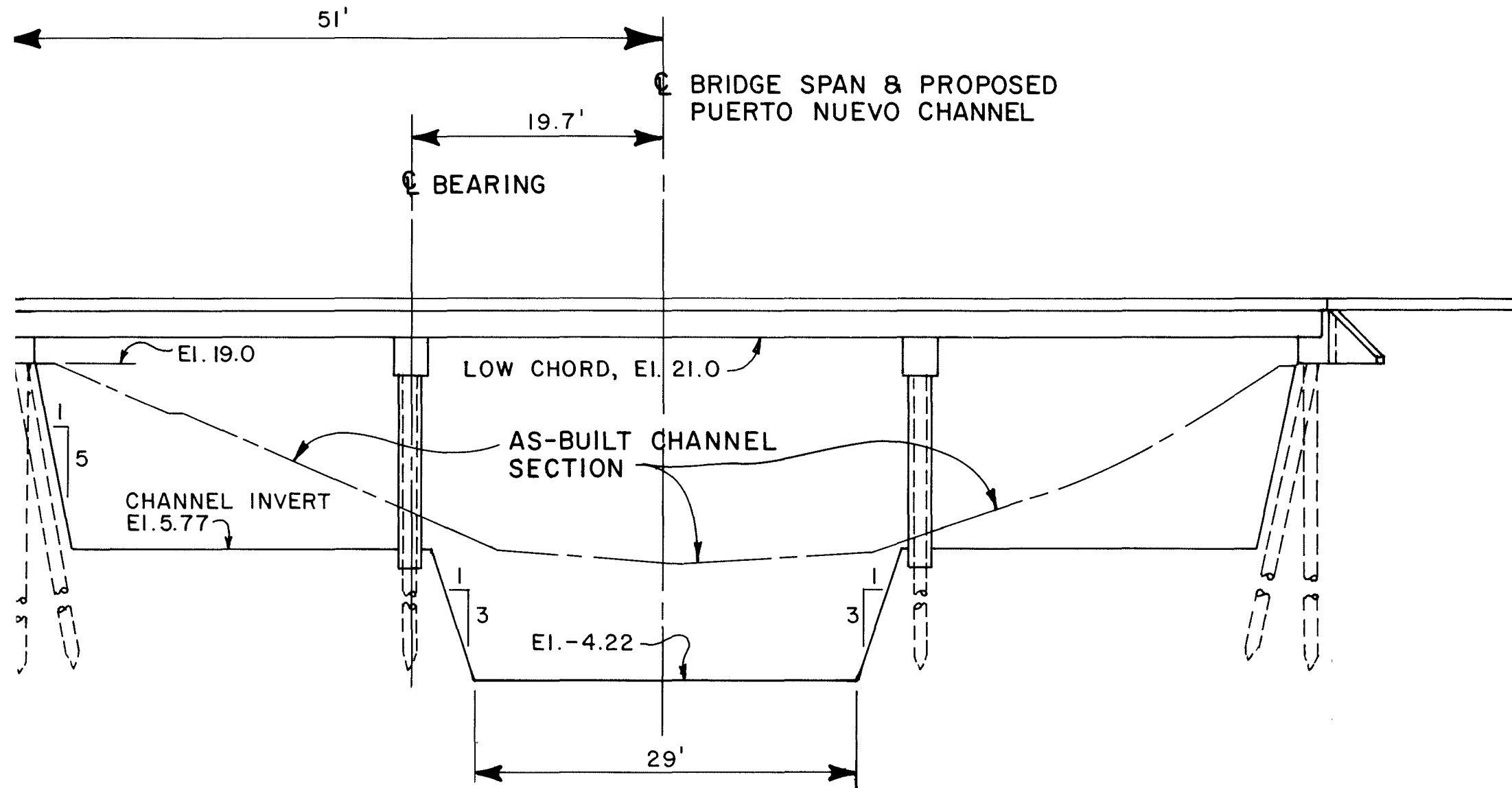


ELEVATION
PUERTO NUEVO STA. 169+22

GRAPHIC SCALE
10' 0 10'

NOTES:

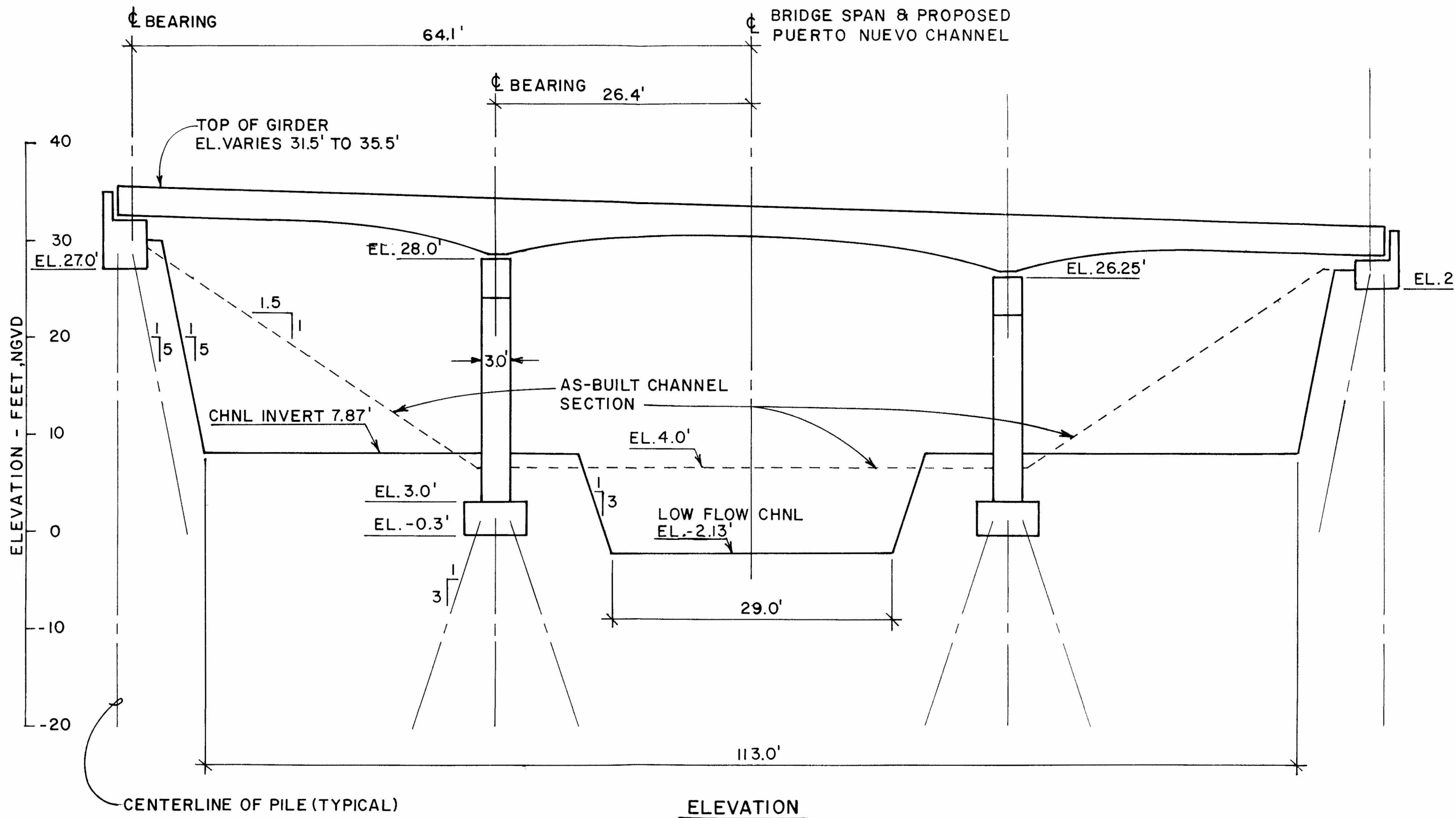
1. EXISTING REINFORCED CONCRETE BRIDGE TO REMAIN.
2. ALL BRIDGE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE, SCALED FROM PR DOT METRIC CONSTRUCTION DRAWINGS.
3. PILE BATTERS ARE TAKEN FROM PR DOT CONSTRUCTION DRAWINGS AND ARE ASSUMED TO REFLECT AS-BUILT CONDITIONS. ESTIMATED LENGTH OF PILES IS 50 FEET FOR BRIDGE PIERS AND ABUTMENTS.
4. BRIDGE SPAN AND CHANNEL SECTION ARE SYMMETRICAL ABOUT CHANNEL CENTERLINE.
5. CHANNEL CENTERLINE INTERSECTS EXPRESSWAY CENTERLINE AT APPROXIMATELY 84 DEGREES. ELEVATION IS CUT PERPENDICULAR TO CHANNEL CENTERLINE.
6. REFERENCE PLATE NO. S-88 FOR CHANNEL CONSTRUCTION METHOD.



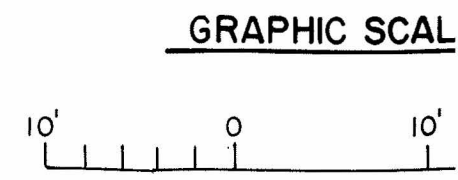
ELEVATION
PUERTO NUEVO STA. 169+22

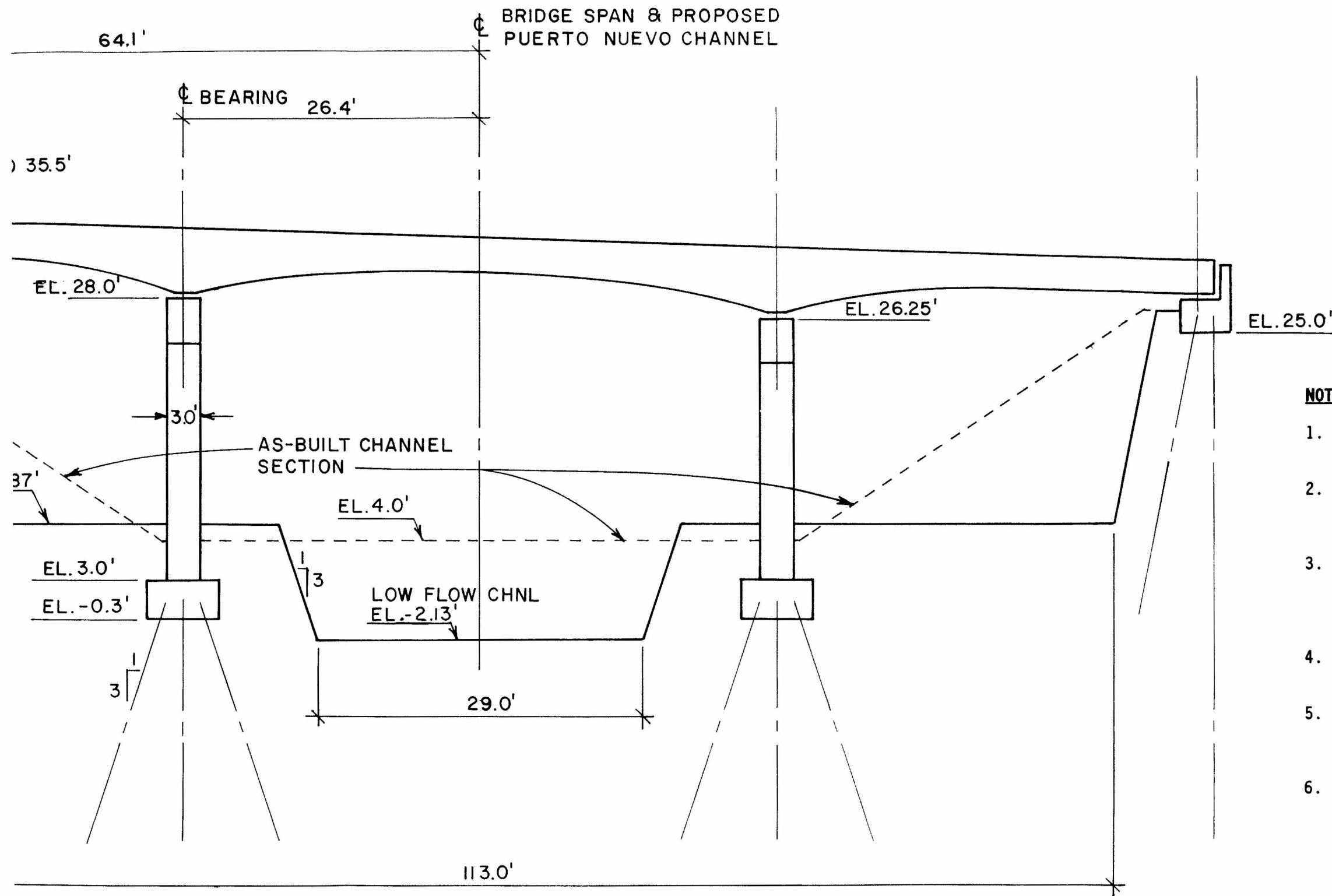


RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL
 BRIDGE MODIFICATIONS
 PINERO AVENUE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



ELEVATION
 PUERTO NUEVO STA. 174+50



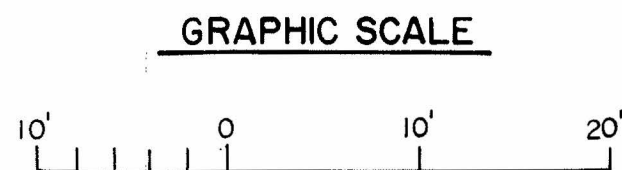


SOUTH EAST ACCESS RAMP - LAS AMERICAS EXPRESSWAY

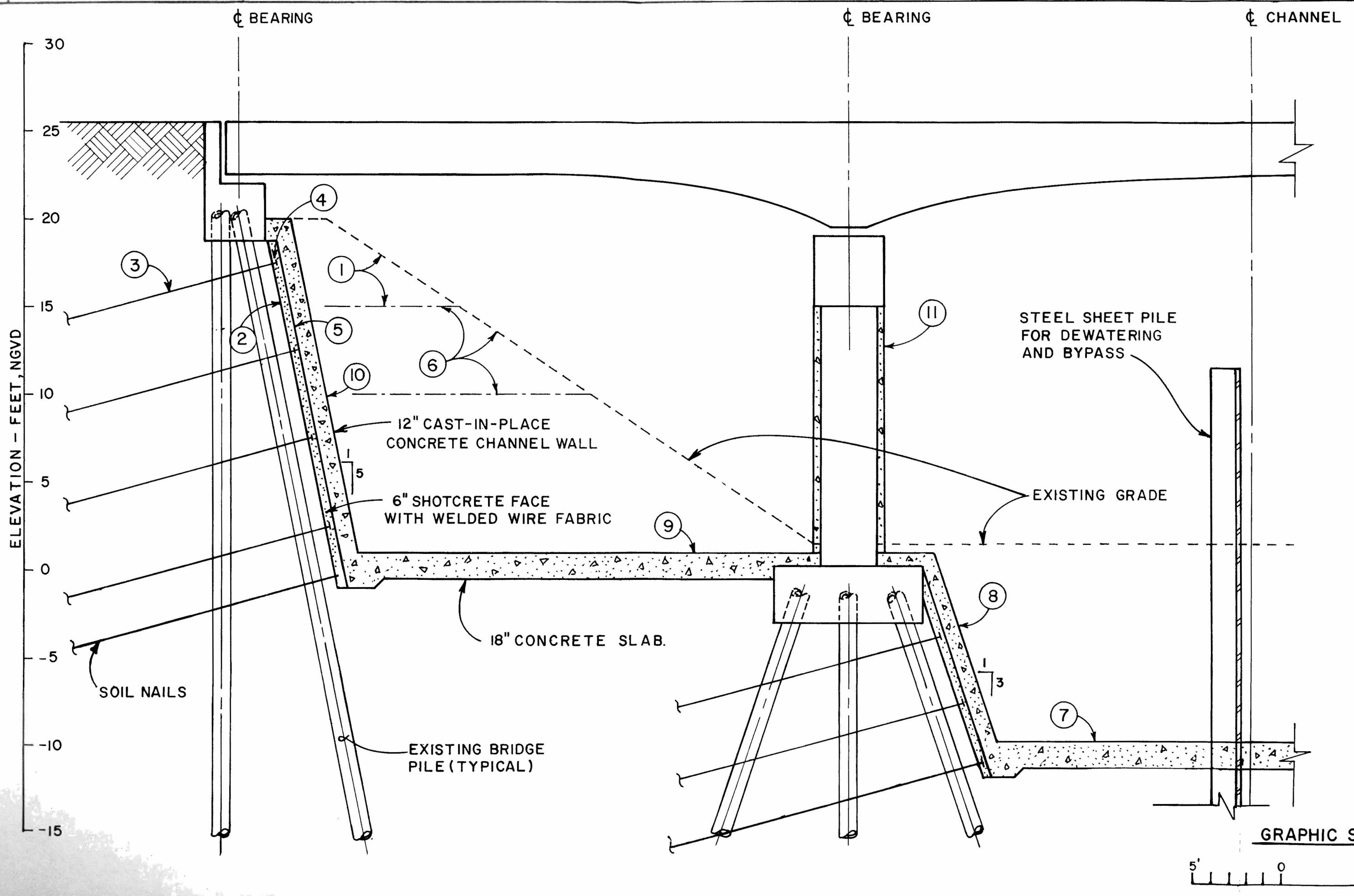
NOTES:

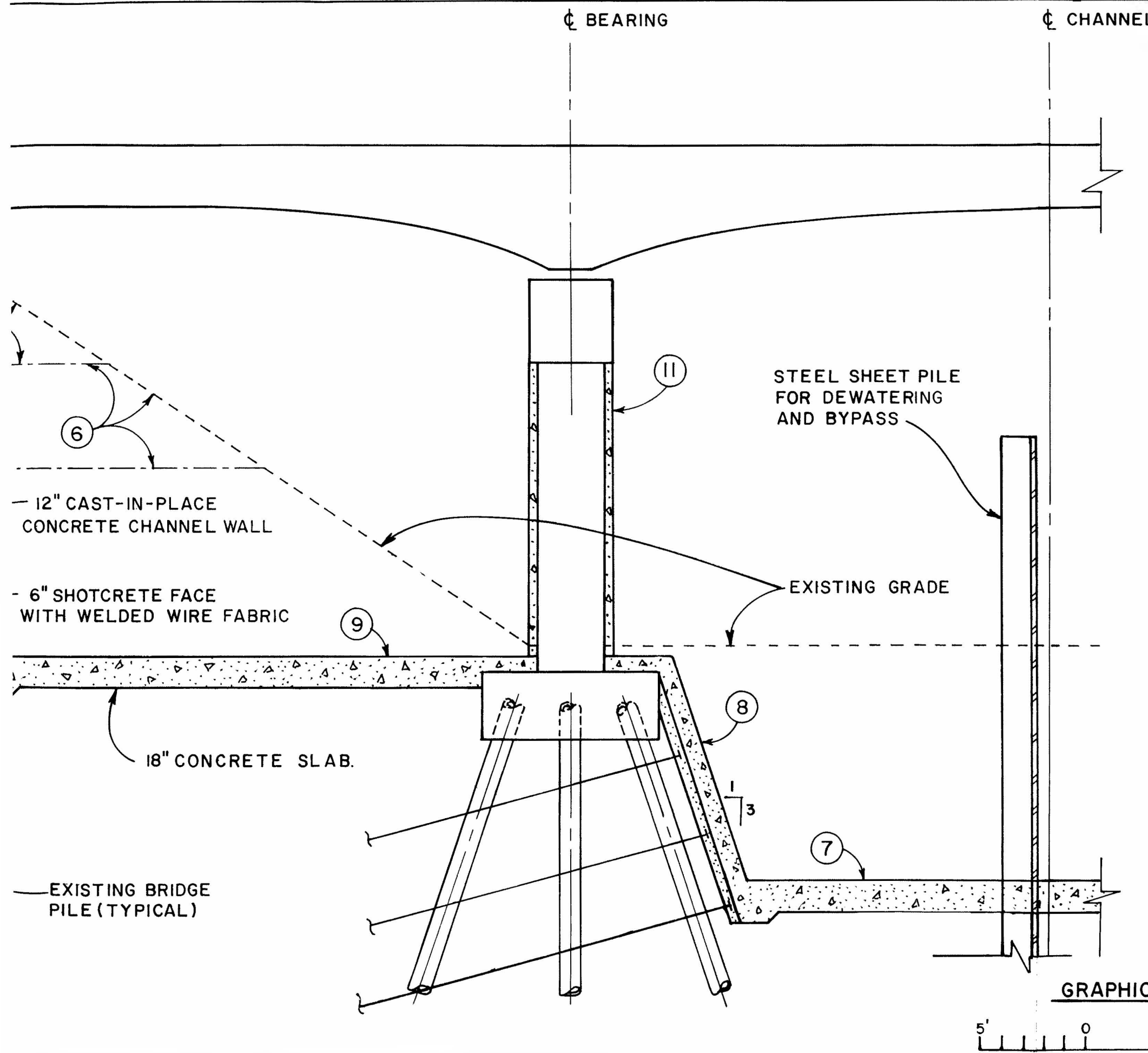
1. EXISTING REINFORCED CONCRETE BRIDGE TO REMAIN.
2. ALL BRIDGE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE, SCALED FROM PR DOT METRIC CONSTRUCTION DRAWINGS.
3. PILE BATTERS ARE TAKEN FROM PR DOT CONSTRUCTION DRAWINGS AND ARE ASSUMED TO REFLECT AS-BUILT CONDITIONS. ESTIMATED LENGTH OF PILES IS 45 FEET FOR BRIDGE PIERS AND 60 FEET FOR ABUTMENTS.
4. BRIDGE SPAN AND CHANNEL SECTION ARE SYMMETRICAL ABOUT CHANNEL CENTERLINE.
5. CHANNEL CENTERLINE INTERSECTS EXPRESSWAY CENTERLINE AT APPROXIMATELY 75 DEGREES. ELEVATION IS CUT PERPENDICULAR TO CHANNEL CENTERLINE.
6. REFERENCE PLATE NO. S-88 FOR CHANNEL CONSTRUCTION METHOD.

ELEVATION
 PUERTO NUEVO STA. 174+50



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL
 BRIDGE MODIFICATIONS
 S. E. ACCESS RAMP
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,575
 DECEMBER 1990





TYPICAL CONSTRUCTION SEQUENCE

1. MAKE A ± 5 FOOT CUT NEAR ABUTMENT.
2. SPRAY ± 3 INCHES OF SHOTCRETE ONTO EXPOSED FACE.
3. DRILL HOLES FOR SOIL NAILS, INSERT NAILS (REINFORCING BARS), AND GROUT IN PLACE.
4. INSTALL WIRE MESH AND BEARING PLATES, THEN PARTIALLY TENSION EACH NAIL.
5. CLEAN FACE OF CUT AND SPRAY SECOND ± 3 INCH LAYER OF SHOTCRETE.
6. EXCAVATE NEXT ± 5 CUT, REPEATING PREVIOUS STEPS UNTIL FINAL LIMIT OF EXCAVATION IS REACHED.
7. POUR LOW FLOW CHANNEL BOTTOM SLAB.
8. CAST LOW FLOW CHANNEL WALL AGAINST THE SOIL NAILED FACE.
9. POUR MAIN CHANNEL BOTTOM SLAB.
10. CAST MAIN CHANNEL WALL AGAINST THE SOIL NAILED FACE.
11. CONSTRUCT BRIDGE PIER PROTECTION.

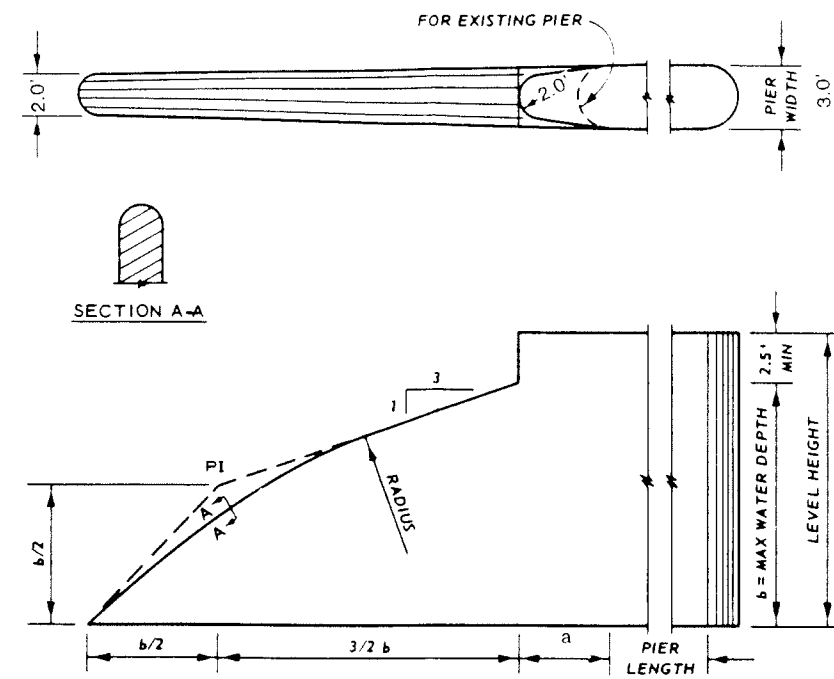
LEGEND

- ① CONSTRUCTION SEQUENCE KEY
- CUT LIMIT LINE

GRAPHIC SCALE



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL
 BRIDGE MODIFICATIONS
 CHANNEL CONSTRUCTION METHOD - LAS
 AMERICAS, PINERO & ACCESS RAMP BRIDGES
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-38,578 DECEMBER 1990



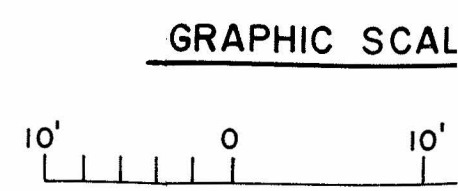
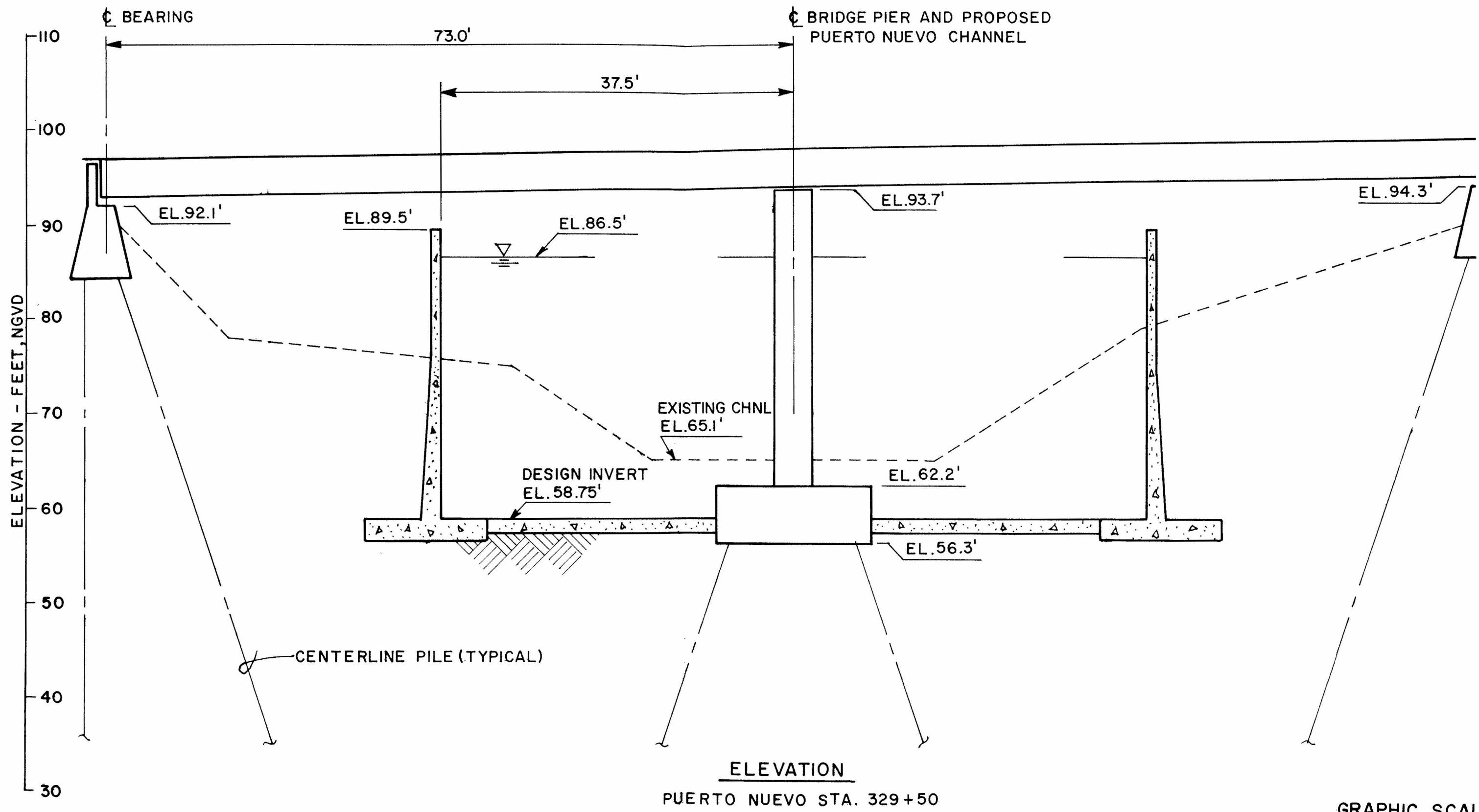
BRIDGE	a	b
LAS AMERICAS EXPRESSWAY	84.0'	22.4'
N. E. ACCESS RAMP	6.0'	22.4'
PINERO AVENUE	6.0'	19.1'
S. E. ACCESS RAMP	6.0'	11.3'

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
BRIDGE MODIFICATIONS
BRIDGE PIER EXTENSION - LAS AMERICAS,
PINERO & ACCESS RAMP BRIDGES
STRUCTURAL

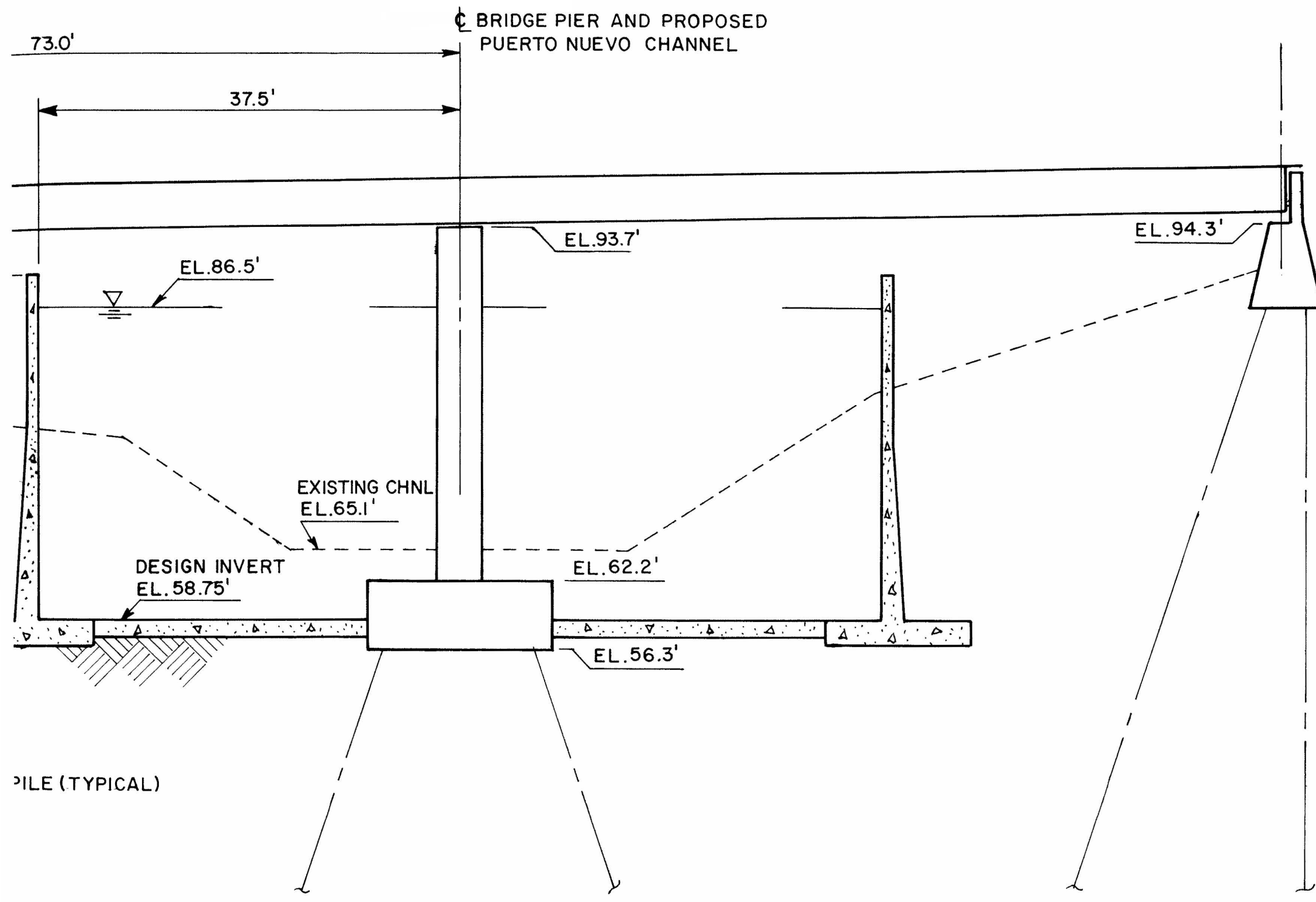
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578

DECEMBER 1990

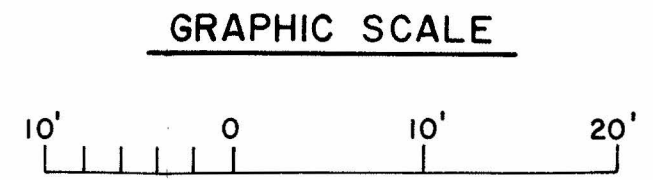


NOTES:

1. EXISTING REINFORCED CONCRETE BRIDGE TO REMAIN.
2. ALL BRIDGE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE, SCALED FROM PR DOT METRIC CONSTRUCTION DRAWINGS.
3. PILE BATTERS ARE TAKEN FROM PR DOT CONSTRUCTION DRAWINGS AND ARE ASSUMED TO REFLECT AS-BUILT CONDITIONS. ESTIMATED LENGTH OF PILES IS 50 FEET FOR BRIDGE ABUTMENTS AND 21 FEET FOR BRIDGE PIER.
4. BRIDGE SPAN AND CHANNEL SECTION ARE SYMMETRICAL ABOUT CHANNEL CENTERLINE.
5. CHANNEL CENTERLINE INTERSECTS EXPRESSWAY CENTERLINE AT 90 DEGREES. ELEVATION IS CUT PERPENDICULAR TO CHANNEL CENTERLINE.



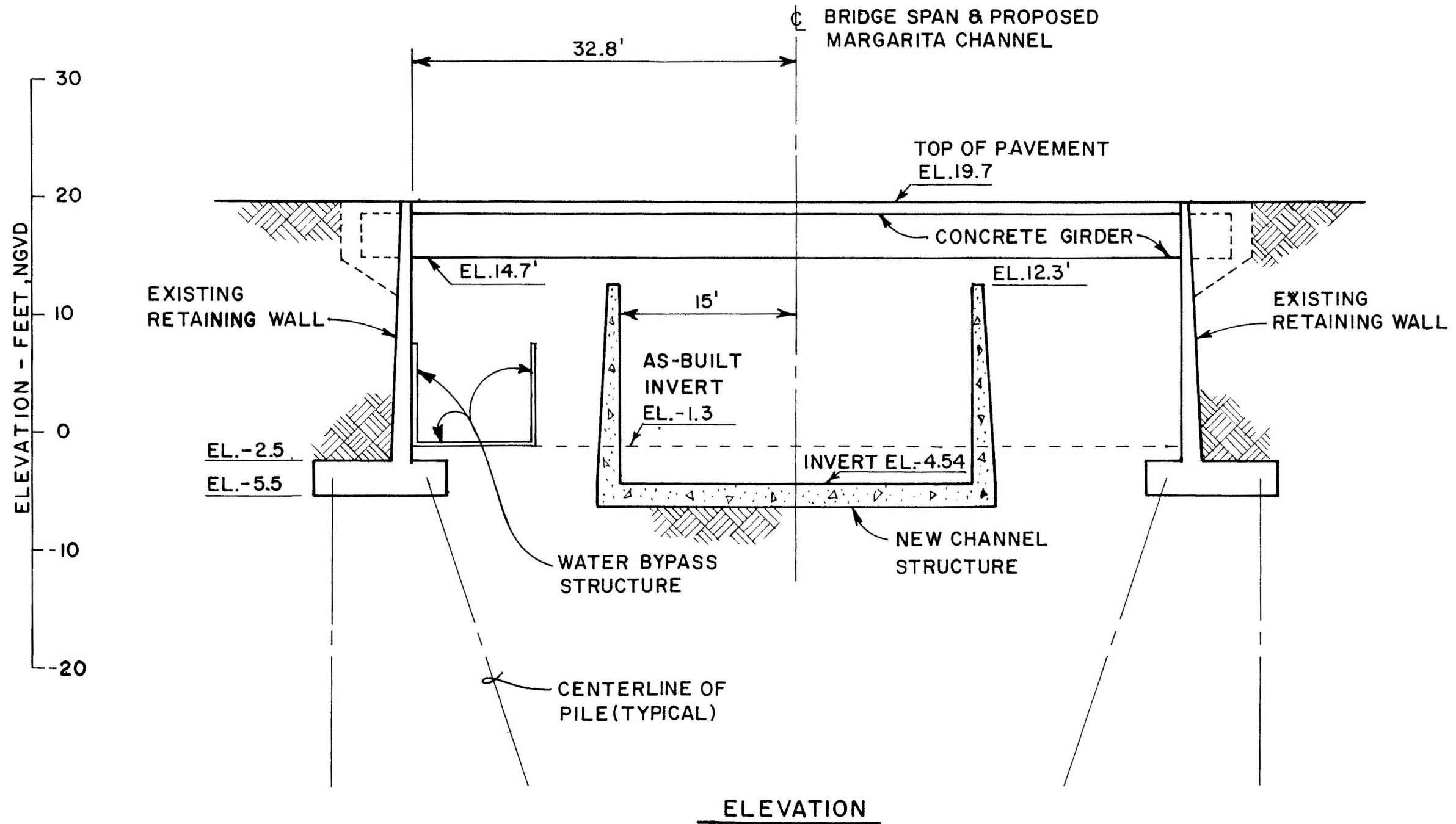
ELEVATION
 PUERTO NUEVO STA. 329+50



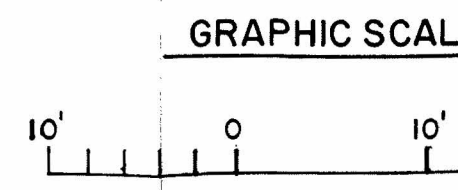
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL
 BRIDGE MODIFICATIONS

 P. R. 177

 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,578 DECEMBER 1990



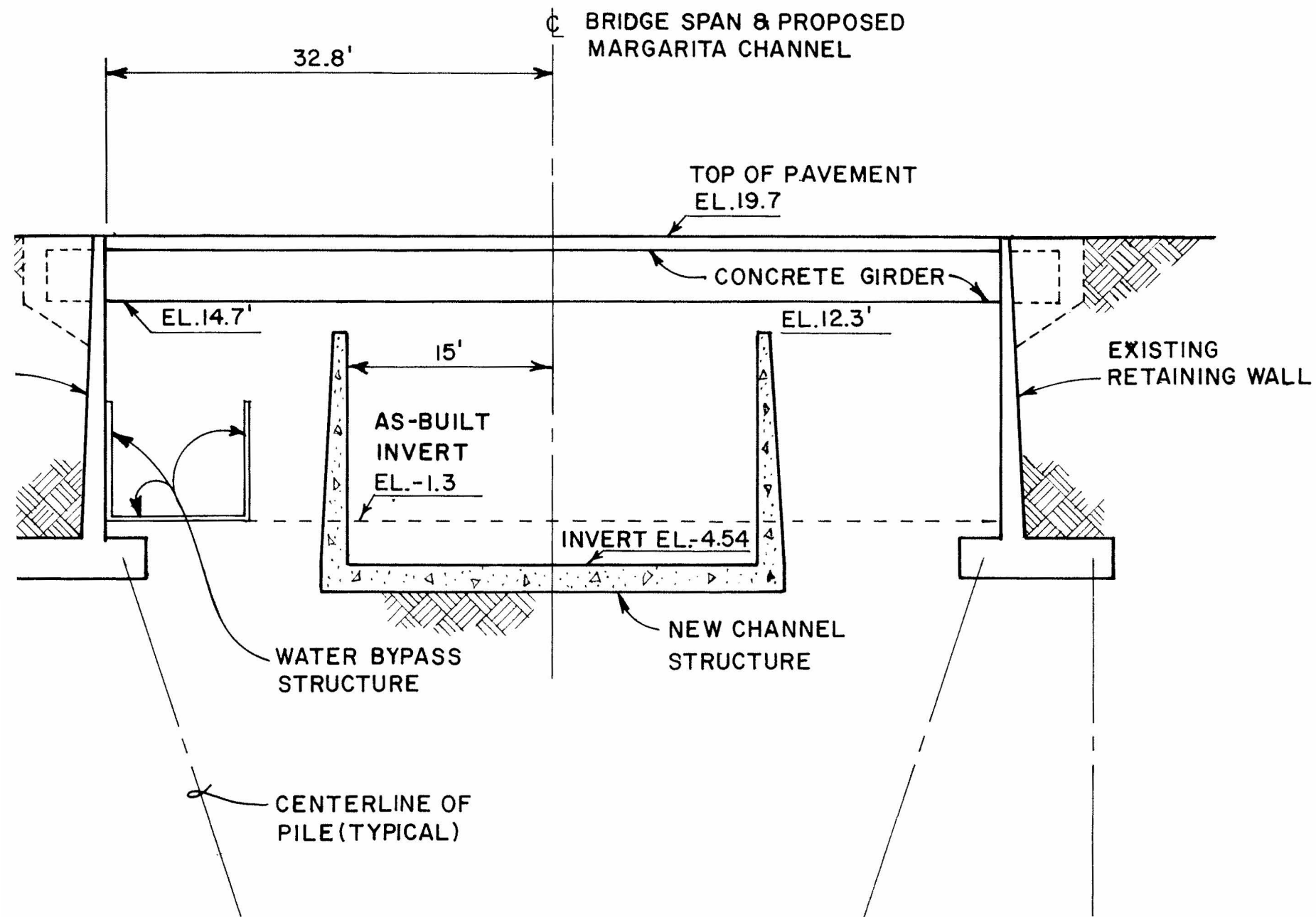
ELEVATION
MARGARITA CHANNEL STA. 60+00



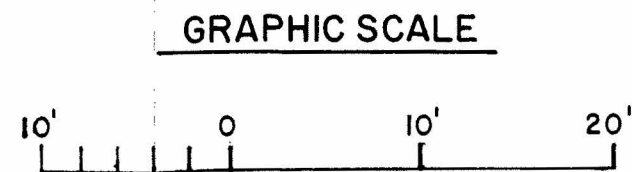
- NOTES:**
1. EX
RE
 2. AL
AP
CO
 3. PI
DR
CO
FO
BR
 4. BR
AB
 5. CH
AT
PEI

NOTES:

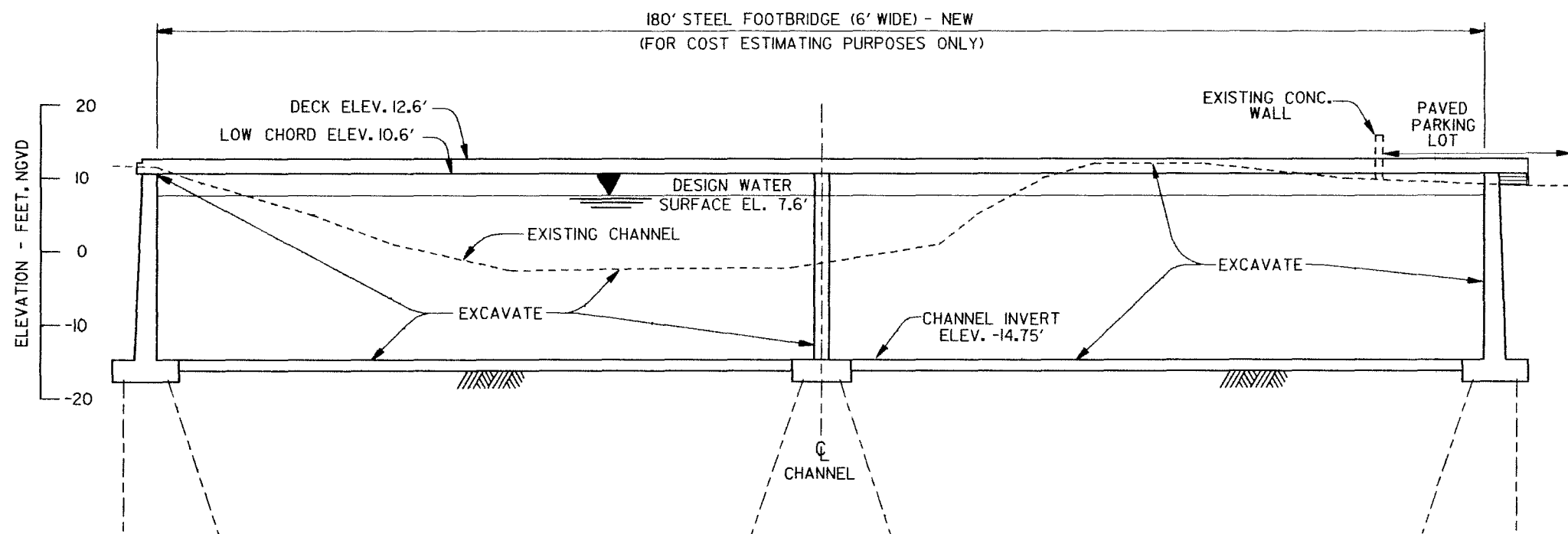
1. EXISTING REINFORCED CONCRETE BRIDGE TO REMAIN.
2. ALL BRIDGE DIMENSIONS AND ELEVATIONS ARE APPROXIMATE, SCALED FROM PR DOT METRIC CONSTRUCTION DRAWINGS.
3. PILE BATTERS ARE TAKEN FROM PR DOT CONSTRUCTION DRAWINGS AND ARE ASSUMED TO REFLECT AS-BUILT CONDITIONS. ESTIMATED LENGTH OF PILES IS 55 FEET FOR EAST BOUND BRIDGE AND 60 FEET FOR WEST BOUND BRIDGE.
4. BRIDGE SPAN AND CHANNEL SECTION ARE SYMMETRICAL ABOUT CHANNEL CENTERLINE.
5. CHANNEL CENTERLINE INTERSECTS EXPRESSWAY CENTERLINE AT APPROXIMATELY 58 DEGREES. ELEVATION IS CUT PERPENDICULAR TO CHANNEL CENTERLINE.



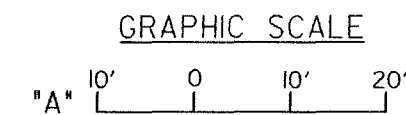
ELEVATION
MARGARITA CHANNEL STA.60+00



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 MARGARITA TRIBUTARY
 BRIDGE MODIFICATIONS
 DE DIEGO EXPRESSWAY
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-36,678 DECEMBER 1990



PEDESTRIAN BRIDGE
 PUERTO NUEVO CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 110+06
 SCALE "A"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

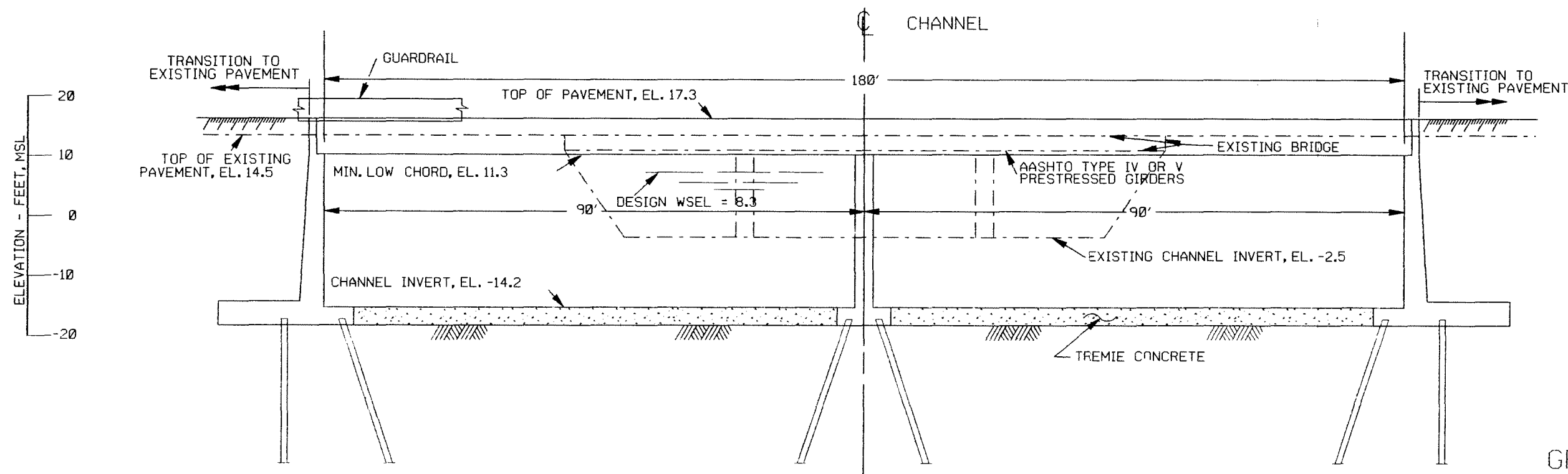
PUERTO NUEVO CHANNEL
 NEW AND REPLACEMENT BRIDGES

PEDESTRIAN BRIDGE

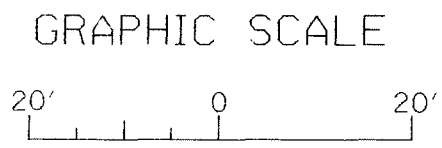
STRUCTURAL

DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

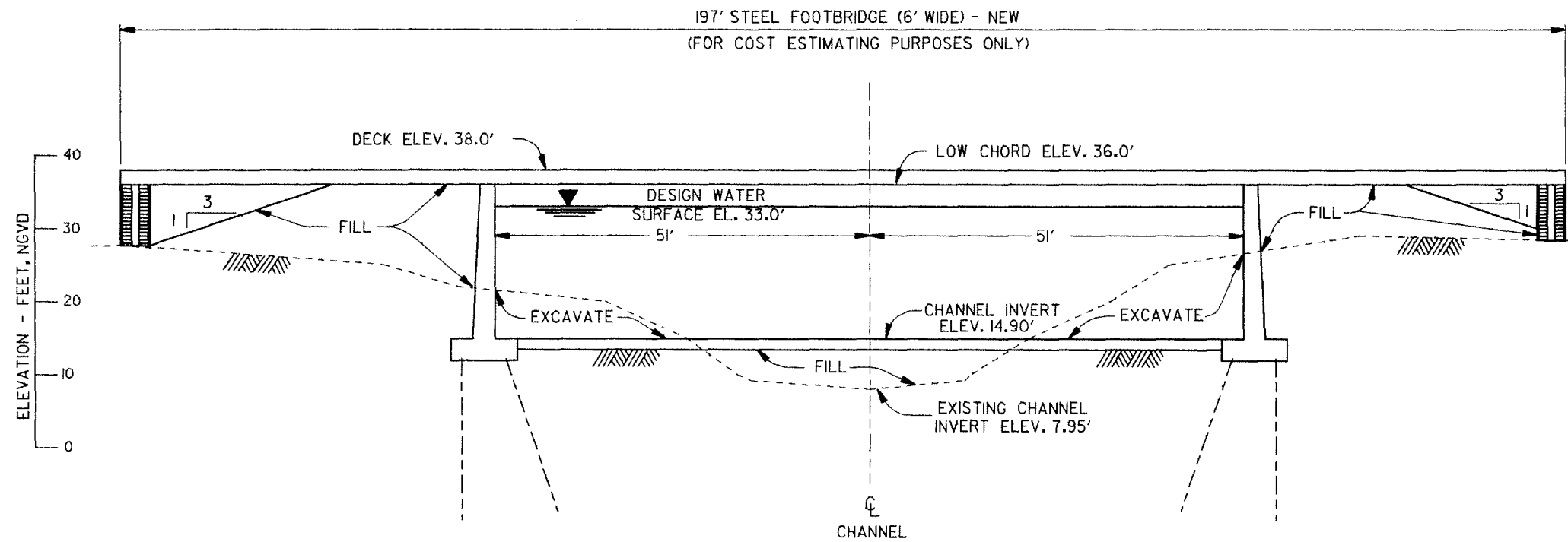


ELEVATION
STA. 119+50

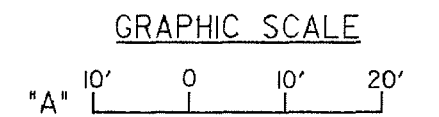


ROOSEVELT AVE. BRIDGE.

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
PUERTO NUEVO CHANNEL
NEW AND REPLACEMENT BRIDGES
ROOSEVELT AVENUE
STRUCTURAL
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
D.O. FILE NO. 102-35,578 DECEMBER 1991



PEDESTRIAN BRIDGE
 PUERTO NUEVO CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 195+00
 SCALE "A"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
 NEW AND REPLACEMENT BRIDGES

PEDESTRIAN BRIDGE

STRUCTURAL

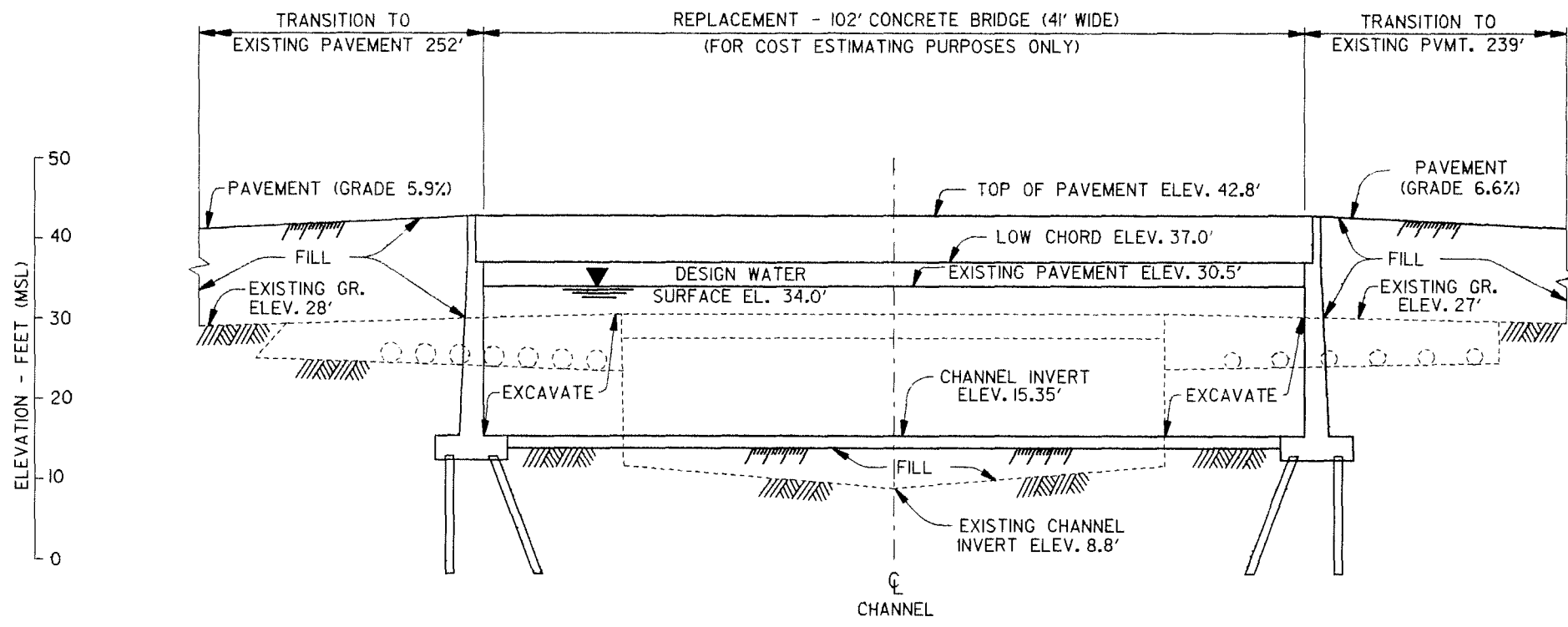
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

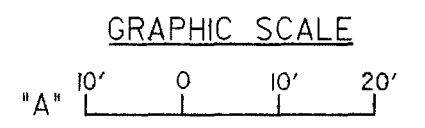
D.O. FILE NO. 102-35,578

DECEMBER 1990

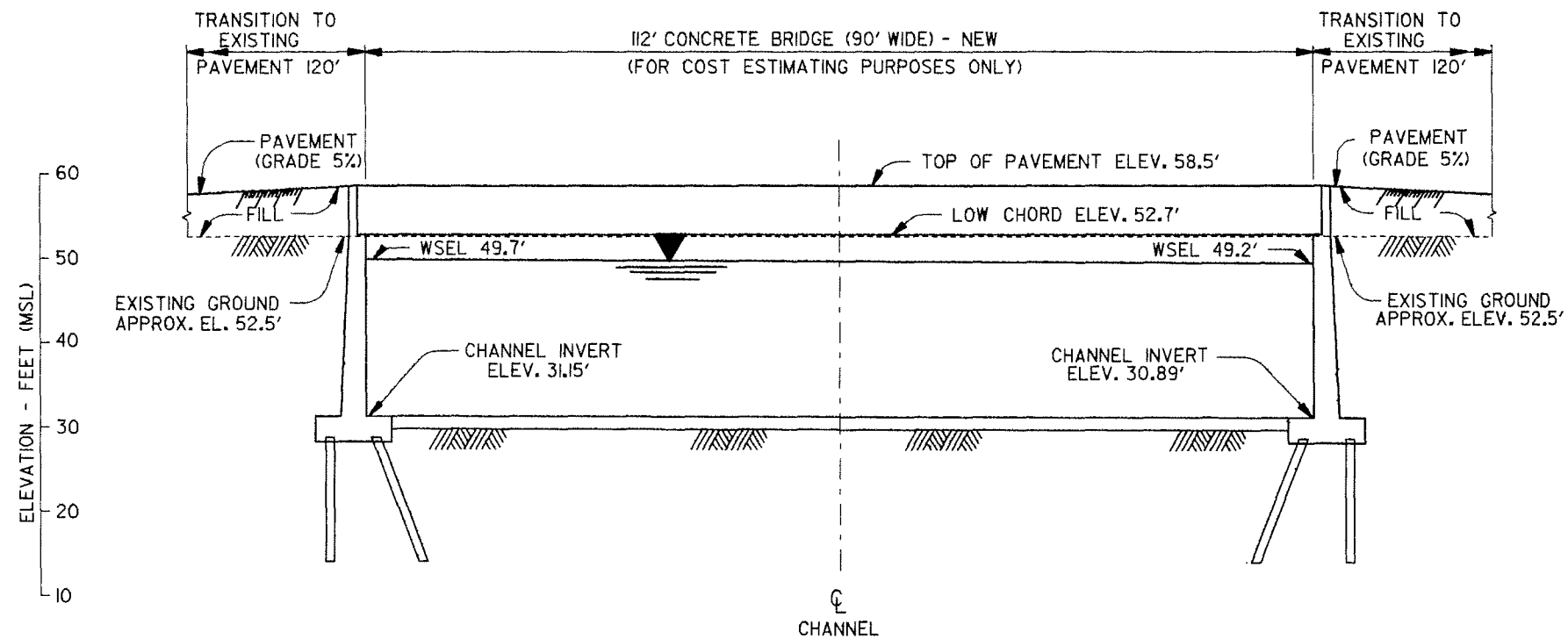
PLATE S-04



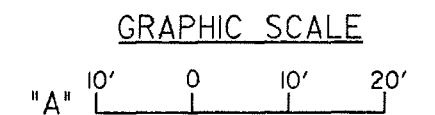
NOTRE DAME ST.
 PUERTO NUEVO CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 196+38
 SCALE "A"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL
 NEW AND REPLACEMENT BRIDGES
 NOTRE DAME STREET
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990



P.R. 1
 PUERTO NUEVO CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 241+40
 SCALE "A"



NOTES:

1. CHANNEL WIDTH IS 83'.
2. 112' SPAN DUE TO 45 DEG. SKEW OF BRIDGE ALIGNMENT RELATIVE TO CHANNEL ALIGNMENT.
3. STATION AT LEFT CHANNEL WALL SECTION IS 241+75.
4. STATION AT RIGHT CHANNEL WALL SECTION IS 241+05.

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
 NEW AND REPLACEMENT BRIDGES

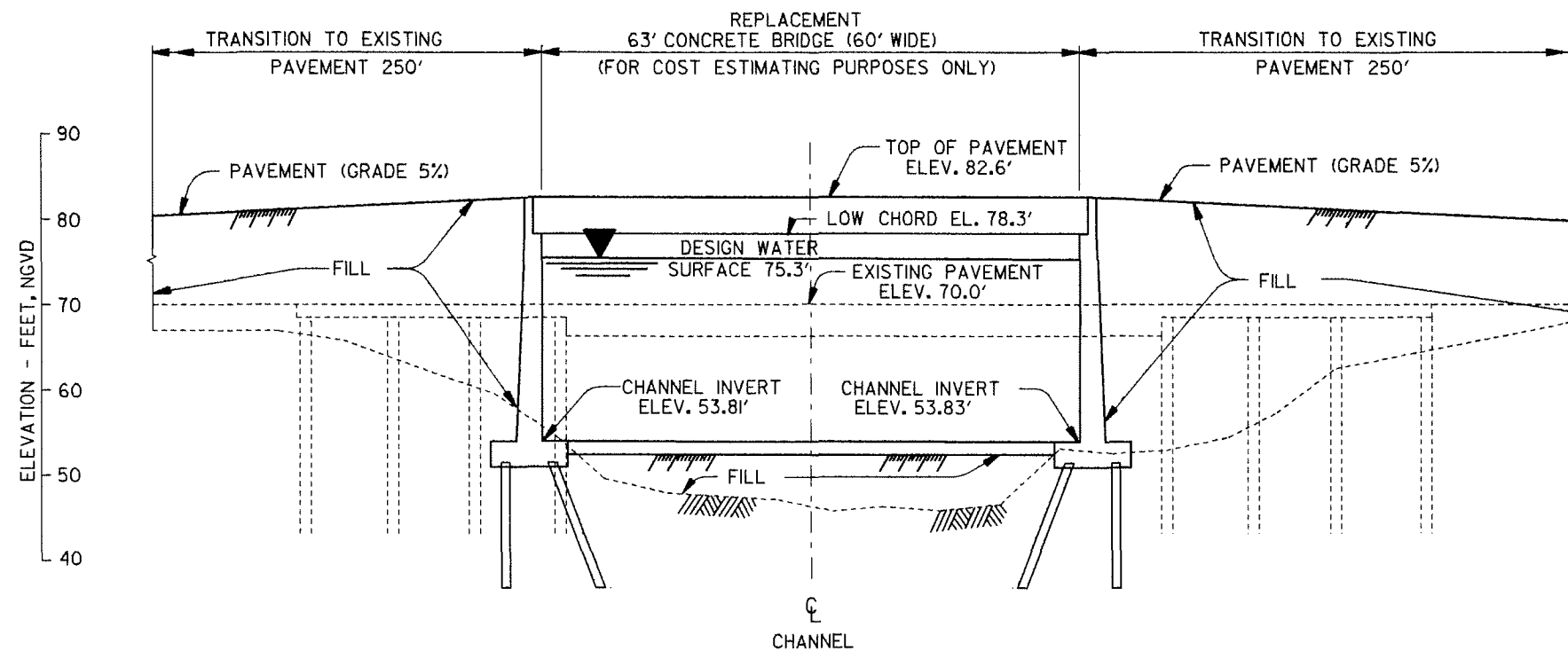
P. R. 1

STRUCTURAL

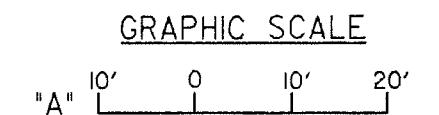
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990



P.R. 176
 PUERTO NUEVO CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 280+27
 SCALE "A"



- NOTES:
1. CHANNEL WIDTH IS 60'.
 2. STATION AT LEFT CHANNEL WALL SECTION IS 280+16.
 3. STATION AT RIGHT CHANNEL WALL SECTION IS 280+37.

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
 NEW AND REPLACEMENT BRIDGES

P. R. 176

STRUCTURAL

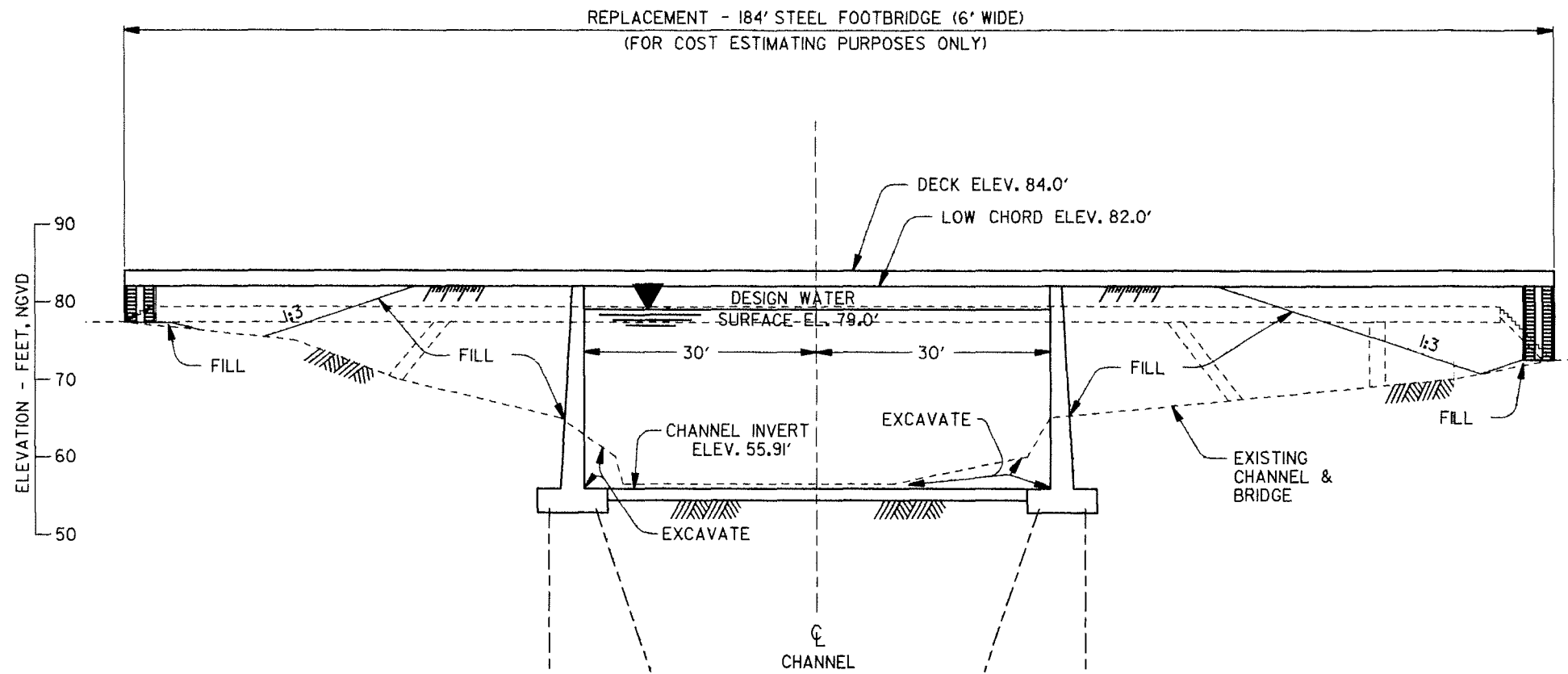
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

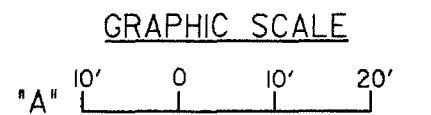
D.O. FILE NO. 102-35,578

DECEMBER 1990

PLATE S-97



PEDESTRIAN BRIDGE
 PUERTO NUEVO CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 301+33
 SCALE "A"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

PUERTO NUEVO CHANNEL
 NEW AND REPLACEMENT BRIDGES

PEDESTRIAN BRIDGE

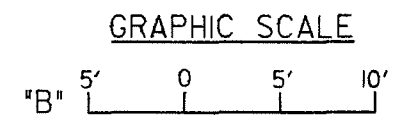
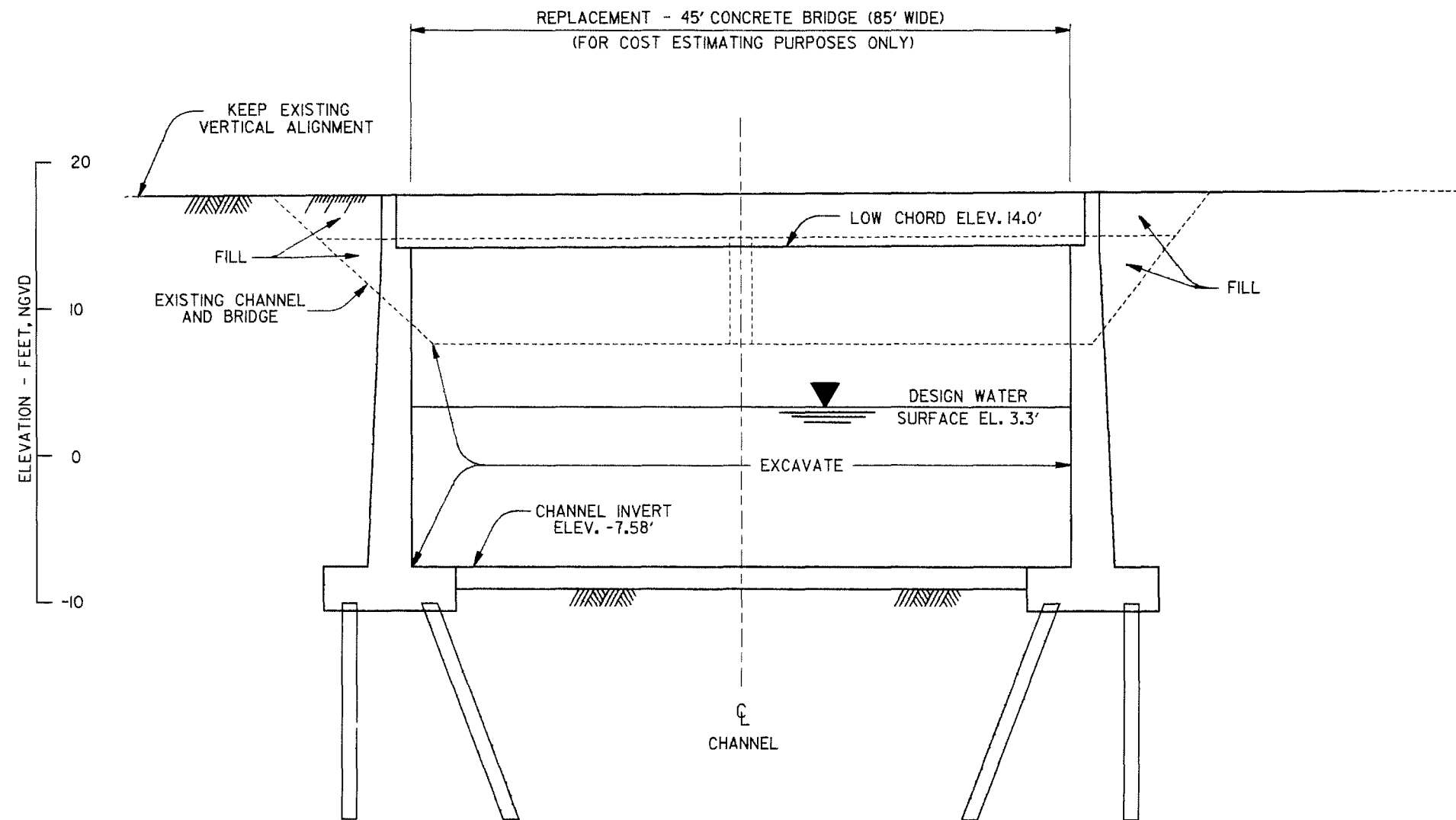
STRUCTURAL

DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO 102-35,578

DECEMBER 1990



PINERO AVENUE
 JOSEFINA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 24+67
 SCALE: "B"

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

JOSEFINA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

PINERO AVENUE

STRUCTURAL

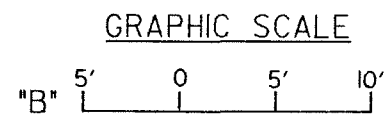
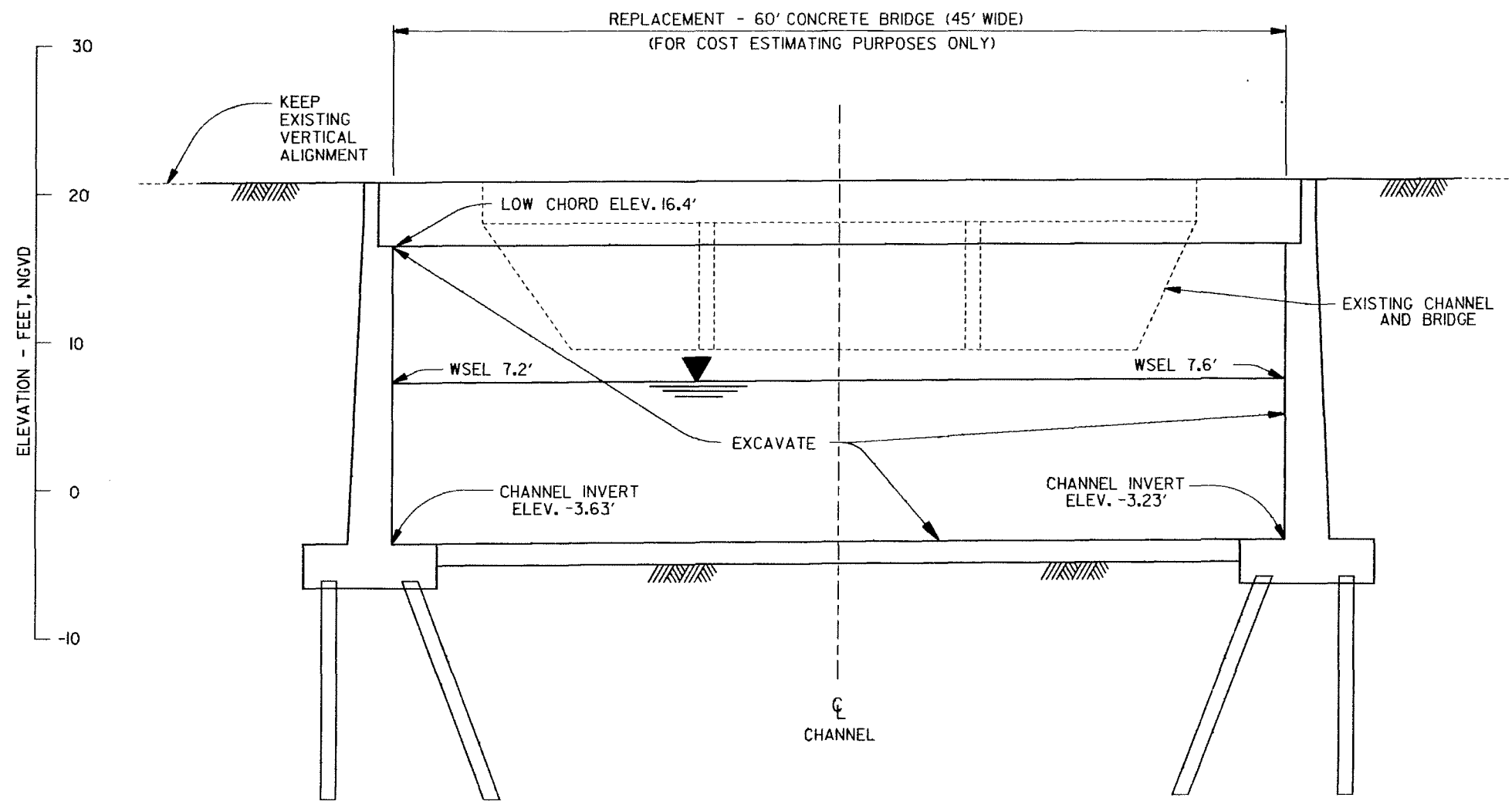
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990

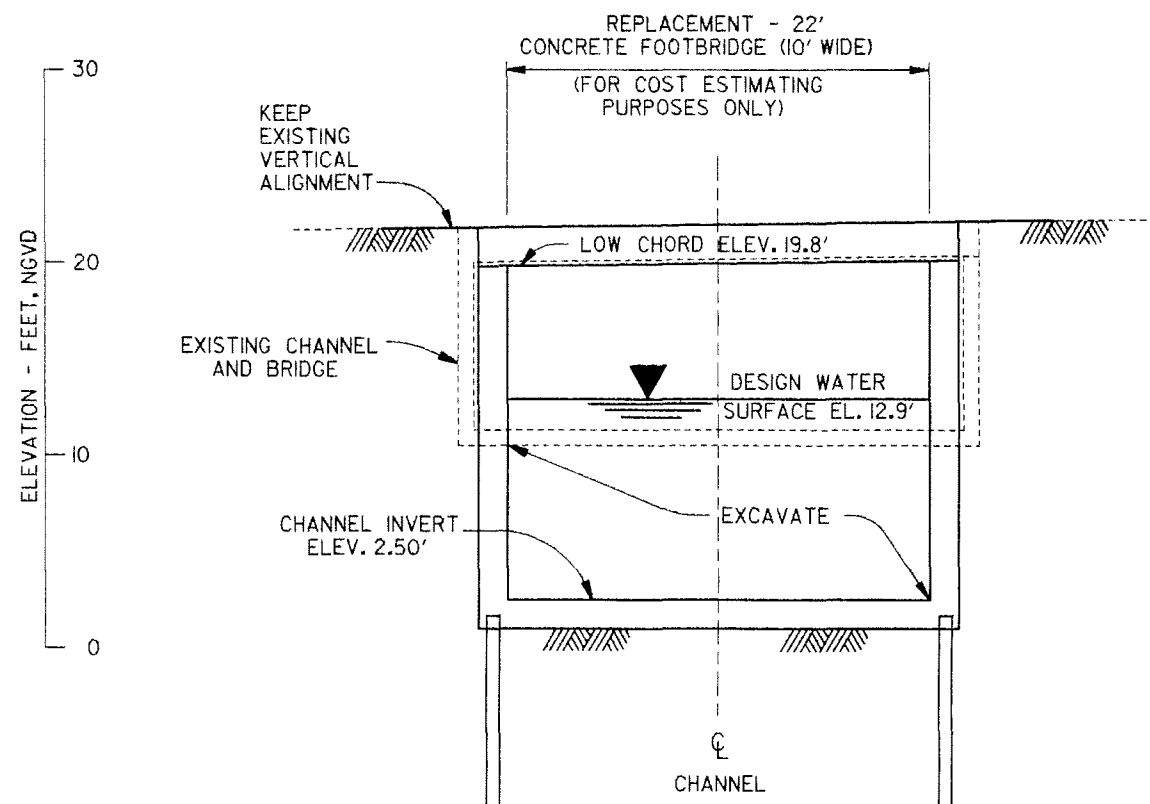
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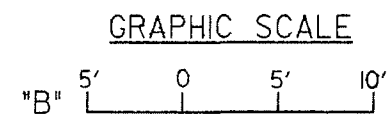
ANDALUCIA AVENUE
 JOSEFINA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 31+10
 SCALE: "B"

- NOTES:**
1. CHANNEL WIDTH IS 45'.
 2. 60' SPAN DUE TO SKEW OF BRIDGE ALIGNMENT RELATIVE TO CHANNEL ALIGNMENT.
 3. STATION OF LEFT CHANNEL WALL SECTION IS 30+95.
 4. STATION OF RIGHT CHANNEL WALL SECTION IS 31+25.

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES
ANDALUCIA AVENUE
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



PEDESTRIAN BRIDGE
JOSEFINA CHANNEL
(LOOKING DOWNSTREAM)
UPSTREAM ELEVATION STA. 40+58
SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

JOSEFINA TRIBUTARY
NEW AND REPLACEMENT BRIDGES

PEDESTRIAN BRIDGE

STRUCTURAL

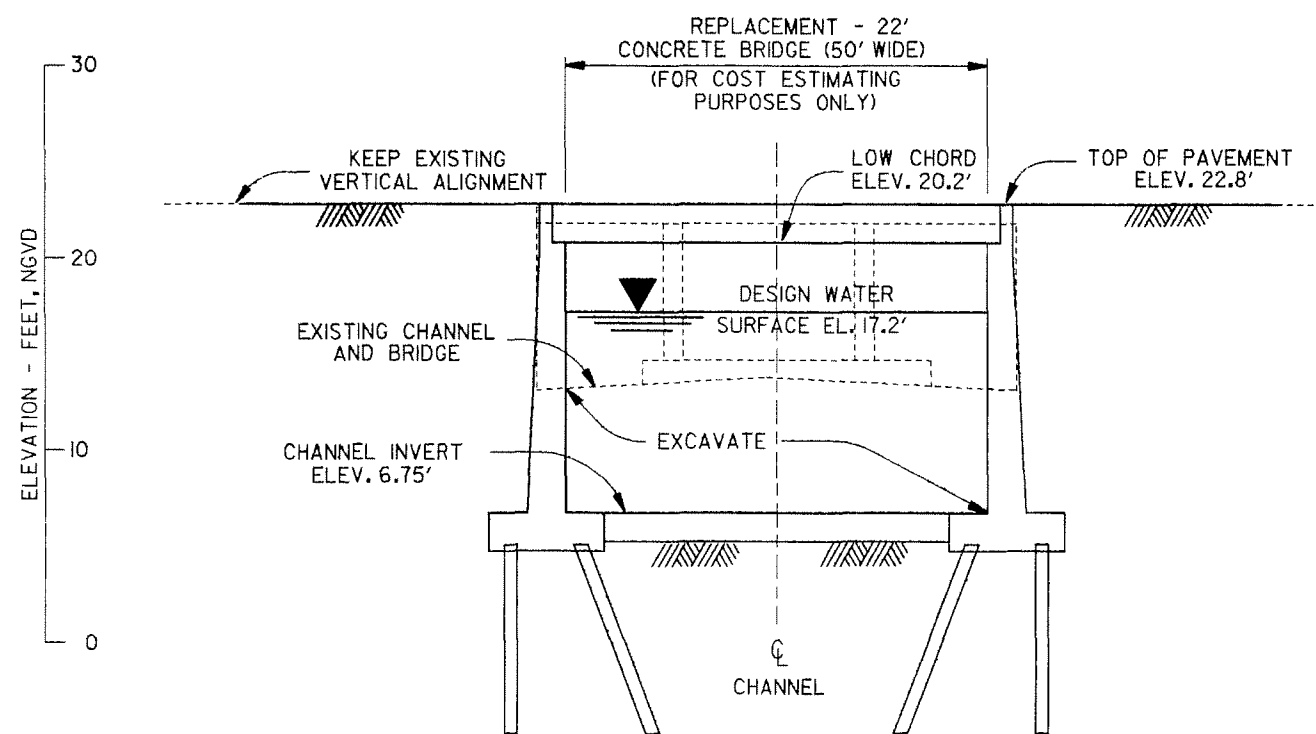
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

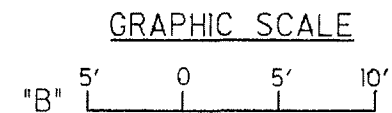
D.O. FILE NO. 102-35,578

DECEMBER 1990

PLATE S-10



AMERICO MIRANDA
 JOSEFINA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 47+30
 SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

JOSEFINA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

AMERICO MIRANDA AVENUE

STRUCTURAL

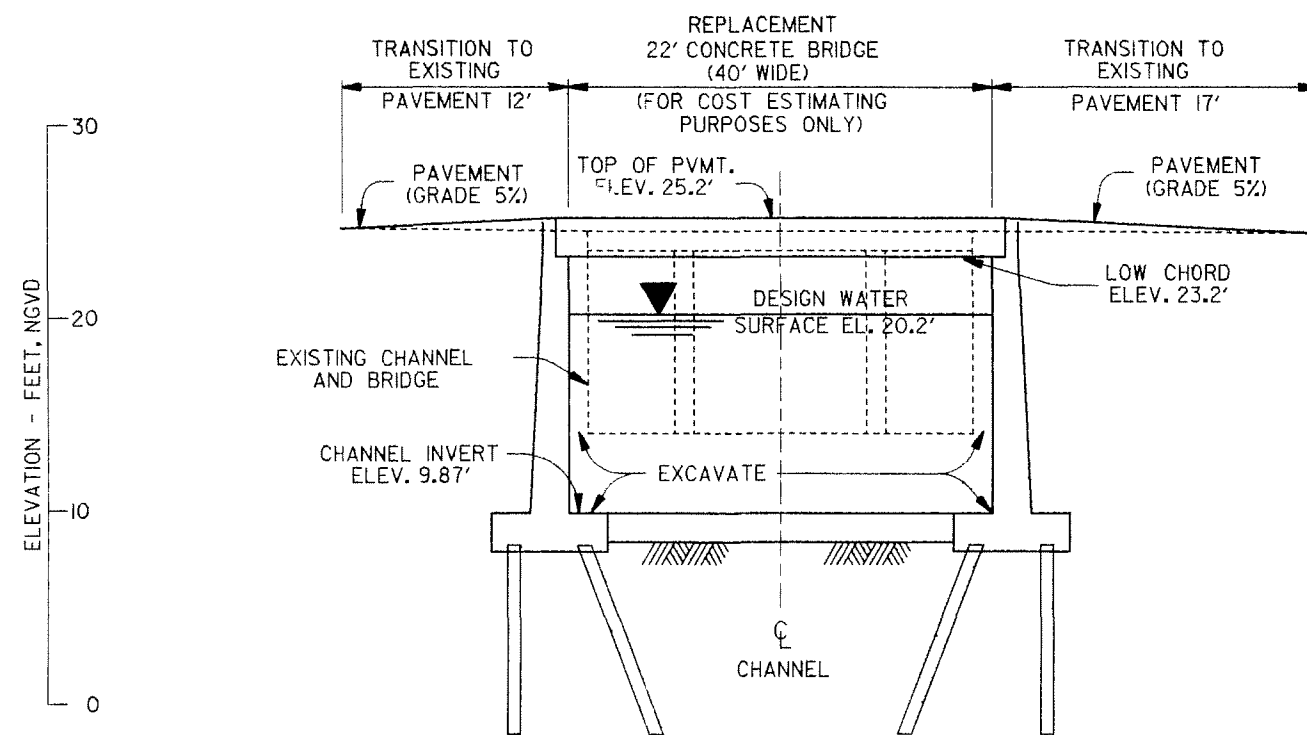
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

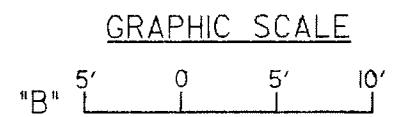
D.O. FILE NO 102-35.578

DECEMBER 1990

PLATE S-10



CALLE 31SE
 JOSEFINA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 52+24
 SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

JOSEFINA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

31ST S. E. STREET

STRUCTURAL

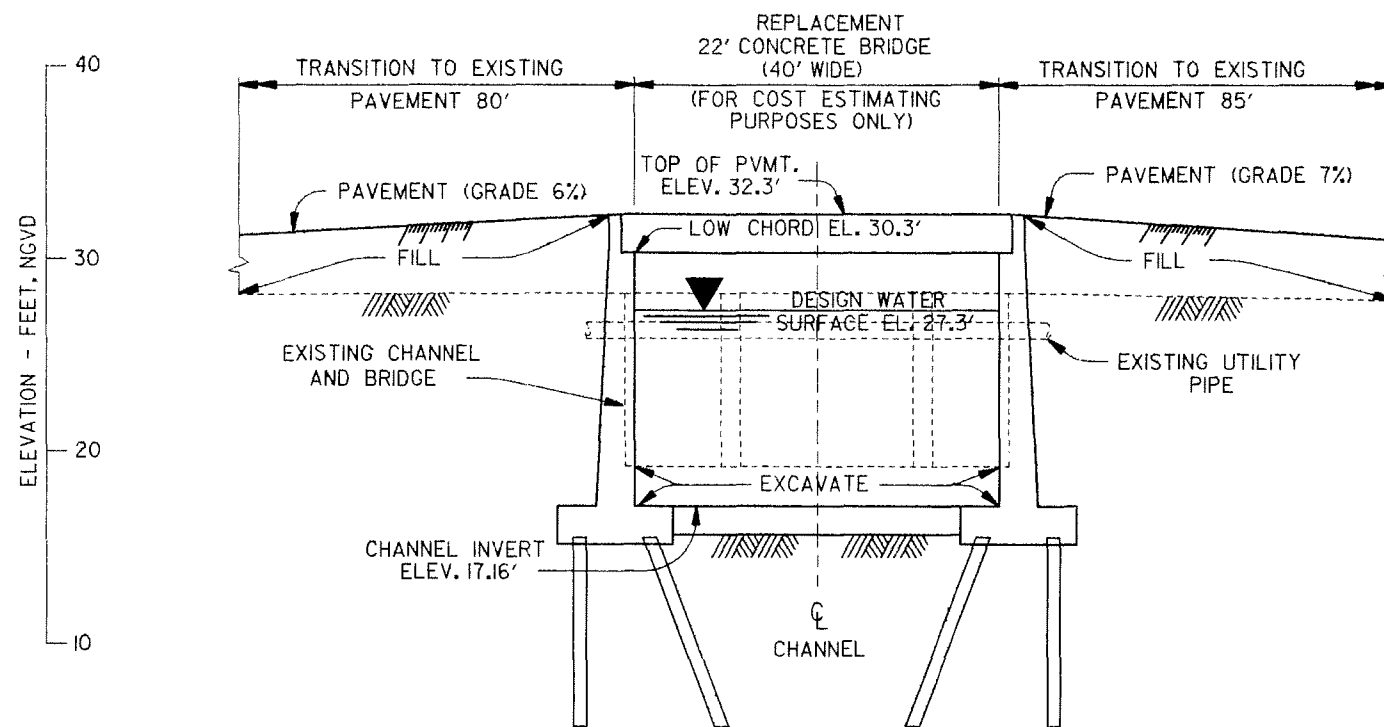
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

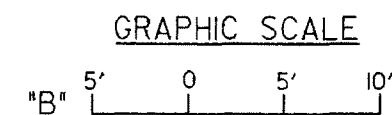
D.O. FILE NO. 102-35,578

DECEMBER 1995

PLATE S-11



CALLE 21SE
 JOSEFINA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 63+40
 SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

JOSEFINA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

21ST S. E. STREET

STRUCTURAL

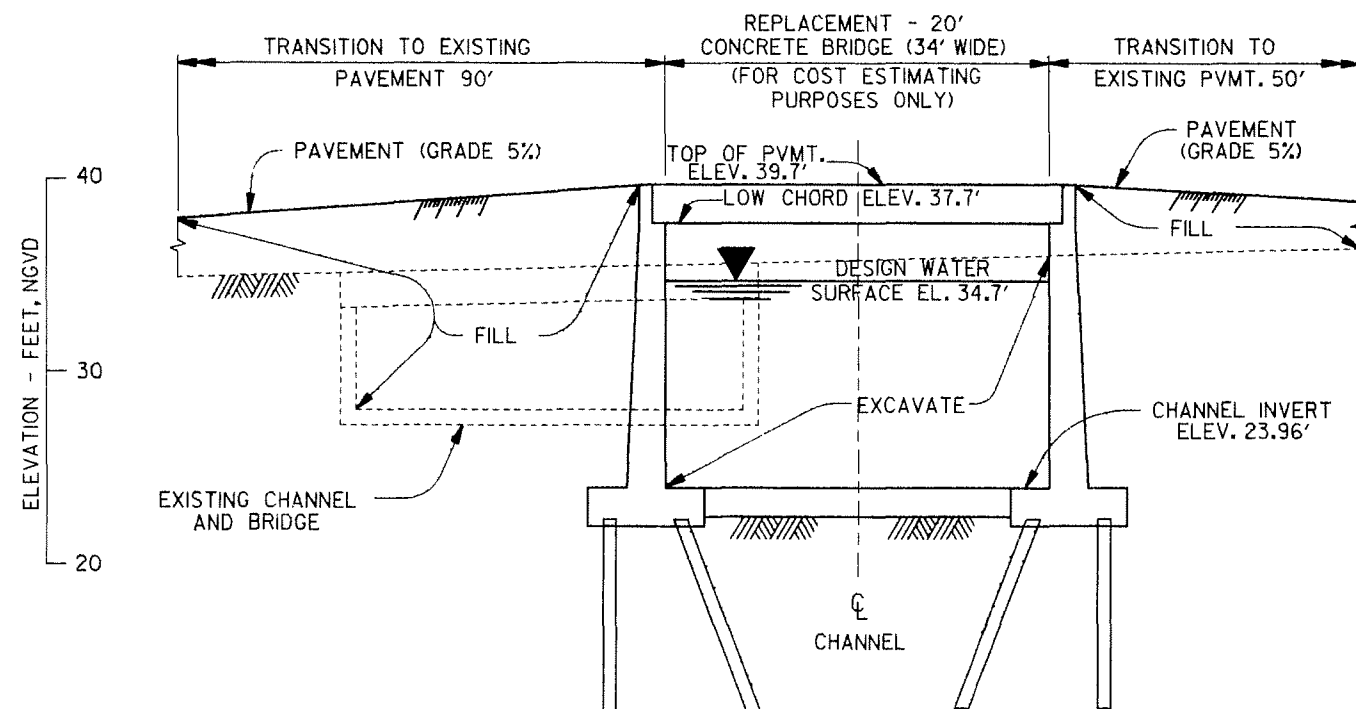
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

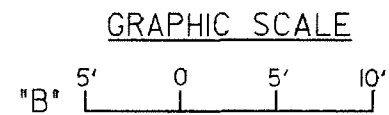
D.O. FILE NO. 102-35,578

DECEMBER 1990

DI ATE S-10.



CALLE 9 SE
 JOSEFINA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 74+50
 SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

JOSEFINA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

9TH S. E. STREET

STRUCTURAL

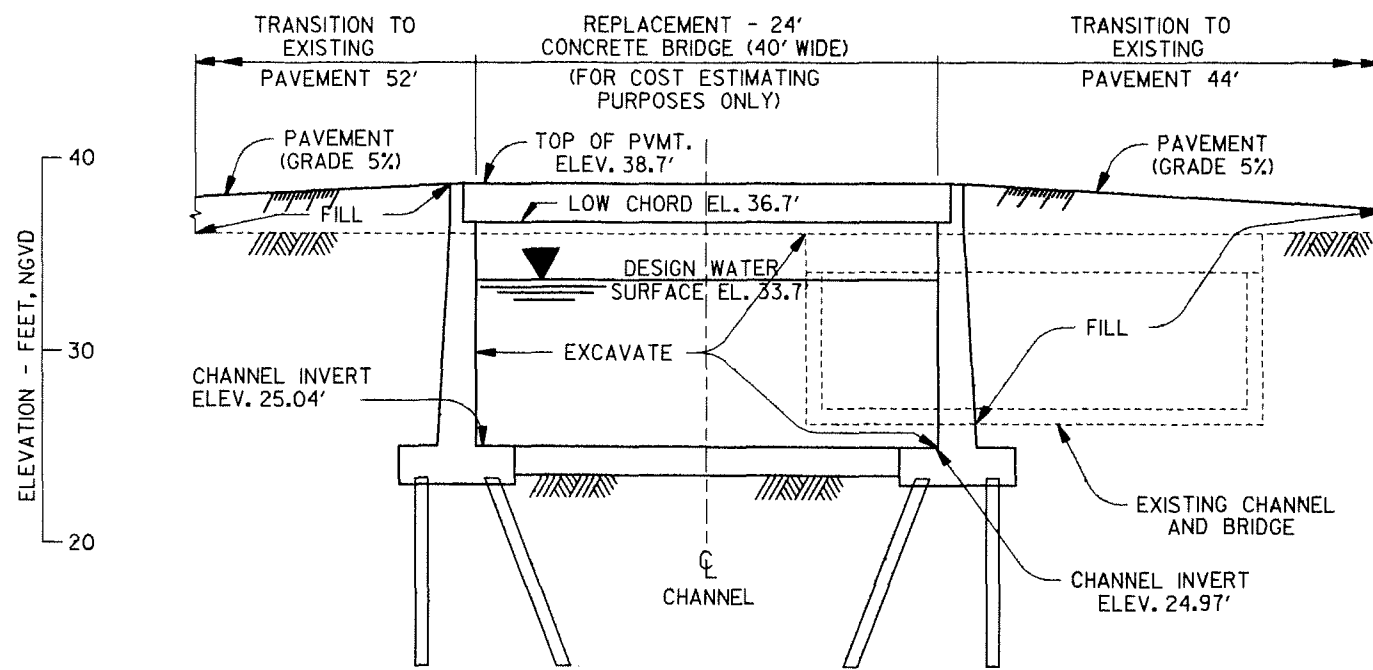
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

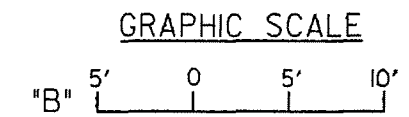
D.O. FILE NO. 102-35,578

DECEMBER 1990

PI ATF S-10



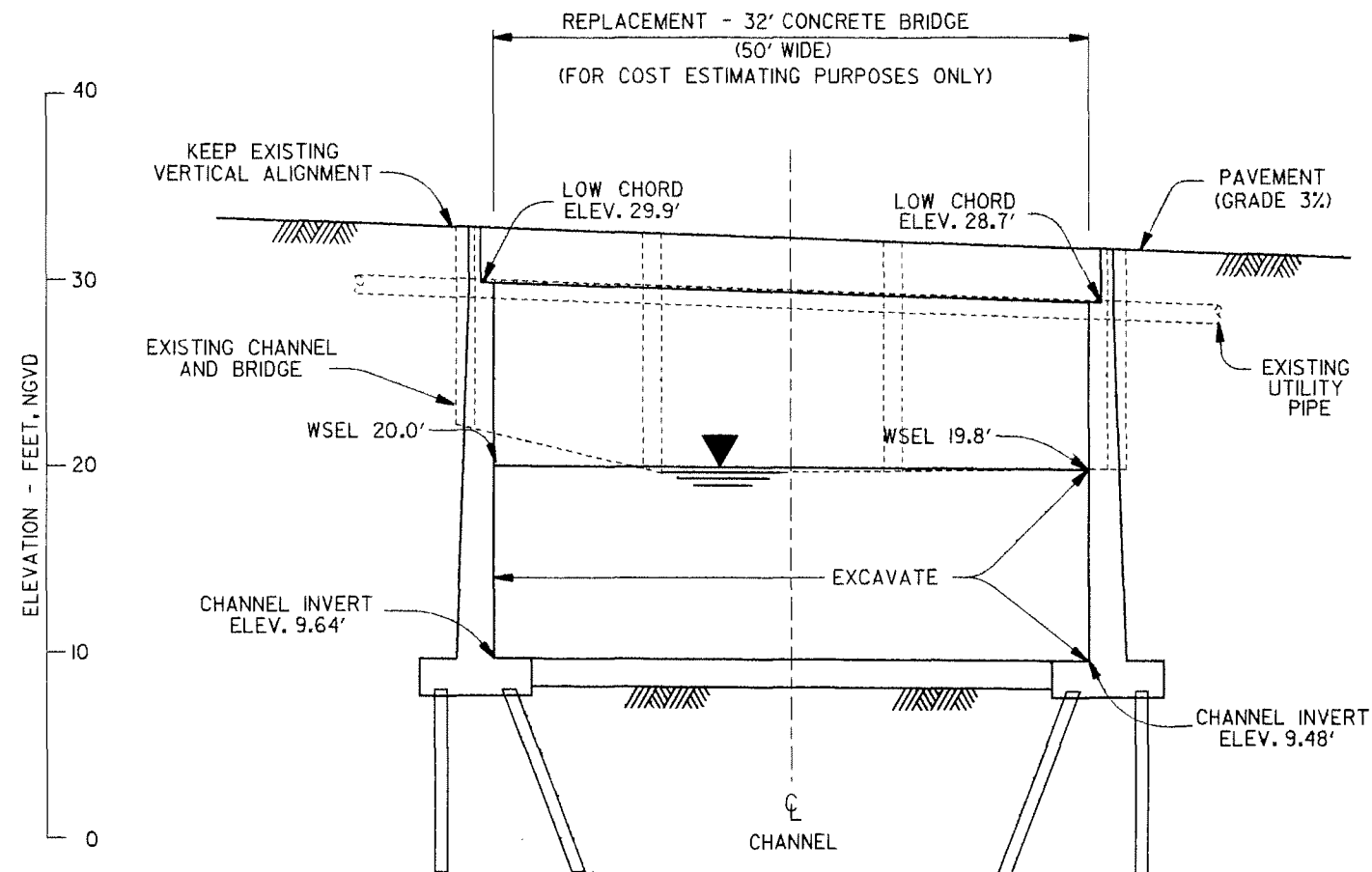
CALLE 54 SE
 JOSEFINA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 76+20
 SCALE: "B"



NOTES:

1. CHANNEL WIDTH IS 17'.
2. 24' SPAN DUE TO SKEW OF BRIDGE
ALIGNMENT RELATIVE TO CHANNEL ALIGNMENT
3. STATION AT LEFT CHANNEL WALL SECTION IS 76+30.
4. STATION AT RIGHT CHANNEL WALL SECTION IS 76+10.

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 JOSEFINA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES
 54TH S. E. STREET
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

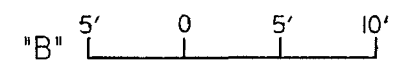


AMERICO MIRANDA
 DONA ANA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 15+45
 SCALE: "B"

NOTES:

1. CHANNEL WIDTH IS 22'.
2. 32' SPAN DUE TO SKEW OF BRIDGE ALIGNMENT RELATIVE TO CHANNEL ALIGNMENT.
3. STATION AT LEFT CHANNEL WALL SECTION IS 15+35.
4. STATION AT RIGHT CHANNEL WALL SECTION IS 15+55.

GRAPHIC SCALE



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

DONA ANA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

AMERICO MIRANDA AVENUE

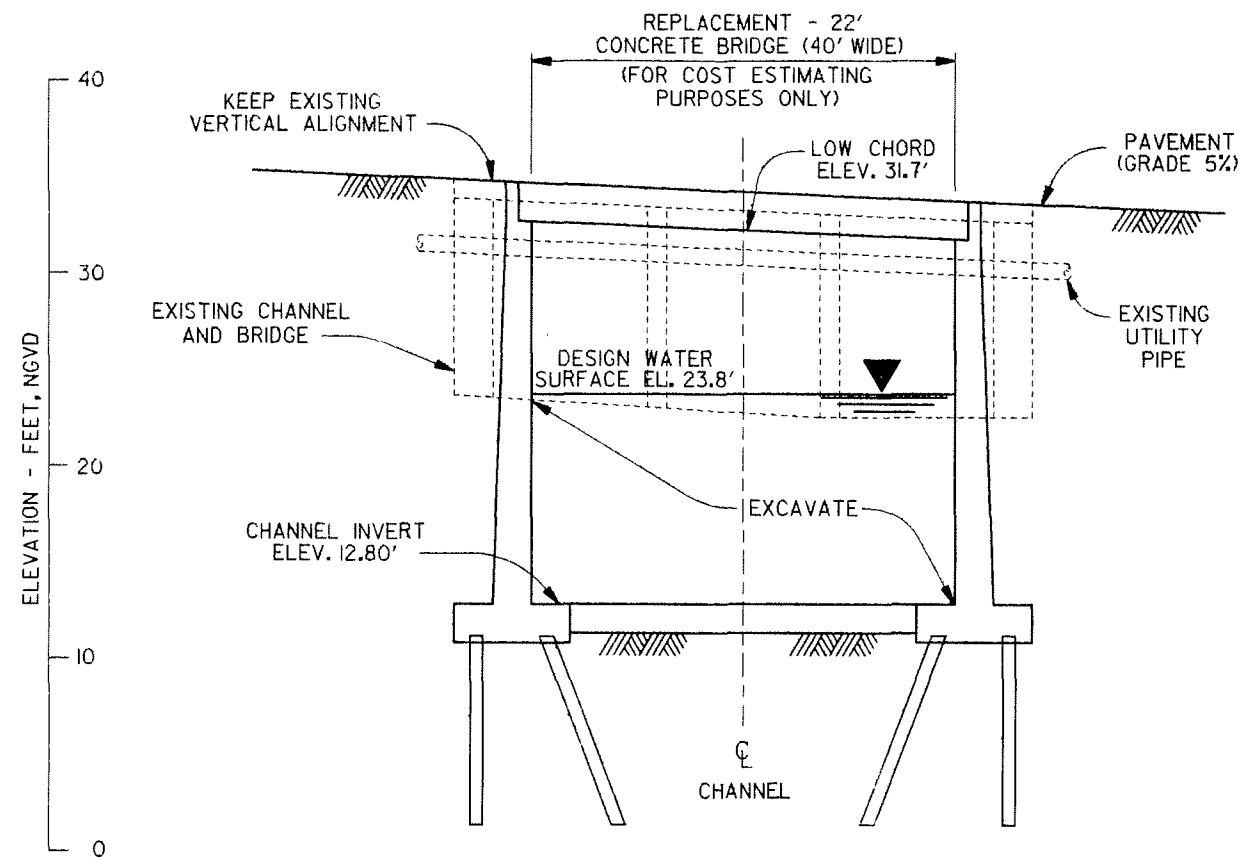
STRUCTURAL

DEPARTMENT OF THE ARMY

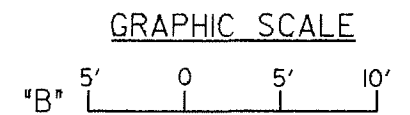
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990



CALLE 29 SE
 DONA ANA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 19+50
 SCALE "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

DONA ANA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

29TH S. E. STREET

STRUCTURAL

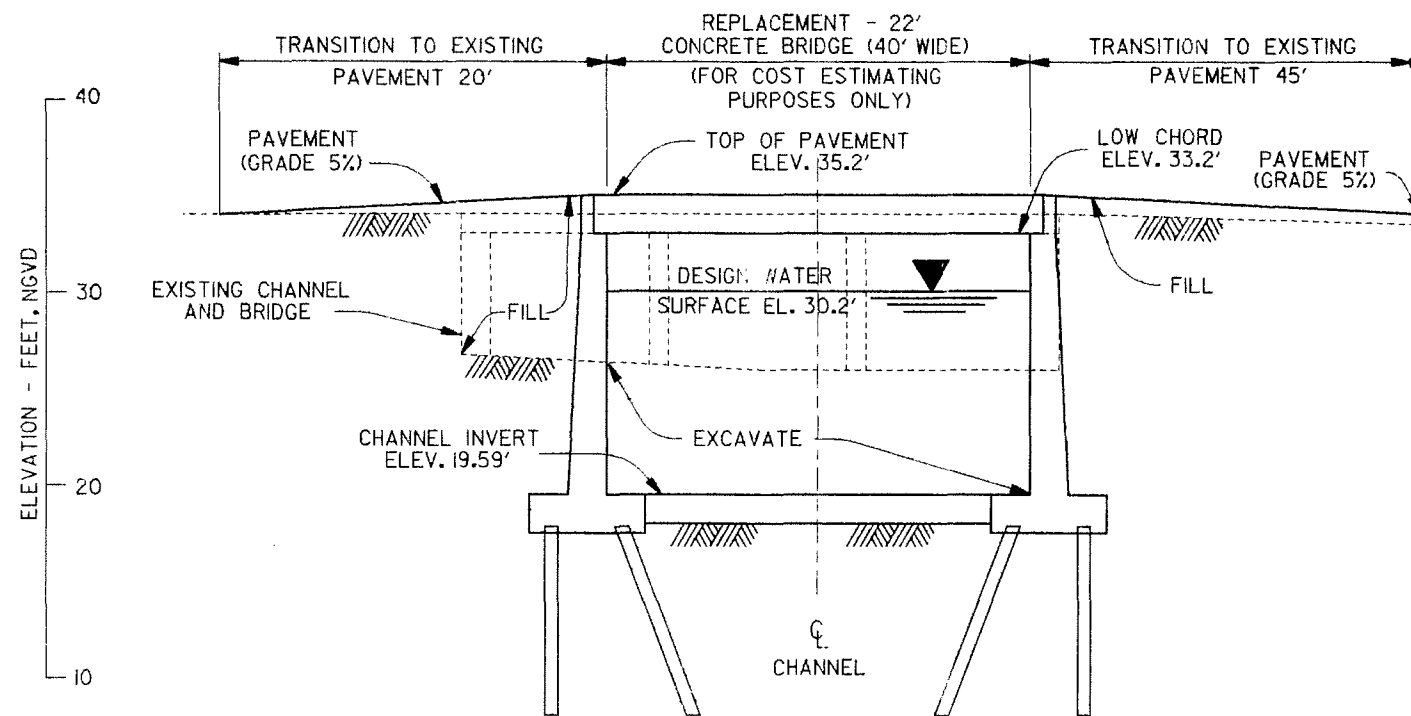
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

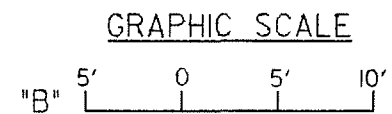
D.O. FILE NO. 102-35,578

DECEMBER 1990

PLATE S-106



CALLE 21SE
 DONA ANA CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 27+94
 SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

DONA ANA TRIBUTARY
 NEW AND REPLACEMENT BRIDGES

21ST S. E. STREET

STRUCTURAL

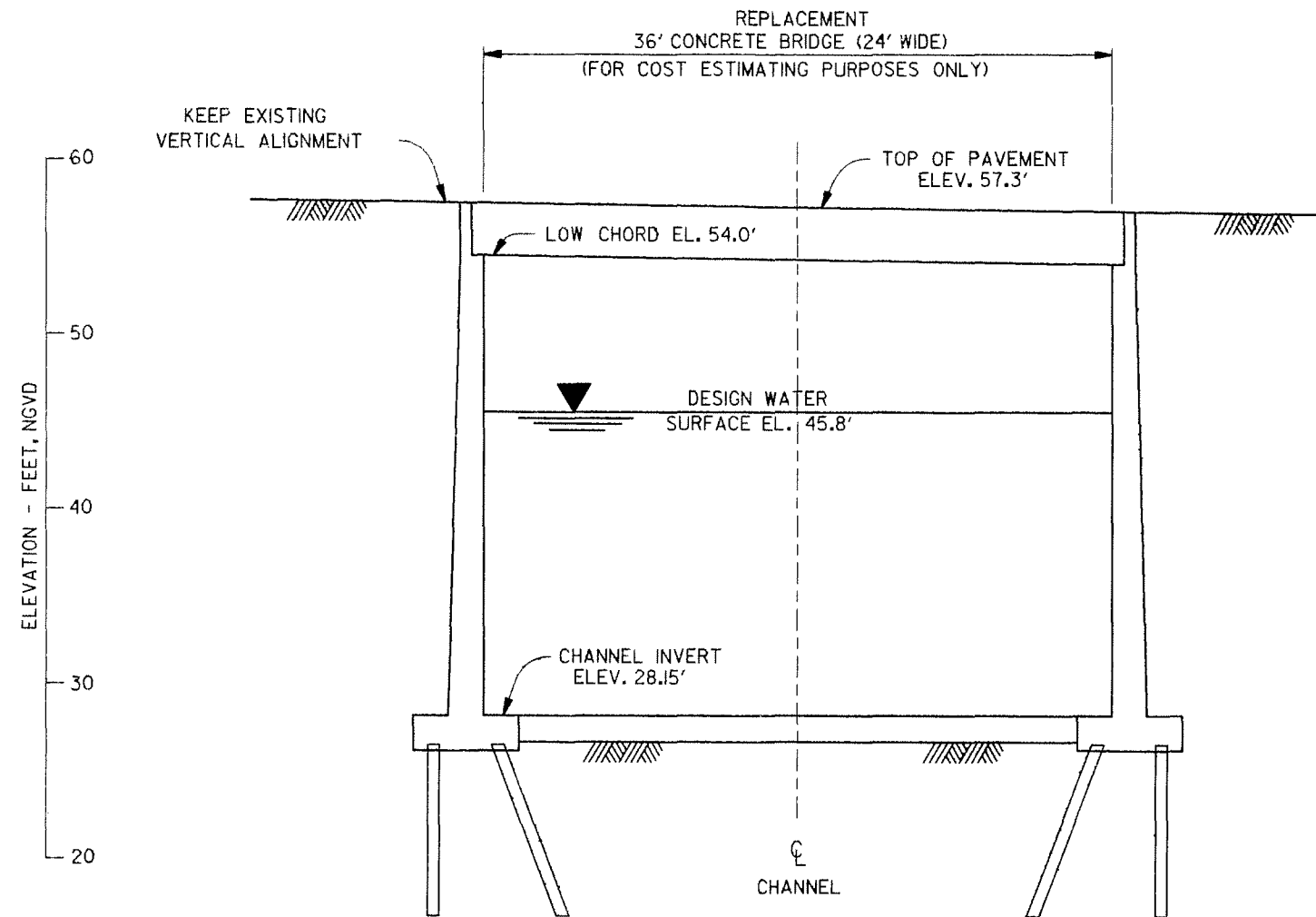
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

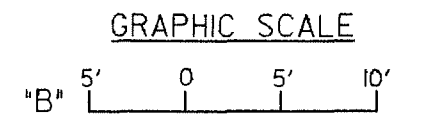
D.O. FILE NO. 102-35,578

DECEMBER 1990

Please Note Plate S-110 and S-111 will not be used in this Report



SERVICE ROAD
 BUENA VISTA DIVERSION CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 22+16
 SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

BUENA VISTA DIVERSION CHANNEL
 NEW AND REPLACEMENT BRIDGES

SERVICE ROAD BRIDGE

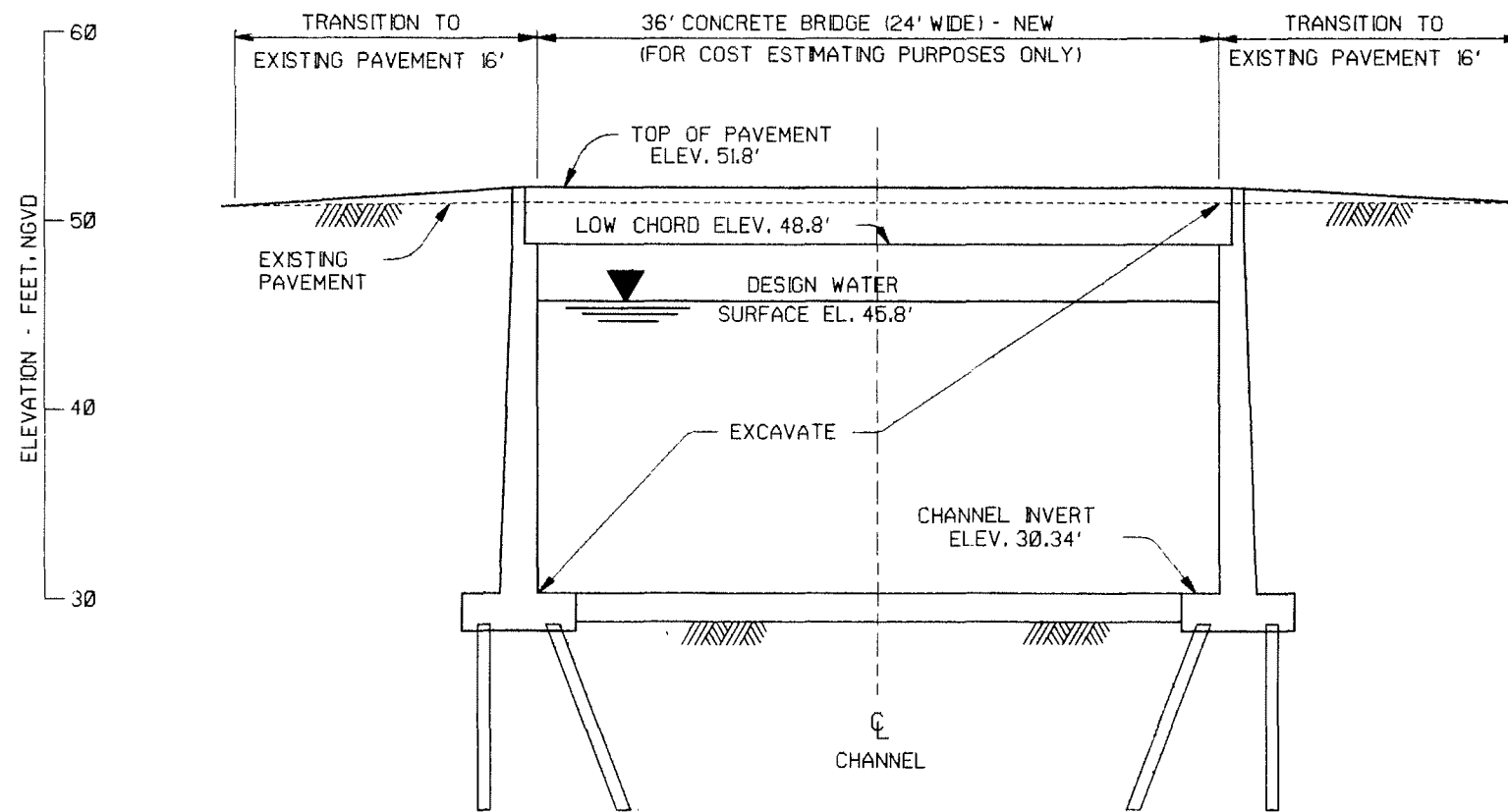
STRUCTURAL

DEPARTMENT OF THE ARMY

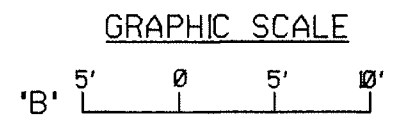
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990



CALLE 17
 BUENA VISTA DIVERSION CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 36+76
 SCALE: 'B'



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

BUENA VISTA DIVERSION CHANNEL
 NEW AND REPLACEMENT BRIDGES

17TH STREET

STRUCTURAL

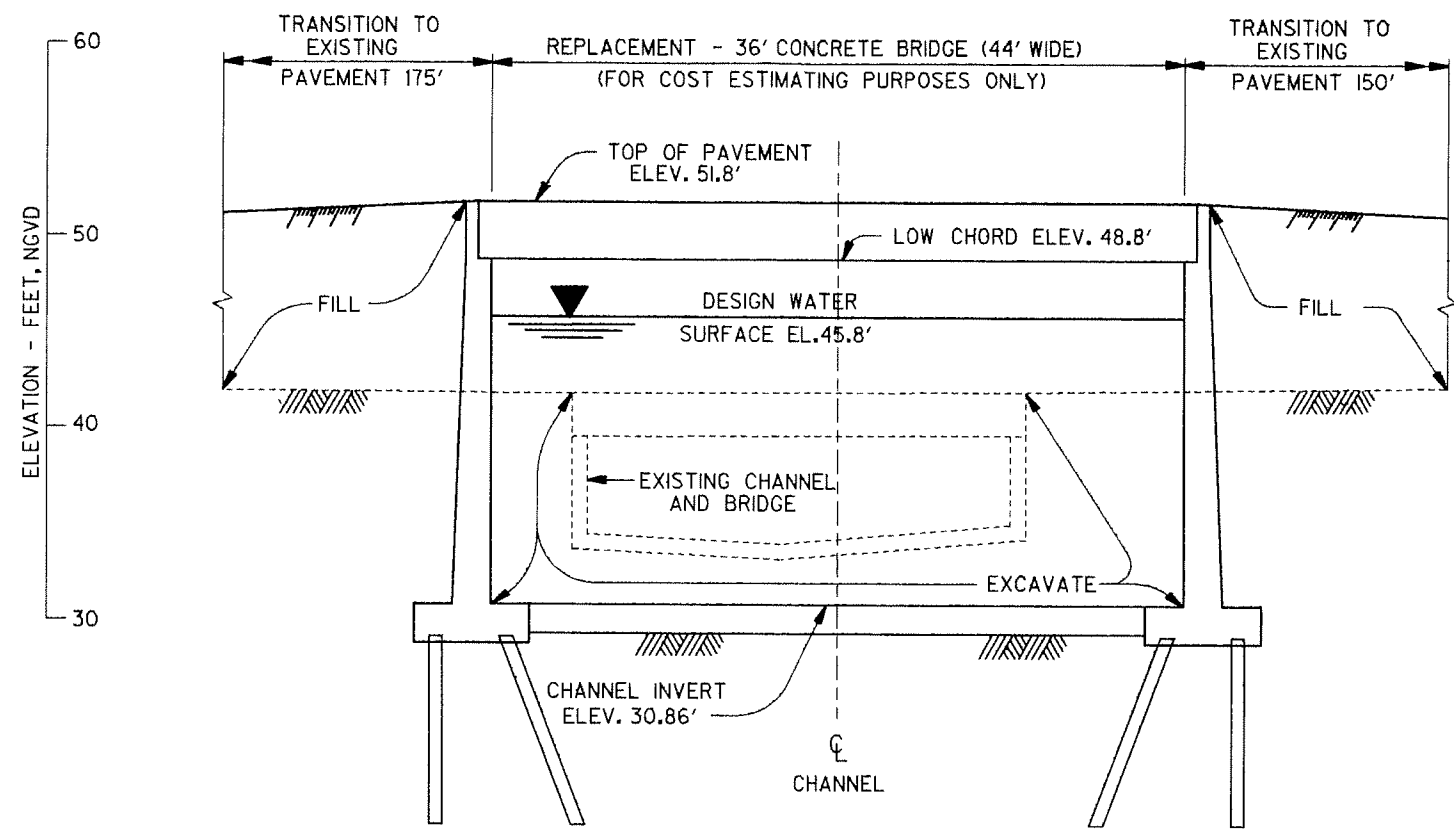
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

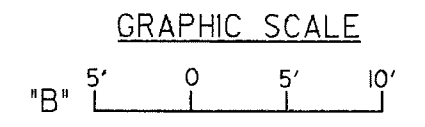
D.O. FILE NO. 102-35,578

DECEMBER 1990

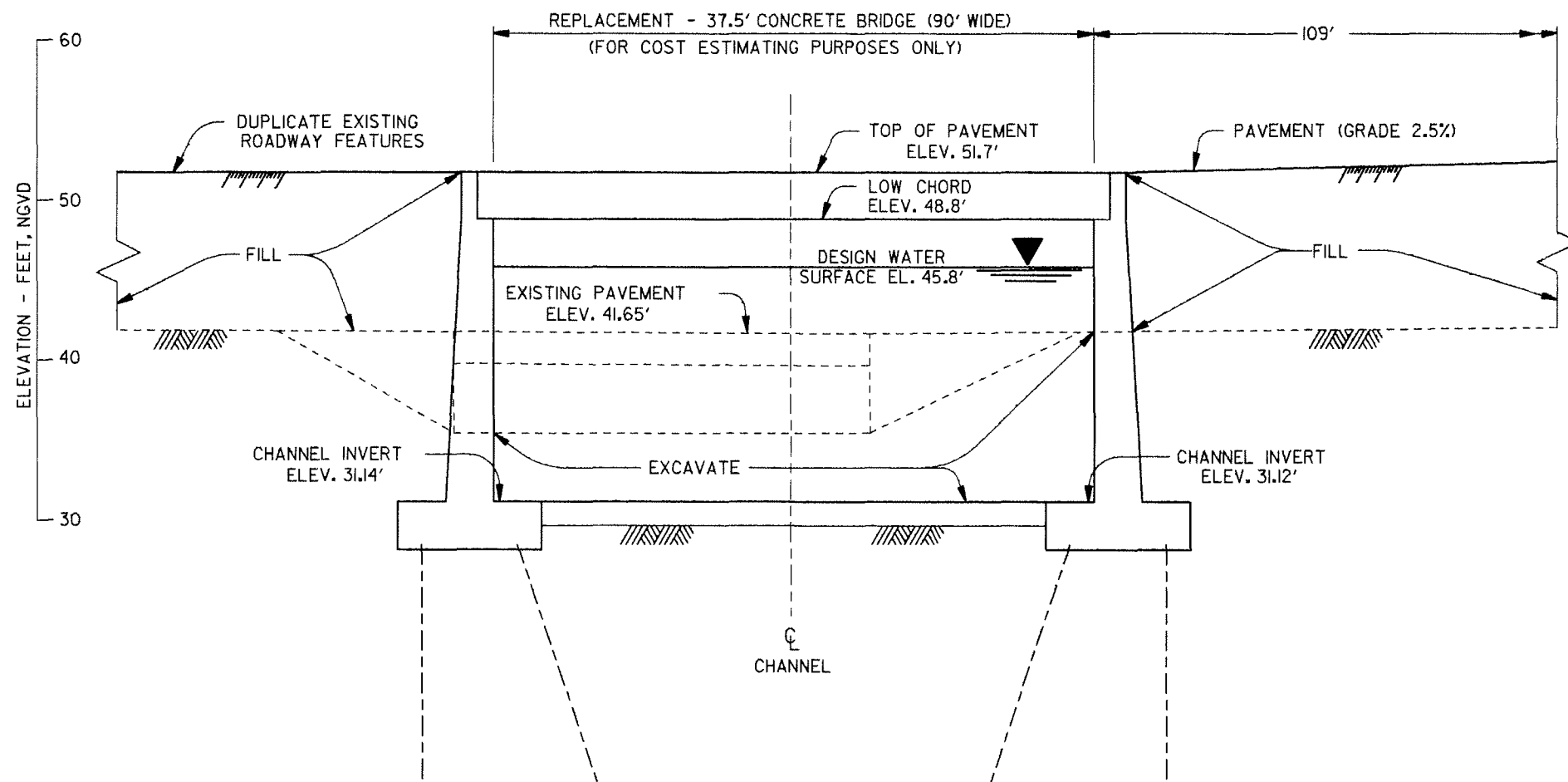
PLATE S-113



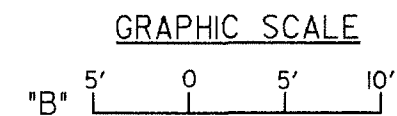
CALLE 4 SE
 BUENA VISTA DIVERSION CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 40+24
 SCALE: "B"



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 BUENA VISTA DIVERSION CHANNEL
 NEW AND REPLACEMENT BRIDGES
 4TH STREET
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



P.R. 21
 BUENA VISTA DIVERSION CHANNEL
 (LOOKING DOWNSTREAM)
 UPSTREAM ELEVATION STA. 42+06.5
 SCALE: "B"



NOTES:

1. CHANNEL WIDTH IS 36'.
2. 37.5' SPAN DUE TO SKEW OF BRIDGE
ALIGNMENT RELATIVE TO CHANNEL ALIGNMENT.
3. STATION AT LEFT CHANNEL WALL SECTION IS 42+11.
4. STATION AT RIGHT CHANNEL WALL SECTION IS 42+01.

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM

BUENA VISTA DIVERSION CHANNEL
 NEW AND REPLACEMENT BRIDGES

P. R. 21

STRUCTURAL

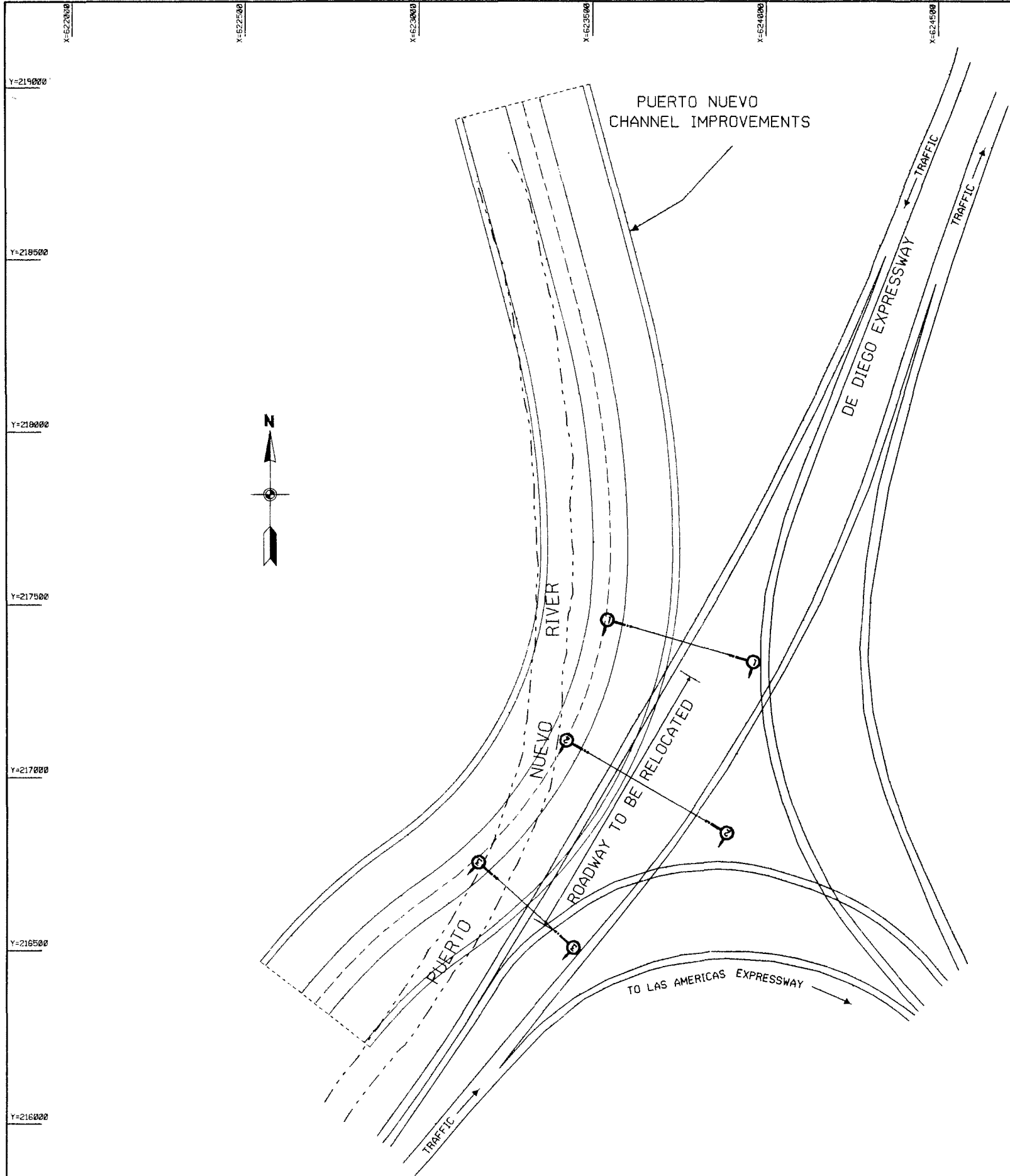
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

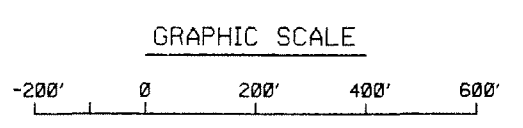
D.O. FILE NO. 102-35,578

DECEMBER 1990

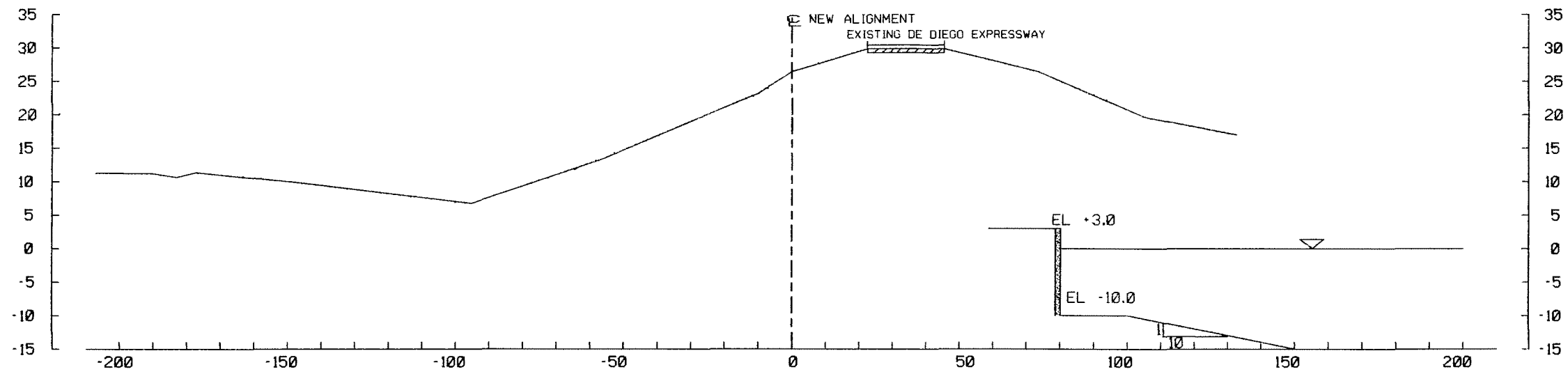
PLATE S-115



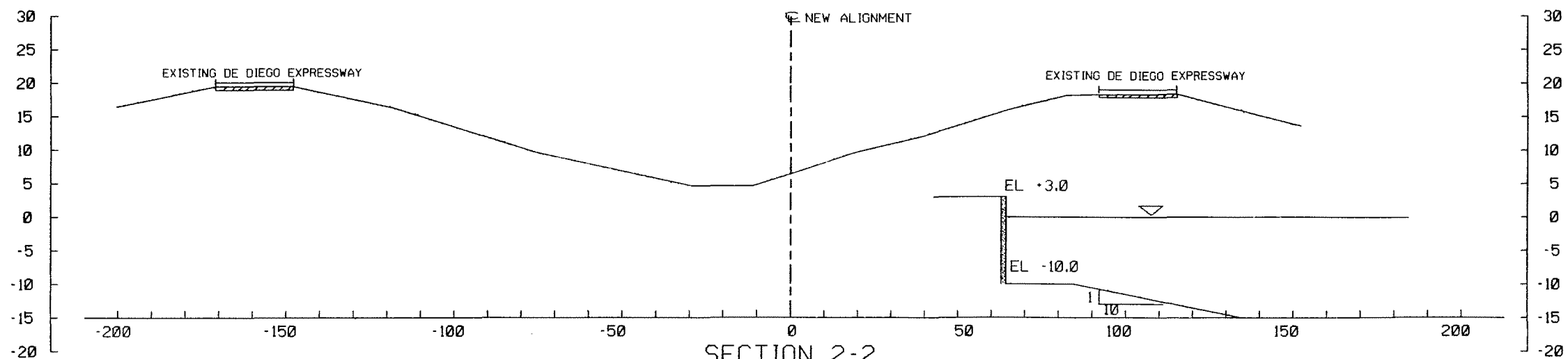
NOTE:
 FOR CROSS-SECTIONS
 SEE PLATE S-117.



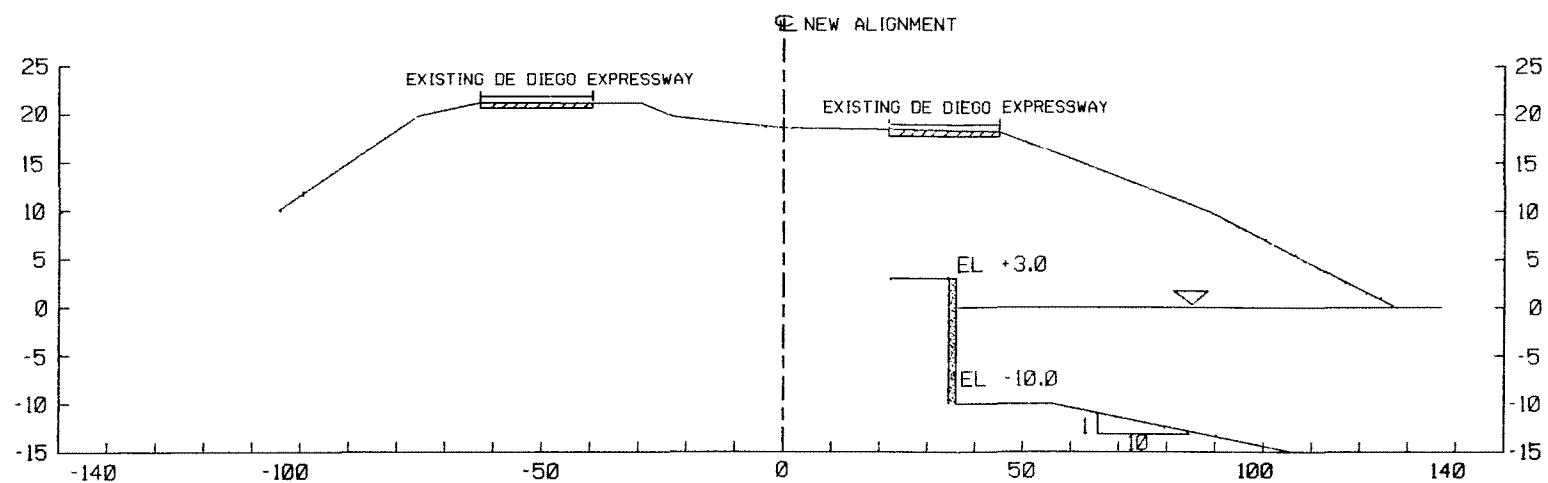
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 DE DIEGO EXPRESSWAY RELOCATION
 EXISTING CONDITION WITH PROPOSED CHANNEL
 PLAN
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578
 DECEMBER 1990



SECTION 1-1



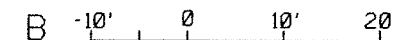
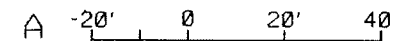
SECTION 2-2



SECTION 3-3

SCALE:
A - HORIZONTAL
B - VERTICAL

GRAPHIC SCALES



SCALES IN FEET

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

DE DIEGO EXPRESSWAY RELOCATION
EXISTING CONDITION WITH PROPOSED CHANNEL

CROSS SECTIONS

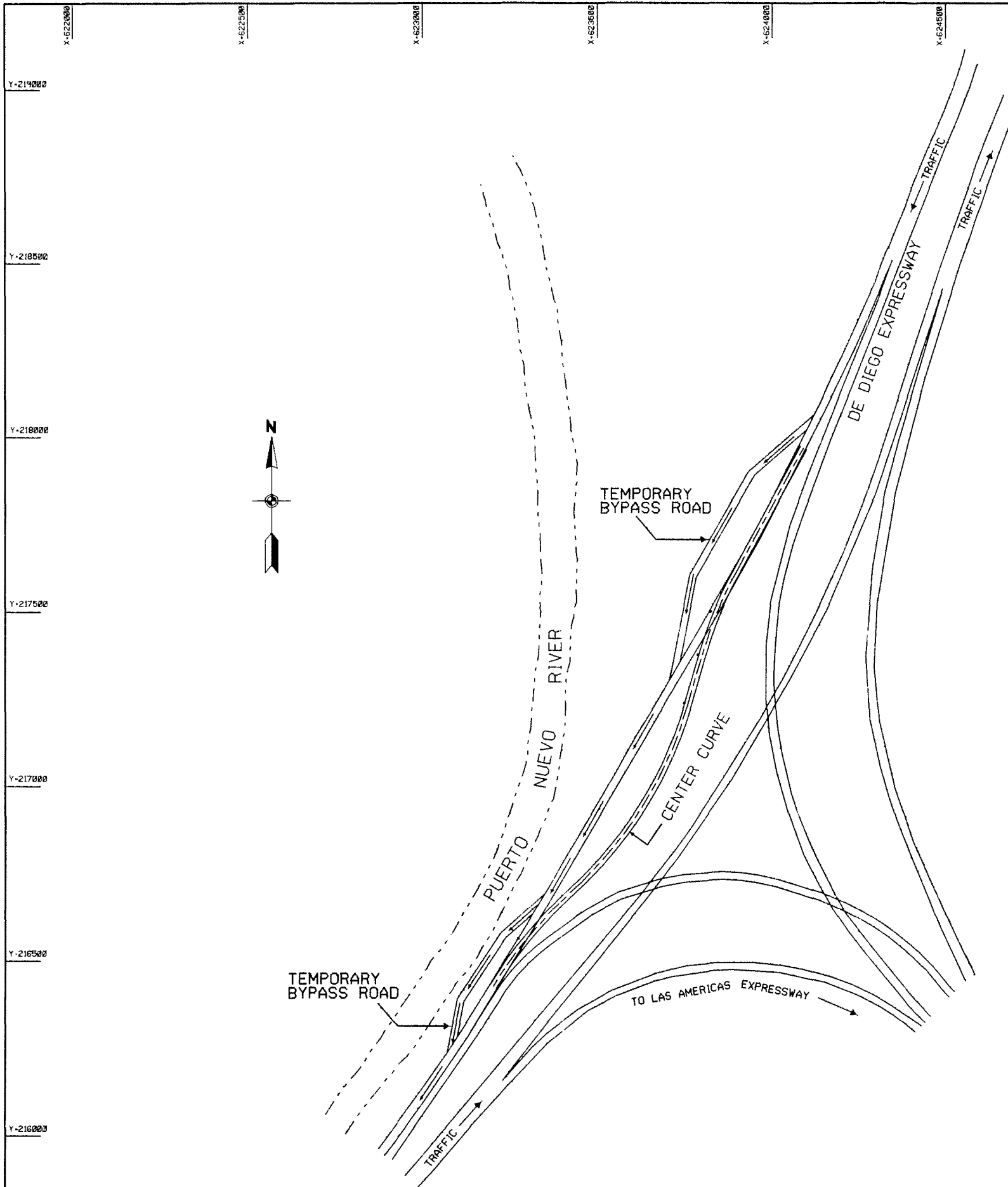
STRUCTURAL

DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

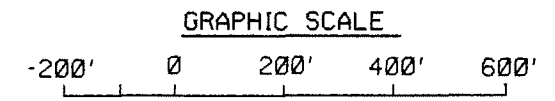
D.O. FILE NO. 102-35,578

DECEMBER 1990

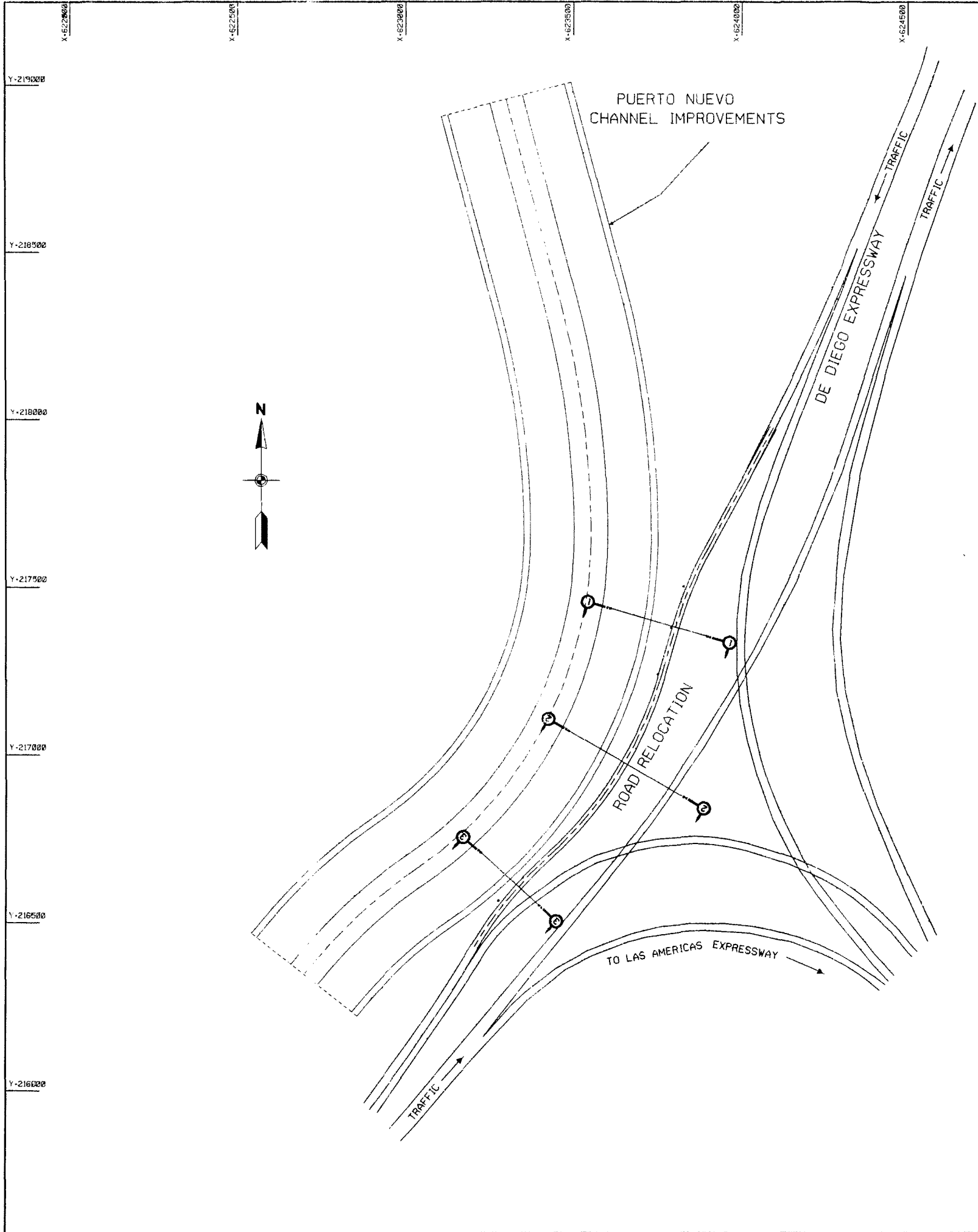


CONSTRUCTION SEQUENCE

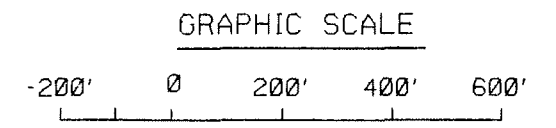
- 1) CONSTRUCT CENTER CURVE.
- 2) CONSTRUCT TEMPORARY BYPASS ROADS.
- 3) ROUTE TRAFFIC TO BYPASS ROADS.
- 4) CONSTRUCT TIE IN TO EXISTING ROAD.



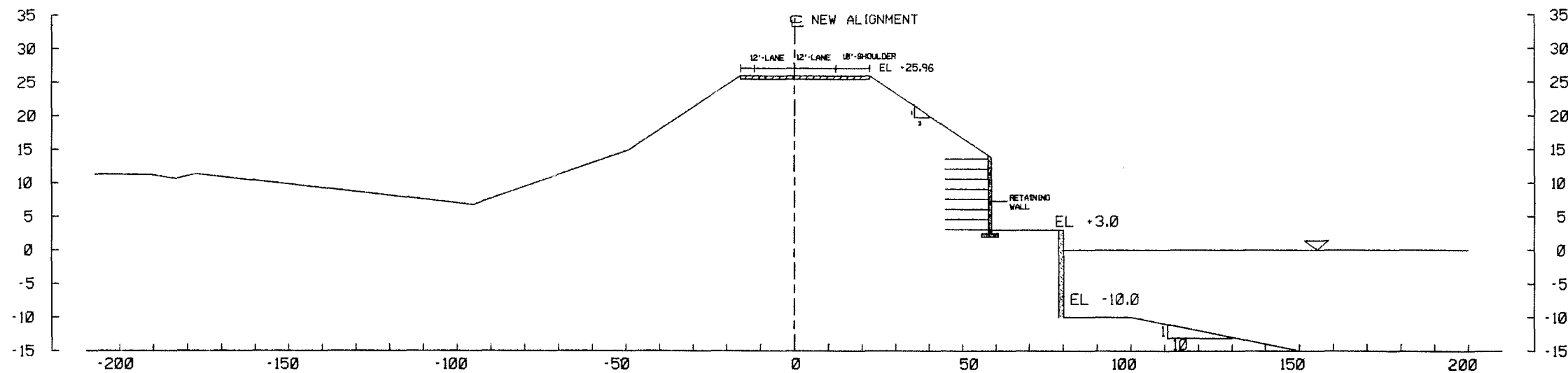
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 DE DIEGO EXPRESSWAY RELOCATION
 CONSTRUCTION SEQUENCE
 PLAN
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



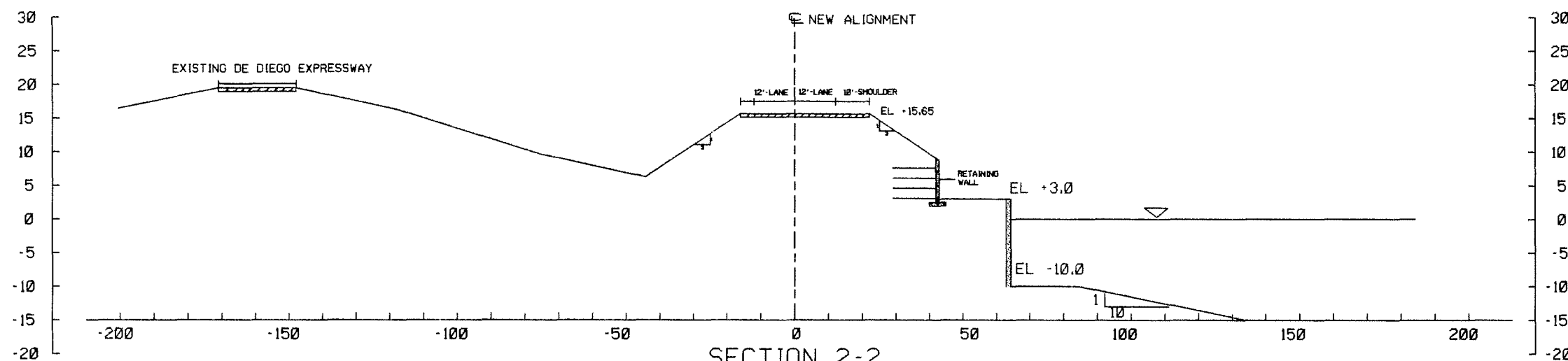
NOTE:
 FOR CROSS-SECTIONS
 SEE PLATE S-120.



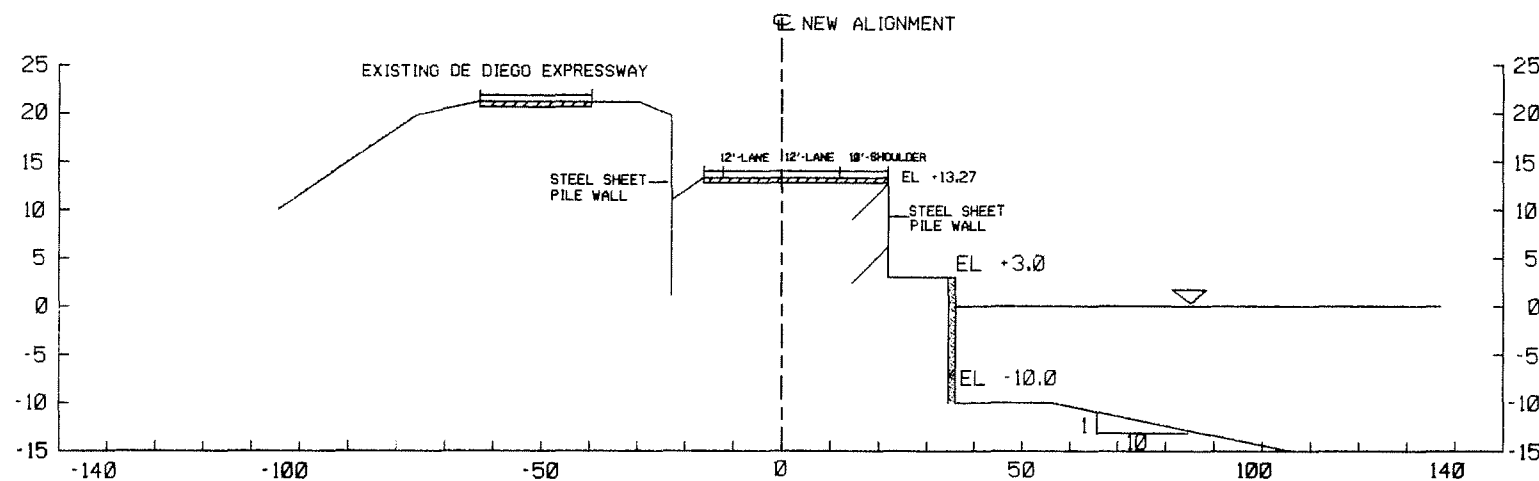
RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 DE DIEGO EXPRESSWAY RELOCATION
 FINISHED CONSTRUCTION
 PLAN
 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990



SECTION 1-1



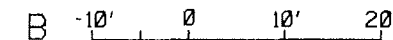
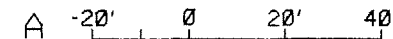
SECTION 2-2



SECTION 3-3

SCALE:
A - HORIZONTAL
B - VERTICAL

GRAPHIC SCALES



SCALES IN FEET

RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM

DE DIEGO EXPRESSWAY RELOCATION
FINISHED CONSTRUCTION

CROSS SECTIONS

STRUCTURAL

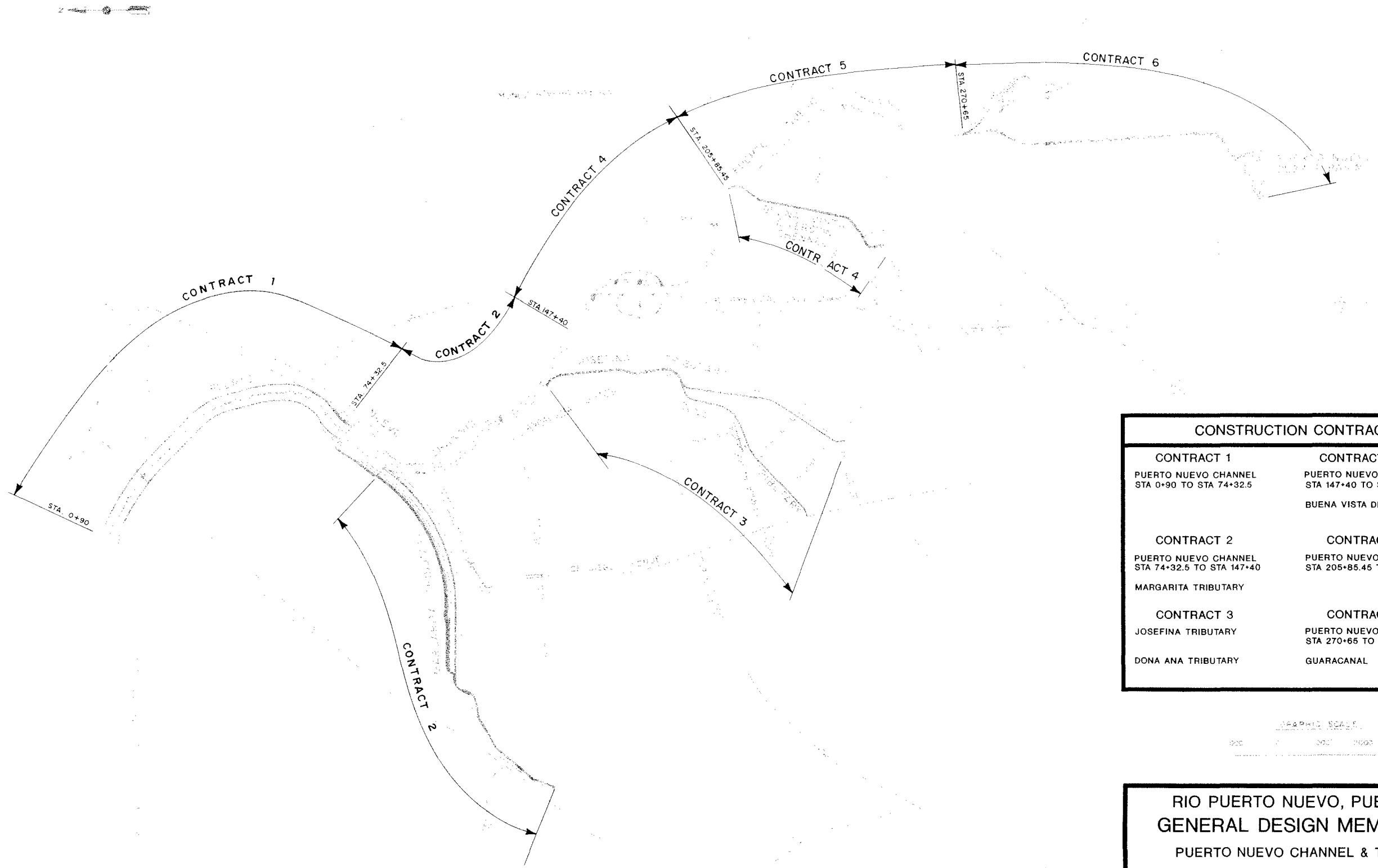
DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990

PLATE S-12C



CONSTRUCTION CONTRACTS	
CONTRACT 1 PUERTO NUEVO CHANNEL STA 0+90 TO STA 74+32.5	CONTRACT 4 PUERTO NUEVO CHANNEL STA 147+40 TO STA 205+85.45 BUENA VISTA DIVERSION CHANNEL
CONTRACT 2 PUERTO NUEVO CHANNEL STA 74+32.5 TO STA 147+40 MARGARITA TRIBUTARY	CONTRACT 5 PUERTO NUEVO CHANNEL STA 205+85.45 TO STA 270+65
CONTRACT 3 JOSEFINA TRIBUTARY DONA ANA TRIBUTARY	CONTRACT 6 PUERTO NUEVO CHANNEL STA 270+65 TO DEBRIS BASIN GUARACANAL

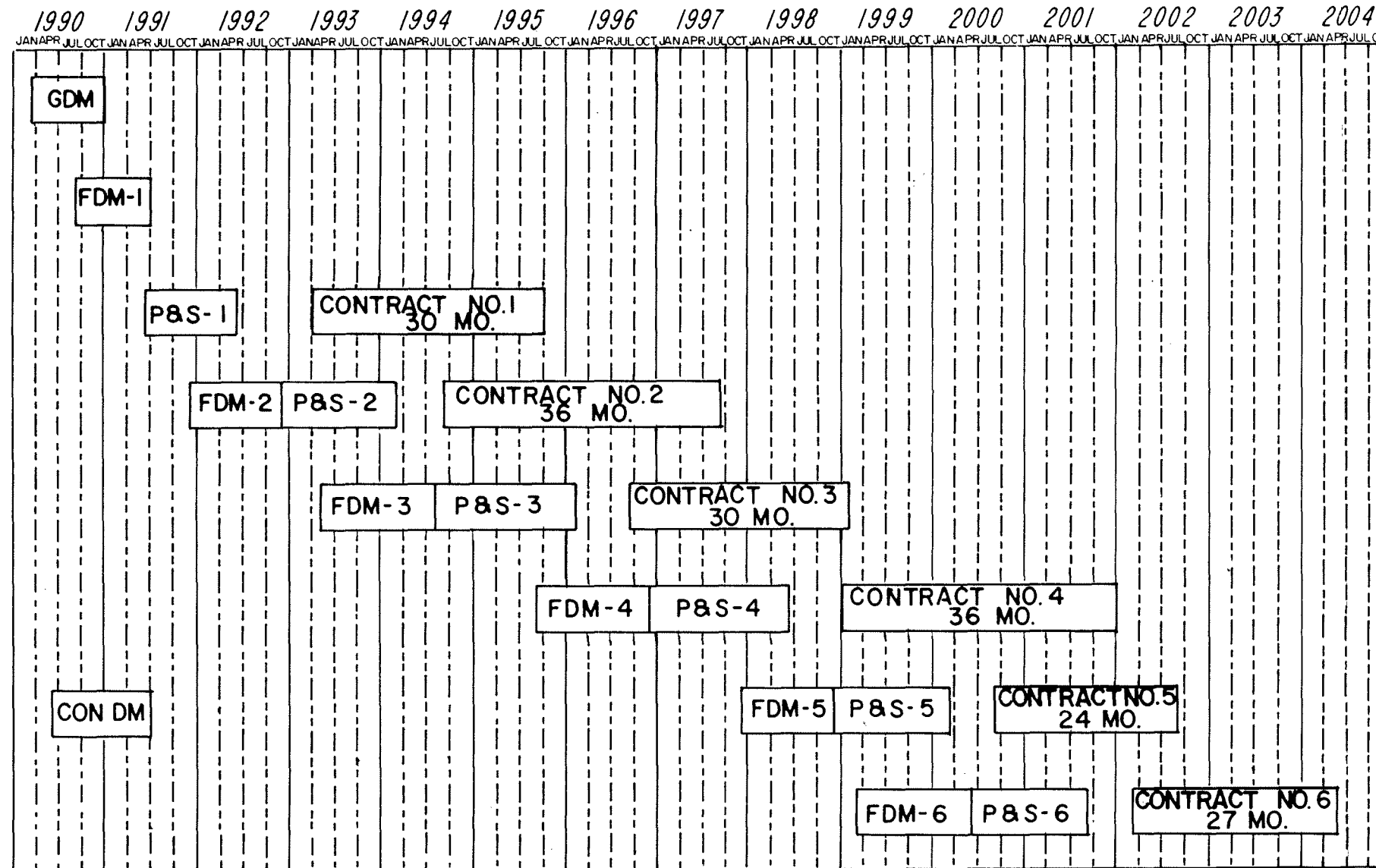


RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL & TRIBUTARIES

CONSTRUCTION CONTRACTS

 STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

RIO PUERTO NUEVO



NOTE:
 SCHEDULE IS SUBJECT TO
 CHANGE AND IS DEPENDANT
 UPON GDM APPROVAL AND
 AVAILABILITY OF FUNDS.
 REVISED SCHEDULE WILL BE
 PROVIDED IN FEATURE
 DESIGN MEMORANDUM 1.

RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL & TRIBUTARIES

SCHEDULE




STRUCTURAL

DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

D.O. FILE NO. 102-35,578

DECEMBER 1990

-  Channel Limits
-  Soil Sample Locations
-  Water Sample Locations

Scale: 1" = 430' ±



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL AND TRIBUTARIES
 CORROSION MITIGATION INVESTIGATION
 SOIL & WATER SAMPLE LOCATIONS

STRUCTURAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

RIO PUERTO NUEVO
GENERAL DESIGN MEMORANDUM

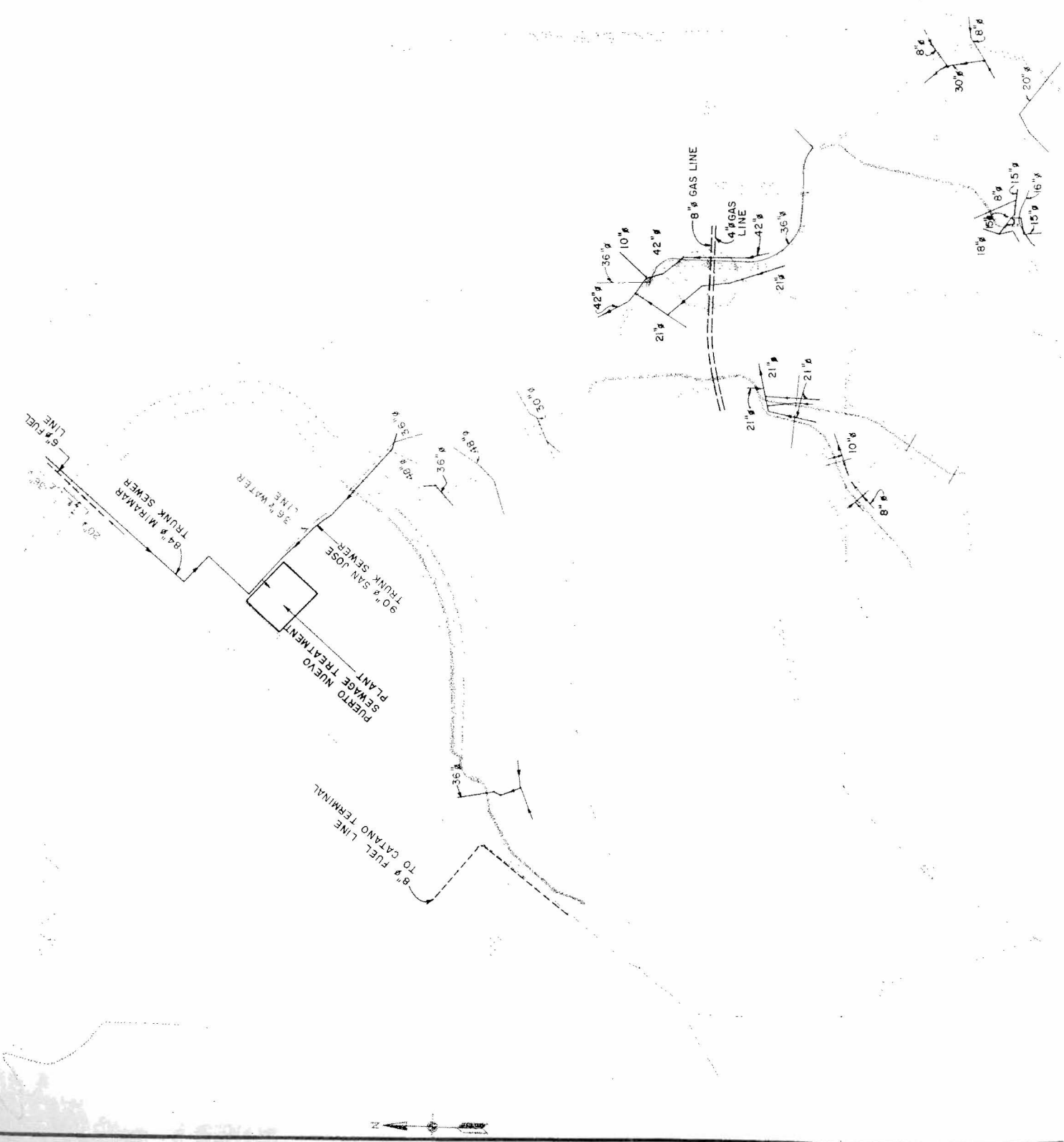
EXISTING UTILITIES

PLATES



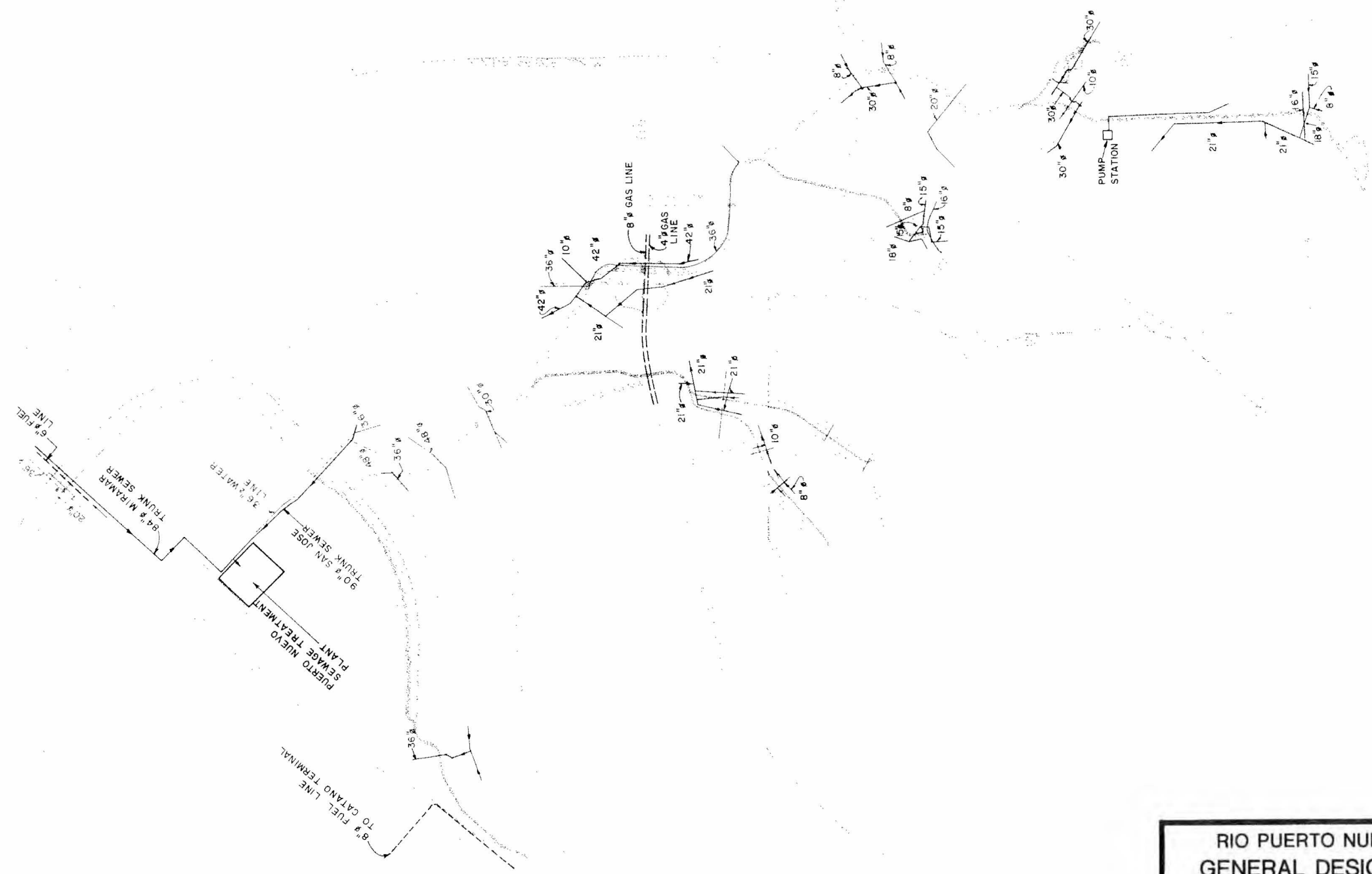
LEGEND

—	WATER LINE
- - -	FUEL LINE
- · - ·	GAS LINE
—	SEWER LINE



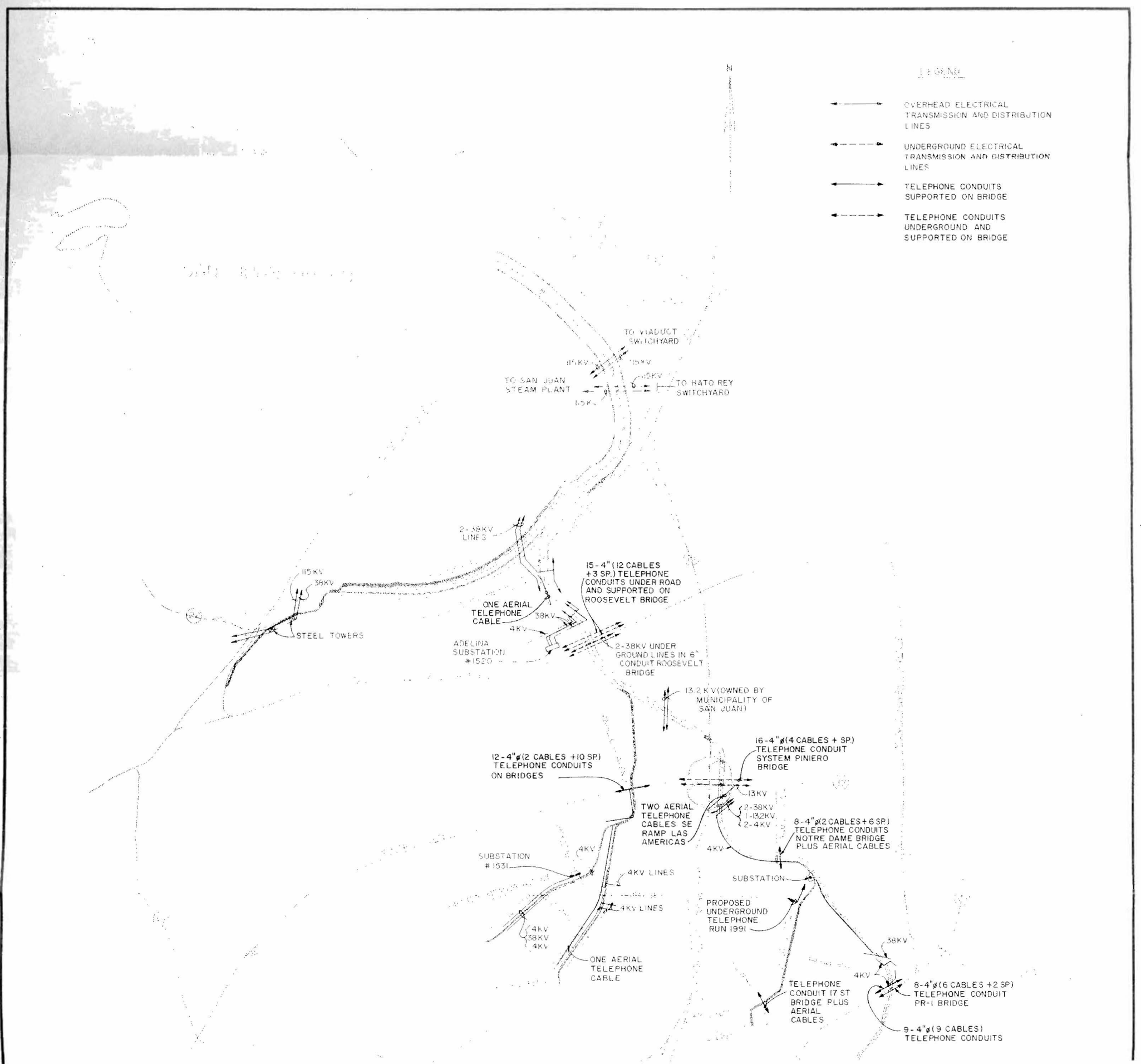
LEGEND

—	WATER LINE
- - -	FUEL LINE
- · - · -	GAS LINE
—	SEWER LINE

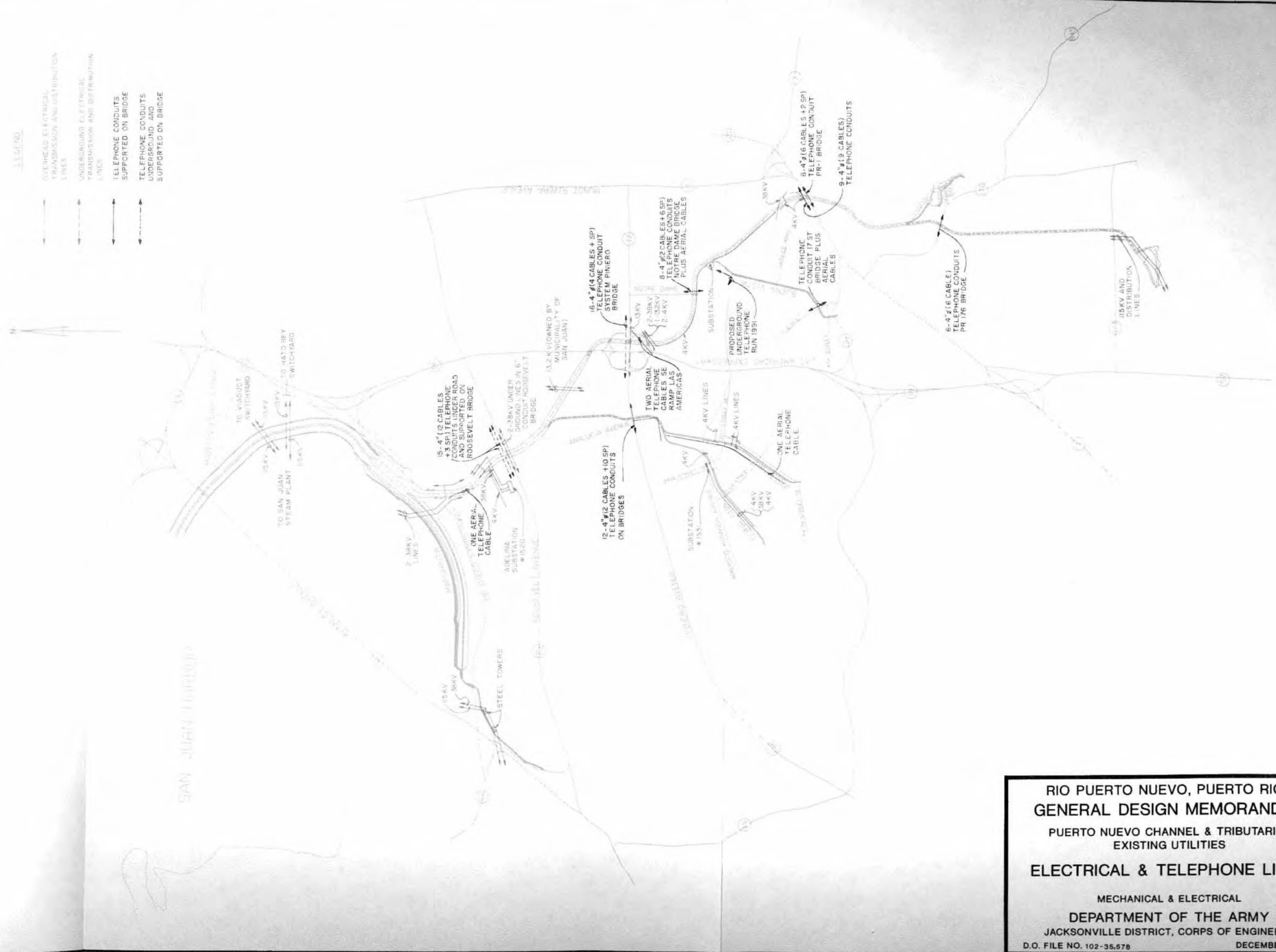


RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL & TRIBUTARIES
 EXISTING UTILITIES
WATER, SEWER, FUEL & GAS LINES

 MECHANICAL & ELECTRICAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO: 102-35,578 DECEMBER 1990



- LEGEND
- OVERHEAD ELECTRICAL TRANSMISSION AND DISTRIBUTION LINES
 - UNDERGROUND ELECTRICAL TRANSMISSION AND DISTRIBUTION LINES
 - TELEPHONE CONDUITS SUPPORTED ON BRIDGE
 - TELEPHONE CONDUITS UNDERGROUND AND SUPPORTED ON BRIDGE



RIO PUERTO NUEVO, PUERTO RICO
GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL & TRIBUTARIES
 EXISTING UTILITIES
ELECTRICAL & TELEPHONE LINES
 MECHANICAL & ELECTRICAL
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990

RIO PUERTO NUEVO
GENERAL DESIGN MEMORANDUM

RECREATIONAL

PLATES



RIO PUERTO NUEVO, PUERTO RICO
 GENERAL DESIGN MEMORANDUM
 PUERTO NUEVO CHANNEL

 BIKE PATH & LINEAR PARK ALIGNMENT

 RECREATION
 DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 D.O. FILE NO. 102-35,578 DECEMBER 1990