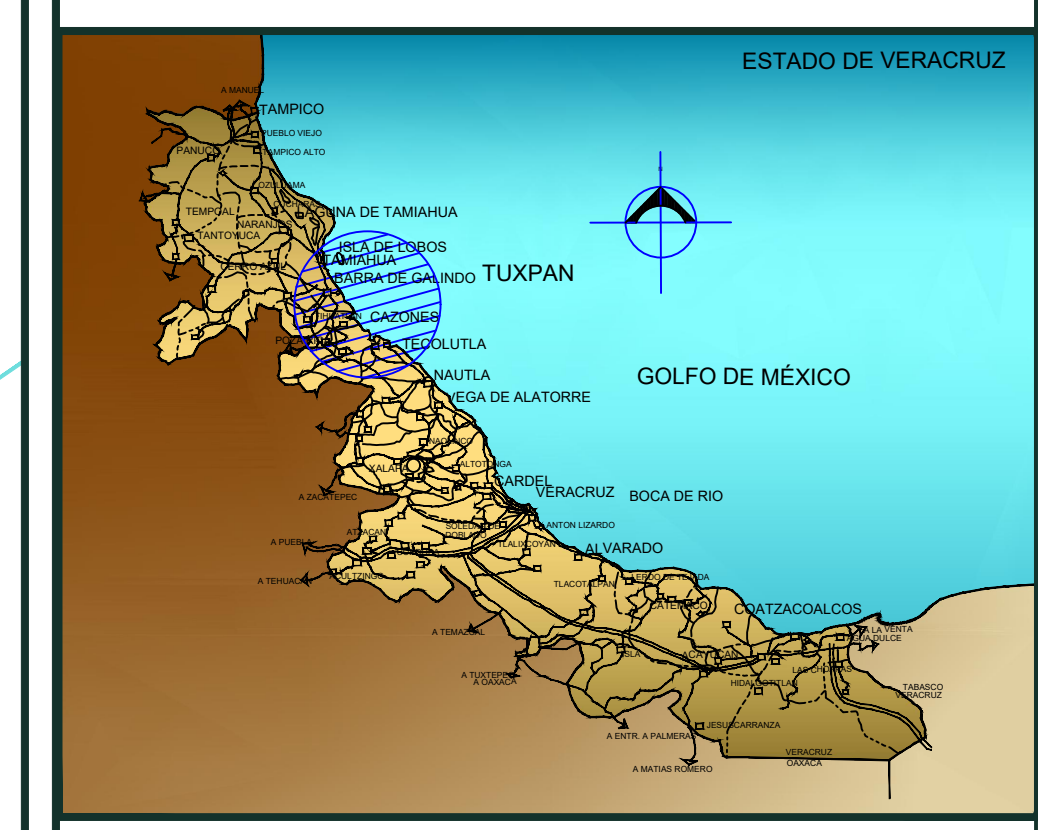
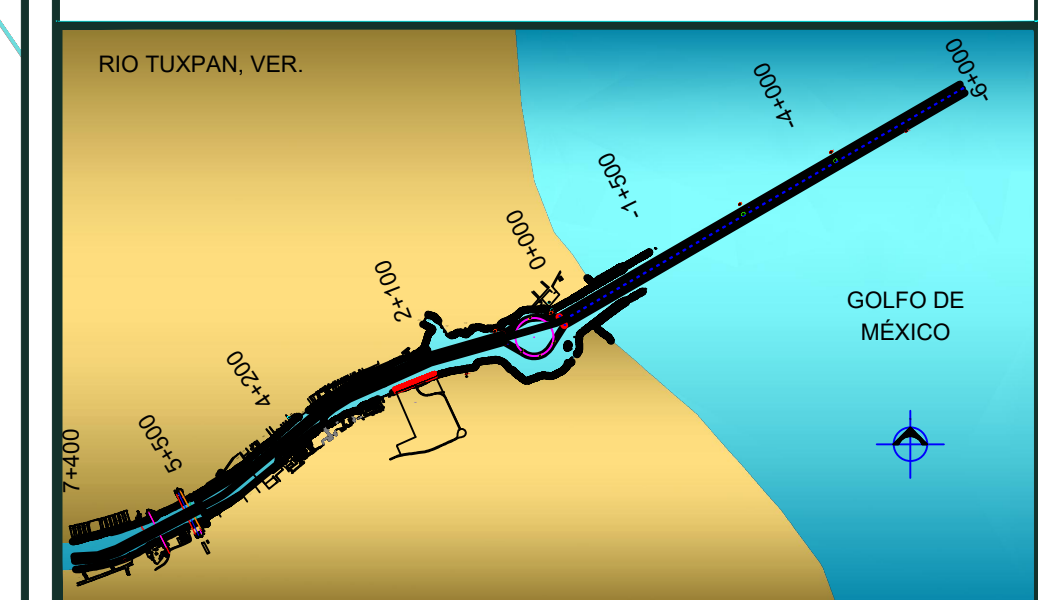




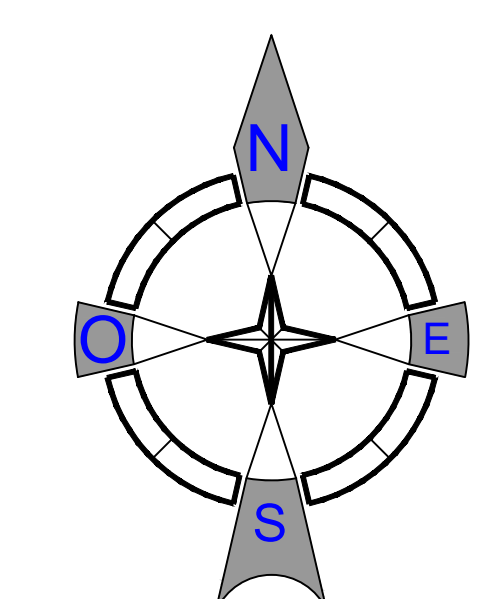
LOCALIZACION NACIONAL



LOCALIZACION ESTATAL



LOCALIZACION PARTICULAR



ORIENTACIÓN

BOYAS

- BOYA A RECALADA
- BOYA A RECALADA

BALIZA DE ENFILACION ANTERIOR

BALIZA DE ENFILACION POSTERIOR

FARO ACTUAL

FARO ANTIGUO

MOJONERA

BITA

BANCO DE NIVEL

SONDEO DE 0.00 A 9.99

SONDEO DE 10.00 A 11.99

SONDEO DE 12.00 A 14.99

SONDEO DE 15.00 EN ADELANTE

SIMBOLOGIA

RESUMEN DE ÁREAS:

ZONA 1 = 133.77 Ha.

ZONA 2 = 42.52 Ha.

ZONA 3 = 39.47 Ha.

ZONA 4 = 28.91 Ha.

ZONA 5 = 44.10 Ha.

ÁREA TOTAL = 288.77 Ha.

CUADRO DE CONSTRUCCION DEL POL GONO DE LA ZONA 1

LADO	RUMBO	DISTANCIA	AZMUT	VERT.	ANGUNT.	Y	X
1-3	S 59°51'21.12" W	5,245.974	239°51'21.12"	1	210°9'38.88"	2,322,088.898	680,433.9457
3-4	S 59°51'36.17" W	53.997	239°51'36.17"	3	179°59'44.95"	2,319,454.4913	675,891.2417
4-5	N 30°08'38.88" E	252.400	339°51'12.12"	4	90°0'0.00"	2,319,427.9787	675,863.7151
5-7	N 59°51'35.83" E	54.999	59°51'35.83"	5	179°59'42.40"	2,319,445.6479	675,723.9700
7-8	N 59°51'21.12" E	5,244.967	59°51'21.12"	7	180°0'14.72"	2,319,473.2637	675,771.5332
8-1	S 30°08'38.88" E	252.400	149°51'21.12"	8	90°0'0.00"	2,322,307.1654	680,307.1962

SUPERFICIE = 1,337,712.655 m²

CUADRO DE CONSTRUCCION DEL POL GONO DE LA ZONA 4

LADO	RUMBO	DISTANCIA	AZMUT	VERT.	ANGUNT.	Y	X
46-47	S 49°37'49.34" W	38.070	226°37'49.34"	46	192°11'45.12"	2,318,076.7303	672,478.3557
47-48	S 52°46'57.10" W	16.289	232°46'57.10"	47	179°59'52.24"	2,318,050.5875	672,451.6411
48-49	N 44°09'24.37" E	243.181	44°09'24.37"	48	48°54'21.47"	2,318,040.7350	672,438.9294
49-50	N 56°15'03.22" E	404.724	56°15'03.22"	49	79°30'32.42"	2,318,215.2016	672,269.2736
50-51	N 59°04'38.58" E	182.245	59°04'38.58"	50	177°10'24.64"	2,318,440.0492	672,605.7932
51-52	N 59°04'38.58" E	78.713	59°04'38.58"	51	180°0'0.00"	2,318,523.4238	672,744.9773
52-53	N 64°07'37.92" E	611.560	64°07'37.92"	52	174°57'0.60"	2,318,563.8727	672,812.5020
53-54	S 23°57'11.24" E	237.133	156°2'48.76"	53	88°4'49.17"	2,318,830.7422	673,362.7626
54-55	S 64°07'37.92" E	601.774	244°7'37.92"	54	91°50'10.83"	2,318,614.0315	673,499.0361
55-56	S 64°07'37.92" E	601.774	244°7'37.92"	55	180°0'0.00"	2,318,351.4325	673,715.8007
56-57	S 29°33'55.63" E	25.548	209°33'55.63"	56	218°31'25.24"	2,318,321.2924	672,855.3020
57-58	S 56°40'53.50" E	220.391	238°40'53.50"	57	146°52'59.07"	2,318,298.2052	672,844.3272
58-46	S 56°49'34.47" E	206.548	238°49'34.47"	58	179°51'19.09"	2,318,183.6470	672,656.0488

SUPERFICIE = 289,135.843 m²

CUADRO DE CONSTRUCCION DEL POL GONO DE LA ZONA 2

LADO	RUMBO	DISTANCIA	AZMUT	VERT.	ANGUNT.	Y	X
9-11	S 52°29'10.79" W	329.311	212°29'10.79"	9	237°50'49.21"	2,319,409.6363	675,811.7562
11-12	S 37°01'53.52" W	46.774	217°1'53.52"	11	179°27'17.27"	2,319,131.8459	675,640.8838
12-13	S 48°07'18.98" W	49.162	226°7'18.98"	12	170°54'34.54"	2,319,094.5064	675,612.7142
13-14	S 59°12'44.44" W	49.162	239°12'44.44"	13	170°54'34.54"	2,319,060.4307	675,577.2772
14-15	S 64°18'09.90" W	49.162	244°18'09.90"	14	170°54'34.54"	2,319,032.3819	675,538.9016
15-16	S 73°23'35.36" W	49.162	252°23'35.36"	15	170°54'34.54"	2,319,011.0643	675,492.6016
16-17	S 82°29'00.82" W	49.162	262°29'00.82"	16	170°54'34.54"	2,318,997.0136	675,445.4900
17-18	N 89°25'33.72" E	49.162	271°34'26.28"	17	170°54'34.54"	2,318,990.2627	675,396.7502
18-19	N 79°20'58.29" E	49.162	280°39'51.74"	18	170°54'34.54"	2,318,991.8330	675,341.6064
19-20	N 70°14'42.80" E	49.162	289°45'17.20"	19	170°54'34.54"	2,319,001.0308	675,299.2933
20-21	N 61°09'17.34" E	44.693	298°50'42.86"	20	170°54'34.54"	2,319,017.6474	675,253.0244
21-22	N 67°34'54.80" E	254.112	299°25'5.20"	21	179°25'37.46"	2,319,039.2091	675,213.8770
22-23	S 74°02'40.00" W	86.751	254°2'40.00"	22	225°22'25.20"	2,319,164.0233	674,992.5310
23-24	N 19°57'20.00" E	244.998	344°2'40.00"	23	90°0'0.00"	2,319,140.1763	674,909.1223
24-25	N 74°02'39.19" E	138.844	74°02'39.19"	24	90°0'0.00"	2,319,375.7363	674,841.7743
25-26	N 58°13'36.83" E	286.377	58°13'36.83"	25	199°49'7.56"	2,319,413.0039	674,979.2685
26-27	N 61°07'36.29" E	29.854	61°07'36.29"	26	177°0'0.34"	2,319,564.6979	675,219.7299
27-28	N 69°50'35.62" E	31.374	69°50'35.62"	27	174°12'0.67"	2,319,579.1130	675,244.8725
28-29	N 74°33'54.90" E	31.374	74°33'54.90"	28	174°12'0.67"	2,319,591.4094	675,273.7371
29-30	N 78°31'34.28" E	31.374	78°31'34.28"	29	174°12'0.67"	2,319,600.7256	675,303.6984
30-31	N 81°19'33.71" E	29.854	81°19'33.71"	30	174°12'0.57"	2,319,606.8666	675,334.4438
31-32	N 87°13'33.17" E	328.439	87°13'33.17"	31	177°6'0.23"	2,319,609.9182	675,364.1516
32-33	N 99°51'18.20" E	37.424	99°51'18.20"	32	207°22'15.18"	2,319,625.8137	675,692.2055
33-34	S 30°08'38.88" E	250.000	149°51'21.12"	33	89°59'51.16"	2,319,644.6076	675,724.5683
34-9	S 59°51'18.07" W	37.417	339°51'18.07"	34	90°0'0.00"	2,319,428.4164	675,650.1125

SUPERFICIE = 425,164.719 m²

CUADRO DE CONSTRUCCION DEL POL GONO DE LA ZONA 3

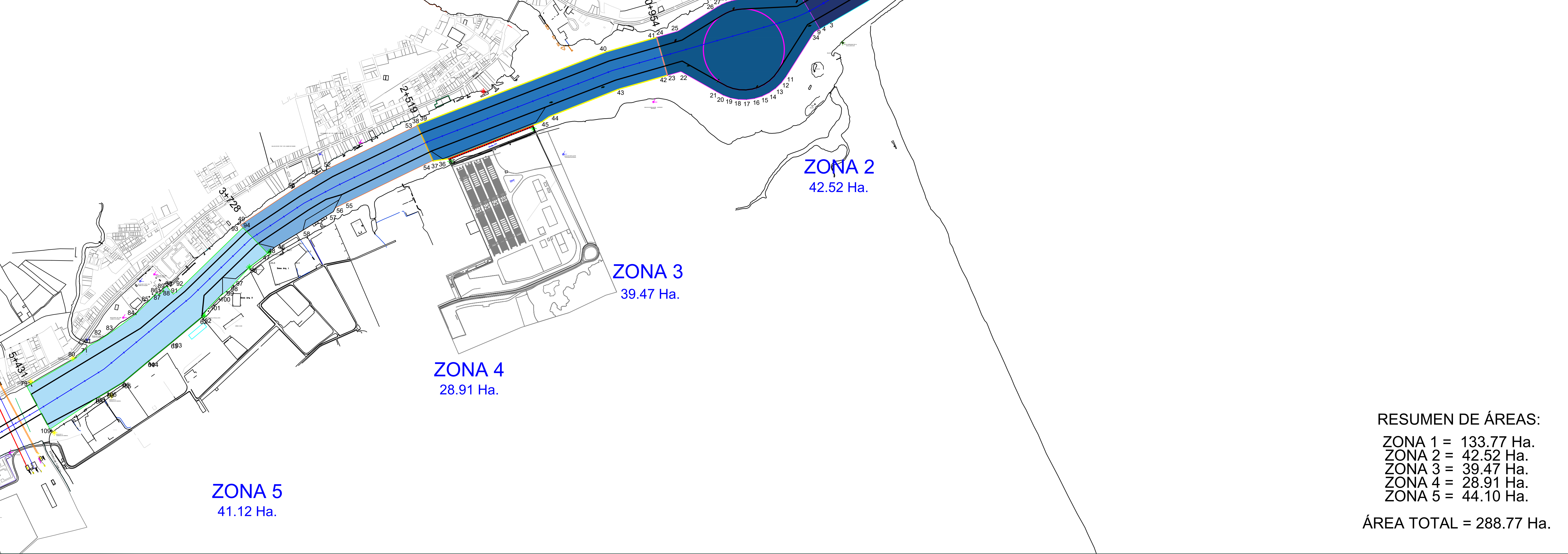
LADO	RUMBO	DISTANCIA	AZMUT	VERT.	ANGUNT.	Y	X
35-36	S 81°35'00.52" W	46.623	281°35'00.52"	35	166°54'13.70"	2,318,624.7537	673,552.5781
36-37	S 81°35'00.52" W	46.623	281°35'00.52"	36	180°0'0.00"	2,318,617.9286	673,506.4571
37-38	N 23°57'11.24" E	243.537	336°2'48.76"	37	109°32'11.77"	2,318,611.7024	673,460.3360
38-39	N 44°07'37.92" E	19.862	44°07'37.92"	38	91°50'10.83"	2,318,633.6680	673,347.4667
39-40	N 68°55'27.60" E	1,332.807	68°55'27.60"	39	179°12'10.33"	2,318,842.3791	673,379.4257
40-41	N 74°02'39.19" E	324.742	74°02'39.19"	40	174°52'48.41"	2,319,285.8971	674,529.7636
41-42	S 19°57'20.00" E	243.398	164°2'40.00"	41	89°59'59.16"	2,319,374.9671	674,841.9942
42-43	S 74°02'39.19" E	313.858	254°2'39.19"	42	90°0'1.80"	2,319,140.9455	674,908.9024
43-44	S 68°23'28.85" E	480.879	248°23'28.85"	43	185°39'9.34"	2,319,054.6658	674,607.1362
44-45	S 59°02'24.34" E	53.652	239°2'24.34"	44	193°21'4.52"	2,318,884.9401	674,178.6470
45-35	S 68°29'14.30" W	625.686	248°29'14.30"	45	166°33'10.04"	2,318,854.1973	674,134.6764

SUPERFICIE = 394,857.658 m²

CUADRO DE CONSTRUCCION DEL POL GONO DE LA ZONA 5

LADO	RUMBO	DISTANCIA	AZMUT	VERT.	ANGUNT.	Y	X
79-80	N 59°56'00.00" E	350.321	59°56'00.00"	79	208°21'35.54"	2,317,217.4665	670,949.5883
80-81	N 47°12'26.24" E	117.657	47°12'26.24"	80	167°16'26.18"	2,317,392.9799	671,252.7514
81-82	N 62°44'14.22" E	65.741	62°44'14.22"	81	189°31'47.87"	2,317,472.9098	671,339.0900
82-83	N 59°57'48.49" E	92.081	59°57'48.49"	82	173°13'35.27"	2,317,563.0239	671,397.5281
83-84	N 53°48'34.21" E	179.757	53°48'34.21"	83	177°50'44.72"	2,317,554.5630	671,473.8338
84-85	N 49°21'18.70" E	125.899	49°21'18.70"	84	171°32'44.49"	2,317,660.7044	671,618.9081
85-86	N 44°39'23.59" E	66.181	44°39'23.59"	85	179°18'49.87"	2,317,784.9887	671,768.8625
86-87	S 39°29'04.77" E	11.548	142°30'55.23"	86	219°51'31.64"	2,317,786.2683	671,755.0146
87-88	N 49°39'16.75" E	40.631	49°39'16.75"	87	89°8'21.52"	2,317,782.7250	671,766.1727
88-89	N 40°20'43.25" E	10.770	319°39'16.75"	88	90°0'0.00"	2,317,809.0290	671,797.1396
89-90	N 49°39'16.75" E	30.828	49°39'16.75"	89	270°0'0.00"	2,317,817.2376	671,790.1671
90-91	S 39°41'43.28" E	63.891	140°18'16.72"	90	270°59'59.97"	2,317,837.1957	671,813.6632
91-92	N 50°20'22.04" E	64.825	50°20'22.04"	91	90°2'5.37"	2,317,788.0347	671,854.4707
92-93	N 49°50'35.87" E	526.195	49°50'35.87"	92	179°30'13.85"	2,317,829.4081	671,904.3751
93-94	N 58°15'03.22" E	44.222	58°15'03.22"	93	180°24'07.35"	2,318,196.9676	672,081.8668
94-95	N 44°09'24.37" E	219.786	44°09'24.37"	94	209°35'32.42"	2,318,198.4245	672,285.5440
95-96	S 52°44'53.49" W	142.479	232°44'53.49"	95	216°54'17.86"	2,318,040.7350	672,438.6791
96-97	S 42°59'43.93" W	148.313	222°59'43.93"	96	170°14'50.44"	2,317,954.4886	672,325.2681
97-98	S 45°55'39.91" W	56.616	229°55'39.91"	97	182°50'59.99"	2,317,846.0128	672,224.1276
98-99	S 47°20'29.89" W	5.560	227°20'29.89"	98	181°24'49.98"	2,317,807.3279	672,184.1692
99-100	S 51°07'06.39" W	58.506	231°7'6.39"	99	185°46'36.49"	2,317,803.5605	672,180.0806
100-101	S 49°58'17.72" W	92.795	225°58'17.72"	100	172°51'11.34"	2,317,786.8359	672,134.5373
101-102	S 39°13'41.28" W	66.487	219°13'41.28"	101	311°19'23.57"	2,317,700.0030	672,070.1097
102-103	S 50°18'44.16" W	240.617	230°18'44.16"	102	199°32'8.77"	2,317,645.5787	672,031.6423
103-104	S 50°44'18.15" W	189.152	230°44'18.15"	103	180°27'33.98"	2,317,491.8125	671,846.5685
104-105	S 50°10'59.32" W	200.000	230°10'59.32"	104	179°24'41.18"	2,317,372.1050	671,700.1145
105-106	S 58°58'31.61" W	117.540	238°58'31.61"	105	188°47'32.29"	2,317,244.0379	671,546.4955
106-108	S 59°16'19.54" W	70.692	239°16'19.54"	106	149°18'54.54"	2,317,183.4569	671,446.7895
108-109	S 56°32'23.42" W	350.902	236°32'23.42"	108	177°16'3.88"	2,317,147.3360	671,385.0025
109-79	N 28°29'35.47" E	299.743	331°34'24.53"	109	279°21'1.12"	2,318,953.8636	671,092.2556

SUPERFICIE = 441,038.088 m²



RUBRO:LEVANTAMIENTO BATIMETRICO PARA EL SEGUIMIENTO DEL COMPORTAMIENTO DE LOS AZOLVES EN CANALES DE NAVEGACION Y FLOTACION DEL PUERTO DE TUXPAN, VERACRUZ.

PLANO:
"PLANO DE LOCALIZACION DE LAS DIFERENTES ÁREAS A LEVANTAR"
Canal de Navegación Exterior, Interior y Dársenas de Ciaboga
CADENAMIENTOS -5+300 / 5