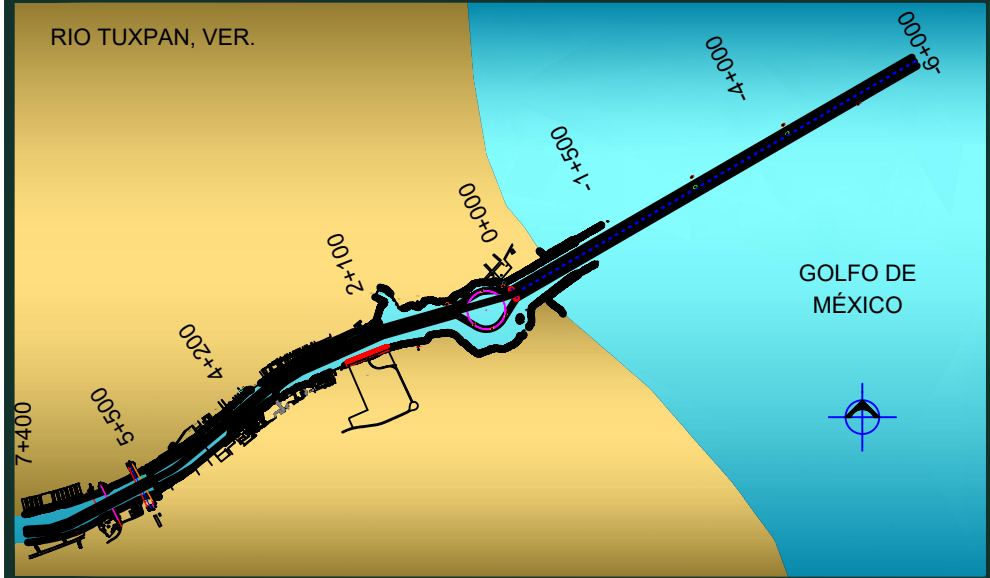




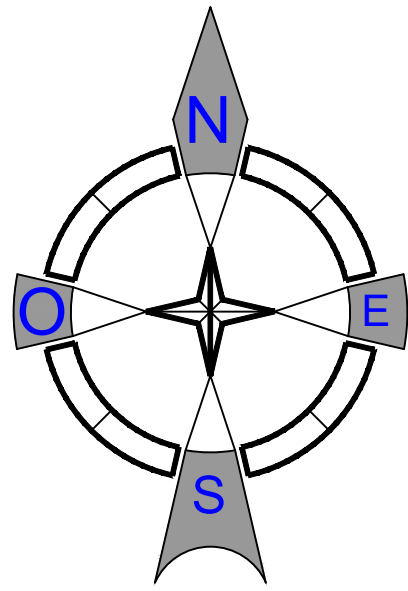
LOCALIZACION NACIONAL



LOCALIZACION ESTATAL



LOCALIZACION PARTICULAR



ORIENTACIÓN



SIMBOLOGÍA

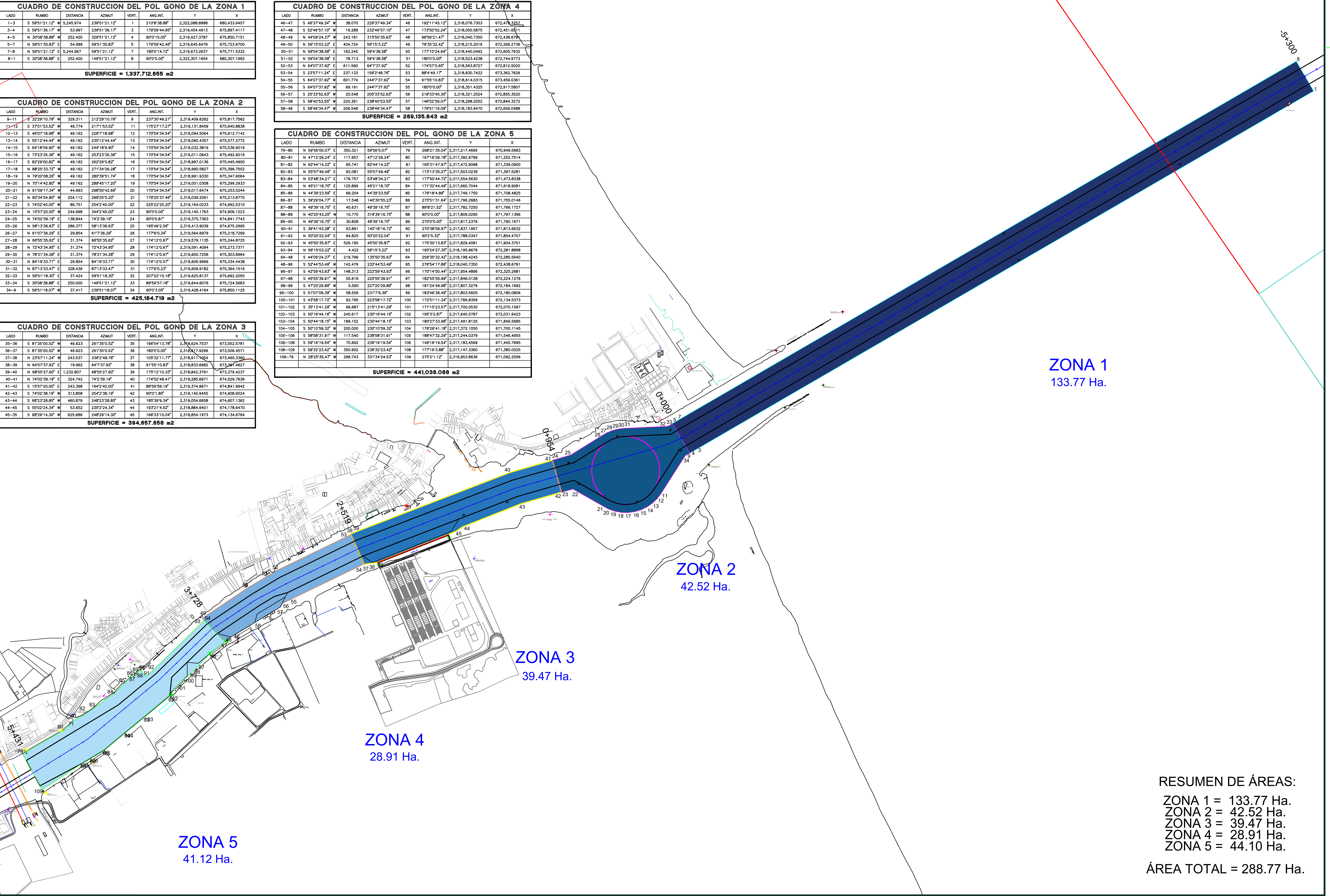
LADO	RUMBO	DISTANCIA	AZIMUT	VERT.	ANG.INT.	Y	X
1-3	S 59°51'21.12" W	5,245.974	239°51'21.12"	1	210°8'38.88"	2,322,088.8988	680,433.9457
3-4	S 59°51'36.17" W	53.997	239°51'36.17"	3	179°59'44.95"	2,319,454.4973	675,897.2177
4-5	N 30°08'38.88" W	252.400	339°51'11.12"	4	90°0'0.00"	2,319,427.3787	675,850.7151
5-7	N 59°51'35.83" E	54.999	59°51'35.83"	5	179°59'42.88"	2,319,845.8479	675,723.9700
7-8	N 59°51'21.12" E	5,244.967	59°51'21.12"	7	180°0'14.72"	2,319,873.2637	675,771.5332
8-1	S 30°08'38.88" E	252.400	149°51'21.12"	8	90°0'0.00"	2,322,307.1854	680,307.1982
SUPERFICIE = 1,337,712.655 m2							

LADO	RUMBO	DISTANCIA	AZIMUT	VERT.	ANG.INT.	Y	X
9-11	S 32°29'10.79" W	329.311	212°29'10.79"	9	237°30'49.21"	2,319,409.8292	675,817.7582
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	675,536.8016
15-16	S 73°23'35.36" W	49.162	253°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 88°25'33.72" E	49.162	271°54'26.28"	17	170°54'34.54"	2,318,990.2627	675,396.7502
18-19	N 79°20'08.26" E	49.162	280°39'51.74"	18	170°54'34.54"	2,318,991.8330	675,341.6004
19-20	N 70°14'42.86" E	49.162	289°45'17.20"	19	170°54'34.54"	2,319,001.0208	675,299.2933
20-21	N 61°09'17.34" E	44.693	298°50'42.66"	20	170°54'34.54"	2,319,017.8474	675,253.0244
21-22	N 60°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°2'39.19"	24	90°0'0.81"	2,319,375.7363	674,841.7743
25-26	N 58°13'36.83" E	286.377	58°13'36.83"	25	189°49'7.56"	2,319,413.9039	674,975.2895
26-27	N 61°07'36.25" E	29.854	61°7'36.25"	26	177°6'0.34"	2,319,564.6979	675,218.7299
27-28	N 66°55'35.62" E	31.374	66°55'35.62"	27	174°12'0.67"	2,319,578.1135	675,244.8725
28-29	N 72°43'34.95" E	31.374	72°43'34.95"	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 84°19'33.71" E	29.854	84°19'33.71"	30	174°12'0.57"	2,319,606.9666	675,334.4438
31-32	N 87°13'33.47" E	328.439	87°13'33.47"	31	177°6'0.23"	2,319,609.9182	675,364.1516
32-33	N 59°51'18.30" E	37.424	59°51'18.30"	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"	2,319,644.8076	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	675,850.1125
SUPERFICIE = 425,184.719 m2							

LADO	RUMBO	DISTANCIA	AZIMUT	VERT.	ANG.INT.	Y	X
35-36	S 81°30'00.52" W	46.623	281°30'00.52"	35	166°54'13.78"	2,318,624.7537	673,552.5781
36-37	S 81°30'00.52" W	46.623	281°30'00.52"	36	180°0'0.00"	2,318,617.9296	673,506.4571
37-38	N 23°57'11.24" E	243.537	336°2'48.76"	37	105°32'11.77"	2,318,611.7044	673,460.3360
38-39	N 44°07'37.62" E	19.862	44°7'37.62"	38	91°50'10.82"	2,318,633.9892	673,347.4667
39-40	N 68°55'27.60" E	1,232.807	68°55'27.60"	39	175°12'10.33"	2,318,842.3791	673,379.4237
40-41	N 74°02'39.19" E	324.742	74°2'39.19"	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°59'59.19"	2,319,374.9671	674,841.9942
42-43	S 74°02'38.19" W	313.808	254°2'38.19"	42	90°0'1.80"	2,319,140.9455	674,908.9024
43-44	S 68°23'28.85" W	460.879	248°23'28.85"	43	185°39'9.34"	2,319,054.6558	674,607.1362
44-45	S 55°02'24.34" W	53.652	235°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	246°29'14.30"	45	166°33'10.04"	2,318,854.1973	674,134.6764
SUPERFICIE = 394,657.658 m2							

LADO	RUMBO	DISTANCIA	AZIMUT	VERT.	ANG.INT.	Y	X
46-47	S 49°37'49.34" W	38.070	228°37'49.34"	46	192°11'45.12"	2,318,076.7303	672,478.3527
47-48	S 52°49'57.10" W	16.289	232°49'57.10"	47	172°59'05.24"	2,318,050.5875	672,451.8111
48-49	N 44°09'24.37" E	243.181	44°9'24.37"	48	90°56'21.47"	2,318,040.7350	672,438.6139
49-50	N 56°15'03.22" E	404.724	56°15'03.22"	49	79°35'32.42"	2,318,215.2016	672,269.2736
50-51	N 59°04'38.58" E	182.245	59°4'38.58"	50	177°10'24.64"	2,318,440.0492	672,605.7932
51-52	N 59°04'38.58" E	78.713	59°4'38.58"	51	180°0'0.00"	2,318,523.4238	672,744.9773
52-53	N 64°07'37.92" E	611.560	64°7'37.92"	52	174°57'0.65"	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" W	601.774	244°7'37.92"	54	91°59'10.83"	2,318,614.0315	673,459.0361
55-56	S 64°07'37.92" W	601.774	244°7'37.92"	55	180°0'0.00"	2,318,351.4325	673,017.5607
56-57	S 29°33'53.83" E	23.548	29°33'53.83"	56	218°33'45.30"	2,318,321.2924	672,855.3030
57-58	S 56°40'53.50" W	220.391	238°40'53.50"	57	145°52'56.07"	2,318,298.2052	672,844.3272
58-46	S 56°49'34.47" W	206.548	238°49'34.47"	58	179°51'19.09"	2,318,183.6470	672,656.0488
SUPERFICIE = 289,135.843 m2							

LADO	RUMBO	DISTANCIA	AZIMUT	VERT.	ANG.INT.	Y	X
79-80	N 59°56'00.07" E	350.321	59°56'00.07"	79	268°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°31'47.97"	2,317,472.9098	671,339.0800
82-83	N 59°57'49.49" E	92.081	59°57'49.49"	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 45°21'18.70" E	125.899	45°21'18.70"	84	173°32'44.49"	2,317,680.7044	671,618.9081
85-86	N 44°39'23.59" E	66.482	44°39'23.59"	85	179°18'44.88"	2,317,768.1750	671,708.8825
86-87	S 39°29'04.77" E	17.548	140°30'55.23"	86	279°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" W	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°38'59.97"	2,317,837.1957	671,813.6632
91-92	N 50°20'22.04" E	64.825	50°20'22.04"	91	90°2'5.32"	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 56°15'03.22" E	14.422	56°15'03.22"	93	180°24'01.35"	2,318,166.9676	672,281.8868
94-95	S 44°09'24.37" E	219.786	135°50'35.42"	94	259°35'32.42"	2,318,198.4245	672,285.5640
95-96	S 52°44'53.49" W	142.479	232°44'53.49"	95	276°54'17.86"	2,318,040.7350	672,438.6791
96-97	S 42°59'43.83" W	148.313	222°59'43.83"	96	170°14'50.44"	2,317,954.4896	672,325.2881
97-98	S 45°55'39.91" W	55.616	229°55'39.91"	97	182°55'55.99"	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°07'08.39" W	58.506	231°7'8.39"	99	183°46'36.49"	2,317,803.5605	672,180.0806
100-01	S 43°58'17.72" E	92.795	223°58'17.72"	100	172°51'11.34"	2,317,786.8399	672,134.3373
101-102	S 39°13'41.29" W	66.487	215°13'41.29"	101	171°19'23.57"	2,317,700.0530	672,076.1097
102-103	S 50°16'44.16" W	240.617	230°16'44.16"	102	199°32'8.7"	2,317,645.5787	672,031.6423
103-104	S 50°44'18.19" W	189.152	230°44'18.19"	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°26'41.18"	2,317,372.1050	671,700.1145
105-106	S 58°58'31.61" W	117.540	238°58'31.61"	105	186°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°16'19.54"	2,317,183.4569	671,445.7695
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°25'35.47" W	299.743	331°34'24.53"	109	279°21'1.12"	2,316,953.8636	671,092.2556
SUPERFICIE = 441,038.088 m2							



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.

RUBRO:
"LEVANTAMIENTO BATIMÉTRICO PARA EL SEGUIMIENTO DEL COMPORTAMIENTO DE LOS AZOLVES EN CANALES DE NAVEGACIÓN Y FLOTACIÓN DEL PUERTO DE TUXPAN, VERACRUZ",
PLANO:
"PLANO DE LOCALIZACIÓN DE LAS DIFERENTES ÁREAS A LEVANTAR"
Canal de Navegación Exterior, Interior y Dársenas de Ciaboga
CADENAMIENTOS 5+300 / 5+431

FECHA :
JULIO 2025
ESCALA:
S/N
ACOTACIÓN:
METROS
No. DE PLANO:
ASIPONATUX-LEV-BAT-PT-01



APROBÓ:
ING. ALBERTO PEYROT AMAYA
GERENTE DE OPERACIONES E INGENIERÍA

VERIFICO:
ING. RAMÓN DE JESÚS RODRÍGUEZ RUIZ
SUBGERENTE DE INGENIERÍA Y ECOLOGÍA.

REVISÓ:
ING. IVAN ZARATE ZUBIRIA
JEFE DEL DEPARTAMENTO DE PROYECTOS