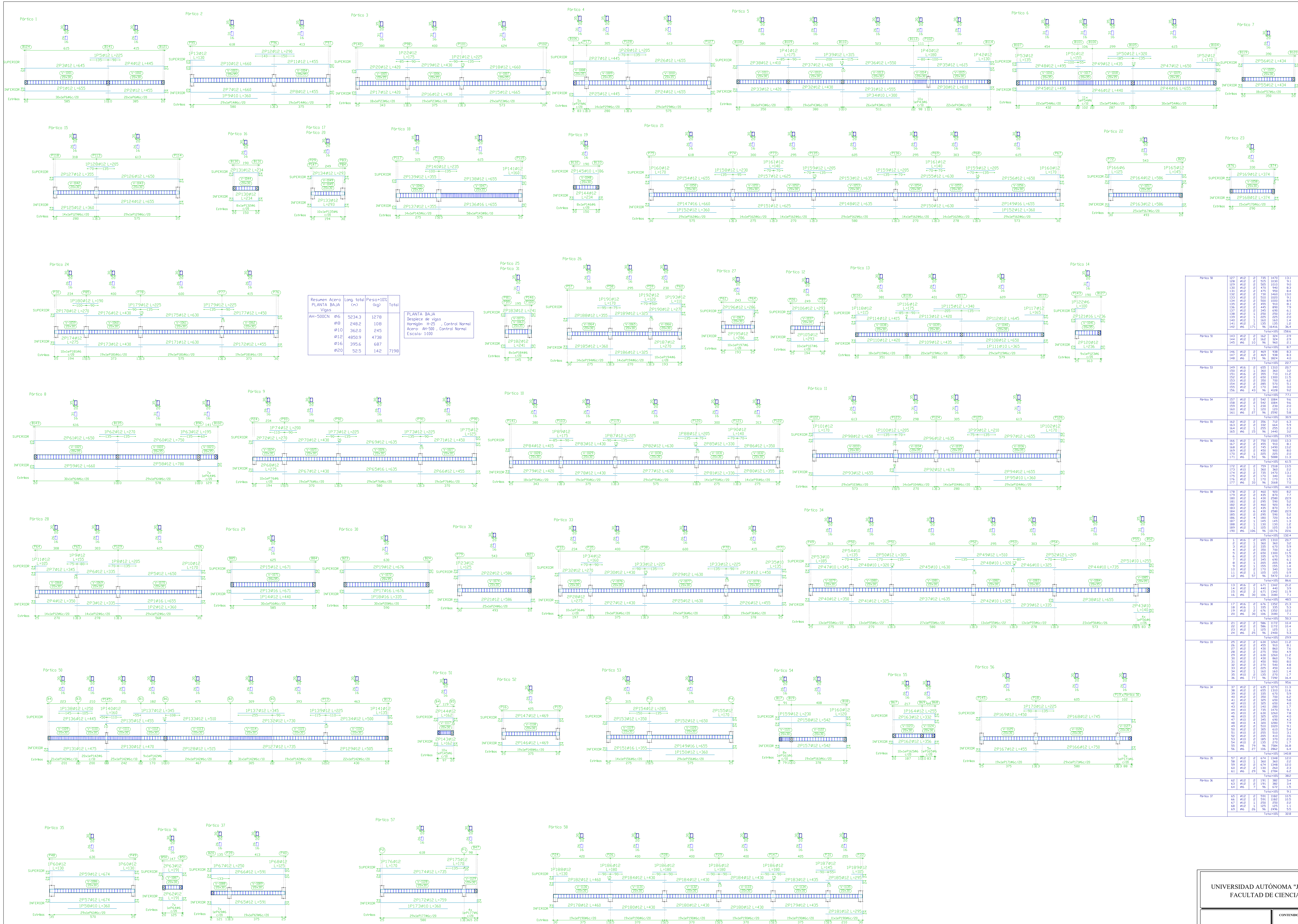
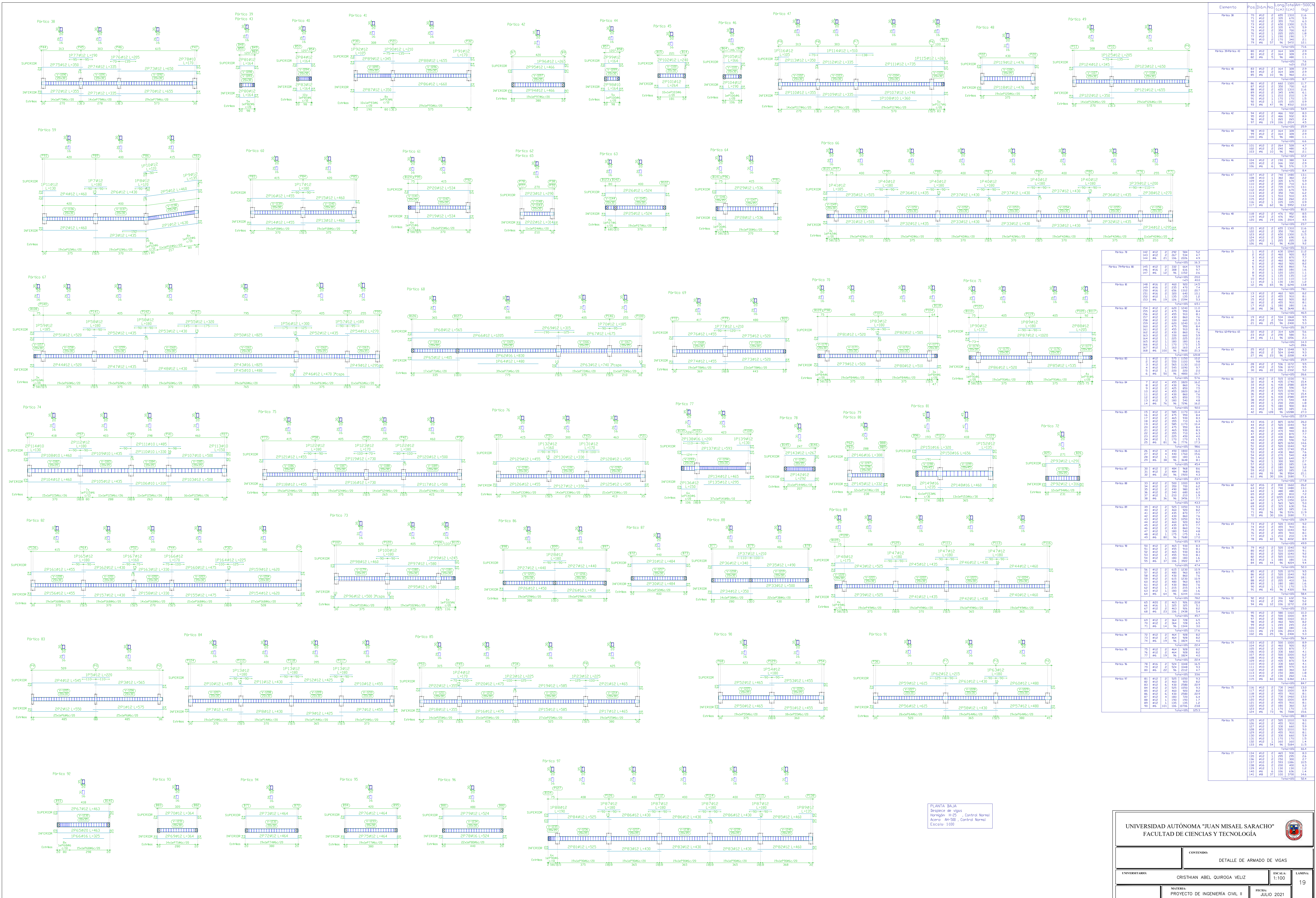
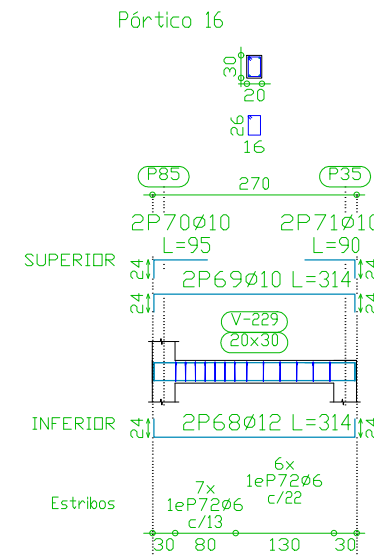




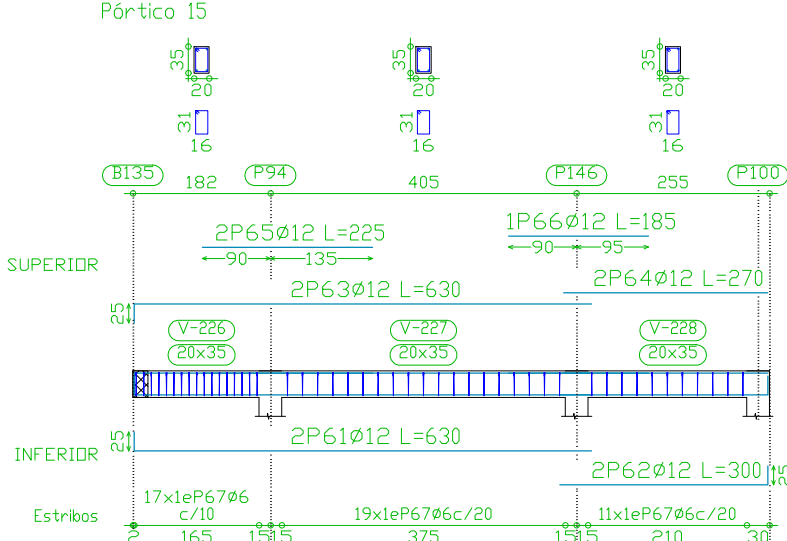
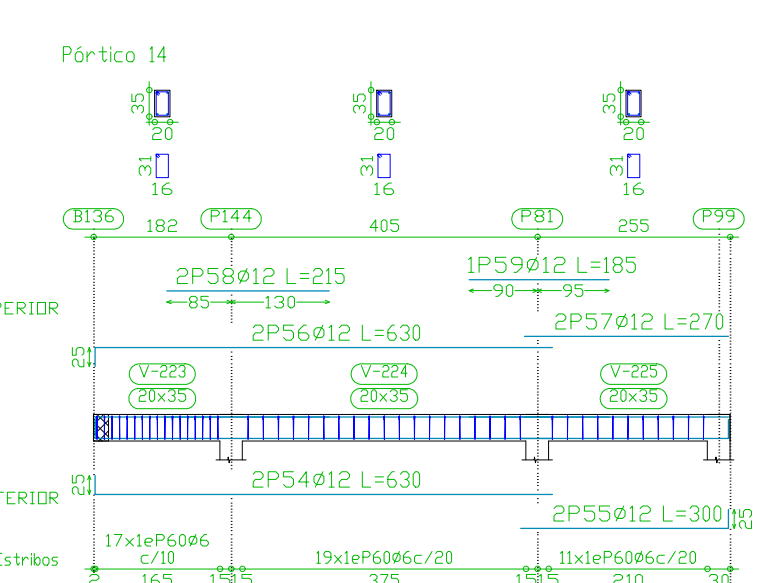
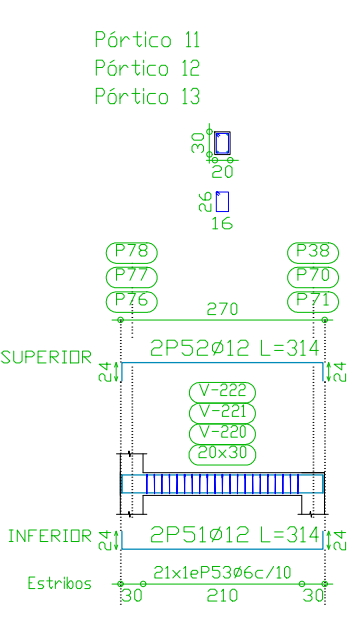
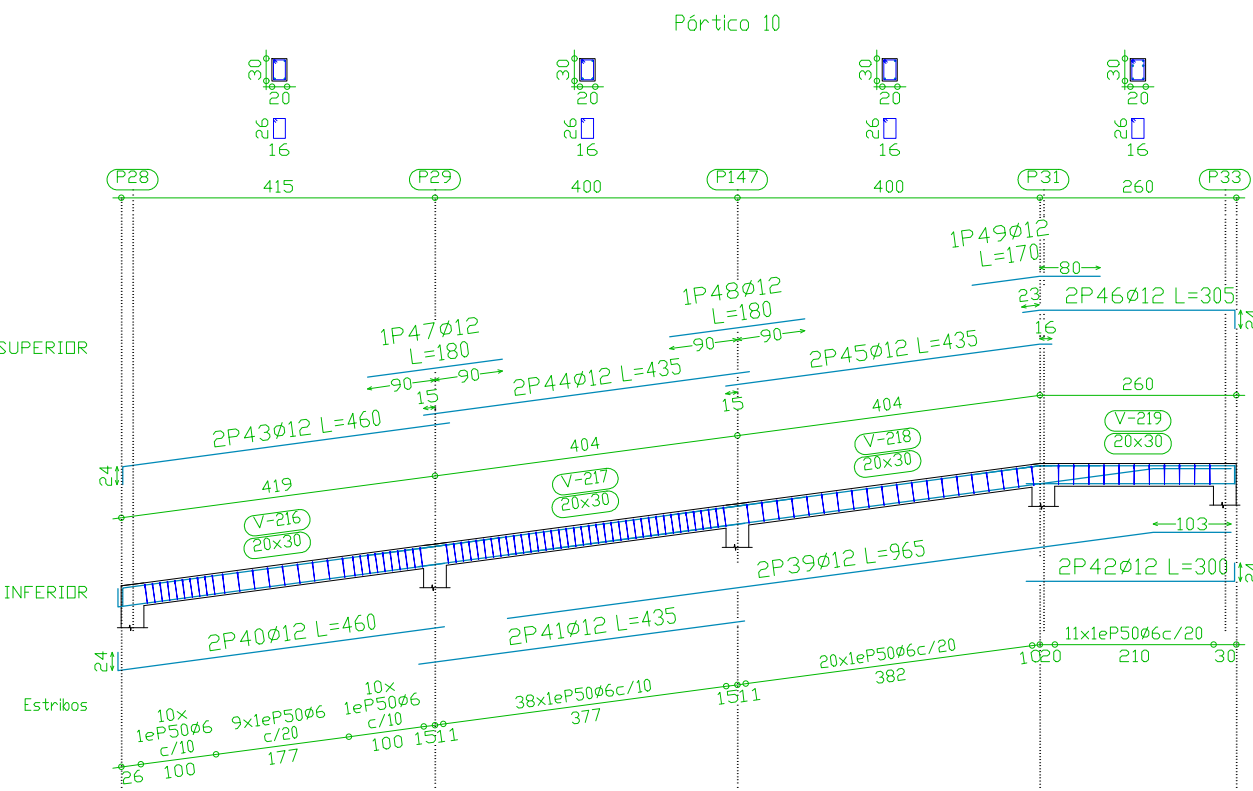
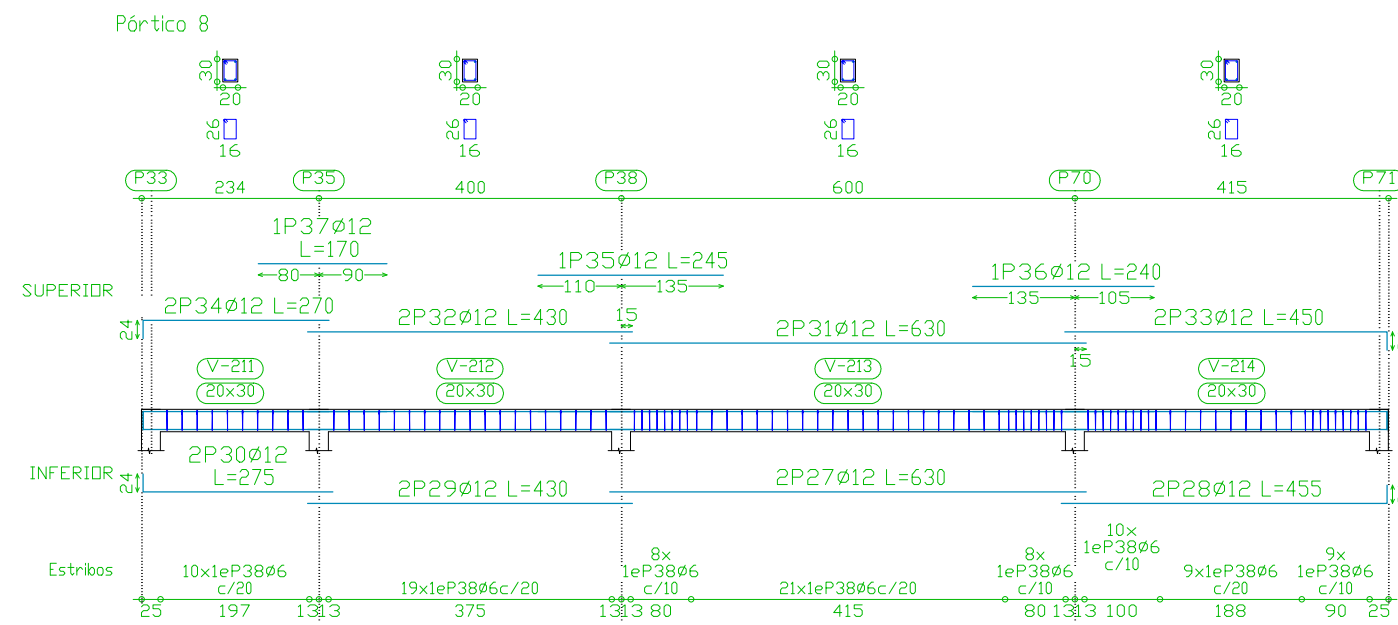
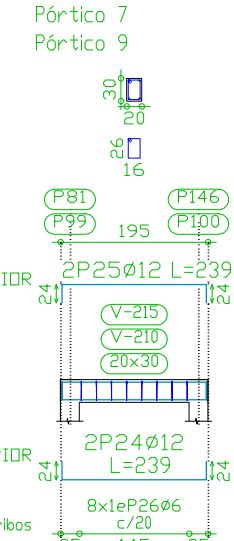
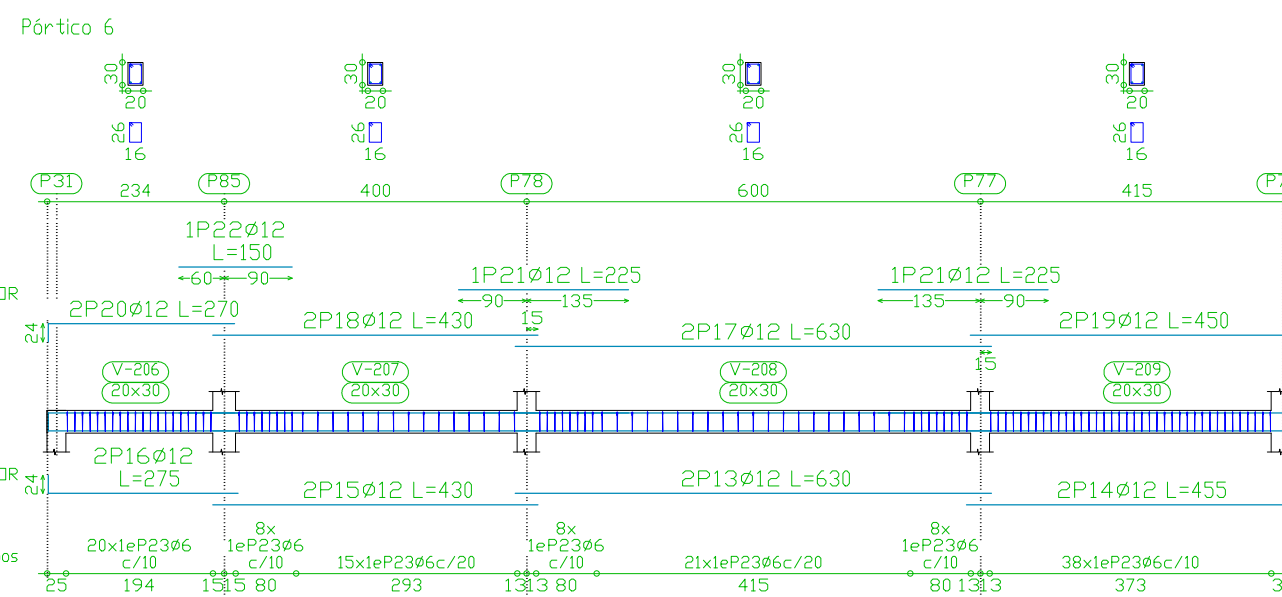
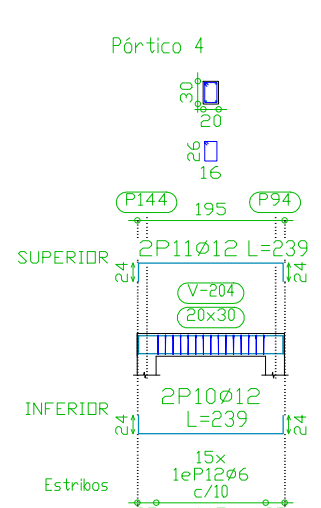
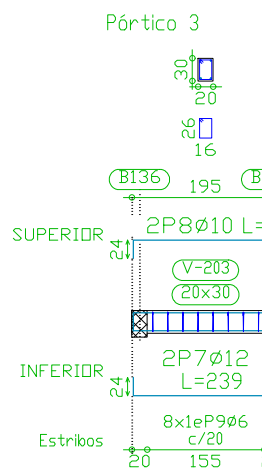
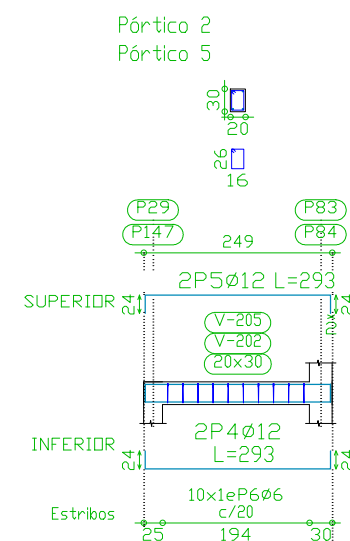
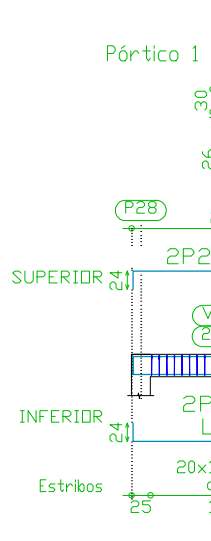
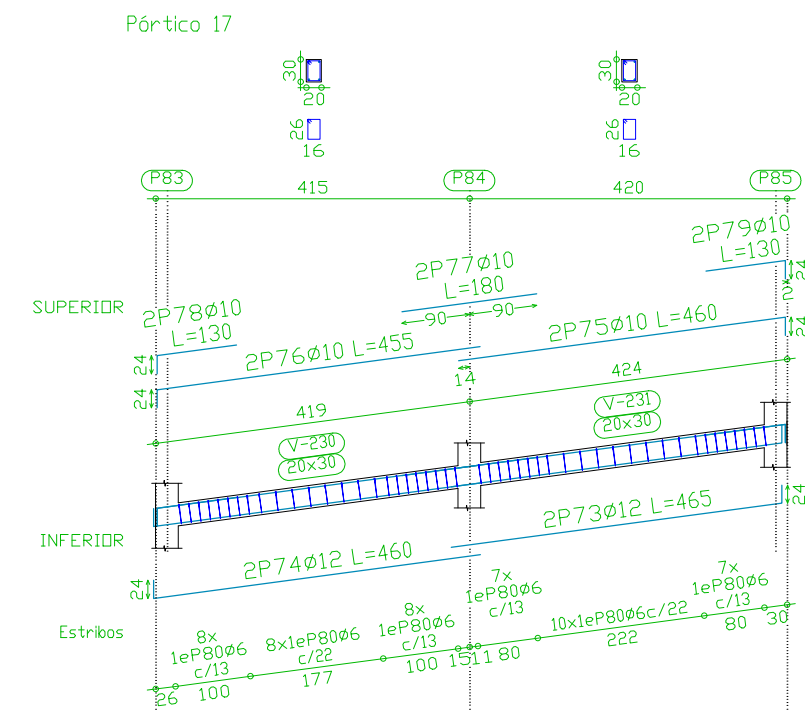
Elemento	Pos.	Dim.Na.	Long.(cm)	Total (kg)	Total (m³)
Pórtico 1	1	102	102	102	102
Pórtico 2	2	102	102	102	102
Pórtico 3	3	102	102	102	102
Pórtico 4	4	102	102	102	102
Pórtico 5	5	102	102	102	102
Pórtico 6	6	102	102	102	102
Pórtico 7	7	102	102	102	102
Pórtico 8	8	102	102	102	102
Pórtico 9	9	102	102	102	102
Pórtico 10	10	102	102	102	102
Pórtico 11	11	102	102	102	102
Pórtico 12	12	102	102	102	102
Pórtico 13	13	102	102	102	102
Pórtico 14	14	102	102	102	102
Pórtico 15	15	102	102	102	102
Pórtico 16	16	102	102	102	102
Pórtico 17	17	102	102	102	102
Pórtico 18	18	102	102	102	102
Pórtico 19	19	102	102	102	102
Pórtico 20	20	102	102	102	102
Pórtico 21	21	102	102	102	102
Pórtico 22	22	102	102	102	102
Pórtico 23	23	102	102	102	102
Pórtico 24	24	102	102	102	102
Pórtico 25	25	102	102	102	102
Pórtico 26	26	102	102	102	102
Pórtico 27	27	102	102	102	102
Pórtico 28	28	102	102	102	102
Pórtico 29	29	102	102	102	102
Pórtico 30	30	102	102	102	102
Pórtico 31	31	102	102	102	102
Pórtico 32	32	102	102	102	102
Pórtico 33	33	102	102	102	102
Pórtico 34	34	102	102	102	102
Pórtico 35	35	102	102	102	102
Pórtico 36	36	102	102	102	102
Pórtico 37	37	102	102	102	102
Pórtico 38	38	102	102	102	102





RAMPA
Desplce de vigas
Hornigón: H-25 , Control Normal
Acero: AH-500 , Control Normal
Escala: 1:100

Resumen Acero RAMPA Vigas	Long total (m)	Peso+10% (kg)	Total
AH-500CN Ø6	592.1	145	
Ø10	41.9	28	
Ø12	453.3	443	616



Elemento	Pos.	Diám.	No.	Long (cm)	Total AH-500CN (kg)
Pórtico 1	1	Ø12	2	293	586
	2	Ø12	2	293	586
	3	Ø6	20	96	1920
	Total+10%				16.2
Pórtico 2-Pórtico 5	4	Ø12	2	293	586
	5	Ø12	2	275	550
	6	Ø6	10	96	960
	Total+10%				13.8
Pórtico 3	7	Ø12	2	239	478
	8	Ø10	2	239	478
	9	Ø6	8	96	768
	Total+10%				9.7
Pórtico 4	10	Ø12	2	239	478
	11	Ø12	2	239	478
	12	Ø6	15	96	1440
	Total+10%				12.8
Pórtico 6	13	Ø12	2	630	1260
	14	Ø12	2	405	810
	15	Ø12	2	430	860
	16	Ø12	2	275	550
	17	Ø12	2	630	1260
	18	Ø12	2	430	860
	19	Ø12	2	450	900
	20	Ø12	2	270	540
	21	Ø12	2	225	450
	22	Ø12	1	150	150
	23	Ø6	110	96	1120
	Total+10%				103.2
Pórtico 7-Pórtico 9	24	Ø12	2	239	478
	25	Ø12	2	239	478
	26	Ø6	8	96	768
	Total+10%				11.1
Pórtico 8	27	Ø12	2	630	1260
	28	Ø12	2	405	810
	29	Ø12	2	430	860
	30	Ø12	2	275	550
	31	Ø12	2	630	1260
	32	Ø12	2	430	860
	33	Ø12	2	450	900
	34	Ø12	2	270	540
	35	Ø12	1	245	245
	36	Ø12	1	240	240
	37	Ø12	1	170	170
	38	Ø6	94	96	9024
	Total+10%				20.0
Pórtico 10	39	Ø12	2	965	1930
	40	Ø12	2	460	920
	41	Ø12	2	435	870
	42	Ø12	2	300	600
	43	Ø12	2	460	920
	44	Ø12	2	435	870
	45	Ø12	2	435	870
	46	Ø12	2	205	410
	47	Ø12	1	180	180
	48	Ø12	1	180	180
	49	Ø12	1	170	170
	50	Ø6	98	96	9408
	Total+10%				20.9
Pórtico 11-Pórtico 12-Pórtico 13	51	Ø12	2	314	628
	52	Ø12	2	314	628
	53	Ø6	21	96	2016
	Total+10%				17.3
Pórtico 14	54	Ø12	2	630	1260
	55	Ø12	2	300	600
	56	Ø12	2	630	1260
	57	Ø12	2	270	540
	58	Ø12	2	215	430
	59	Ø12	1	185	185
	60	Ø6	47	106	4982
	Total+10%				53.9
Pórtico 15	61	Ø12	2	630	1260
	62	Ø12	2	300	600
	63	Ø12	2	630	1260
	64	Ø12	2	270	540
	65	Ø12	2	225	450
	66	Ø12	1	185	185
	67	Ø6	47	106	4982
	Total+10%				54.1
Pórtico 16	68	Ø12	2	314	628
	69	Ø10	2	314	628
	70	Ø10	2	95	190
	71	Ø10	2	90	180
	72	Ø6	13	96	1248
Pórtico 17	73	Ø12	2	465	930
	74	Ø12	2	460	920
	75	Ø10	2	460	920
	76	Ø10	2	455	910
	77	Ø10	2	180	360
	78	Ø10	2	130	260
	79	Ø10	2	130	260
	80	Ø6	48	96	4608
	Total+10%				47.7
Ø6: 145.8					
Ø10: 28.3					
Ø12: 448.2					
Total: 615.7					

UNIVERSIDAD AUTÓNOMA "JUAN MISAEL SARACHO"

FACULTAD DE CIENCIAS Y TECNOLOGÍA

CONTENIDO:

DETALLE DE ARMADO DE VIGAS

UNIVERSITARIO:

CRISTHIAN ABEL QUIROGA VELIZ

MATERIA:

PROYECTO DE INGENIERÍA CIVIL II

ESCALA:

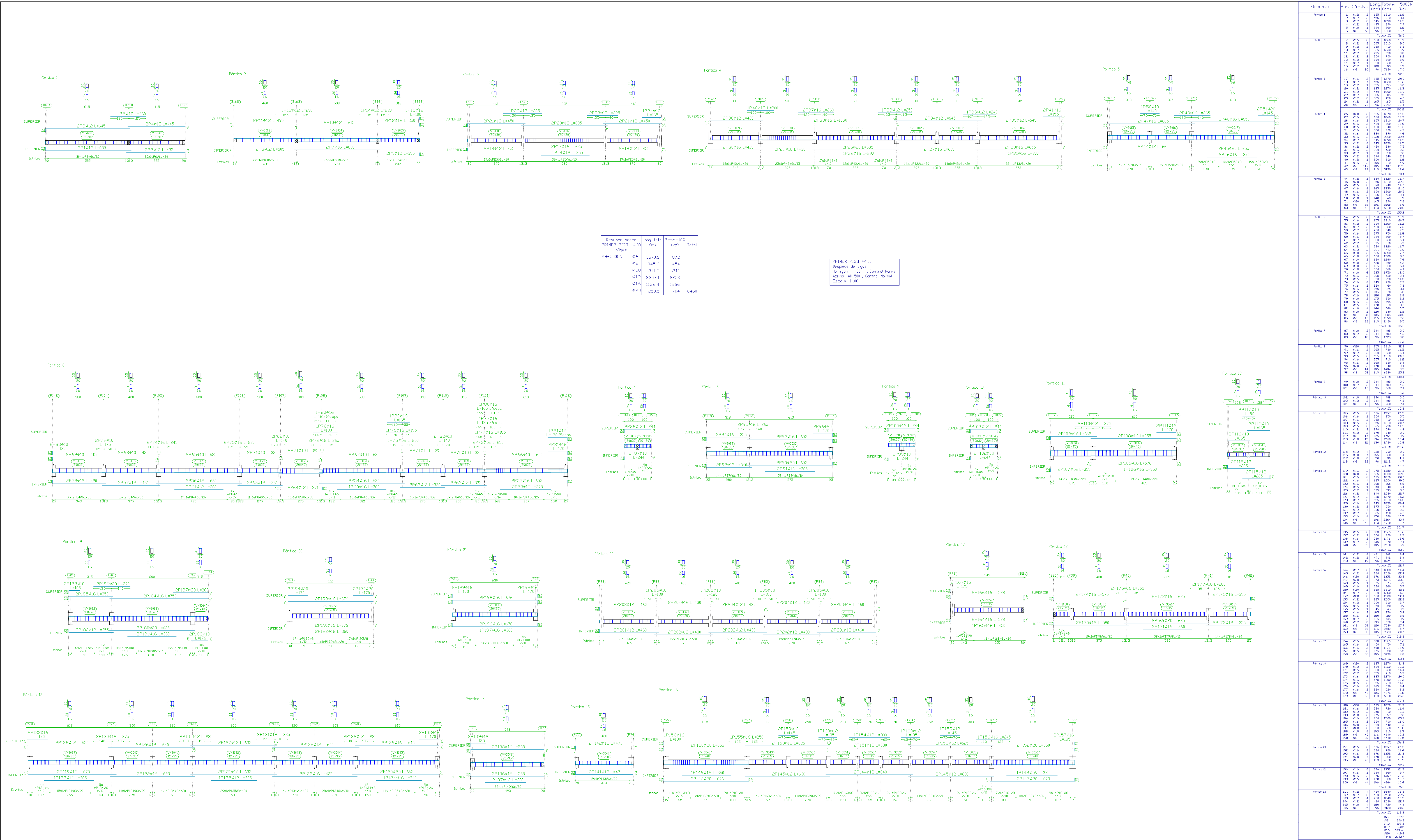
1:100

LAMINA:

21

FECHA:

JULIO 2021





UNIVERSIDAD AUTÓNOMA "JUAN MISAEL SARACHO"
FACULTAD DE CIENCIAS Y TECNOLOGÍA



CONTENIDO:
DETALLE DE ARMADO DE VIGAS

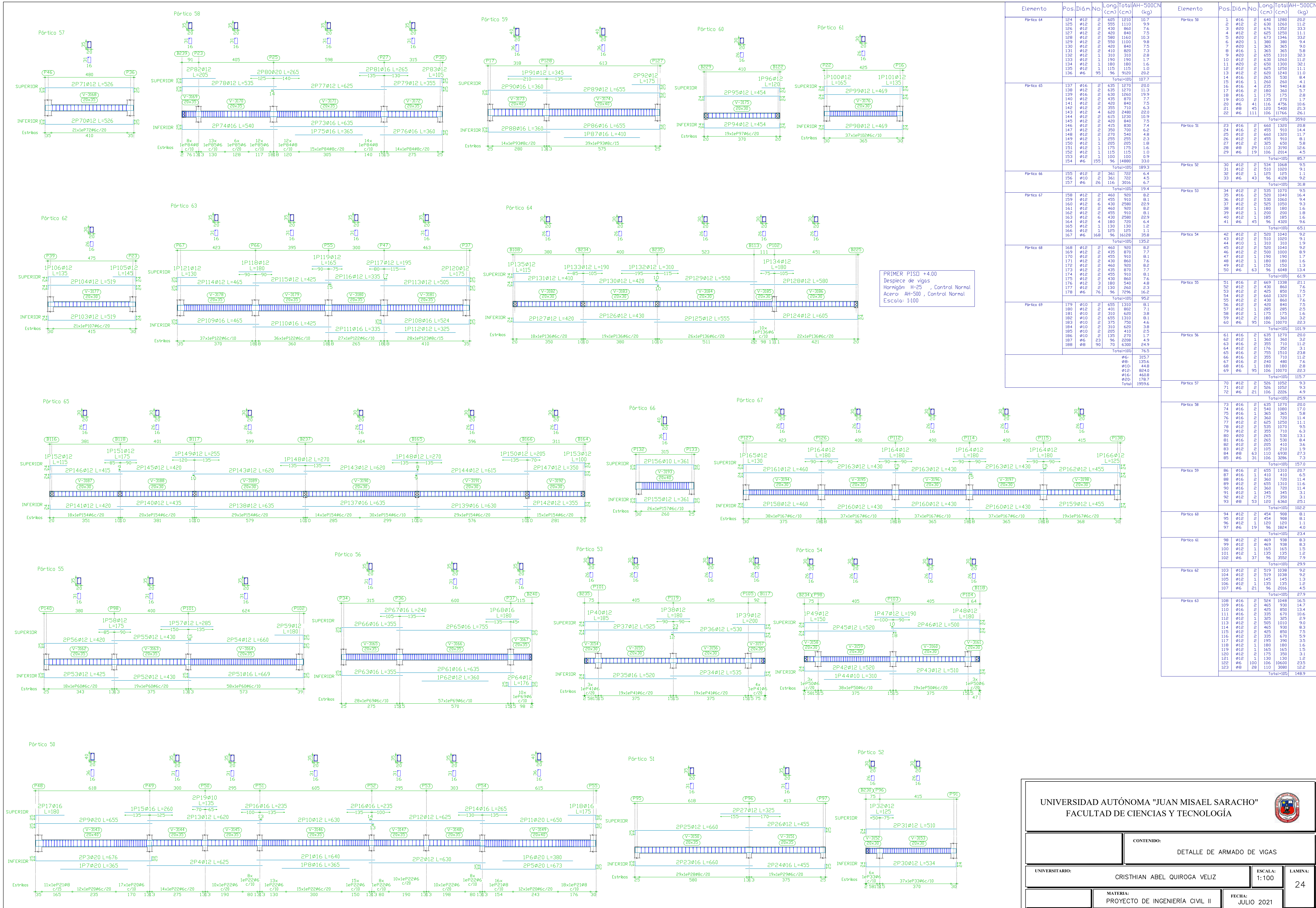
UNIVERSITARIO: CRISTIAN ABEL QUIROGA VELIZ

ESCALA: 1:100

LÁMINA: 23

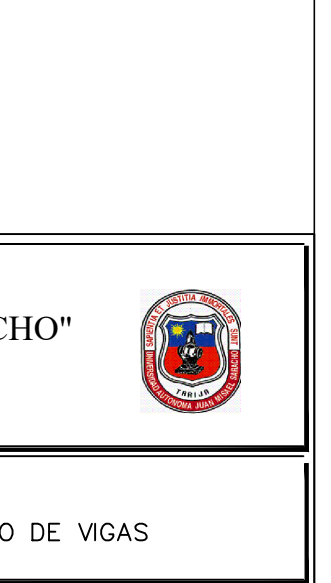
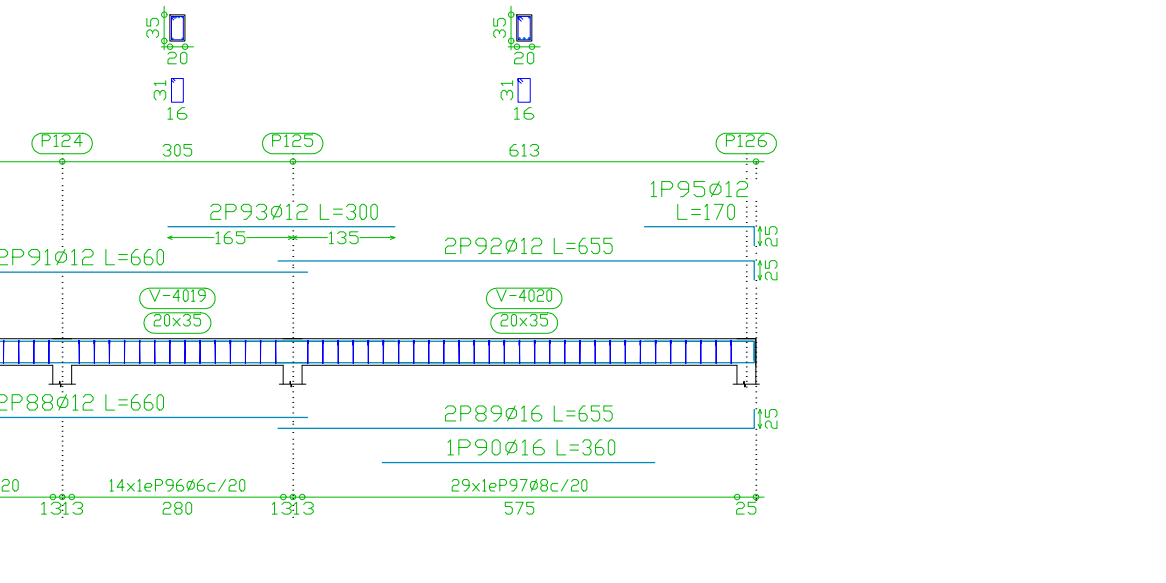
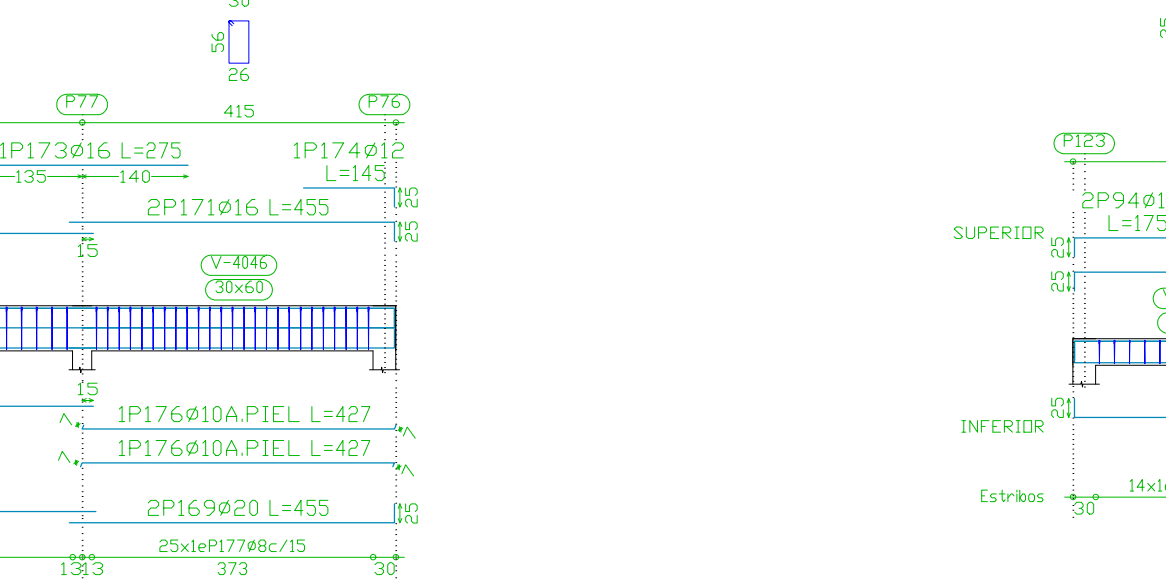
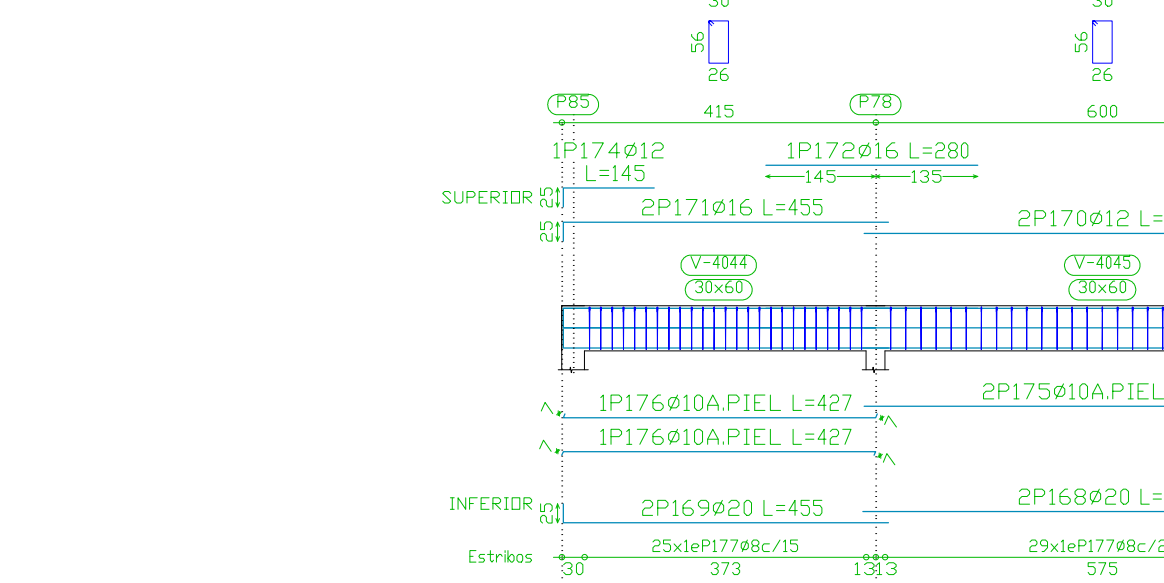
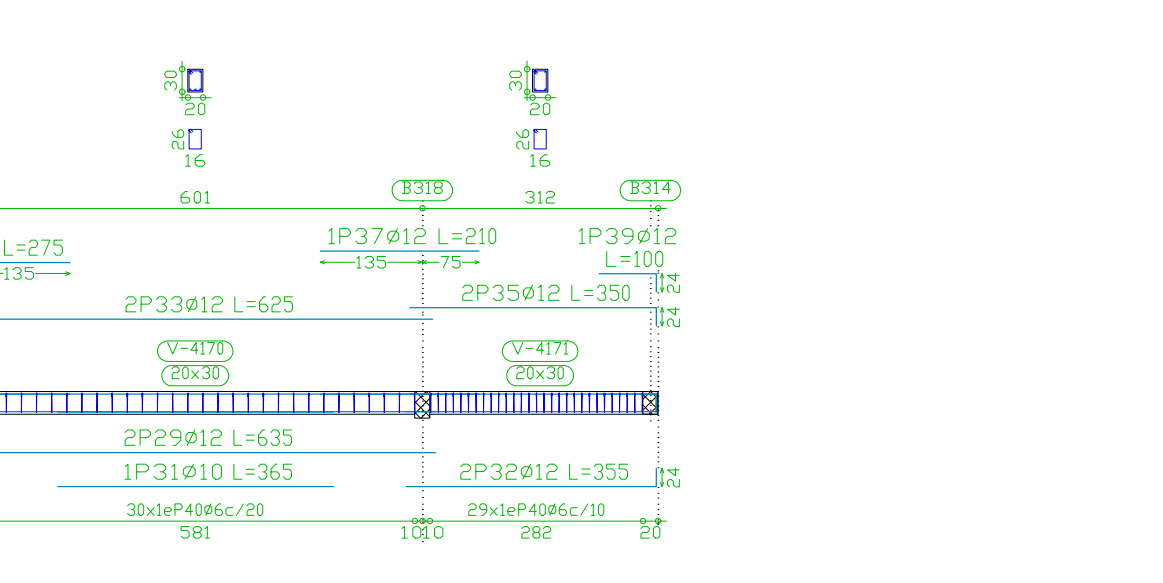
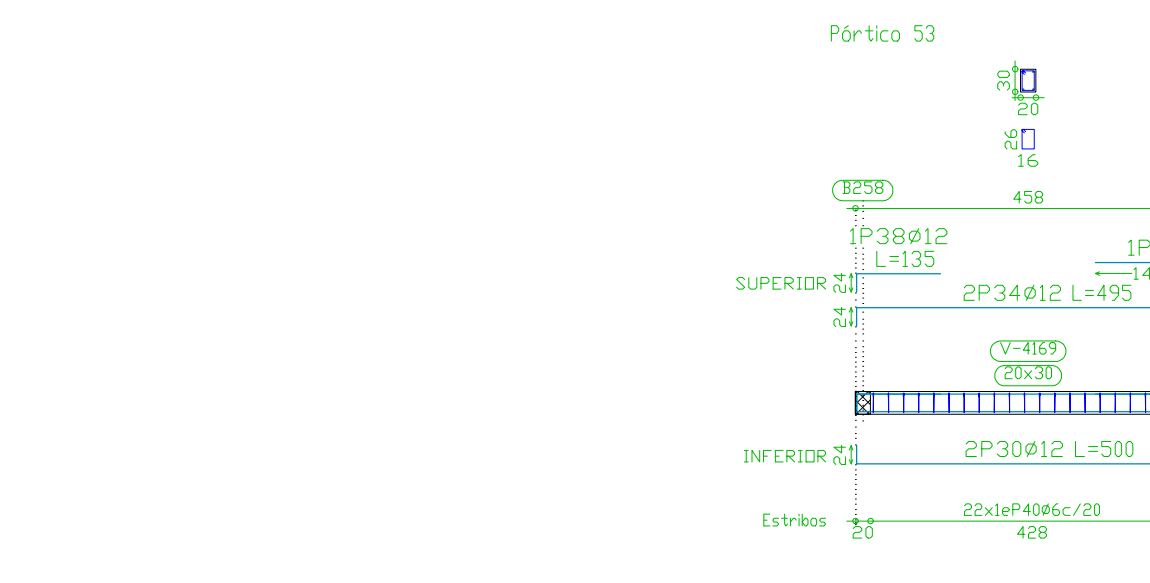
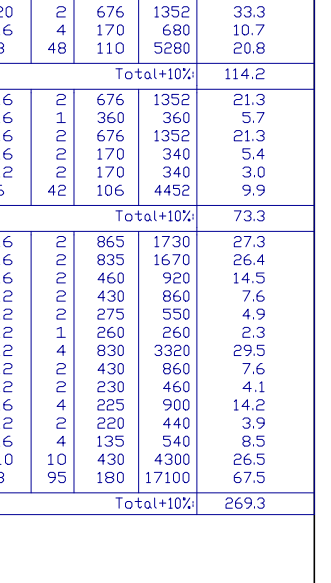
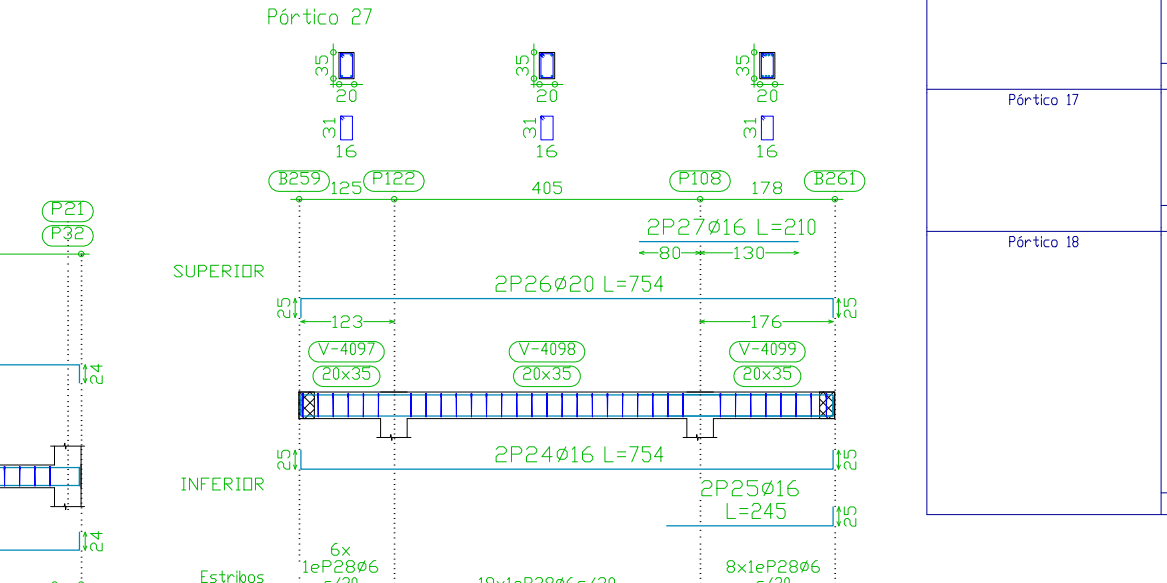
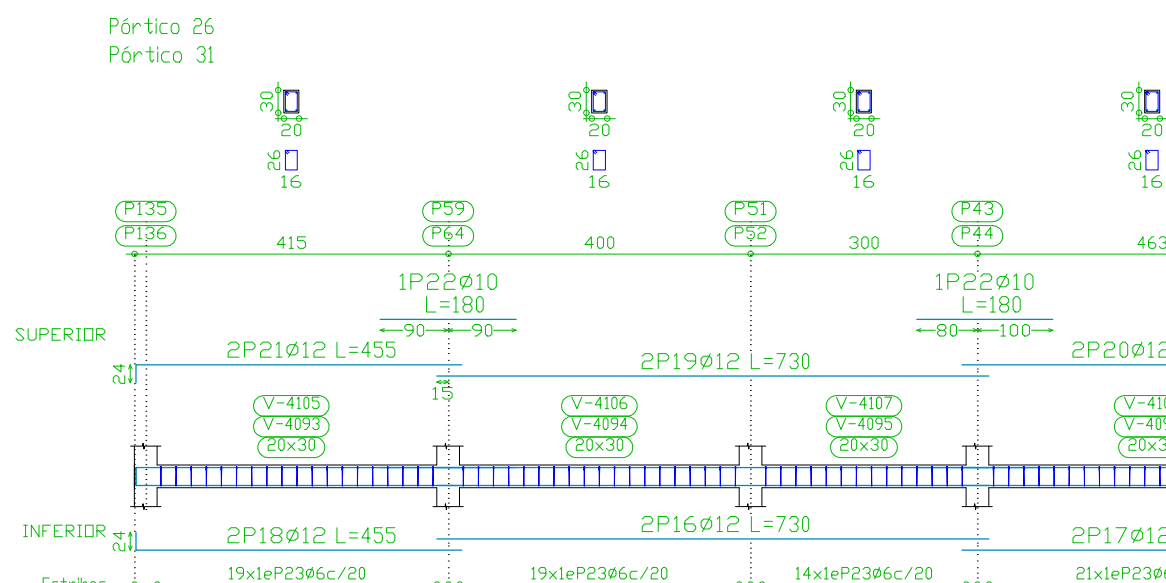
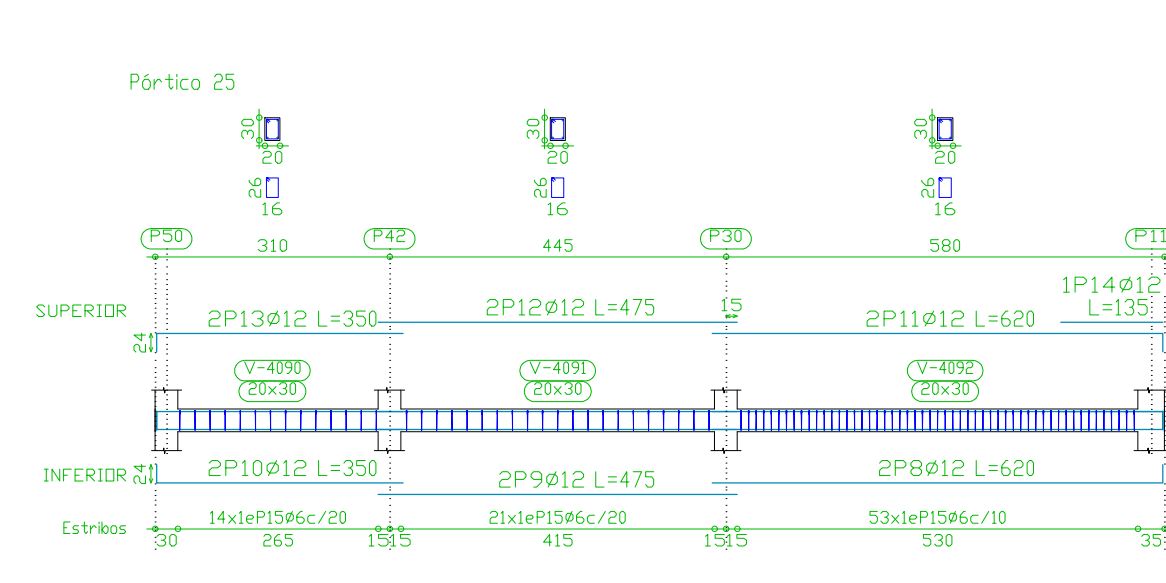
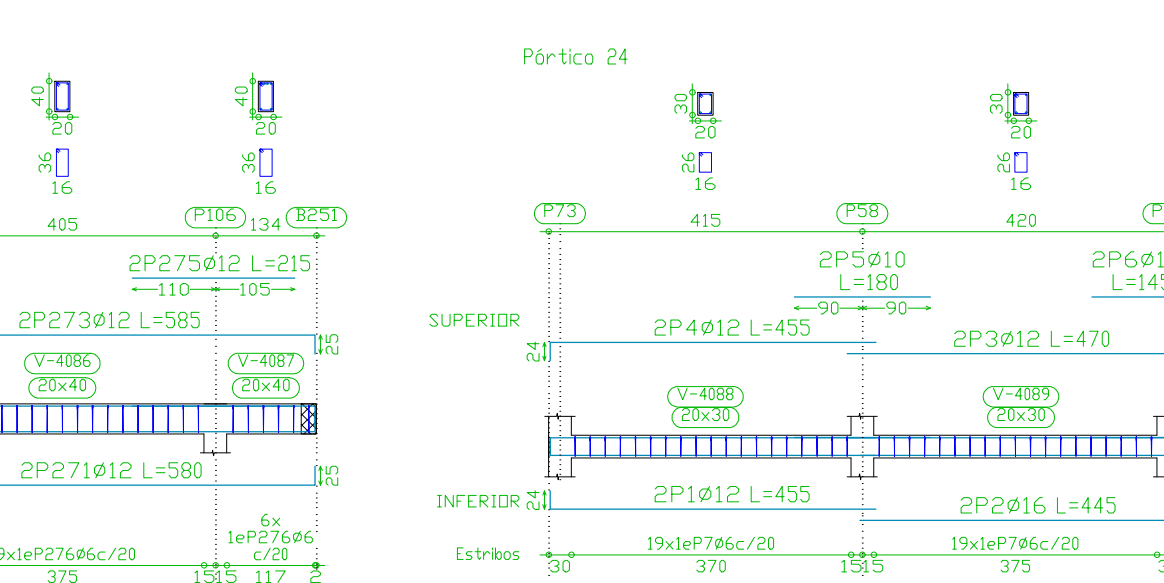
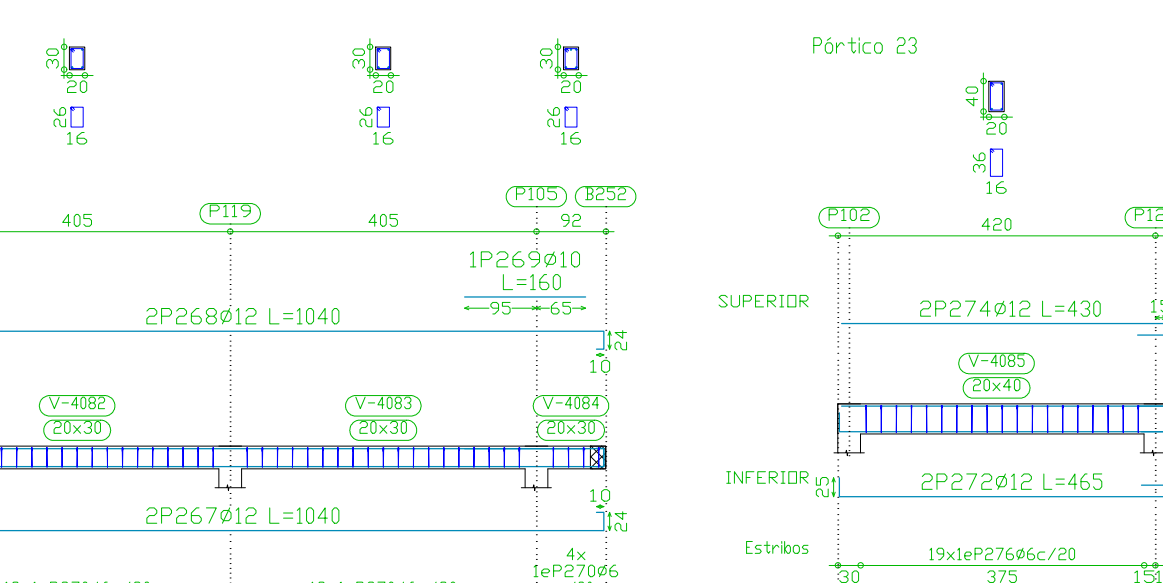
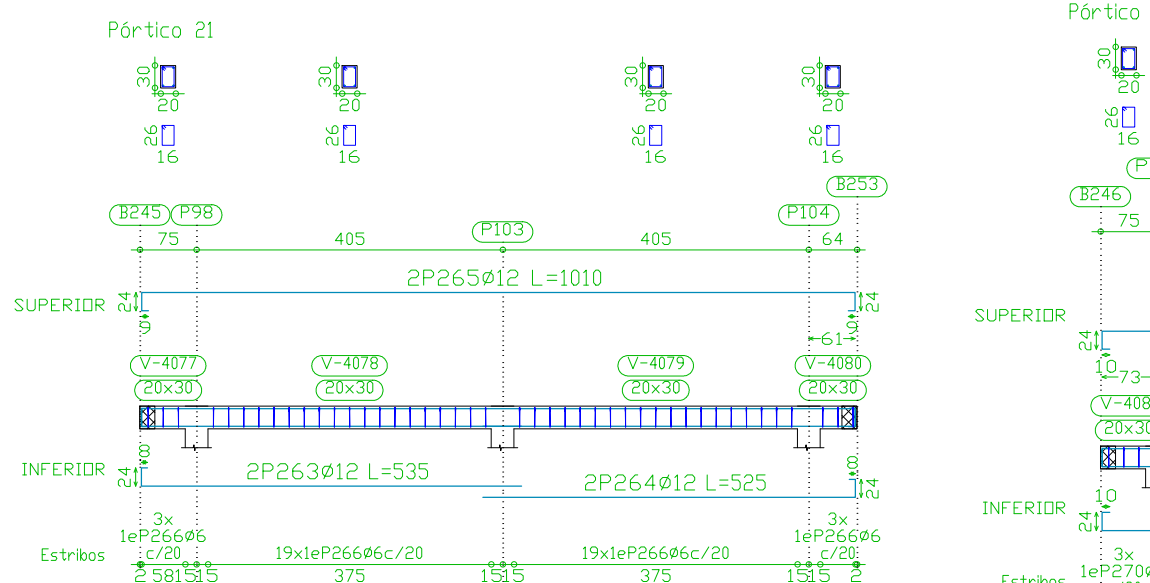
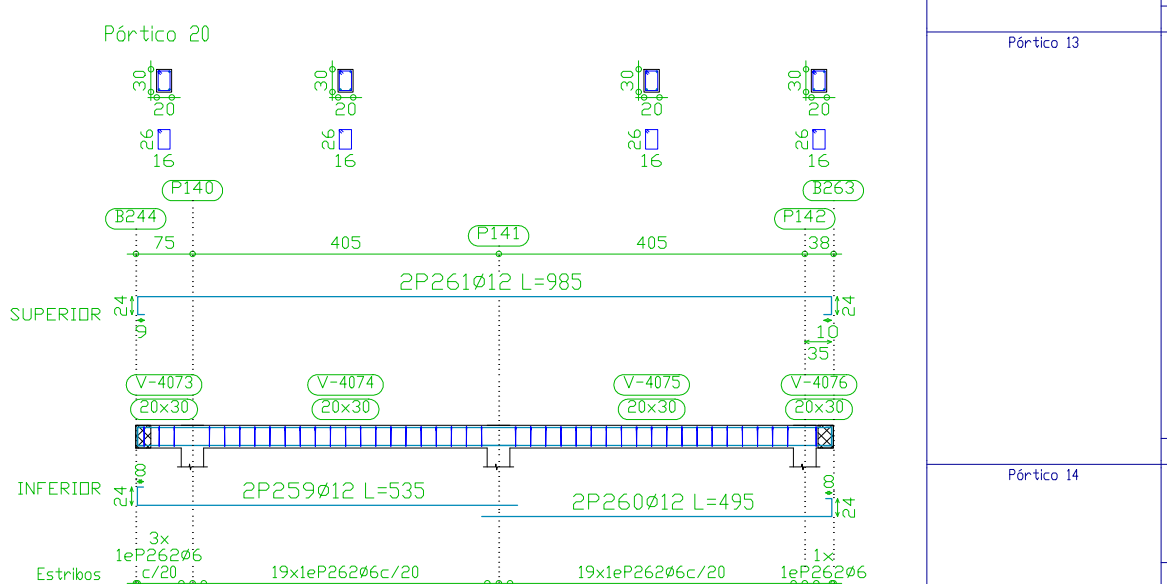
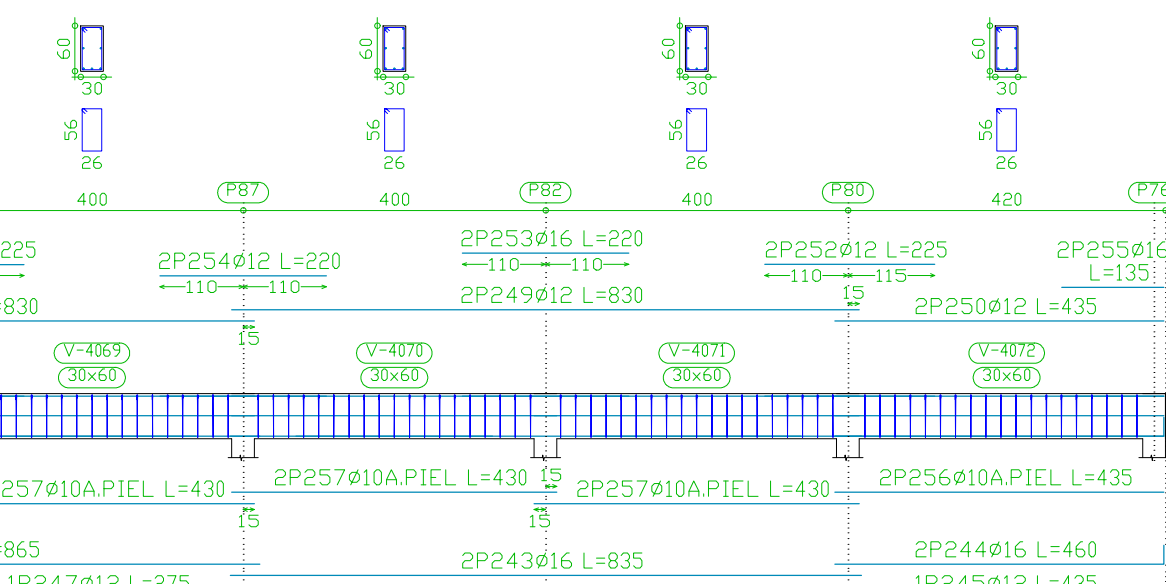
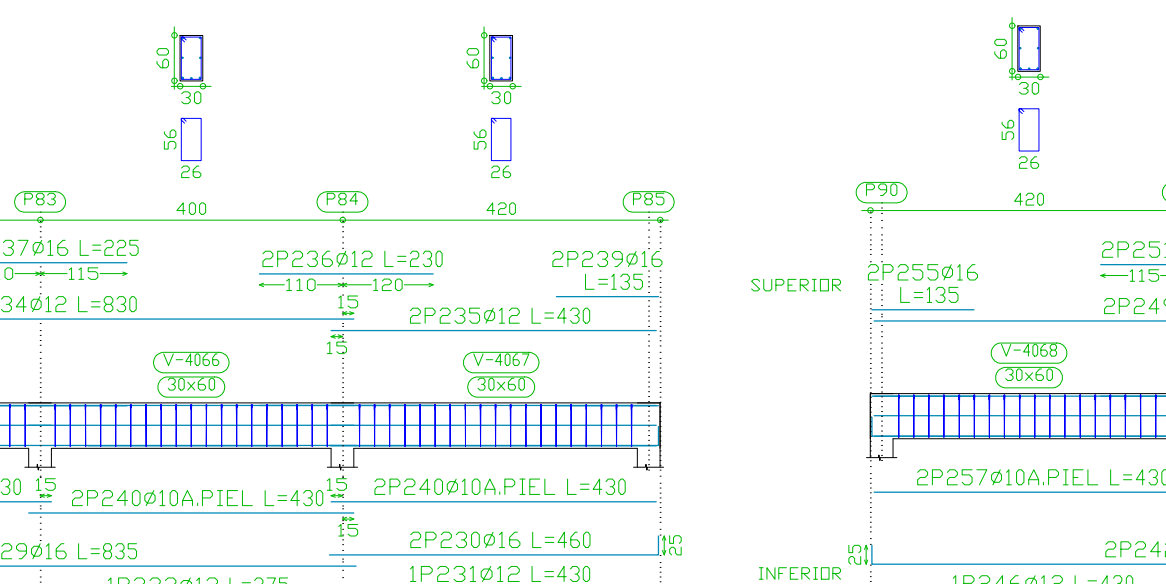
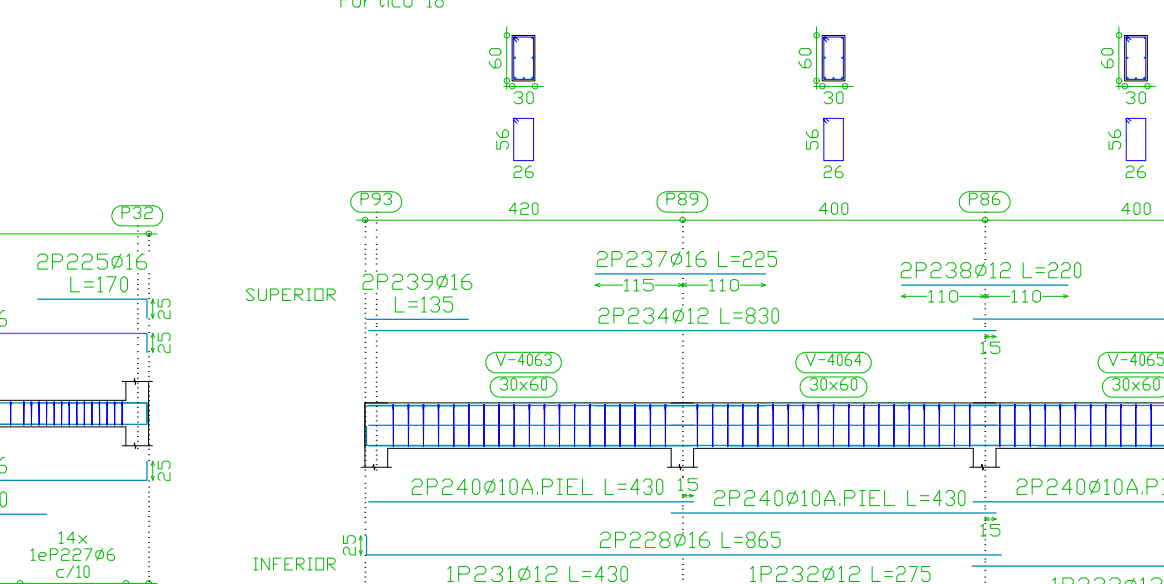
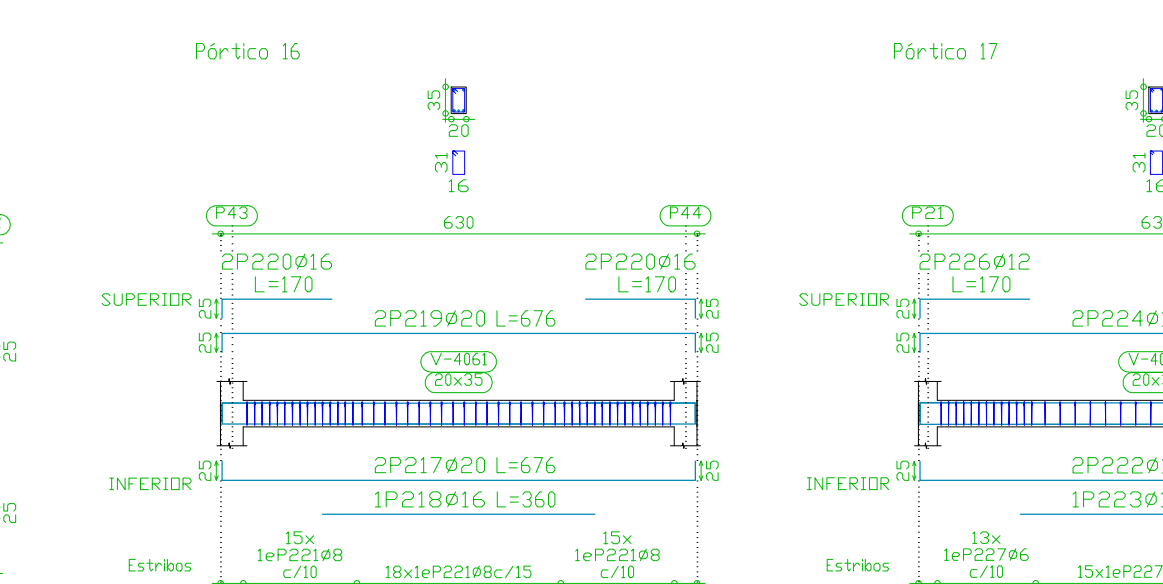
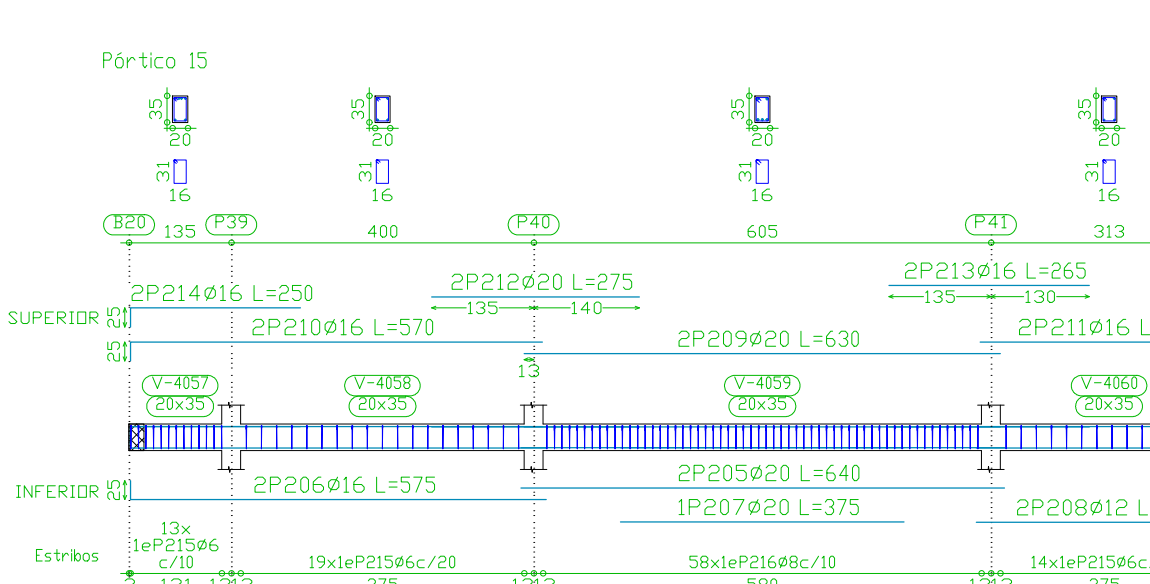
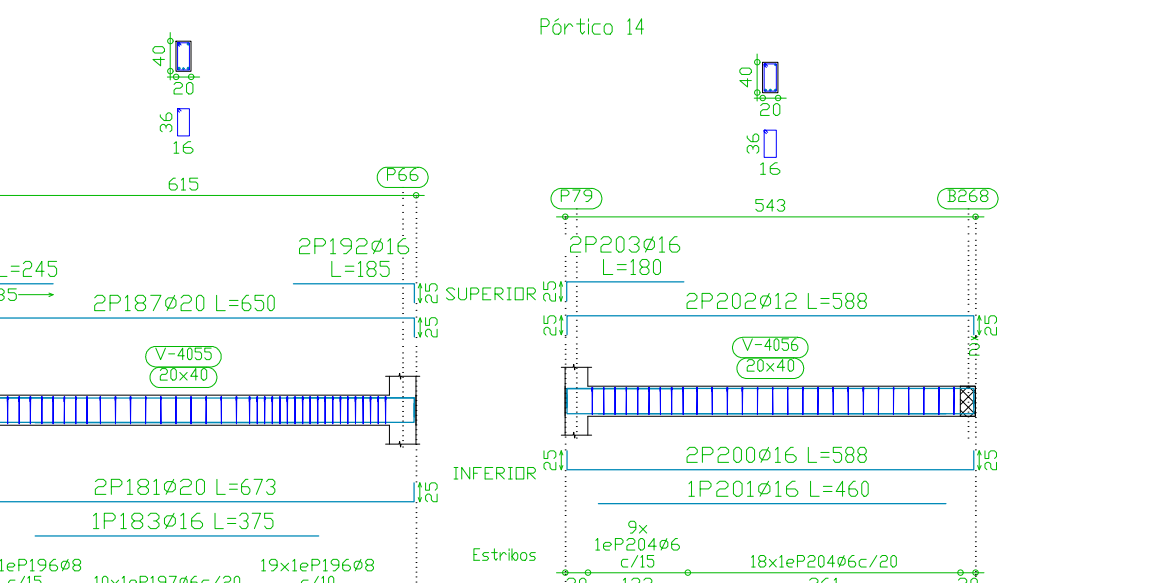
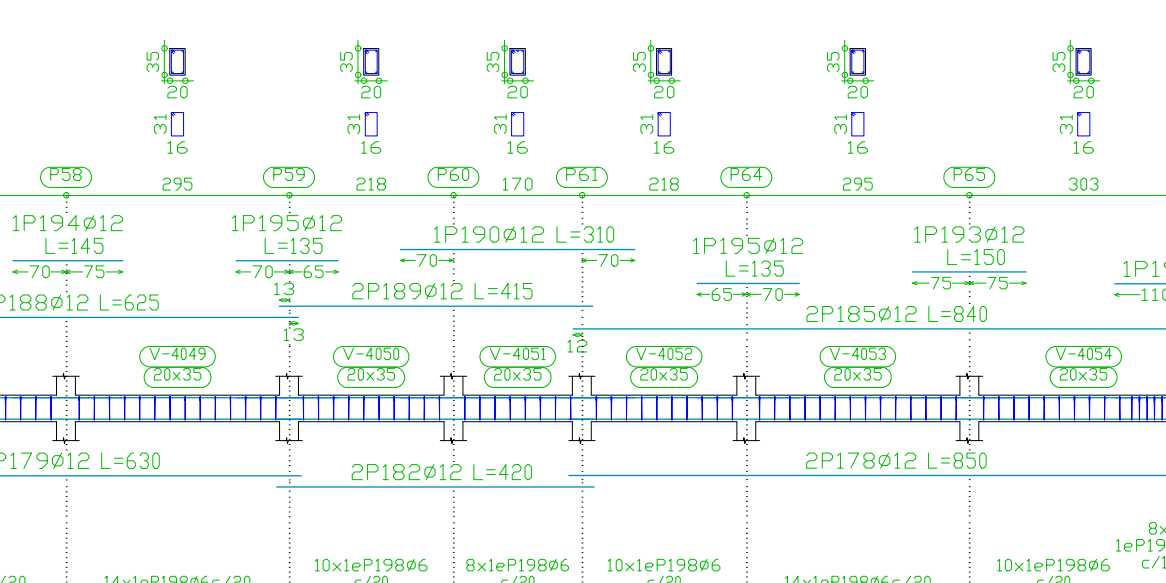
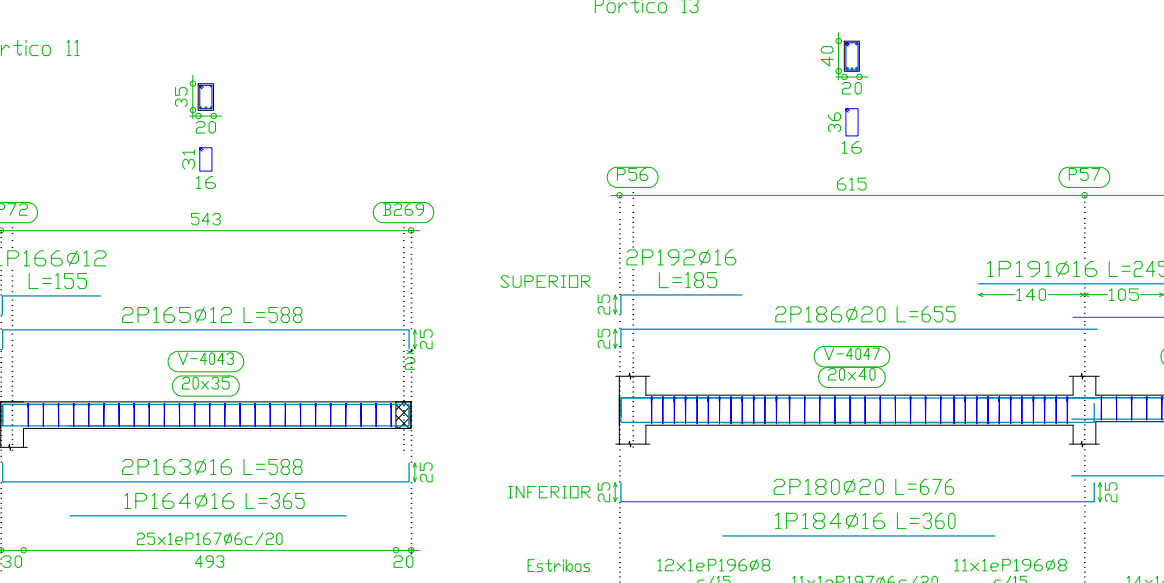
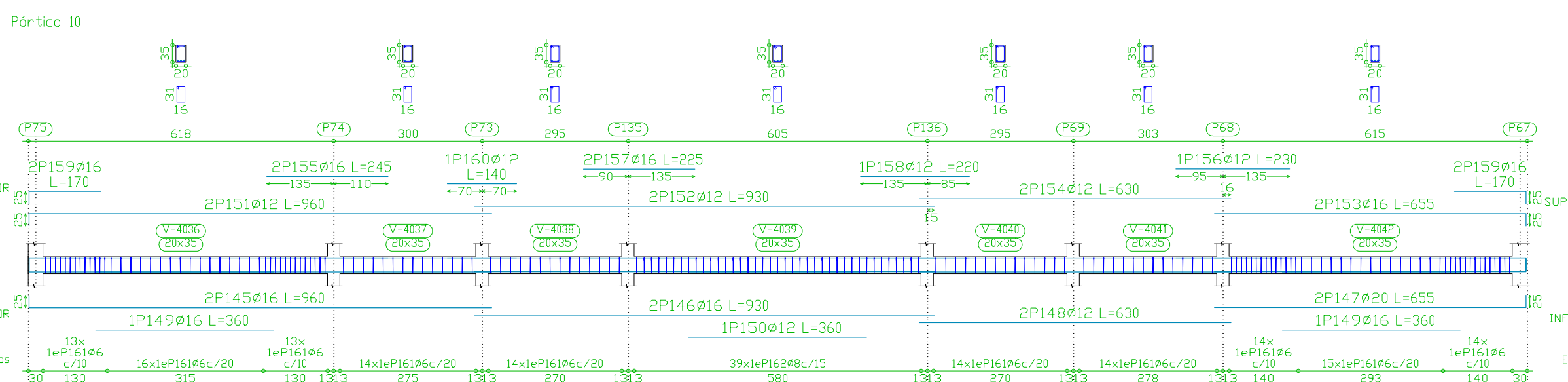
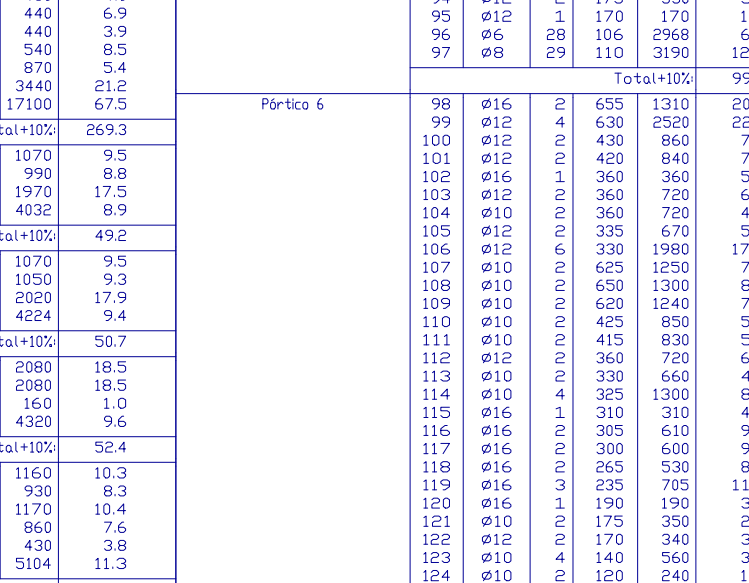
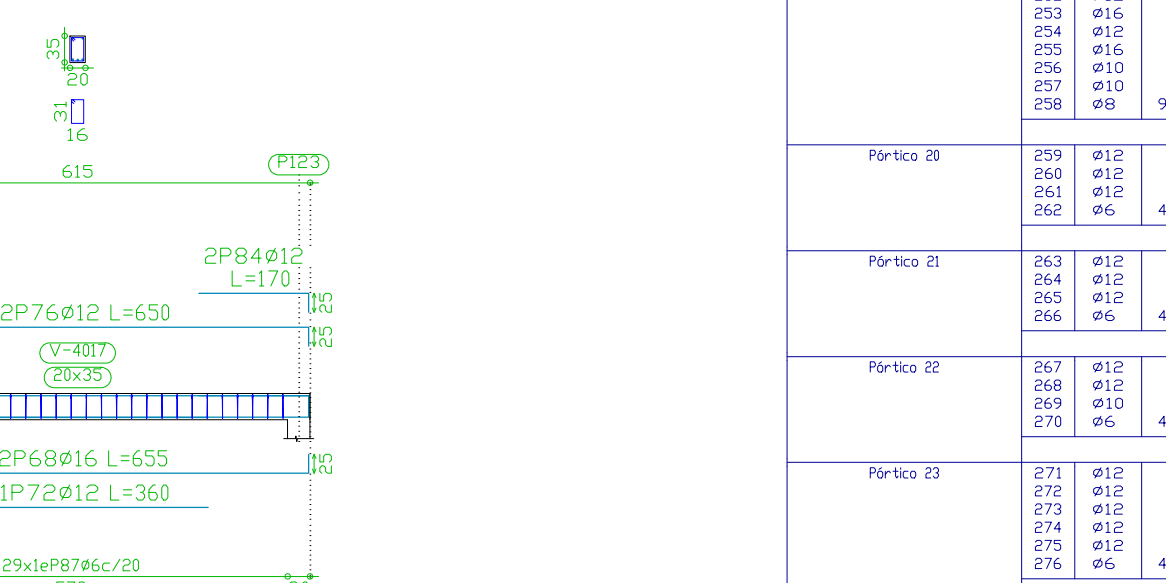
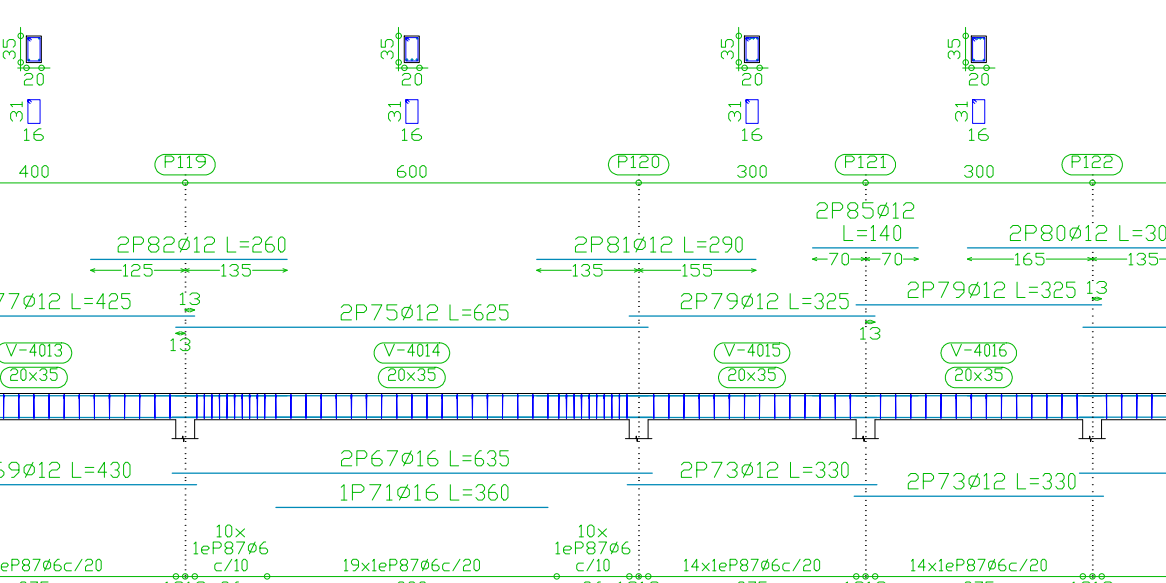
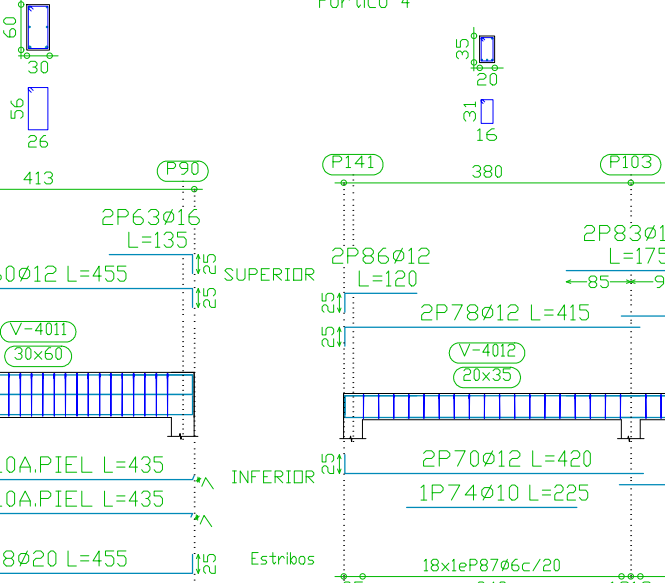
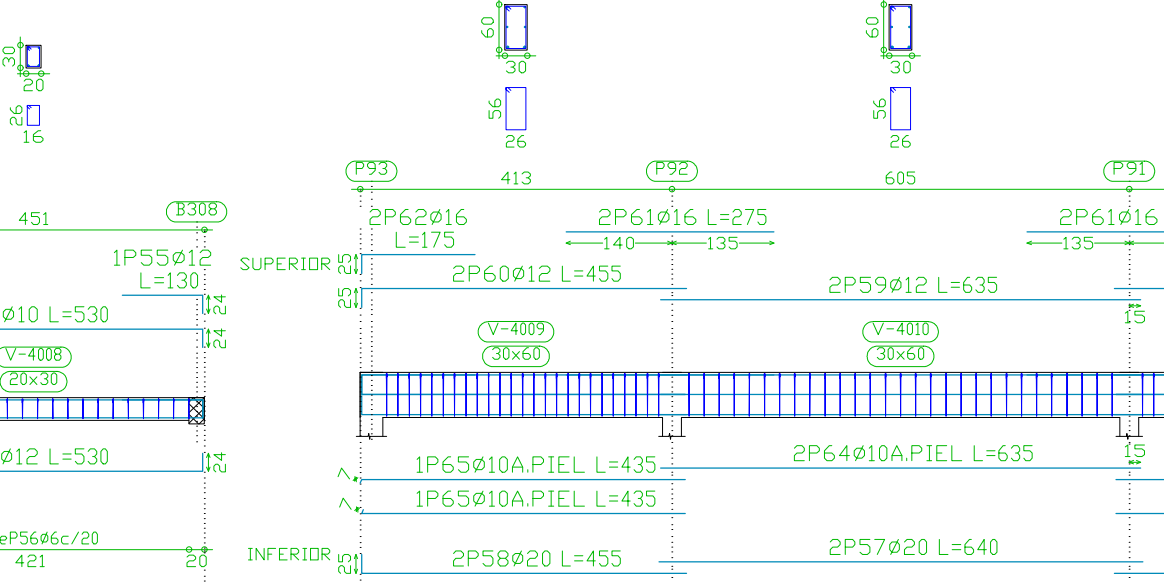
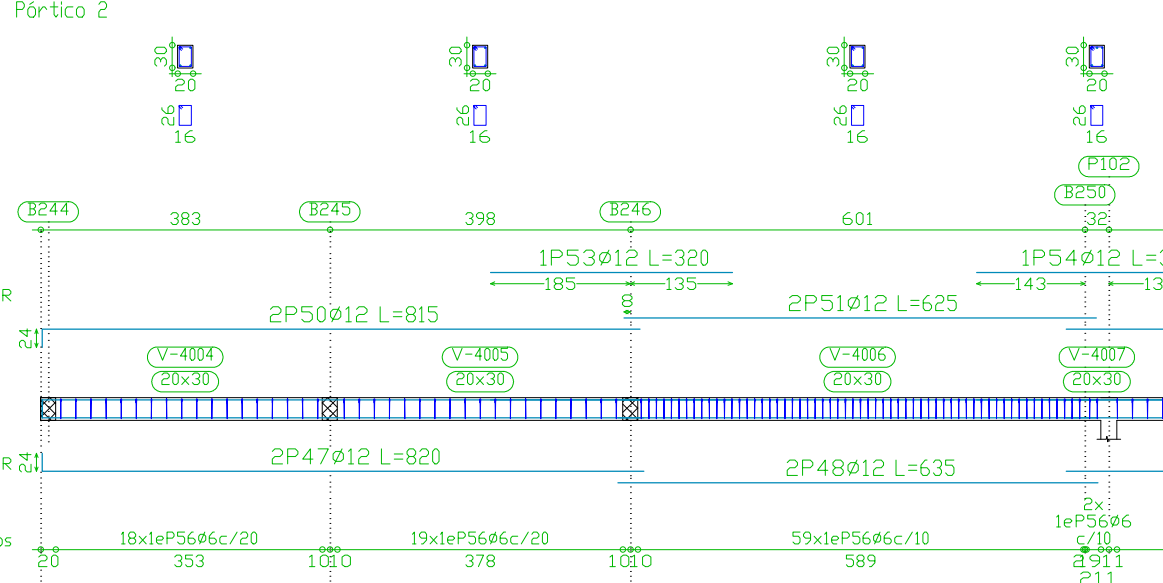
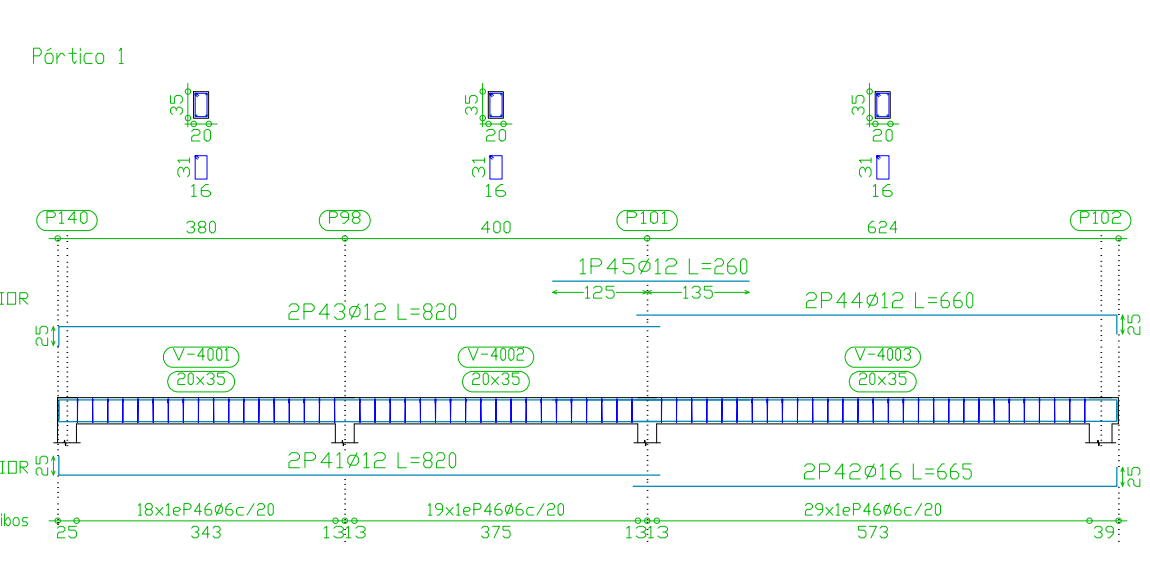
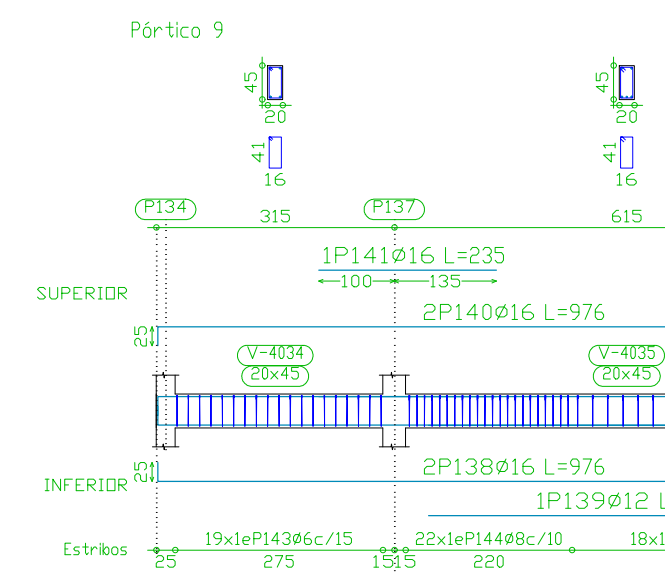
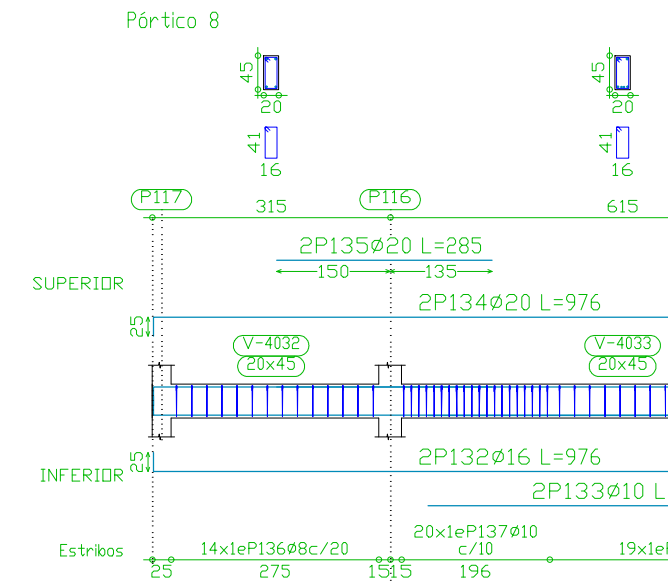
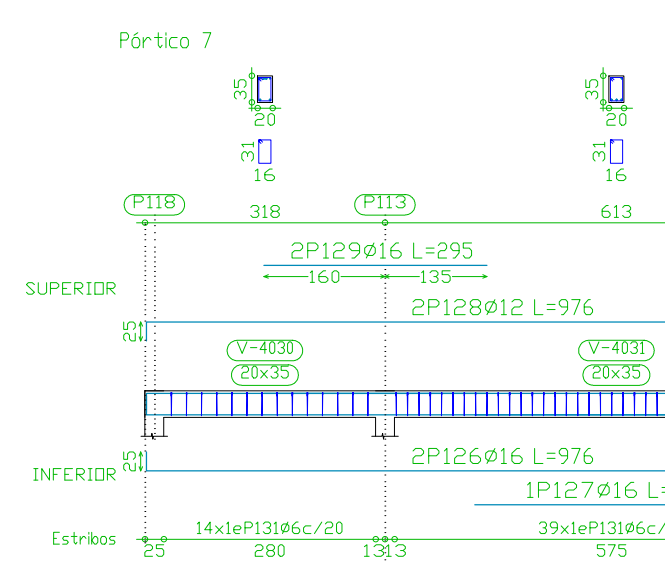
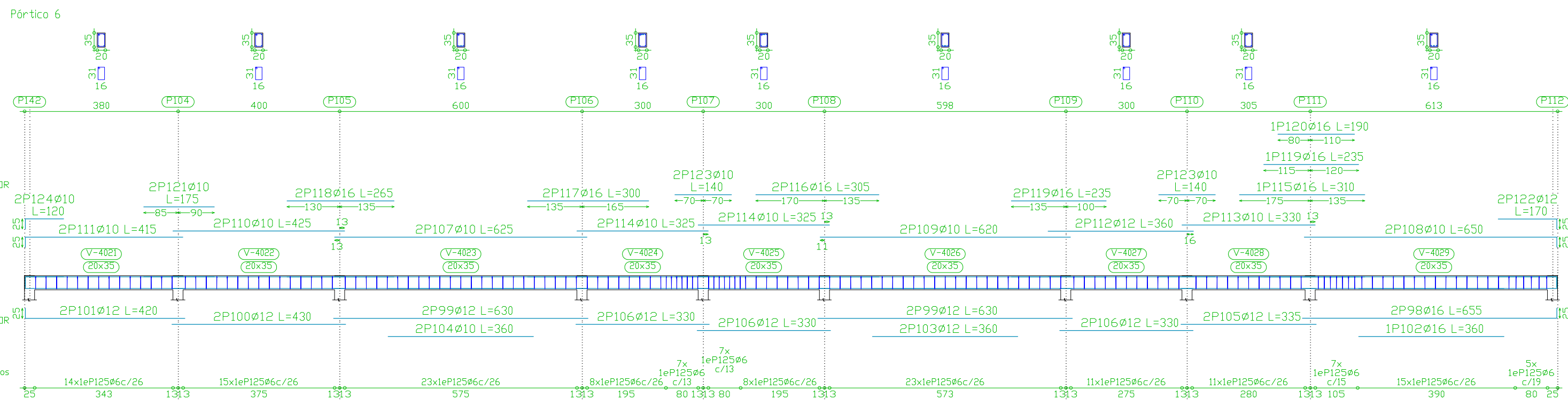
MATERIA: PROYECTO DE INGENIERÍA CIVIL II

FECHA: JULIO 2021



SEGUNDO PISO +7.50
Despiece de vigas
Volumen: 1+25 Control Normal
Acero: AH-500, Control Normal
Escala: 1:100

Resumen Acero	Long. total (m)	Peso +10% (kg)	Total
SEGUNDO PISO +7.50	2845.4	695	
Ø6	1663.6	722	
Ø8	572.7	388	
Ø12	2297.6	2244	
Ø16	810.2	1407	
Ø20	349.5	948	6404

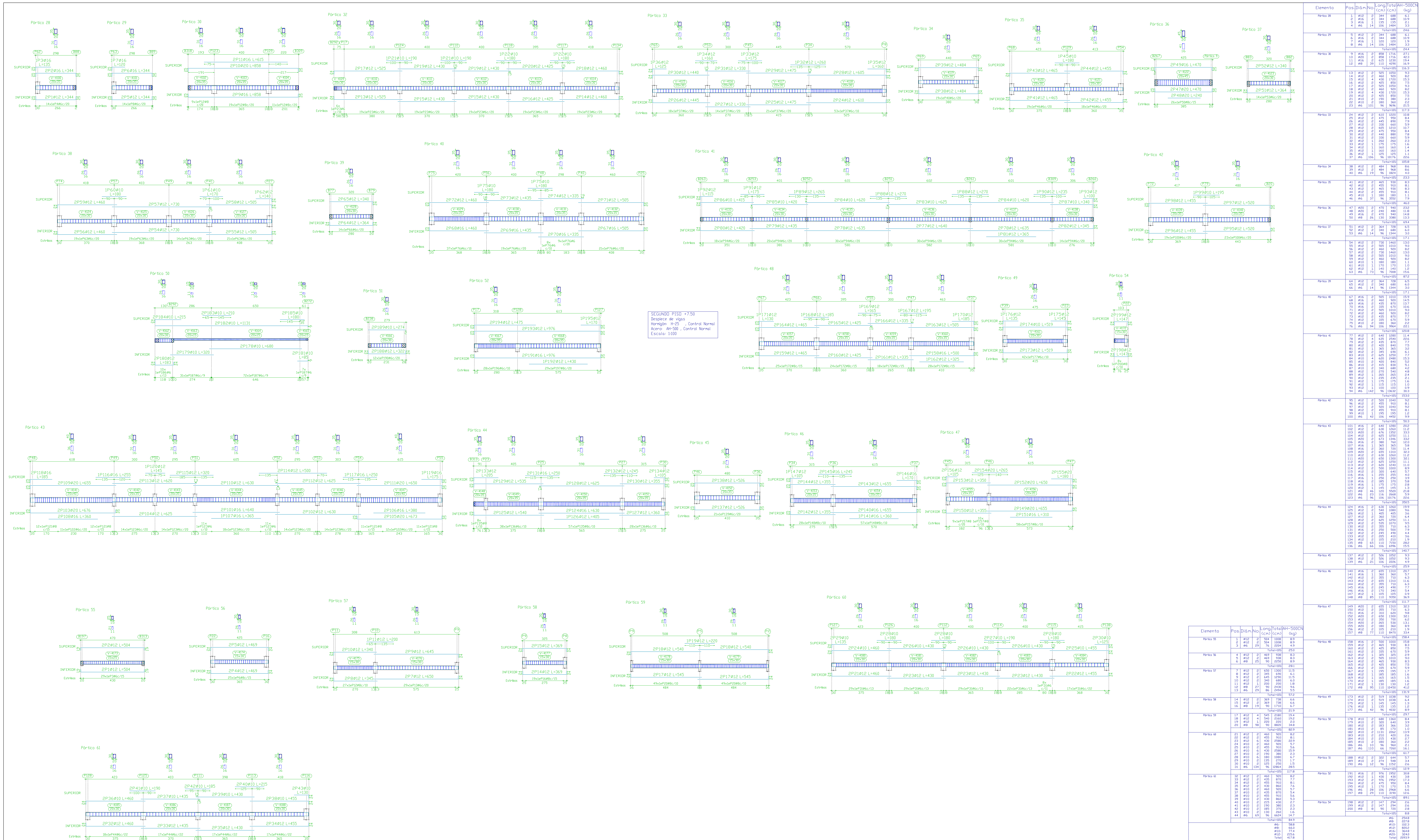


UNIVERSIDAD AUTÓNOMA "JUAN MISAR SARACHO"
FACULTAD DE CIENCIAS Y TECNOLOGÍA

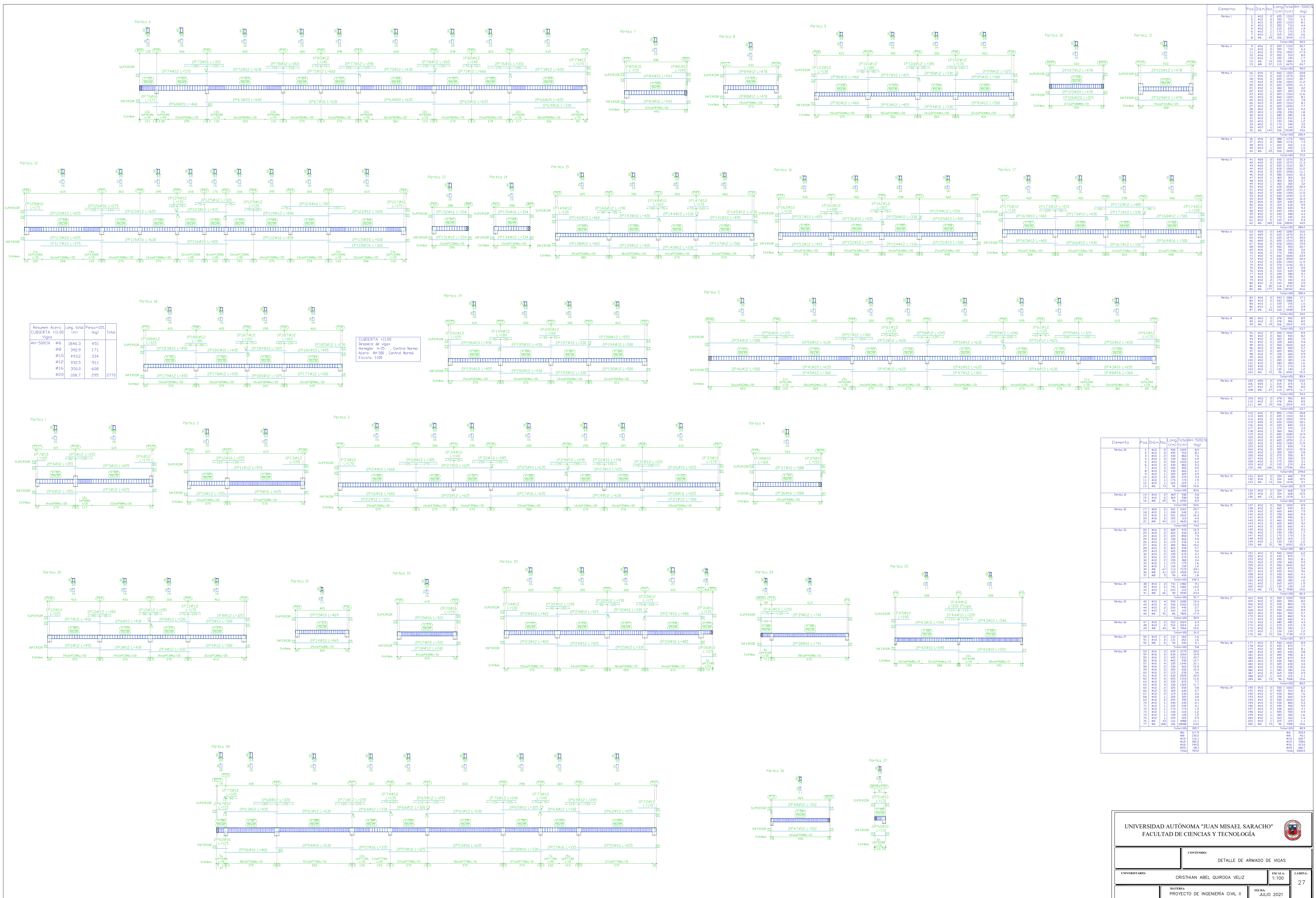
CONTENIDO:

DETALLE DE ARMADO DE VIGAS

UNIVERSITARIO:	CRISTIAN ABEL QUIROGA VELIZ	ESCALA:	1:100	LÁMINA:	25
MATERIA:	PROYECTO DE INGENIERÍA CIVIL II	FECHA:	JULIO 2021		

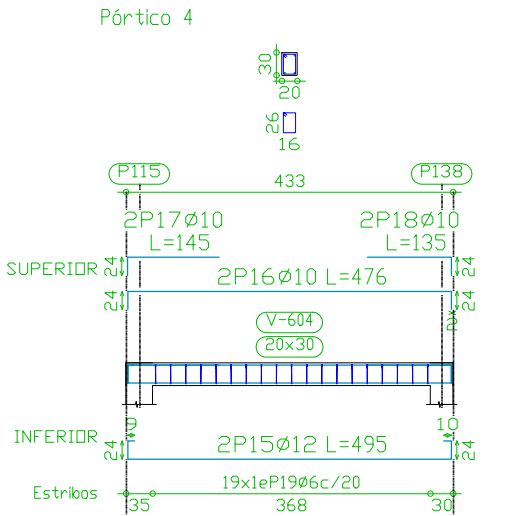


Elemento	Pos.	Diámetro	No.	Long (cm)	Total AH-500CN	
					kg	kg
Pórtico 28	1	#12	2	344	688	8.9
	2	#12	2	344	688	8.9
	3	#12	2	344	688	8.9
	4	#12	2	344	688	8.9
Pórtico 29	5	#12	2	344	688	8.9
	6	#12	2	344	688	8.9
	7	#12	2	344	688	8.9
	8	#12	2	344	688	8.9
Pórtico 30	9	#12	2	344	688	8.9
	10	#12	2	344	688	8.9
	11	#12	2	344	688	8.9
	12	#12	2	344	688	8.9
Pórtico 31	13	#12	2	344	688	8.9
	14	#12	2	344	688	8.9
	15	#12	2	344	688	8.9
	16	#12	2	344	688	8.9
Pórtico 32	17	#12	2	344	688	8.9
	18	#12	2	344	688	8.9
	19	#12	2	344	688	8.9
	20	#12	2	344	688	8.9
Pórtico 33	21	#12	2	344	688	8.9
	22	#12	2	344	688	8.9
	23	#12	2	344	688	8.9
	24	#12	2	344	688	8.9
Pórtico 34	25	#12	2	344	688	8.9
	26	#12	2	344	688	8.9
	27	#12	2	344	688	8.9
	28	#12	2	344	688	8.9
Pórtico 35	29	#12	2	344	688	8.9
	30	#12	2	344	688	8.9
	31	#12	2	344	688	8.9
	32	#12	2	344	688	8.9
Pórtico 36	33	#12	2	344	688	8.9
	34	#12	2	344	688	8.9
	35	#12	2	344	688	8.9
	36	#12	2	344	688	8.9
Pórtico 37	37	#12	2	344	688	8.9
	38	#12	2	344	688	8.9
	39	#12	2	344	688	8.9
	40	#12	2	344	688	8.9
Pórtico 38	41	#12	2	344	688	8.9
	42	#12	2	344	688	8.9
	43	#12	2	344	688	8.9
	44	#12	2	344	688	8.9
Pórtico 39	45	#12	2	344	688	8.9
	46	#12	2	344	688	8.9
	47	#12	2	344	688	8.9
	48	#12	2	344	688	8.9
Pórtico 40	49	#12	2	344	688	8.9
	50	#12	2	344	688	8.9
	51	#12	2	344	688	8.9
	52	#12	2	344	688	8.9
Pórtico 41	53	#12	2	344	688	8.9
	54	#12	2	344	688	8.9
	55	#12	2	344	688	8.9
	56	#12	2	344	688	8.9
Pórtico 42	57	#12	2	344	688	8.9
	58	#12	2	344	688	8.9
	59	#12	2	344	688	8.9
	60	#12	2	344	688	8.9
Pórtico 43	61	#12	2	344	688	8.9
	62	#12	2	344	688	8.9
	63	#12	2	344	688	8.9
	64	#12	2	344	688	8.9
Pórtico 44	65	#12	2	344	688	8.9
	66	#12	2	344	688	8.9
	67	#12	2	344	688	8.9
	68	#12	2	344	688	8.9
Pórtico 45	69	#12	2	344	688	8.9
	70	#12	2	344	688	8.9
	71	#12	2	344	688	8.9
	72	#12	2	344	688	8.9
Pórtico 46	73	#12	2	344	688	8.9
	74	#12	2	344	688	8.9
	75	#12	2	344	688	8.9
	76	#12	2	344	688	8.9
Pórtico 47	77	#12	2	344	688	8.9
	78	#12	2	344	688	8.9
	79	#12	2	344	688	8.9
	80	#12	2	344	688	8.9
Pórtico 48	81	#12	2	344	688	8.9
	82	#12	2	344	688	8.9
	83	#12	2	344	688	8.9
	84	#12	2	344	688	8.9
Pórtico 49	85	#12	2	344	688	8.9
	86	#12	2	344	688	8.9
	87	#12	2	344	688	8.9
	88	#12	2	344	688	8.9
Pórtico 50	89	#12	2	344	688	8.9
	90	#12	2	344	688	8.9
	91	#12	2	344	688	8.9
	92	#12	2	344	688	8.9
Pórtico 51	93	#12	2	344	688	8.9
	94	#12	2	344	688	8.9
	95	#12	2	344	688	8.9
	96	#12	2	344	688	8.9
Pórtico 52	97	#12	2	344	688	8.9
	98	#12	2	344	688	8.9
	99	#12	2	344	688	8.9
	100	#12	2	344	688	8.9
Pórtico 53	101	#12	2	344	688	8.9
	102	#12	2	344	688	8.9
	103	#12	2	344	688	8.9
	104	#12	2	344	688	8.9
Pórtico 54	105	#12	2	344	688	8.9
	106	#12	2	344	688	8.9
	107	#12	2	344	688	8.9
	108	#12	2	344	688	8.9
Pórtico 55	109	#12	2	344	688	8.9
	110	#12	2	344	688	8.9
	111	#12	2	344	688	8.9
	112	#12	2	344	688	8.9
Pórtico 56	113	#12	2	344	688	8.9
	114	#12	2	344	688	8.9
	115	#12	2	344	688	8.9
	116	#12	2	344	688	8.9
Pórtico 57	117	#12	2	344	688	8.9
	118	#12	2	344	688	8.9
	119	#12	2	344	688	8.9
	120	#12	2	344	688	8.9
Pórtico 58	121	#12	2	344	688	8.9
	122	#12	2	344	688	8.9
	123	#12	2	344	688	8.9
	124	#12	2	344	688	8.9
Pórtico 59	125	#12	2	344	688	8.9
	126	#12	2	344	688	8.9
	127	#12	2	344	688	8.9
	128	#12	2	344	688	8.9
Pórtico 60	129	#12	2	344	688	8.9
	130	#12	2	344	688	8.9
	131	#12	2	344	688	8.9
	132	#12	2	344	688	8.9
Pórtico 61	133	#12	2	344	688	8.9
	134	#12	2	344	688	8.9
	135	#12	2	344	688	8.9
	136	#12	2	344	688	8.9
Pórtico 62	137	#12	2	344	688	8.9
	138	#12	2	344	688	8.9
	139	#12	2	344	688	8.9
	140	#12	2	344	688	8.9
Pórtico 63	141	#12	2	344	688	8.9
	142	#12	2	344	688	8.9
	143	#12	2	344	688	8.9
	144	#12	2	344	688	8.9
Pórtico 64	145	#12	2	344	688	8.9
	146	#12	2	344	688	8.9
	147	#12	2	344	688	8.9
	148	#12	2	344	688	8.9
Pórtico 65	149	#12	2	344	688	8.9
	150	#12	2	344	688	8.9
	151	#12	2	344	688	8.9
	152	#12	2	344	688	8.9
Pórtico 66	153	#12	2	344	688	8.9
	154	#12	2	344	688	8.9
	155	#12	2	344	688	8.9
	156	#12	2	344	688	8.9
Pórtico 67	157	#12	2	344	688	8.9
	158	#12	2	344	688	8.9
	159	#12	2	344	688	8.9
	160	#12	2	344	688	8.9
Pórtico 68	161	#12	2	344	688	8.9
	162	#12	2	344	688	8.9
	163	#12	2	344	688	8.9
	164	#12	2	344	688	8.9
Pórtico 69	165	#12	2	344	688	8.9
	166	#12	2	344	688	8.9
	167	#12	2	344	688	8.9
	168	#12	2	344	688	8.9
Pórtico 70	169	#12	2	344	688	8.9
	170	#12	2	344	688	8.9
	171	#12	2	344	688	8.9
	172	#12	2	344	688	8.9
Pórtico 71	173	#12	2	344	688	8.9
	174	#12	2	344	688	8.9
	175	#12	2	344	688	8.9
	176	#12	2	344	688	8.9
Pórtico 72	177	#12	2	344	688	8.9
	178	#12	2	344	688	8.9
	179	#12	2	344	688	8.9
	180	#12	2	344	688	8.9
Pórtico 73	181	#12	2	344	688	8.9
	182	#12	2	344	688	8.9
	183	#12	2	344	688	8.9
	184	#12	2	344	688	8.9
Pórtico 74	185	#12	2	344	688	8.9
	186	#12	2	344	688	8.9
	187	#12	2	344	688	8.9
	188	#12	2	344	688	8.9
Pórtico 75	189	#12	2	344	688	8.9
	190	#12	2	344	688	8.9
	191	#12	2	344	688	8.9
	192	#12	2	344	688	8.9
Pórtico 76	193	#12	2	344	688	8.9
	194	#12	2	344	688	8.9
	195	#12	2	344	688	8.9
	196	#12	2	344	688	8.9
Pórtico 77	197	#12	2	344	688	8.9
	198	#12	2	344	688	8.9
	199	#12	2	344	688	8.9
	200	#12	2	344	688	8.9
Pórtico 78	201	#12	2	344	688	8.9
	202	#12	2	344	688	8.9
	203	#12	2	344	688	8.9
	204	#12	2	344	688	8.9
Pórtico 79	205	#12	2	344	688	8.9
	206	#12	2	344	688	8.9
	207	#12	2	344	688	8.9
	208	#12	2	344	688	8.9
Pórtico 80	209	#12	2	344	688	8.9
	210	#12	2	344	688	8.9
	211	#12	2	344	688	8.9
	212	#12	2	344	688	8.9
Pórtico 81	213	#12	2	344	688	8.9
	214	#12	2	344	688	8.9
	215	#12	2	344	688	8.9
	216	#12	2	344	688	8.9
Pórtico 82	217	#12	2	344	688	8.9
	218	#12	2	344	688	8.9
	219	#12	2	344	688	8.9
	220	#12	2	344	688	8.9
Pórtico 83	221	#12	2	344	688	8.9
	222	#12	2	344	688	8.9
	223	#12	2	344	688	8.9
	224	#12	2	344	688	8.9
Pórtico 84	225	#12	2	344	688	8.9
	226	#12	2	344	688	8.9
	227	#12	2	344	688	8.9
	228	#12	2	344	688	8.9
Pórtico 85	229	#12	2	344	688	8.9
	230	#12	2	344	688	8.9
	231	#12	2	344	688	8.9
	232	#12	2	344	688	8.9
Pórtico 86	233	#12	2	344	688	8.9
	234	#12	2	344	688	8.9
	235	#12	2	344	688	8.9



Resumen Acero CUBIERTA DE GRADAS Vigas		Long. total (m)	Peso+10% (kg)	Total
AH-500CN	Ø6	118.1	29	148
	Ø10	78.6	53	
	Ø12	19.8	19	
	Ø16	27.0	47	

CUBIERTA DE GRADAS
Despiece de vigas
Hormigón: H-25 , Control Normal
Acero: AH-500 , Control Normal
Escala: 1:100



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-500CN (kg)
Pórtico 1	1	Ø16	2	676	1352	21.3
	2	Ø10	1	375	375	2.3
	3	Ø10	2	676	1352	8.3
	4	Ø10	4	170	680	4.2
	5	Ø6	39	106	4134	9.2
Total+10%						49.8
Pórtico 2	6	Ø16	2	676	1352	21.3
	7	Ø10	1	370	370	2.3
	8	Ø10	2	676	1352	8.3
	9	Ø10	4	170	680	4.2
	10	Ø6	38	106	4028	8.9
Total+10%						49.5
Pórtico 3	11	Ø12	2	495	990	8.8
	12	Ø10	2	490	980	6.0
	13	Ø10	4	140	560	3.5
	14	Ø6	19	96	1824	4.0
Total+10%						24.5
Pórtico 4	15	Ø12	2	495	990	8.8
	16	Ø10	2	476	952	5.9
	17	Ø10	2	145	290	1.8
	18	Ø10	2	135	270	1.7
	19	Ø6	19	96	1824	4.0
Total+10%						24.4
						Ø6: 28.7
						Ø10: 53.3
						Ø12: 19.4
						Ø16: 46.8
						Total: 148.2

