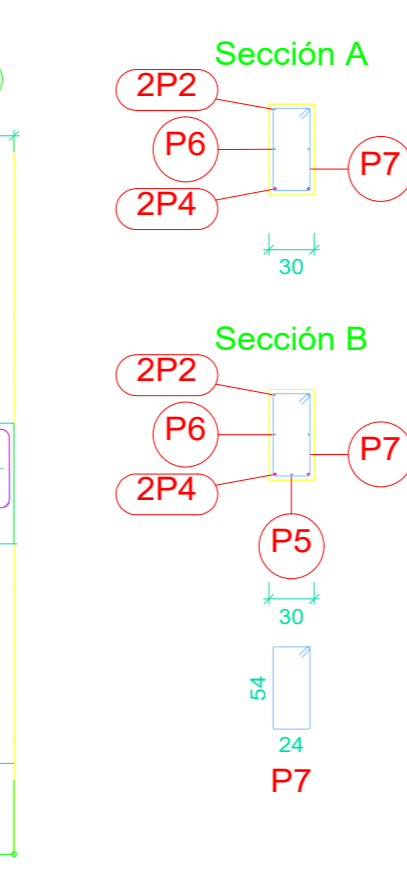
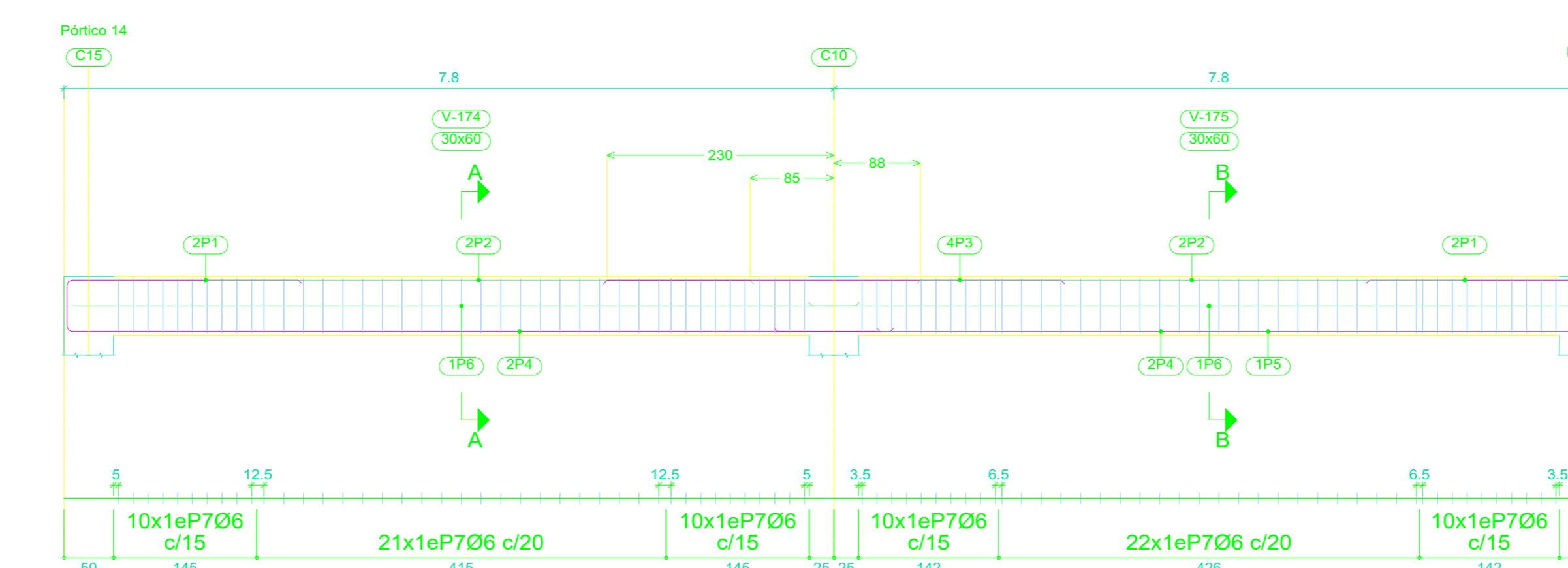
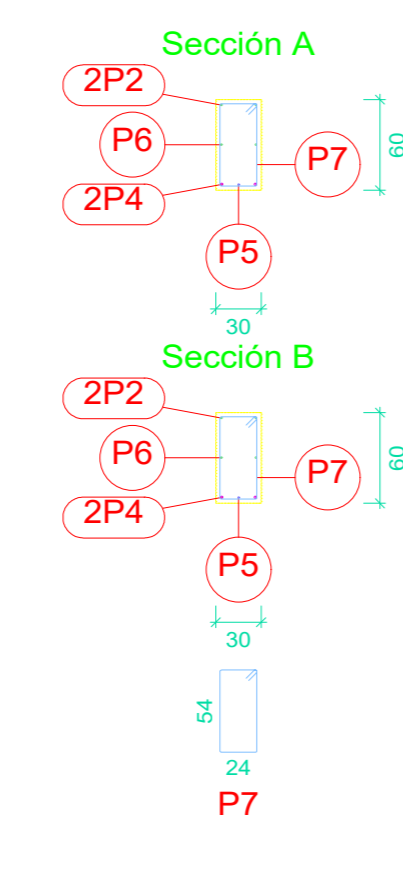
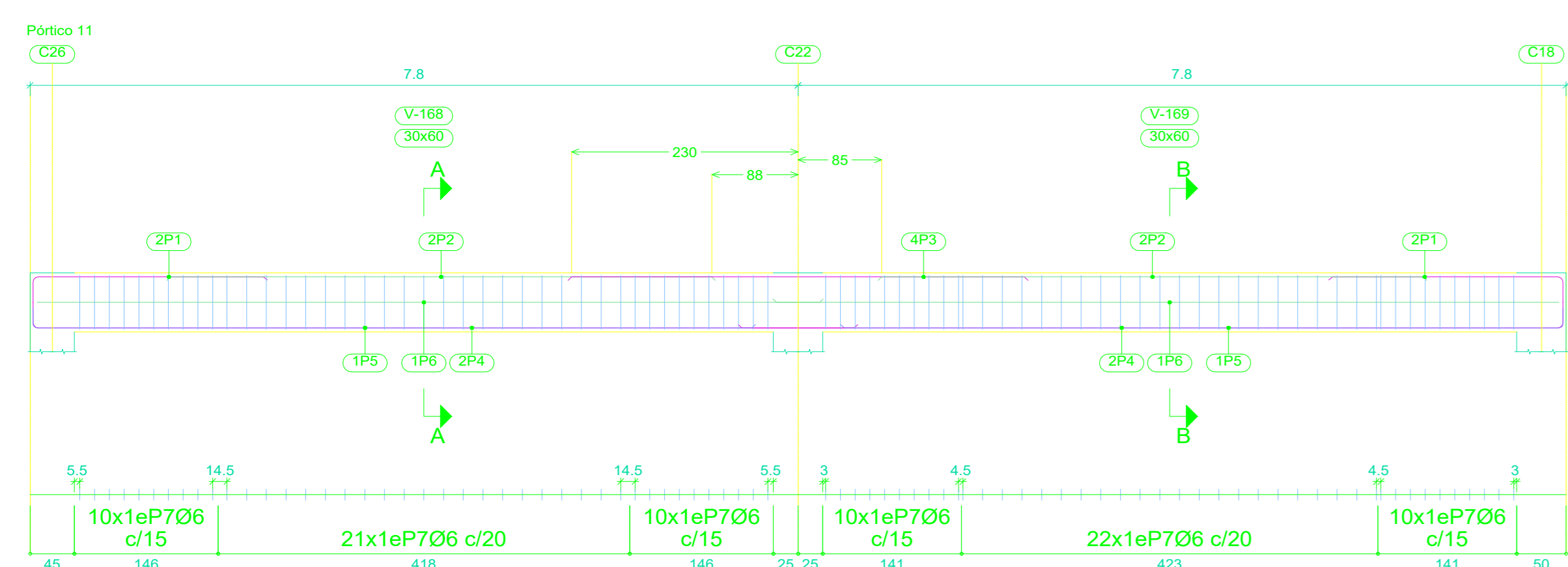
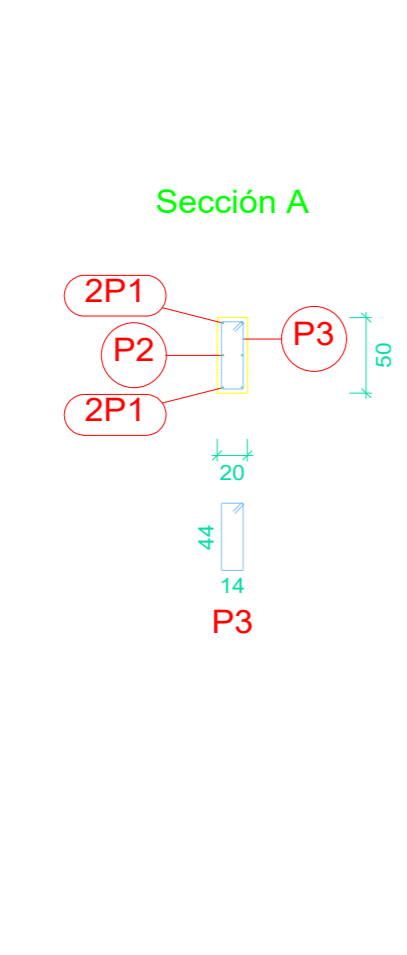
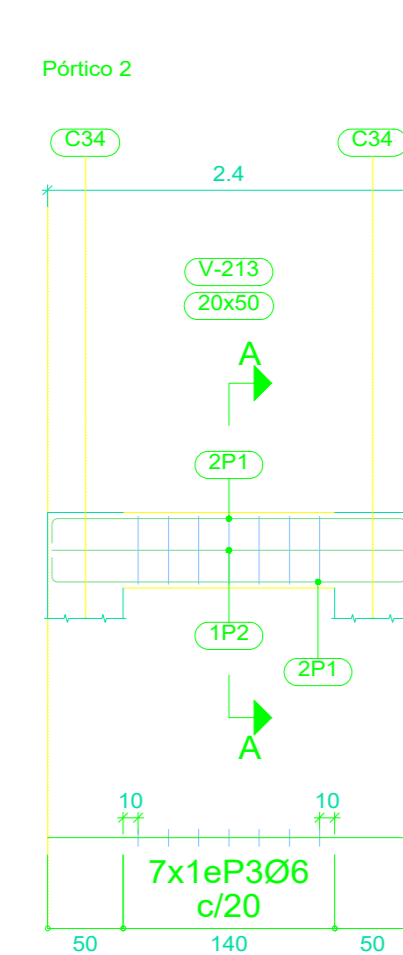
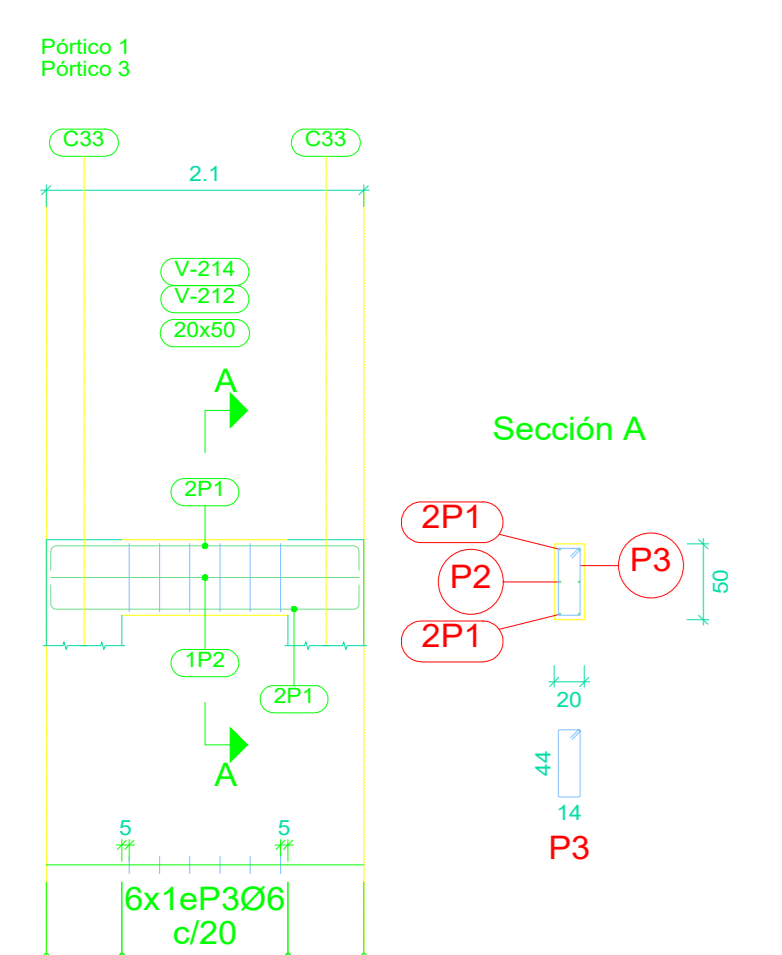


Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 14	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	1	730	750	750	6.7
	6	Ø10	4	799	815	3260	20.1
	7	Ø6	83	7	172	14276	31.7
Total+10%:							189.0



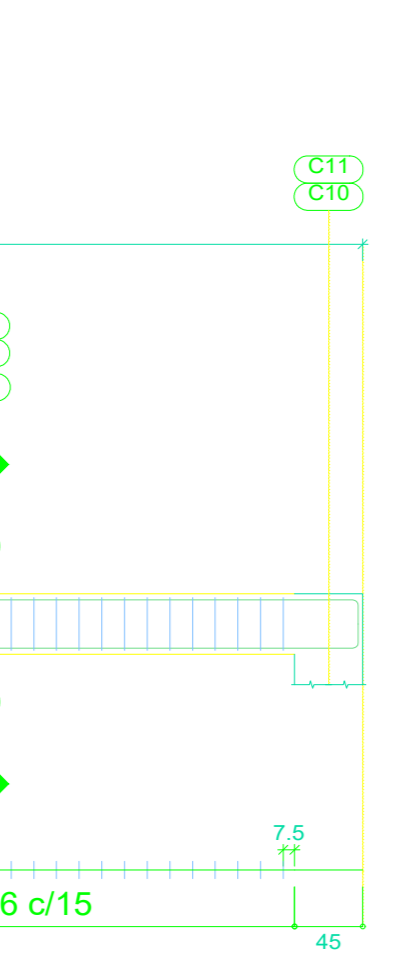
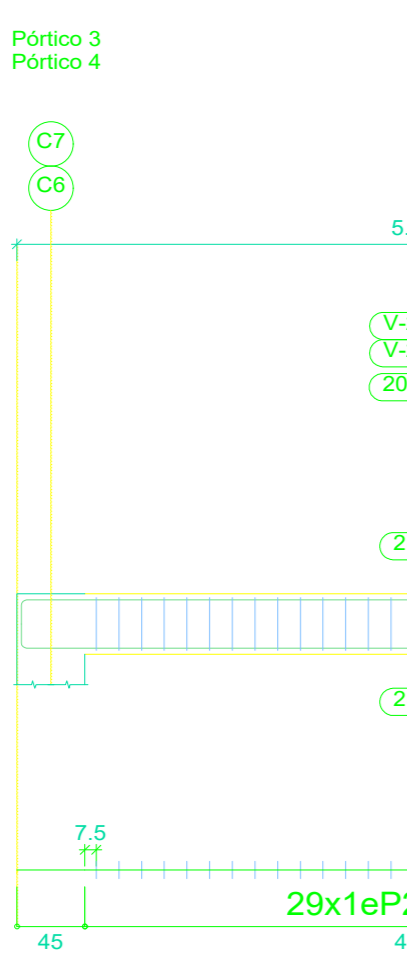
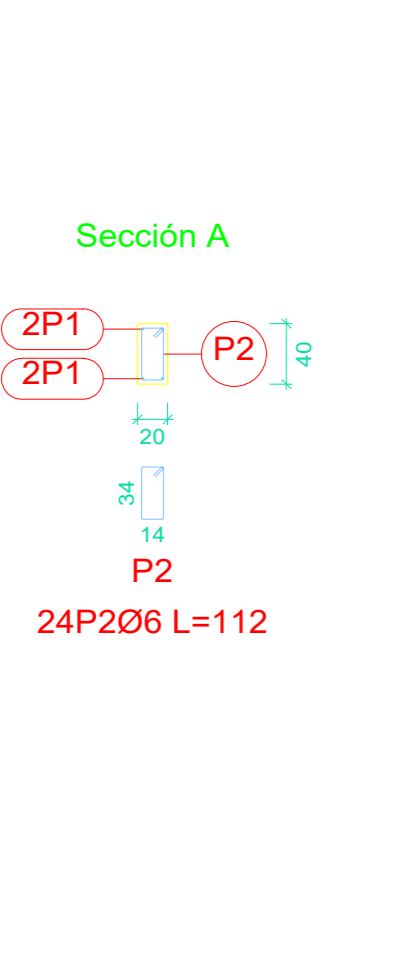
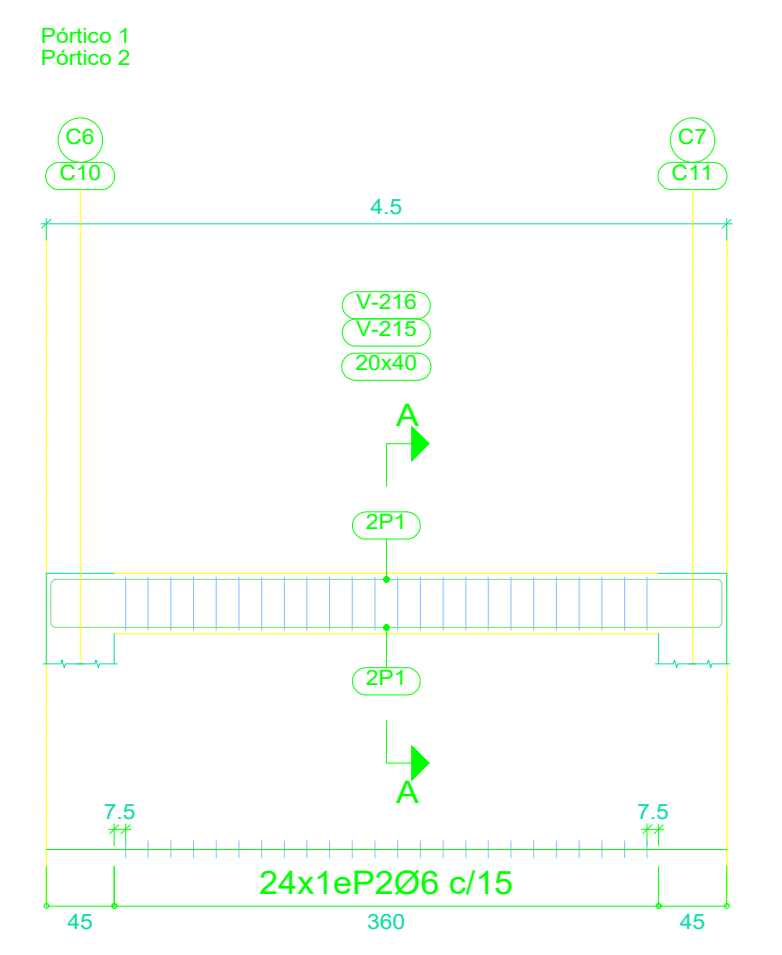
Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 7	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	2	730	750	1500	13.3
	6	Ø10	4	797	813	3252	20.0
	7	Ø6	83	7	172	14276	31.7
Total+10%:							196.1
Pórtico 10	1	Ø12	4	230	250	1000	8.9
	2	Ø12	5	789	829	4145	36.8
	3	Ø10	2	789	825	1650	10.2
	4	Ø6	43	7	172	7396	16.4
Total+10%:							79.5
Pórtico 11	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	2	730	750	1500	13.3
	6	Ø10	4	799	815	3260	20.1
	7	Ø6	83	7	172	14276	31.7
Total+10%:							196.2
Pórtico 12	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	2	730	750	1500	13.3
	6	Ø10	4	799	815	3260	20.1
	7	Ø6	103	7	172	17716	39.3
Total+10%:							204.6
Pórtico 13	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	3	460	460	1380	21.8
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	2	730	750	1500	13.3
	6	Ø10	4	799	815	3260	20.1
	7	Ø6	83	7	172	14276	31.7
Total+10%:							188.3

PÓRTICOS DE MÓDULO 2



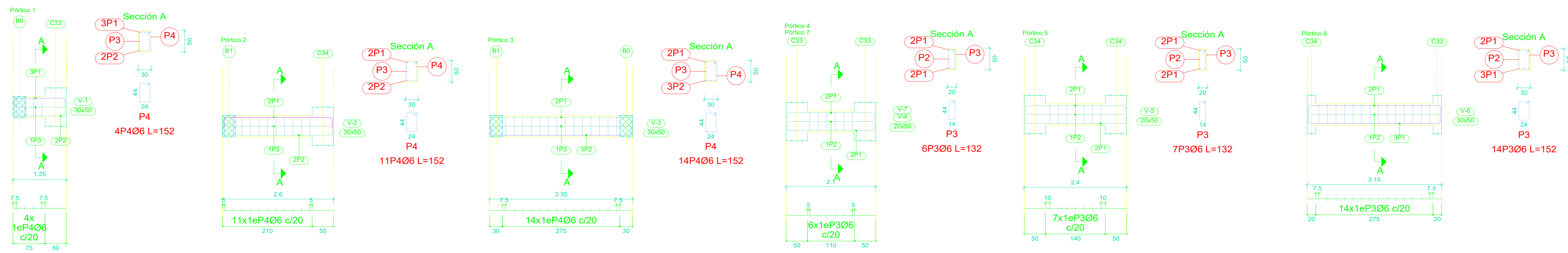
SALA DE MÁQUINAS
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Acero en estribos: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1=Pórtico 3	1	Ø10	4	204	236	944	5.8
	2	Ø10	2	204	204	408	2.5
	3	Ø6	6	7	132	792	1.8
Total+10%:							11.1
Pórtico 2	1	Ø10	4	234	266	1064	6.6
	2	Ø10	2	234	234	468	2.9
	3	Ø6	7	7	132	924	2.1
Total+10%:							12.8



ACCESO AZOTEA
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Acero en estribos: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

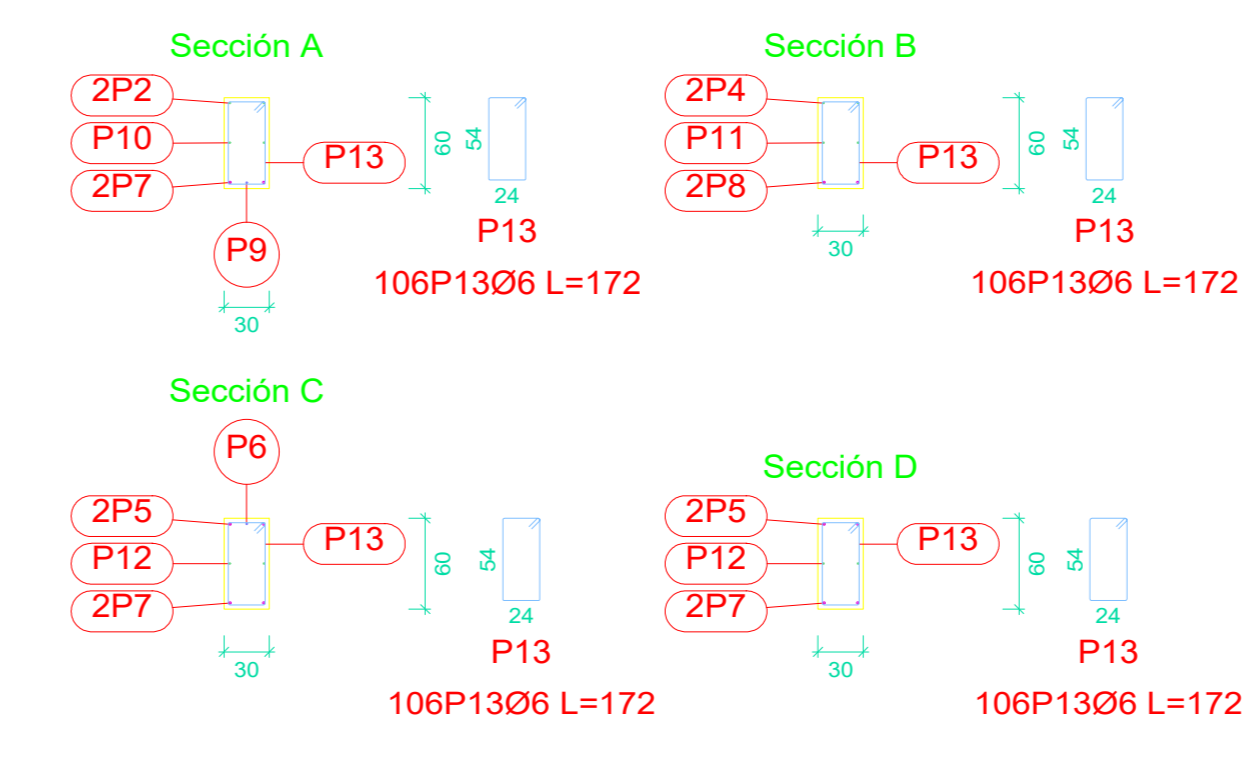
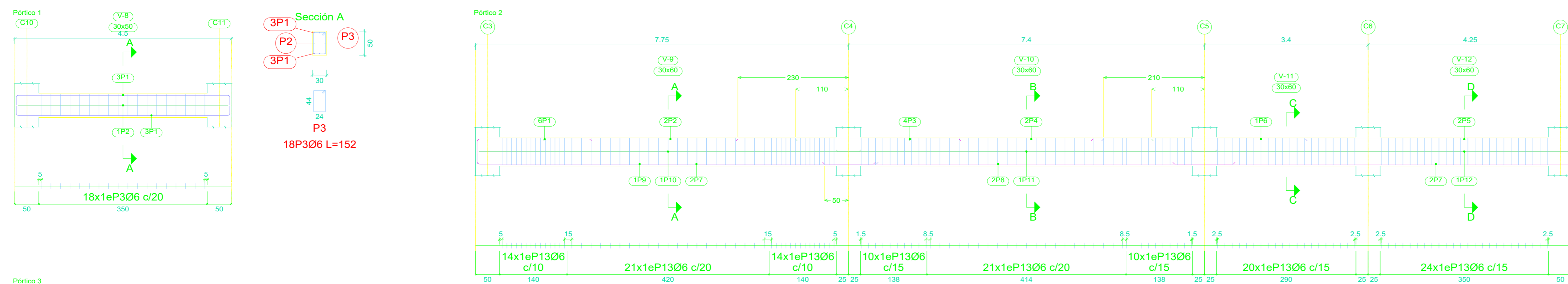
Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1=Pórtico 2	1	Ø10	4	444	476	1904	11.7
	2	Ø6	24	7	112	2688	6.0
Total+10%:							19.5
Pórtico 3=Pórtico 4	1	Ø10	4	519	551	2204	13.6
	2	Ø6	29	7	112	3248	7.2
Total+10%:							22.9



SÓTANO
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

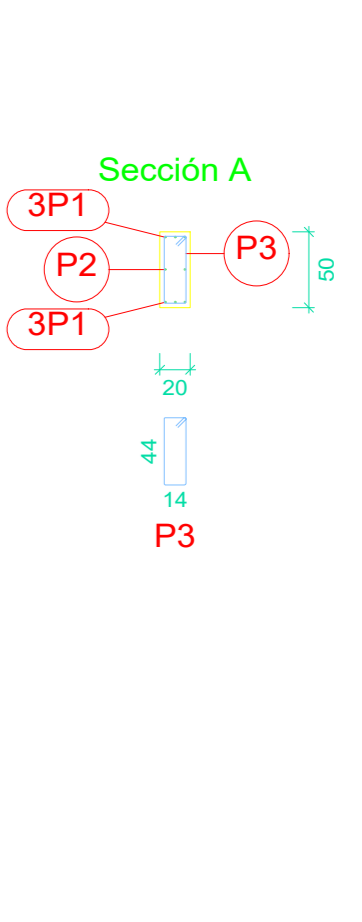
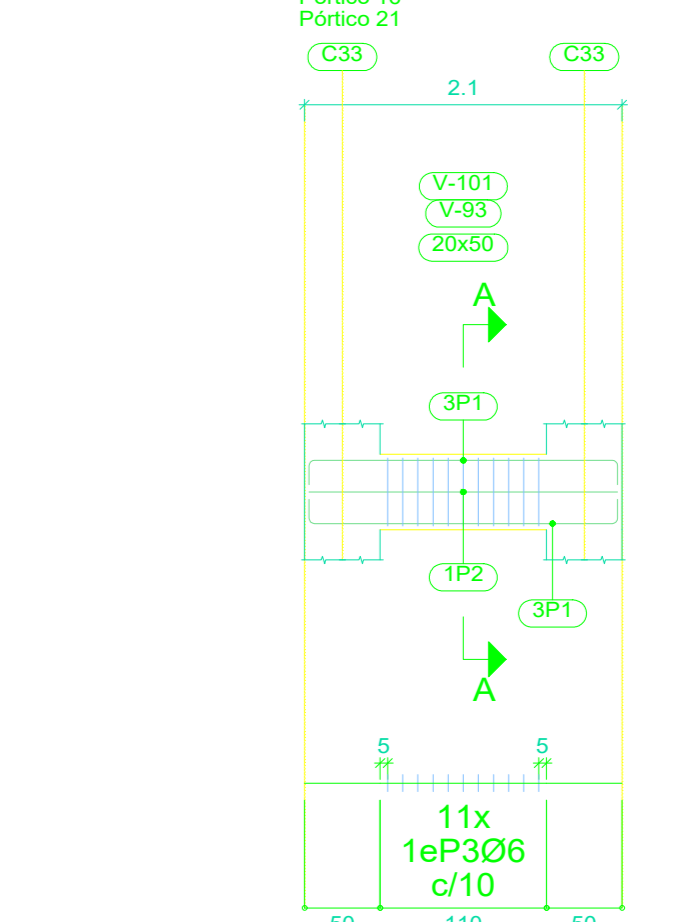
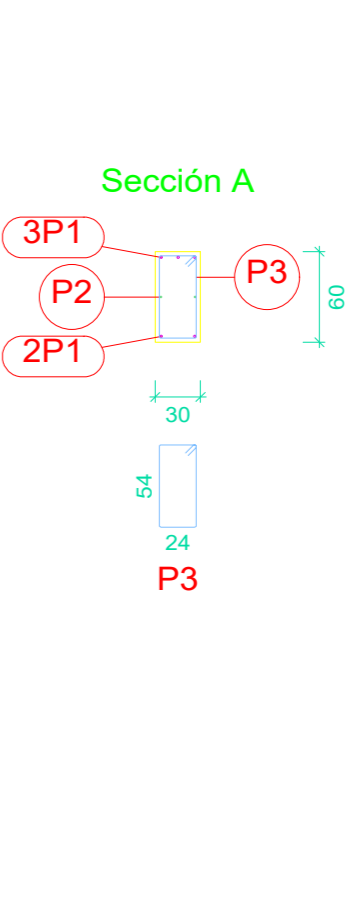
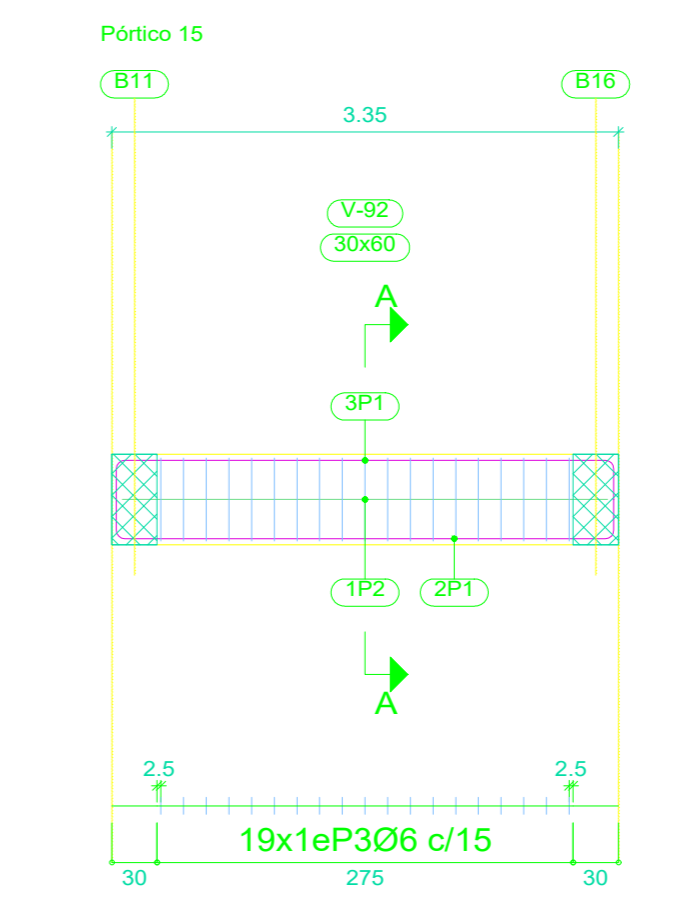
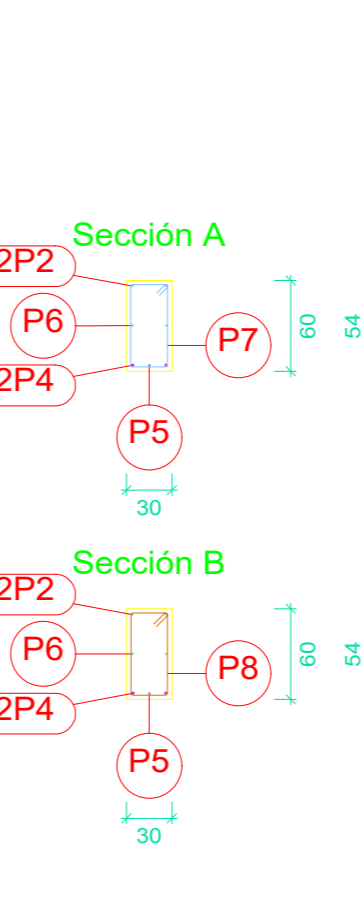
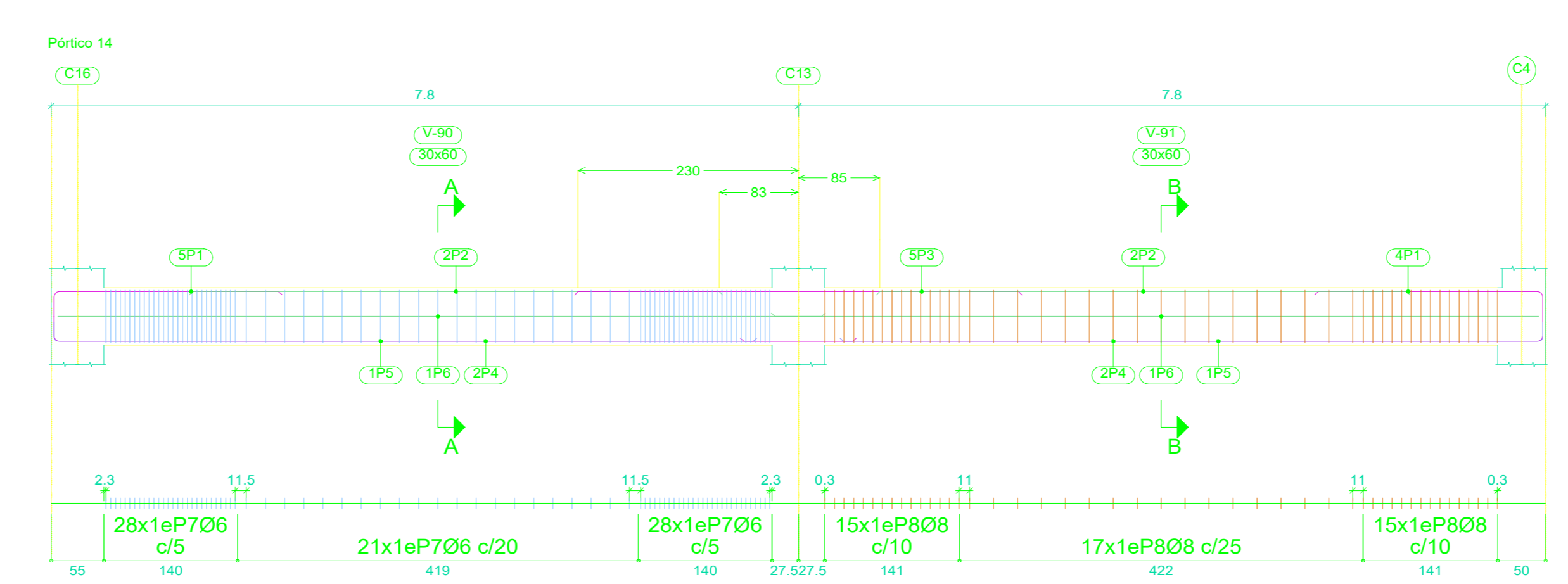
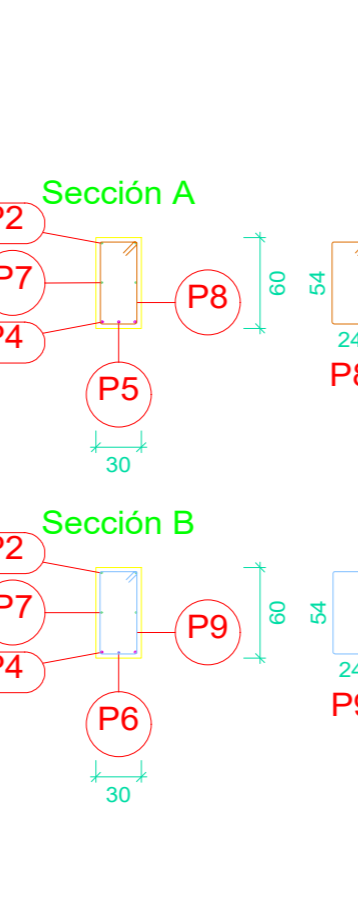
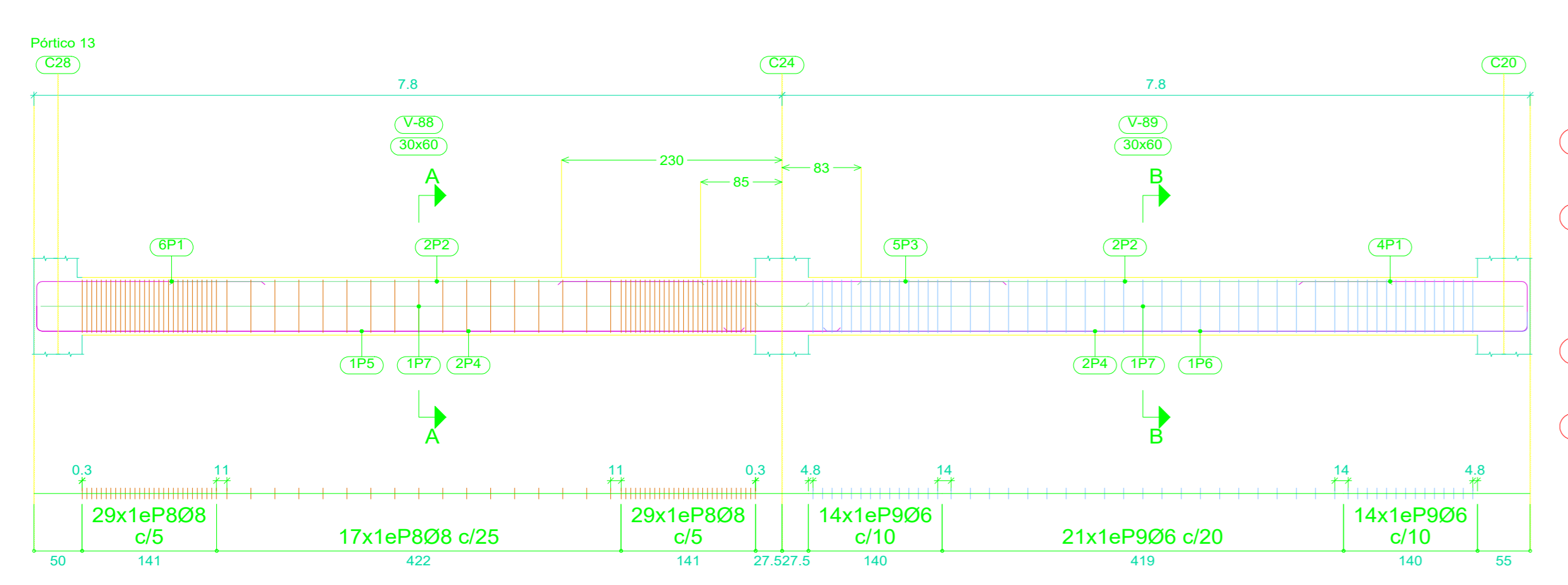
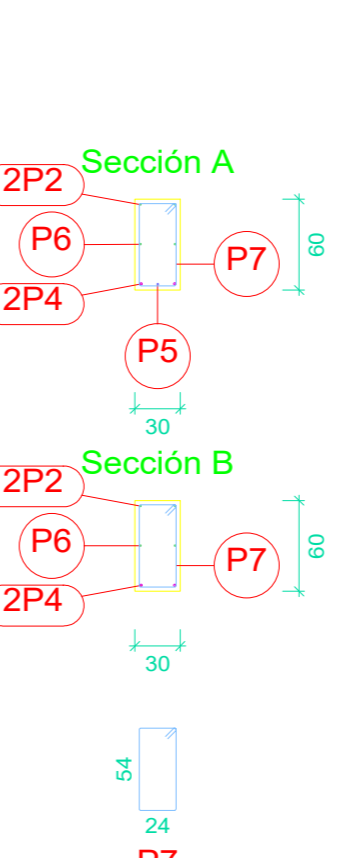
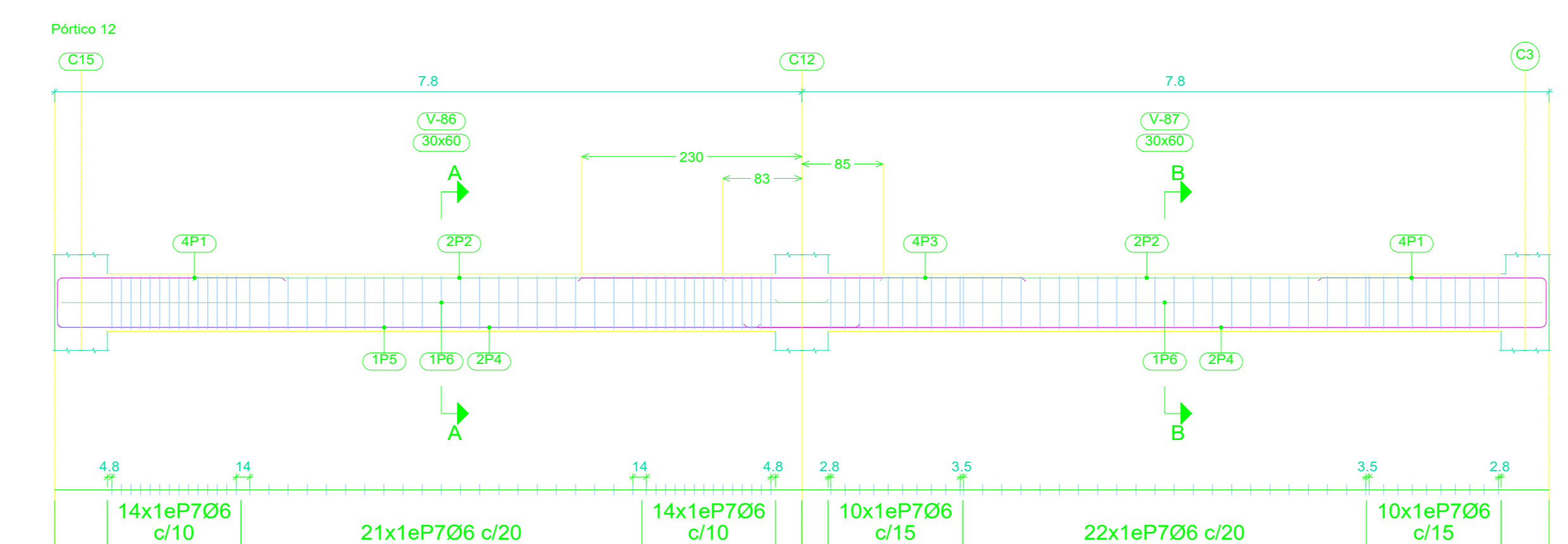
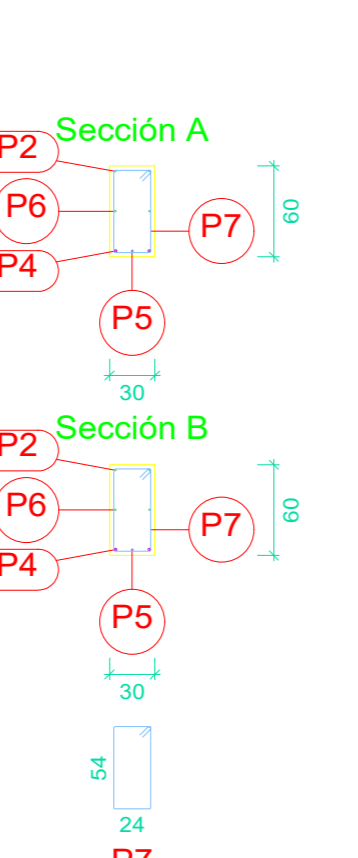
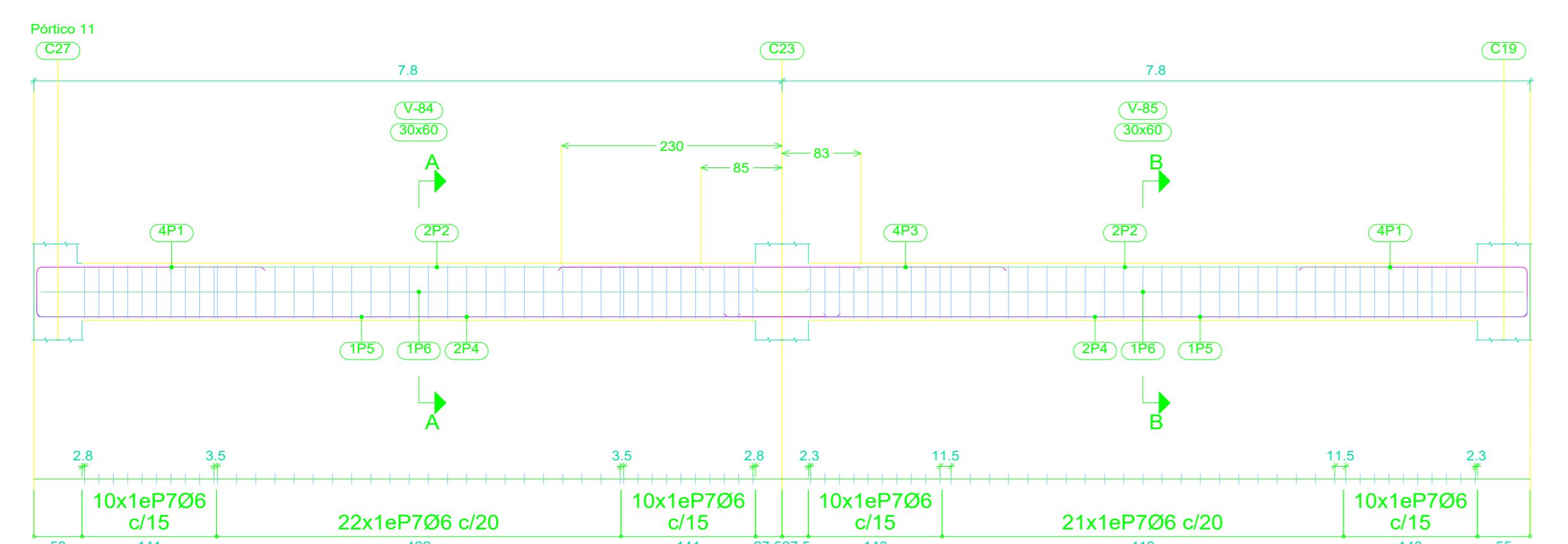
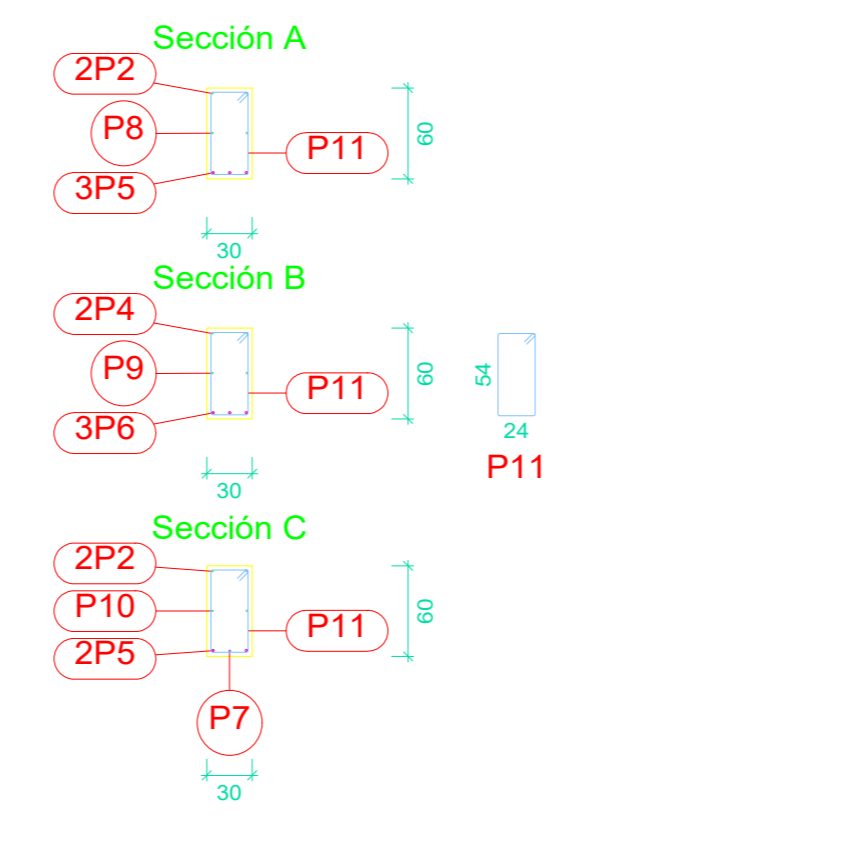
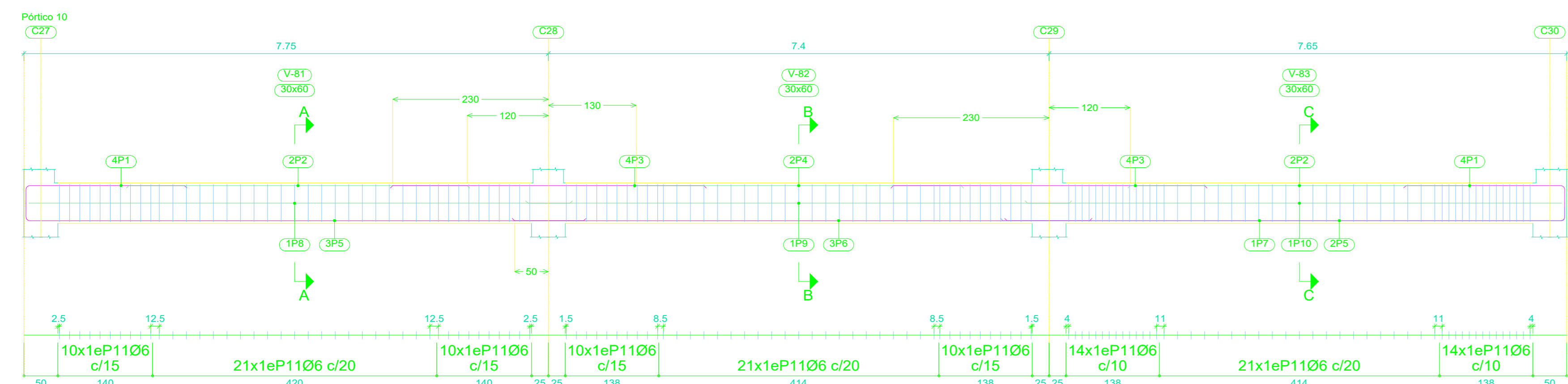
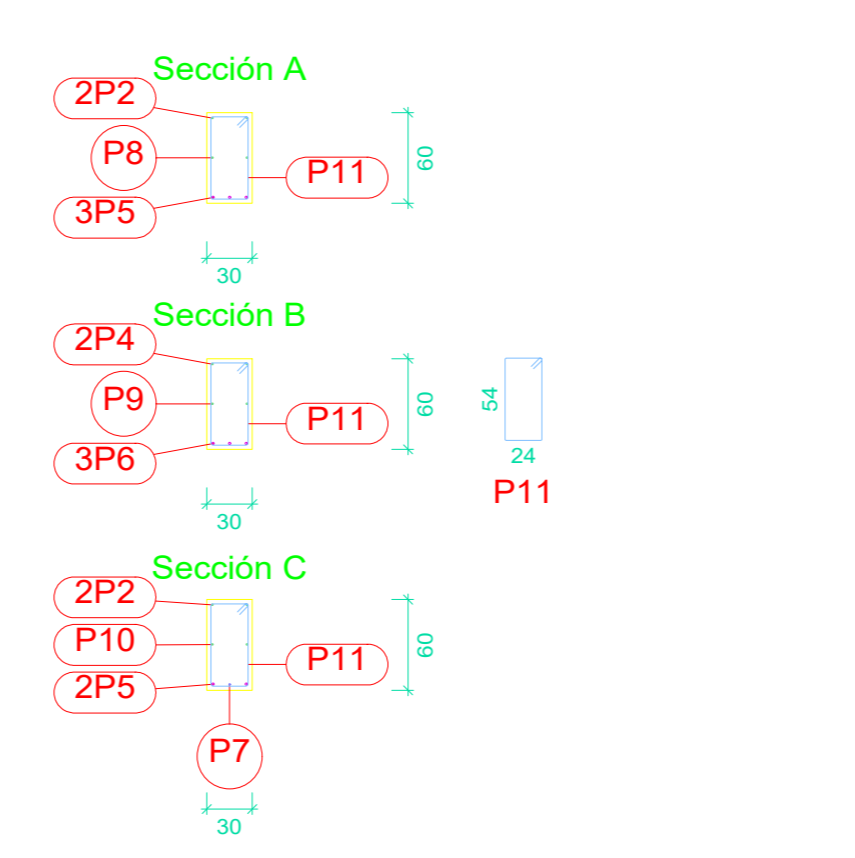
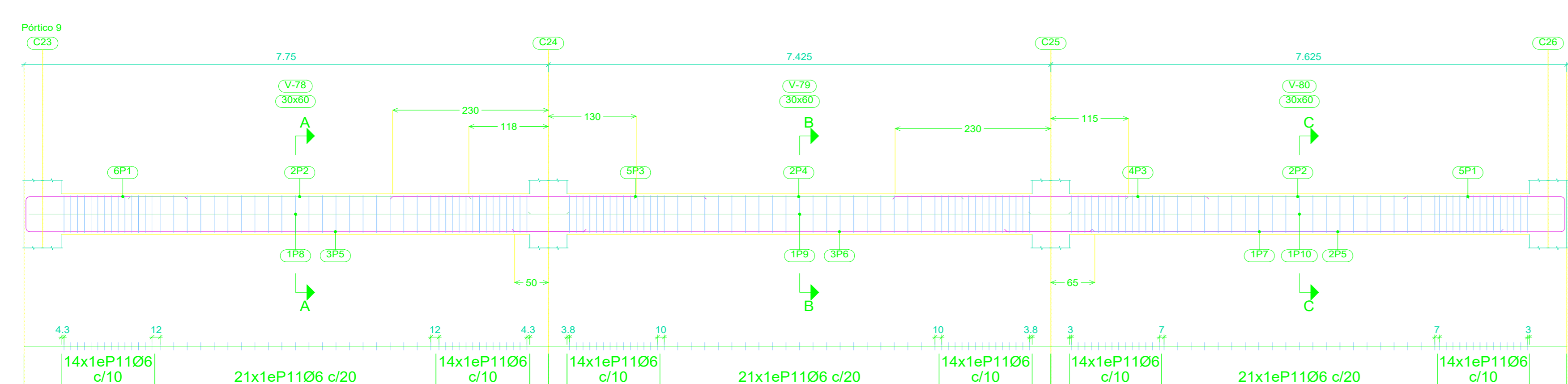
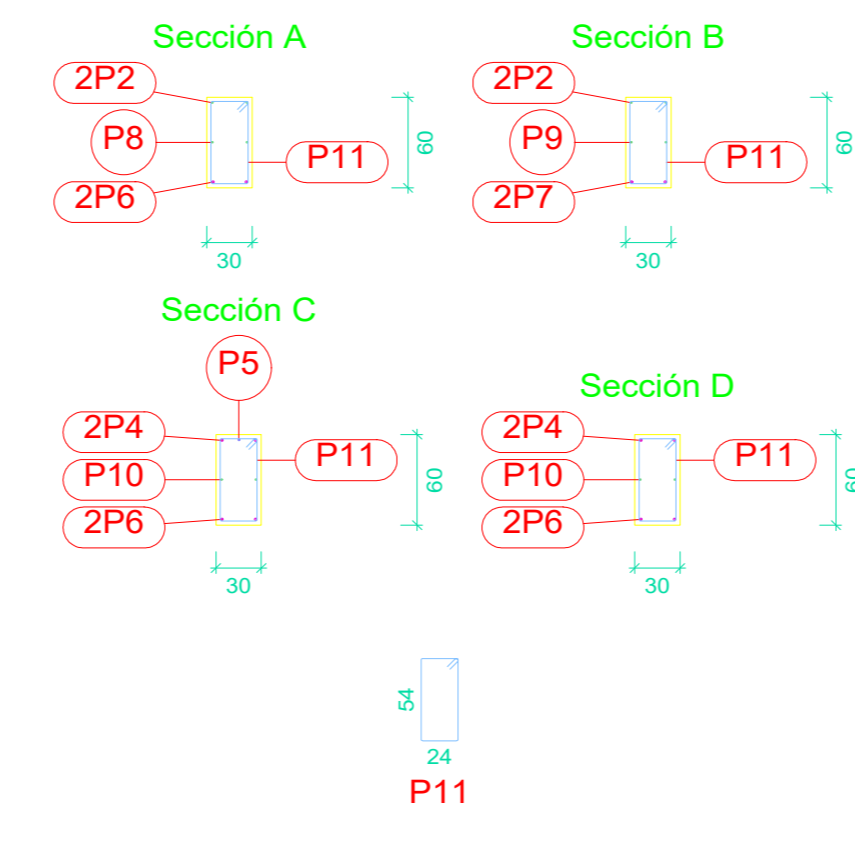
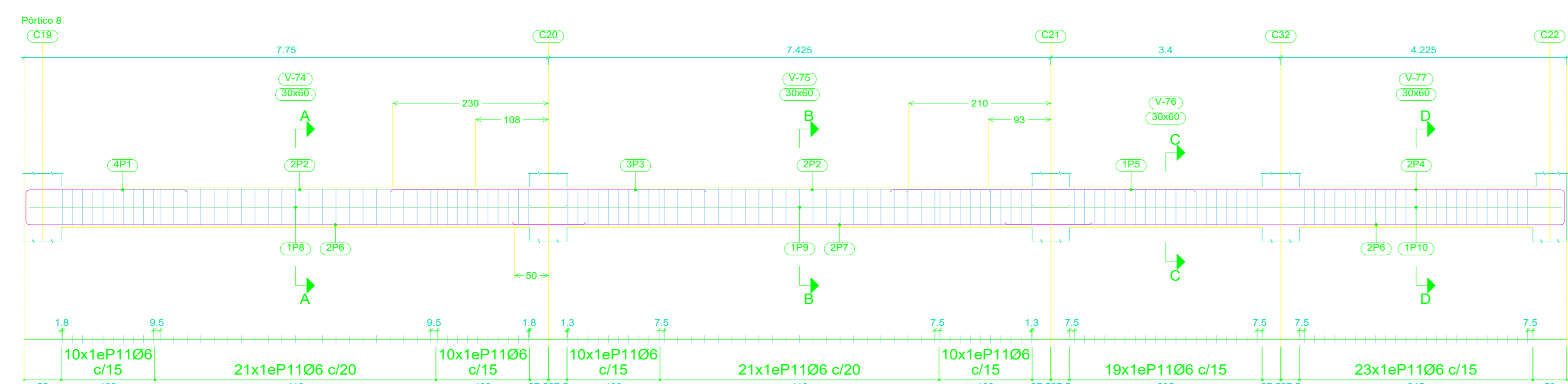
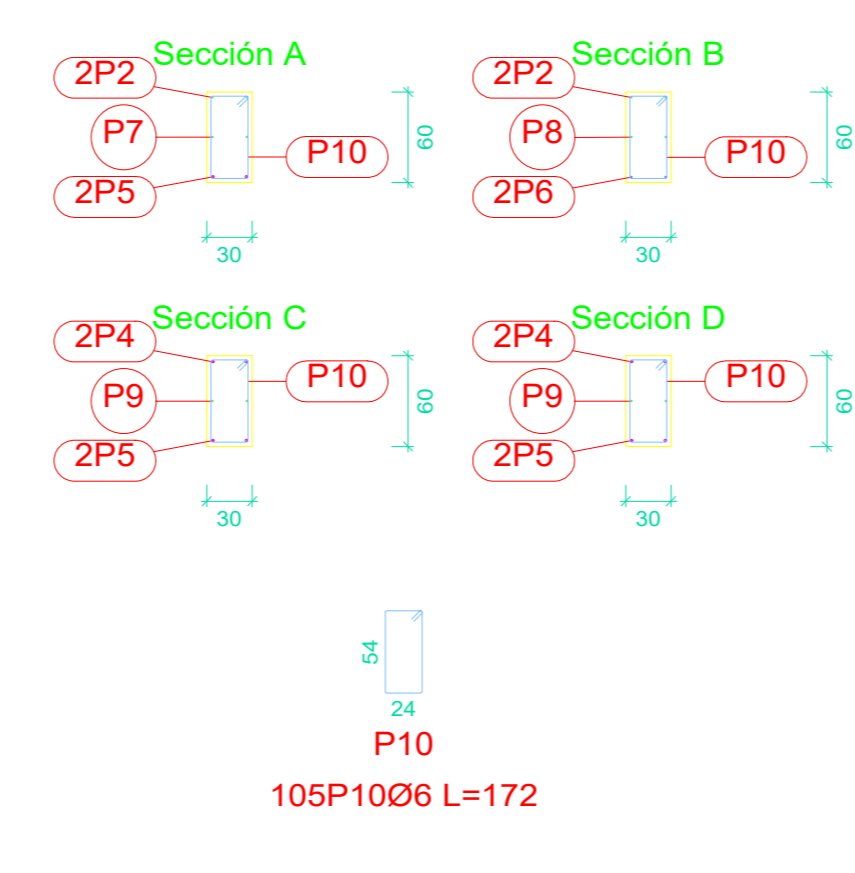
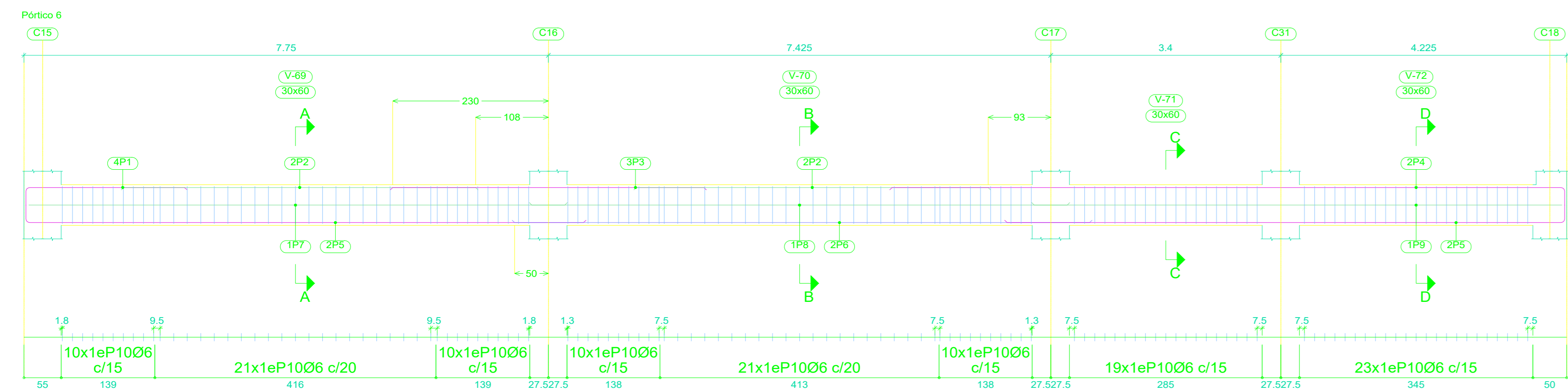
Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1	1	Ø12	3	119	159	477	4.2
	2	Ø10	2	119	151	302	1.9
	3	Ø10	2	119	119	238	1.5
Total+10%:							9.8
Pórtico 2	1	Ø16	2	254	306	612	9.7
	2	Ø10	2	254	286	572	3.5
	3	Ø10	2	254	254	508	3.1
	4	Ø6	11	24	152	1672	3.7
Total+10%:							22.0
Pórtico 3	1	Ø10	2	329	361	722	4.5
	2	Ø12	3	329	369	1107	9.8
	3	Ø10	2	329	329	658	4.1
Total+10%:							18.4
Pórtico 4	1	Ø10	4	234	268	1064	6.6
	2	Ø10	2	234	234	468	2.9
	3	Ø6	7	14	132	924	2.1
Total+10%:							12.8

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1	1	Ø12	3	119	159	477	4.2
	2	Ø10	2	119	151	302	1.9
	3	Ø10	2	119	119	238	1.5
	4	Ø6	4	24	152	608	1.3
Total+10%:							9.8
Pórtico 2	1	Ø16	2	254	306	612	9.7
	2	Ø10	2	254	286	572	3.5
	3	Ø10	2	254	254	508	3.1
	4	Ø6	11	24	152	1672	3.7
Total+10%:							22.0
Pórtico 3	1	Ø10	2	329	361	722	4.5
	2	Ø12	3	329	369	1107	9.8
	3	Ø10	2	329	329	658	4.1
Total+10%:							18.4
Pórtico 4	1	Ø10	4	234	268	1064	6.6
	2	Ø10	2	234	234	468	2.9
	3	Ø6	7	14	132	924	2.1
Total+10%:							12.8
Pórtico 4=Pórtico 7	1	Ø10	4	204	236	944	5.8
	2	Ø10	2	204	204	408	2.5
	3	Ø6	6	14	132	792	1.8
Total+10%:							11.1

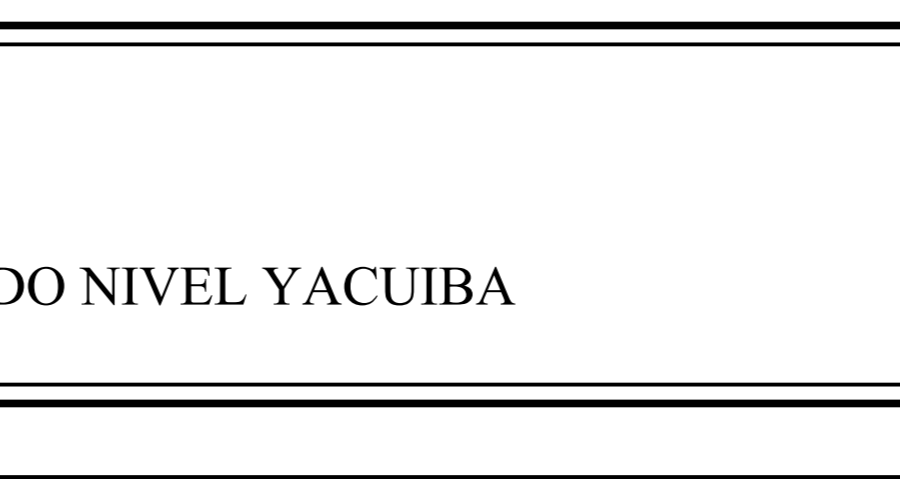
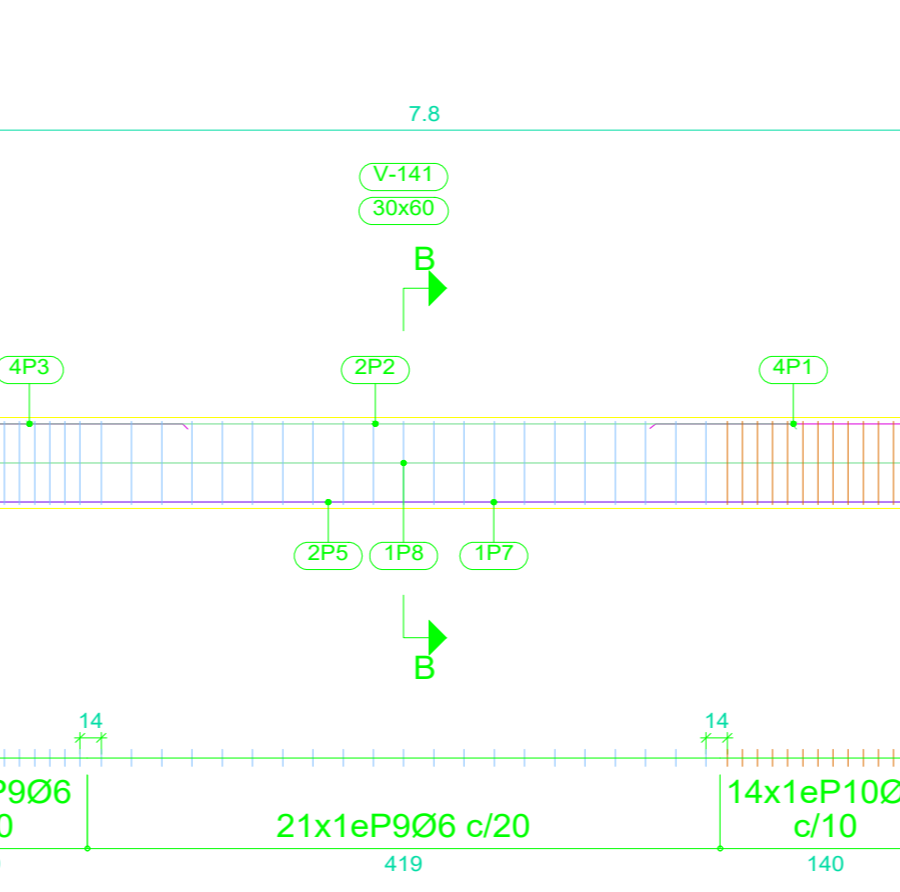
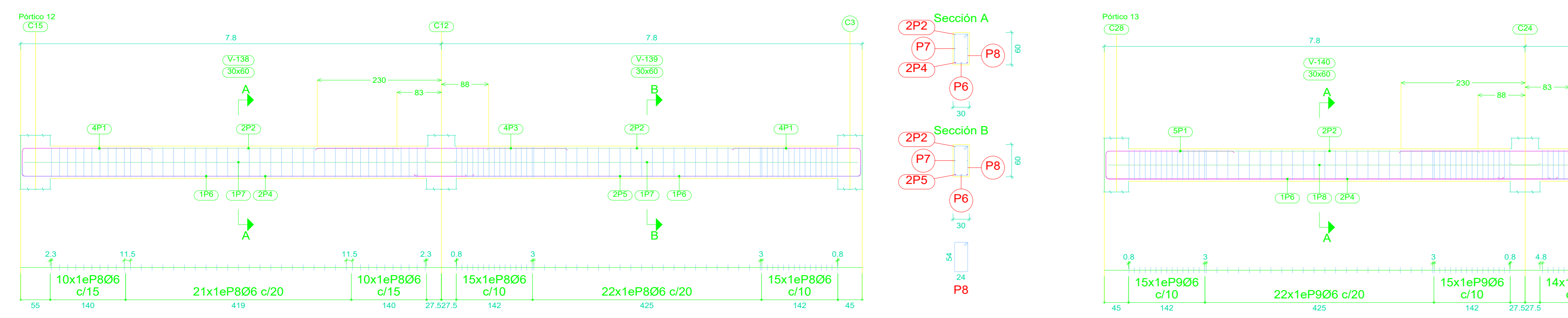
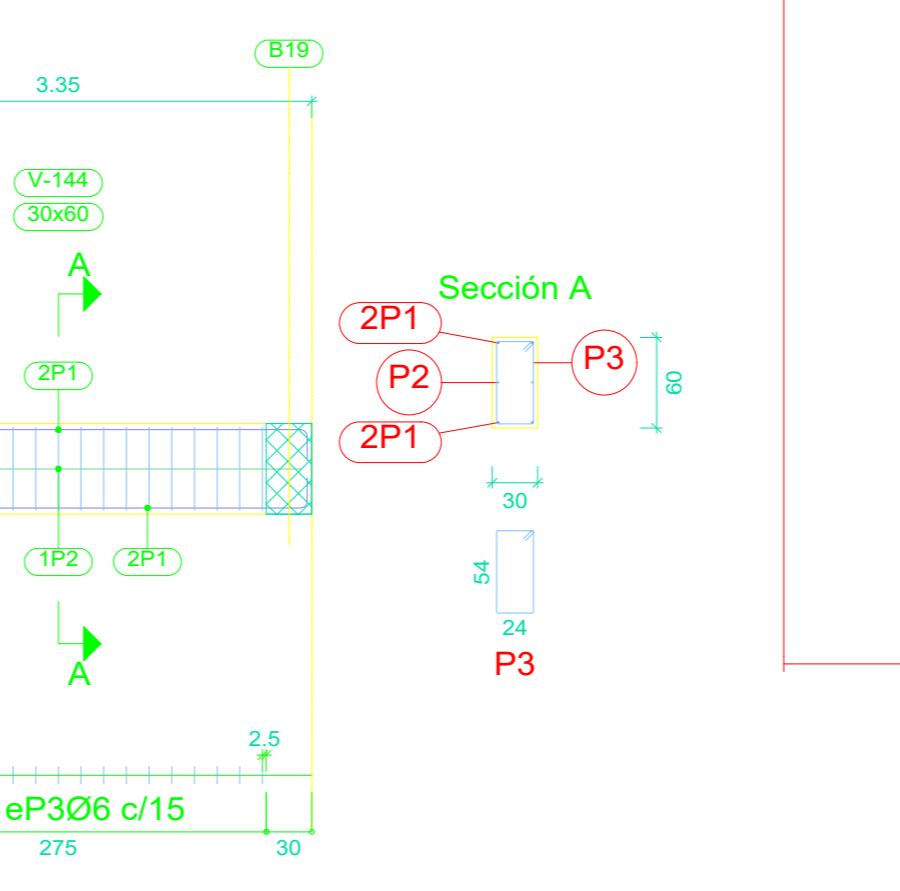
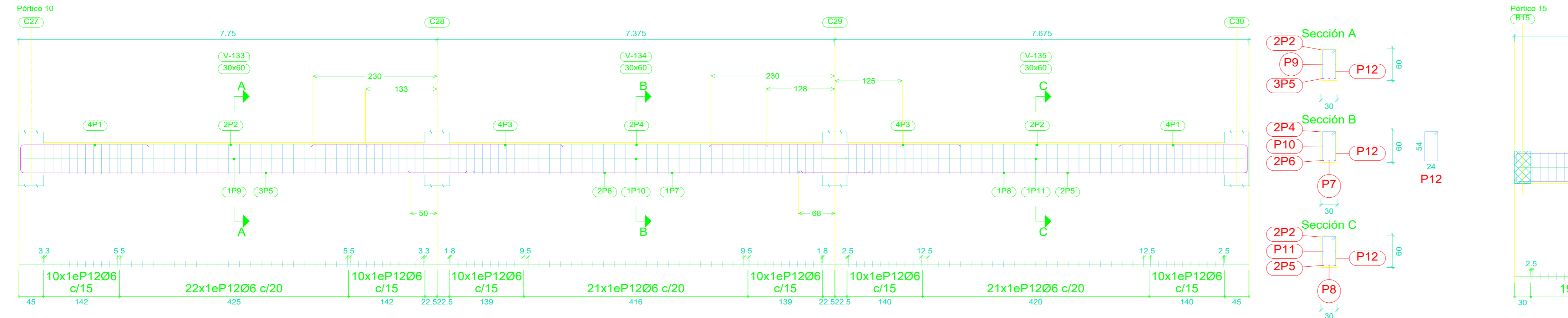
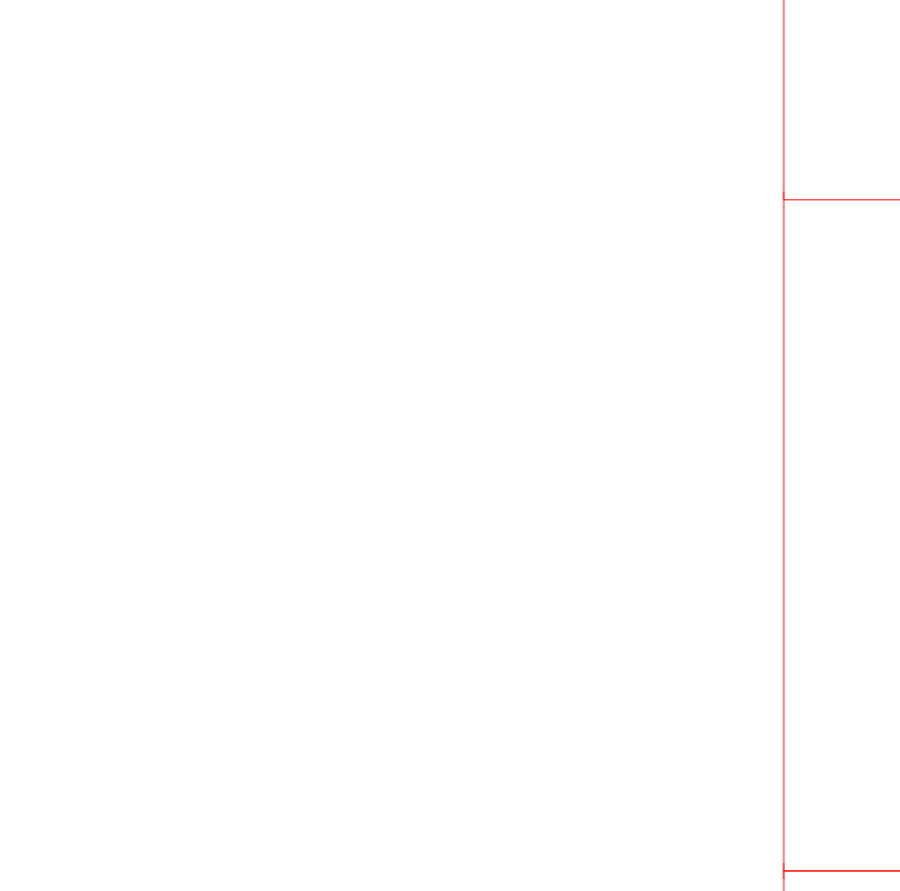
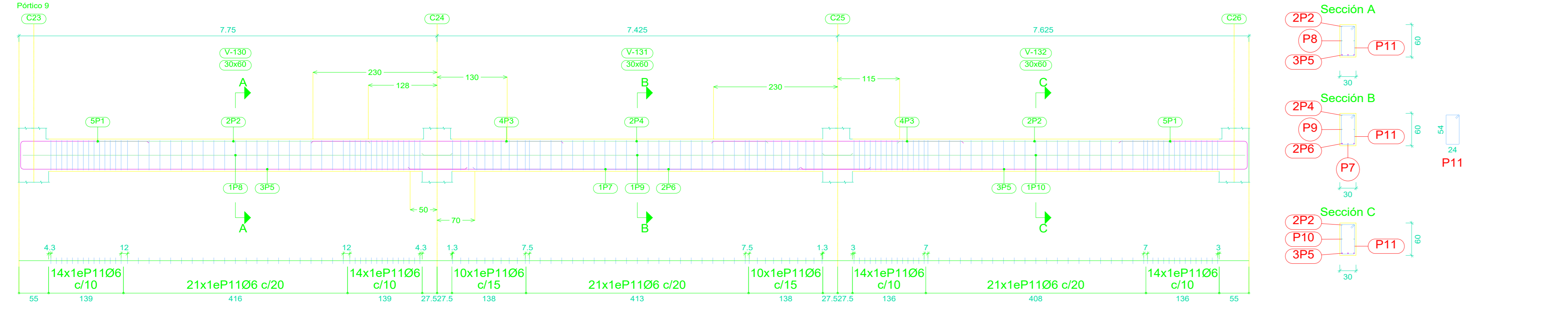
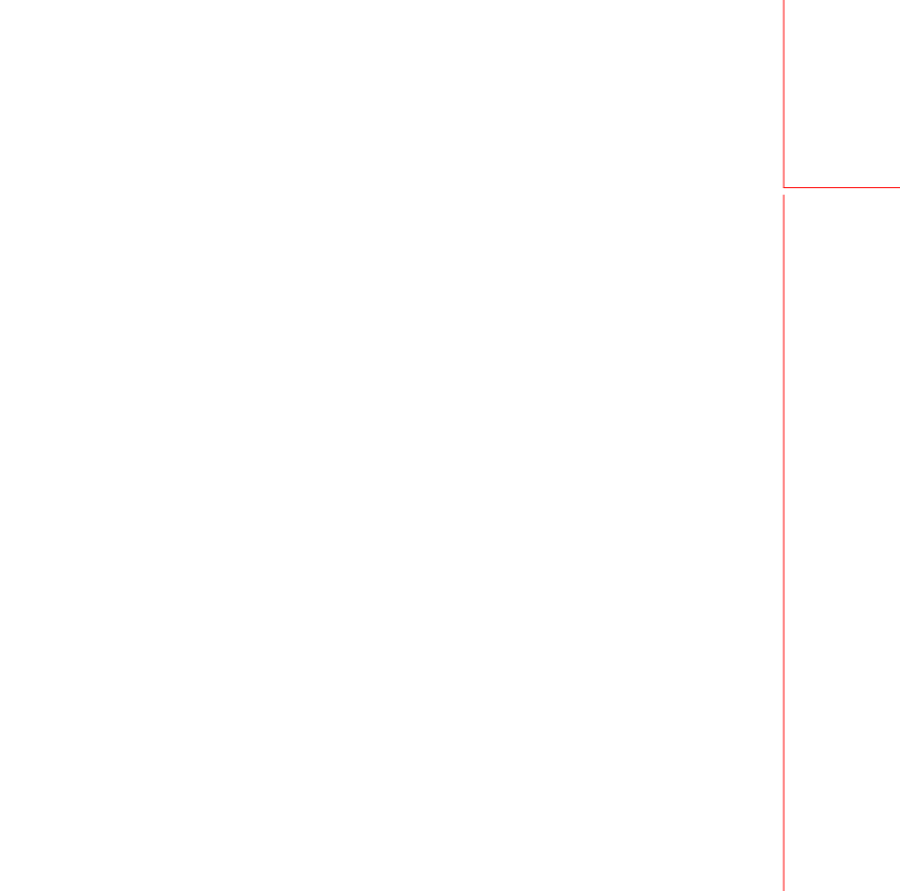
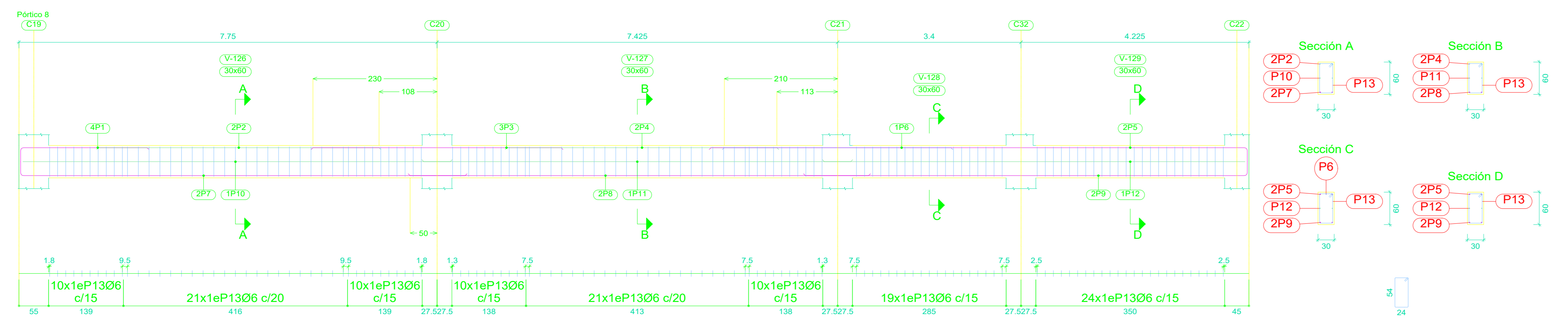
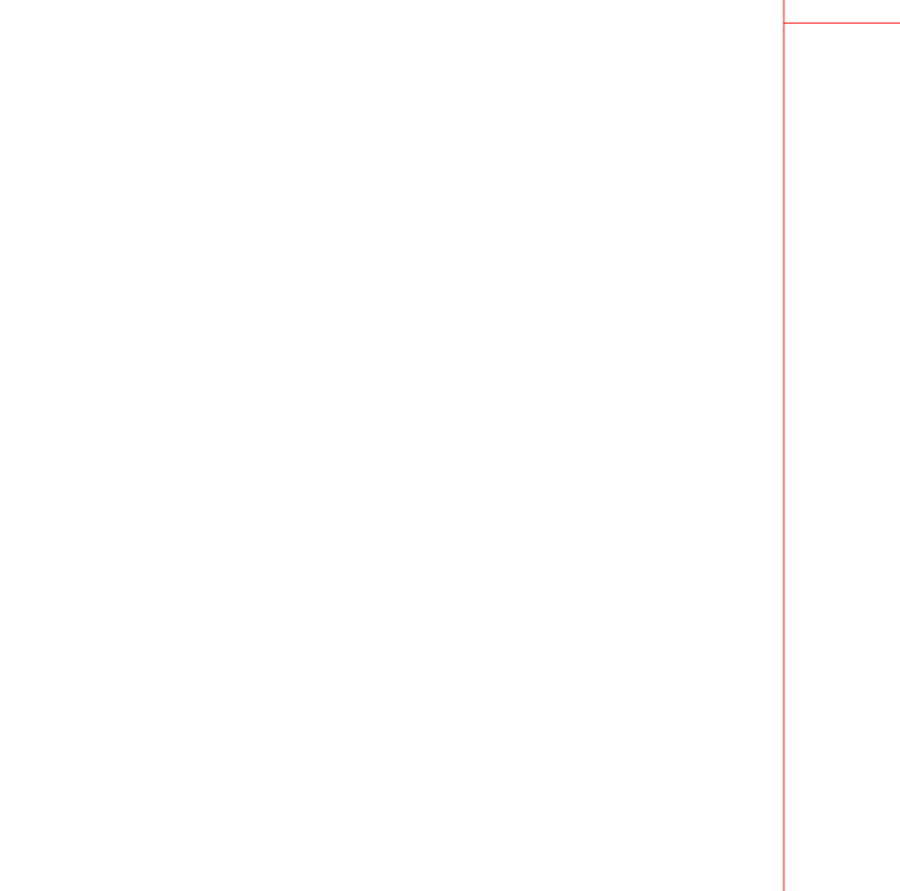
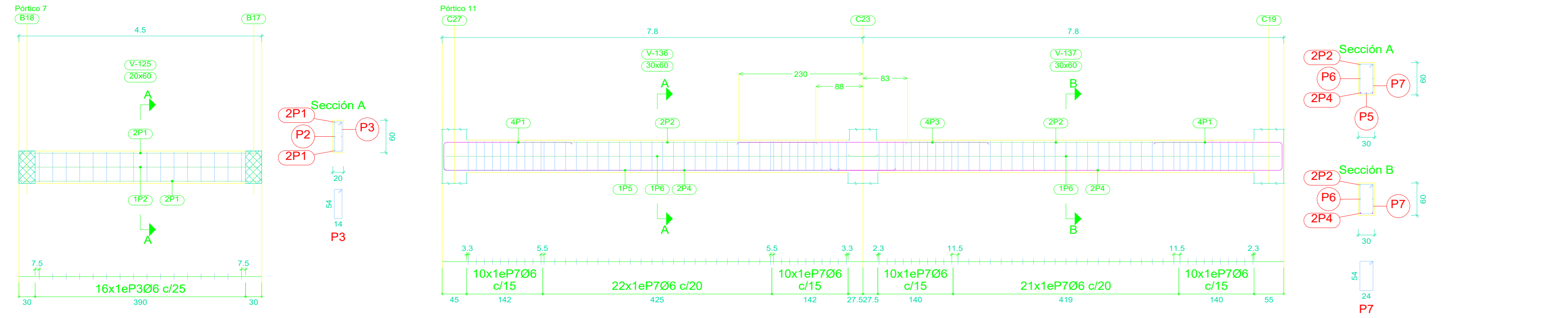
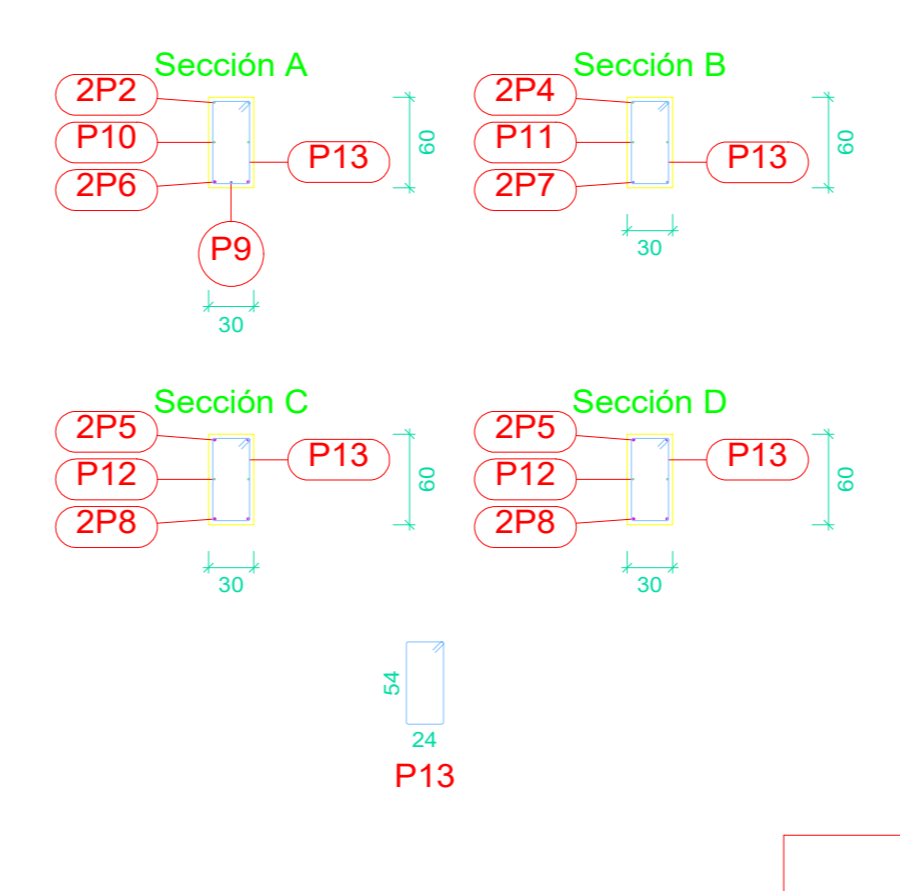
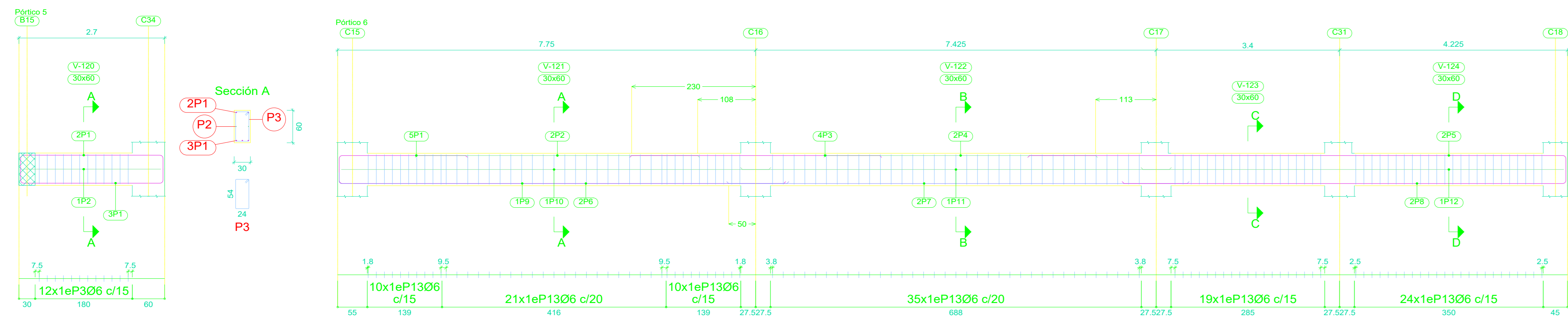


PLANTA BAJA
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	
Pórtico 1	1	Ø12	6	444	484	2904	25.8	
	2	Ø10	2	444	476	952	5.9	
	3	Ø6	18	24	152	2736	6.1	
	Total+10%:							41.8
	Pórtico 2	1	Ø16	6	234	260	1560	24.6
		2	Ø10	2	520	520	1040	6.4
		3	Ø16	4	460	460	1840	29.0
		4	Ø10	2	500	500	1000	6.2
		5	Ø16	2	994	1020	2040	32.2
		6	Ø12	1	420	420	420	3.7
		7	Ø16	4	824	850	3400	53.7
		8	Ø16	2	850	850	1700	26.8
		9	Ø12	1	830	850	850	7.5
10		Ø10	2	794	810	1620	10.0	
11		Ø10	2	784	784	1568	9.7	
12		Ø10	2	784	800	1600	9.9	
Total+10%:							297.9	
Pórtico 3	1	Ø12	2	400	400	800	7.1	
	2	Ø16	5	249	275	1375	21.7	
	3	Ø10	2	500	500	1000	6.2	
	4	Ø16	3	594	620	1860	29.4	
	5	Ø16	2	1114	1166	2332	36.8	
	6	Ø16	1	800	800	800	12.6	
	7	Ø10	2	1114	1114	2228	13.7	
	8	Ø6	64	24	172	11008	24.4	
	Total+10%:							167.1
	Pórtico 4	1	Ø16	6	234	260	1560	24.6
		2	Ø10	2	520	520	1040	6.4
		3	Ø16	6	460	460	2760	43.6
		4	Ø10	2	500	500	1000	6.2
5		Ø16	3	994	1020	3060	48.3	
6		Ø12	2	420	420	840	7.5	
7		Ø16	5	824	850	4250	67.1	
8		Ø16	2	850	850	1700	26.8	
9		Ø12	1	850	850	850	7.5	
10		Ø10	2	799	815	1630	10.0	
11		Ø10	2	799	799	1598	9.9	
12		Ø10	2	784	800	1600	9.9	
Total+10%:							372.7	
Pórtico 5		1	Ø10	4	264	296	1184	7.3
	2	Ø10	2	264	296	592	3.6	
	3	Ø6	9	24	172	1548	3.4	
	Total+10%:							15.7

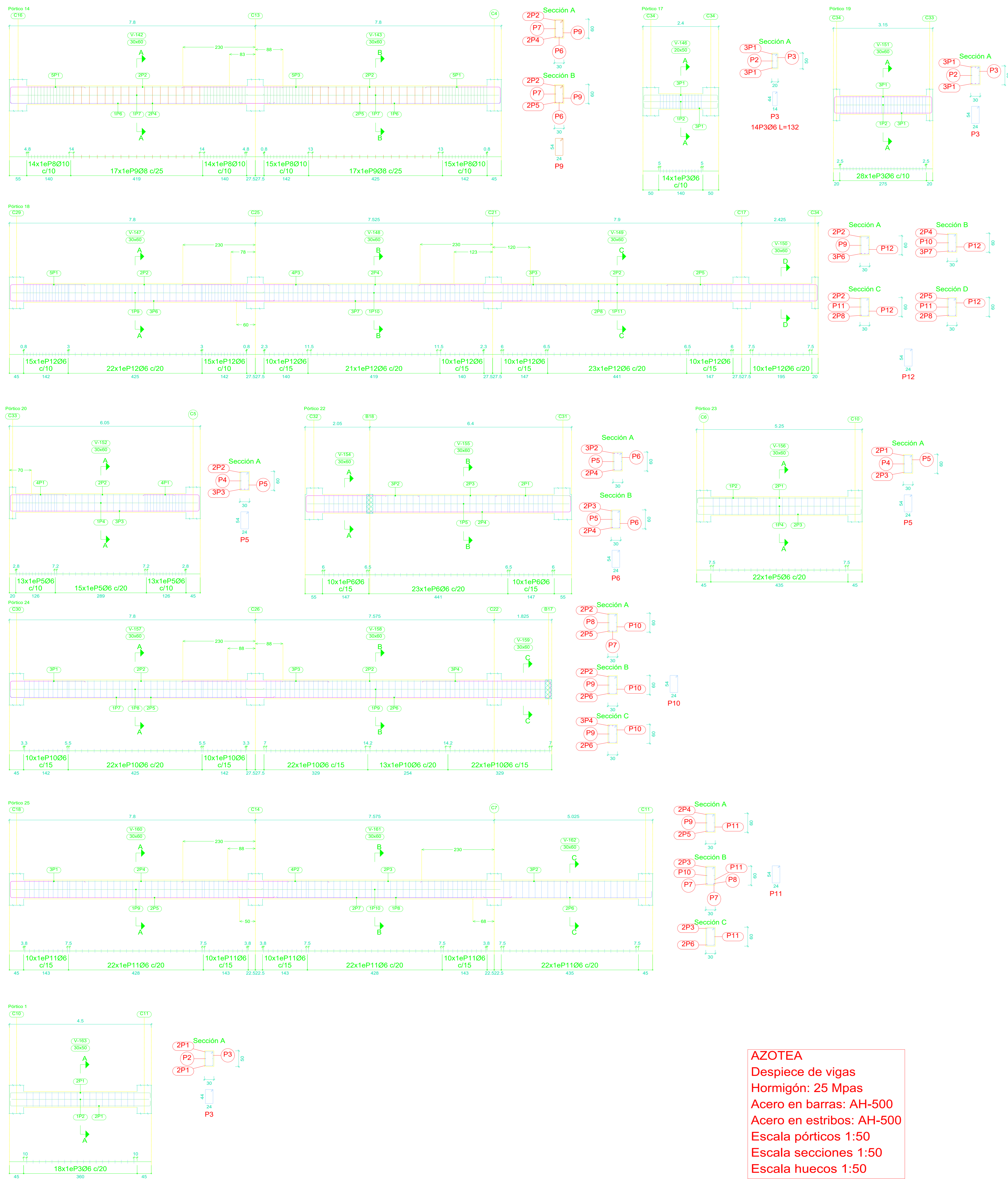


Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	
Pórtico 6	1	Ø16	4	234	260	1040	16.4	
	2	Ø10	4	520	520	2080	12.8	
	3	Ø16	3	460	460	1380	21.8	
	4	Ø16	2	994	1020	2040	32.2	
	5	Ø16	4	824	850	3400	53.7	
	6	Ø12	2	850	850	1700	15.1	
	7	Ø10	2	797	813	1626	10.0	
	8	Ø10	2	792	792	1584	9.8	
	9	Ø10	2	784	800	1600	9.9	
	10	Ø6	124	7	24	172	21328	47.3
	Total+10%:							251.9
Pórtico 9	1	Ø16	11	234	260	2860	45.1	
	2	Ø10	4	500	500	2000	12.3	
	3	Ø16	9	460	460	4140	65.3	
	4	Ø10	2	480	480	960	5.9	
	5	Ø16	5	824	850	4250	67.1	
	6	Ø16	3	850	850	2550	40.2	
	7	Ø12	1	600	600	600	5.3	
	8	Ø10	2	799	815	1630	10.0	
	9	Ø10	2	795	795	1590	9.8	
	10	Ø10	2	789	805	1610	9.9	
	Total+10%:							359.7
Pórtico 11	1	Ø16	8	234	260	2080	32.8	
	2	Ø10	4	550	550	2200	13.6	
	3	Ø16	4	460	460	1840	29.0	
	4	Ø16	4	834	860	3440	54.3	
	5	Ø12	2	730	750	1500	13.3	
	6	Ø10	4	802	818	3272	20.2	
	7	Ø6	83	7	24	172	14276	31.7
Total+10%:							214.4	
Pórtico 13	1	Ø16	10	234	260	2600	41.0	
	2	Ø10	4	550	550	2200	13.6	
	3	Ø16	5	460	460	2300	36.3	
	4	Ø16	4	834	860	3440	54.3	
	5	Ø16	1	734	780	760	12.0	
	6	Ø12	1	730	750	750	6.7	
	7	Ø10	4	802	818	3272	20.2	
	8	Ø8	75	10	176	13200	52.1	
	9	Ø6	49	7	172	8428	18.7	
Total+10%:							280.4	
Pórtico 14	1	Ø16	9	234	260	2340	36.9	
	2	Ø10	4	550	550	2200	13.6	
	3	Ø16	5	460	460	2300	36.3	
	4	Ø16	4	834	860	3440	54.3	
	5	Ø12	2	730	750	1500	13.3	
	6	Ø10	4	802	818	3272	20.2	
	7	Ø6	77	7	172	13244	29.4	
Pórtico 15	1	Ø16	5	329	381	1905	30.1	
	2	Ø10	2	329	361	722	4.5	
	3	Ø6	19	7	172	3268	7.3	
Total+10%:							46.1	
Pórtico 16+Pórtico 21	1	Ø10	6	204	236	1416	8.7	
	2	Ø10	2	204	204	408	2.5	
	3	Ø6	11	7	132	1452	3.2	
Total+10%:							15.8	



Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 6	1	Ø16	5	234	260	1300	20.5
	2	Ø10	2	520	520	1040	6.4
	3	Ø16	4	460	460	1840	29.0
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	2	994	1020	2040	32.2
	6	Ø16	2	824	850	1700	26.8
	7	Ø12	2	850	850	1700	15.1
	8	Ø16	2	819	845	1690	26.7
	9	Ø12	1	830	850	850	7.5
	10	Ø10	2	797	813	1626	10.0
	11	Ø10	2	792	792	1584	9.8
	12	Ø10	2	784	800	1600	9.9
	Total+10%:						
Pórtico 9	1	Ø16	10	234	260	2600	41.0
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	8	460	460	3680	58.1
	4	Ø10	2	480	480	960	5.9
	5	Ø16	6	824	850	5100	80.5
	6	Ø16	2	850	850	1700	26.8
	7	Ø12	1	600	600	600	5.3
	8	Ø10	2	792	813	1626	10.0
	9	Ø10	2	792	792	1584	9.8
	10	Ø10	2	784	800	1600	9.9
	11	Ø6	139	7	172	23908	53.1
Total+10%:							344.0
Pórtico 11	1	Ø16	8	234	260	2080	32.8
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	1	730	750	750	6.7
	6	Ø10	4	802	818	3272	20.2
	7	Ø6	83	7	172	14276	31.7
Total+10%:							207.1
Pórtico 12	1	Ø16	8	234	260	2080	32.8
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	2	834	860	1720	27.1
	5	Ø16	2	824	850	1700	26.8
	6	Ø12	2	730	750	1500	13.3
	7	Ø10	4	802	818	3272	20.2
	8	Ø6	93	7	172	15996	35.5
Total+10%:							218.1

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 4	1	Ø16	4	234	260	1040	16.4
	2	Ø16	3	249	275	825	13.0
	3	Ø10	1	500	500	500	3.1
	4	Ø16	2	784	816	1632	26.4
	5	Ø12	1	600	600	600	5.3
	6	Ø10	2	784	816	1632	10.1
	7	Ø8	28	10	176	4928	19.4
	8	Ø6	21	7	172	3612	8.0
Total+10%:							111.9
Pórtico 5	1	Ø16	5	264	316	1580	24.9
	2	Ø10	2	264	296	592	3.6
	3	Ø6	12	172	2064	4.6	
Total+10%:							36.4
Pórtico 7	1	Ø10	4	444	476	1904	11.7
	2	Ø10	2	444	444	888	5.5
	3	Ø6	16	152	2432	5.4	
Total+10%:							24.9
Pórtico 8	1	Ø16	4	234	260	1040	16.4
	2	Ø10	2	520	520	1040	6.4
	3	Ø16	3	460	460	1380	21.8
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	2	994	1020	2040	32.2
	6	Ø16	2	824	850	1700	26.8
	7	Ø12	1	850	850	850	7.5
	8	Ø16	2	819	845	1690	26.7
	9	Ø10	2	797	813	1626	10.0
	10	Ø10	2	792	792	1584	9.8
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	125	7	172	21500	47.7
	Total+10%:						
Pórtico 10	1	Ø16	8	234	260	2080	32.8
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	8	460	460	3680	58.1
	4	Ø10	2	480	480	960	5.9
	5	Ø16	5	824	850	4250	67.1
	6	Ø16	2	850	850	1700	26.8
	7	Ø12	1	600	600	600	5.3
	8	Ø12	1	830	850	850	7.5
	9	Ø10	2	792	808	1616	10.0
	10	Ø10	2	777	777	1554	9.6
	11	Ø10	2	784	800	1600	9.9
12	Ø6	124	7	172	21328	47.3	
Total+10%:							321.9
Pórtico 13	1	Ø16	9	234	260	2340	36.9
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	2	834	860	1720	27.1
	5	Ø16	2	824	850	1700	26.8
	6	Ø16	1	734	760	760	12.0
	7	Ø12	1	730	750	750	6.7
	8	Ø10	4	802	818	3272	20.2
9	Ø6	87	7	172	14964	33.2	
10	Ø8	14	10	176	2464	9.7	
Total+10%:							236.7
Pórtico 16=Pórtico 21	1	Ø10	6	204	236	1416	8.7
	2	Ø10	2	204	204	408	2.5
	3	Ø6	11	132	1452	3.2	
Total+10%:							15.8
Pórtico 15	1	Ø12	4	329	369	1476	13.1
	2	Ø10	2	329	361	722	4.5
	3	Ø6	19	172	3268	7.3	
Total+10%:							27.4



AZOTEA
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Acero en estribos: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 14	1	Ø16	10	234	260	2600	41.0
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	5	460	460	2300	36.3
	4	Ø16	2	834	860	1720	27.1
	5	Ø16	2	824	850	1700	26.8
	6	Ø12	2	730	750	1500	13.3
	7	Ø10	4	802	818	3272	20.2
	8	Ø10	58	12	180	10440	64.4
	9	Ø8	34	24	176	5984	23.6
Total+10%:							292.9
Pórtico 17	1	Ø10	6	234	266	1596	9.8
	2	Ø10	2	234	234	468	2.9
	3	Ø6	14	7	132	1848	4.1
Total+10%:							18.5
Pórtico 22	1	Ø16	2	234	260	520	8.2
	2	Ø16	3	354	380	1140	18.0
	3	Ø10	2	584	600	1200	7.4
	4	Ø16	2	839	891	1782	28.1
	5	Ø10	2	839	871	1742	10.7
	6	Ø6	43	24	172	7396	16.4
Total+10%:							97.7
Pórtico 23	1	Ø10	2	519	535	1070	6.6
	2	Ø10	1	184	200	200	1.2
	3	Ø10	2	519	551	1102	6.8
	4	Ø10	2	519	551	1102	6.8
	5	Ø6	22	7	172	3784	8.4
Total+10%:							32.8
Pórtico 25	1	Ø16	3	234	260	780	12.3
	2	Ø16	7	460	460	3220	50.8
	3	Ø10	2	1150	1150	2300	14.2
	4	Ø10	2	550	550	1100	6.8
	5	Ø16	2	834	860	1720	27.1
	6	Ø12	2	530	550	1100	9.8
	7	Ø16	2	860	860	1720	27.1
	8	Ø12	1	620	620	620	5.5
	9	Ø10	2	797	813	1626	10.0
	10	Ø10	2	797	797	1594	9.8
	11	Ø6	106	24	172	18232	40.5
Total+10%:							235.3

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 18	1	Ø16	5	234	260	1300	20.5
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	7	460	460	3220	50.8
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	2	474	500	1000	15.8
	6	Ø16	3	834	860	2580	40.7
	7	Ø16	3	900	900	2700	42.6
	8	Ø16	2	1094	1120	2240	35.4
	9	Ø10	2	802	818	1636	10.1
	10	Ø10	2	802	802	1604	9.9
	11	Ø10	2	1054	1070	2140	13.2
12	Ø6	146	7	172	25112	55.7	
Total+10%:							346.0
Pórtico 19	1	Ø16	6	309	361	2166	34.2
	2	Ø10	2	309	341	682	4.2
	3	Ø6	28	7	172	4816	10.7
Total+10%:							54.0
Pórtico 20	1	Ø16	8	174	200	1600	25.3
	2	Ø10	2	450	450	900	5.5
	3	Ø16	3	599	651	1953	30.8
	4	Ø10	2	599	631	1262	7.8
	5	Ø6	41	7	172	7052	15.6
Total+10%:							93.5
Pórtico 24	1	Ø16	3	234	260	780	12.3
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	3	460	460	1380	21.8
	4	Ø16	3	404	430	1290	20.4
	5	Ø16	2	834	860	1720	27.1
	6	Ø16	2	994	1020	2040	32.2
	7	Ø12	1	730	750	750	6.7
	8	Ø10	2	802	818	1636	10.1
	9	Ø10	2	962	978	1956	12.1
	10	Ø6	99	24	172	17028	37.8
Total+10%:							213.5

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1	1	Ø10	4	444	476	1904	11.7
	2	Ø10	2	444	476	952	5.9
	3	Ø6	18	14	152	2736	6.1
Total+10%:							26.1



UNIVERSIDAD:
 JUAN MISAE SARACHO



UNIVERSITARIO:
 MARCELO CRUZ CAIHUARA

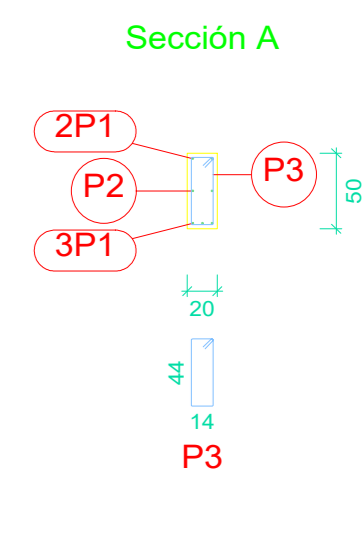
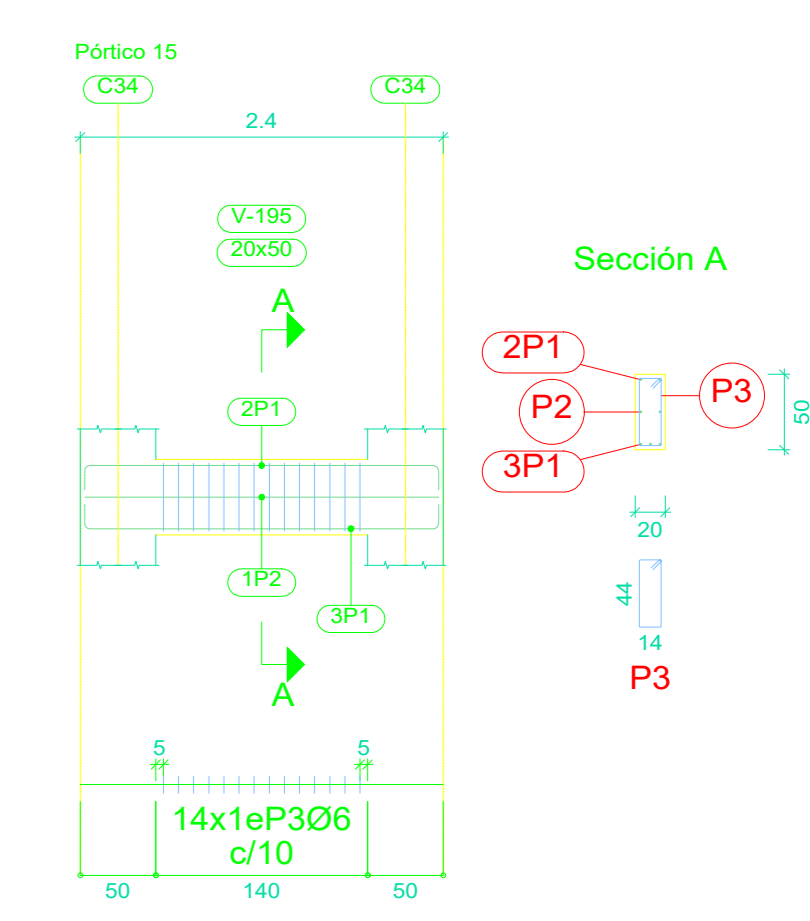
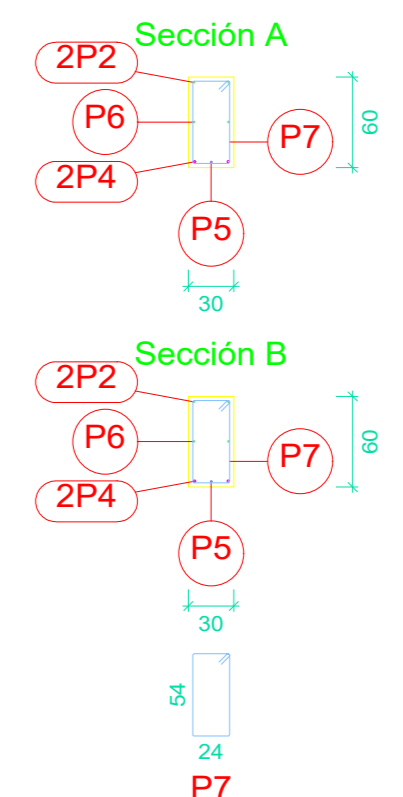
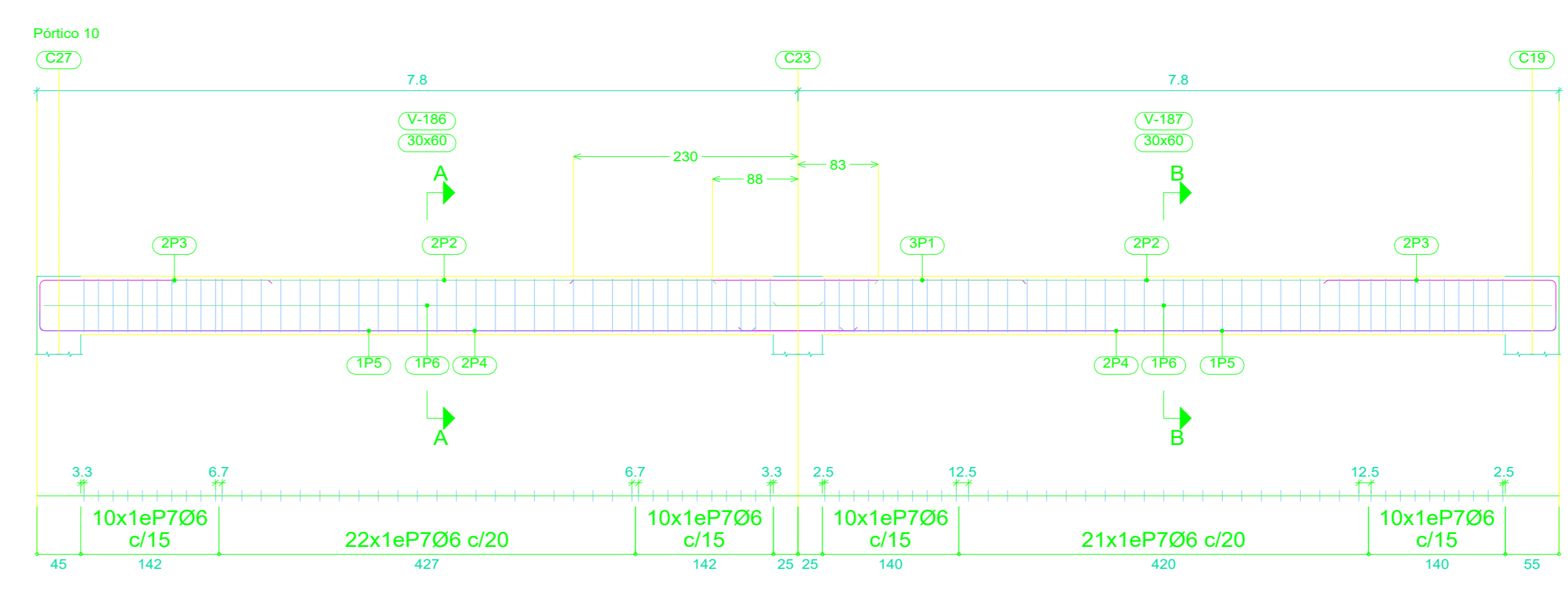
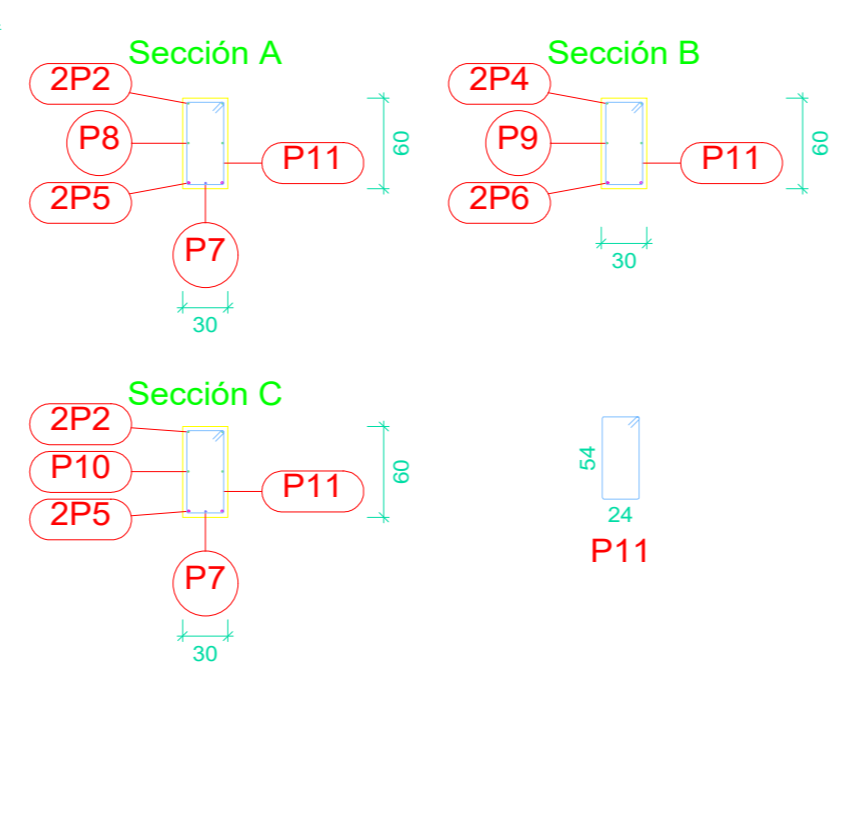
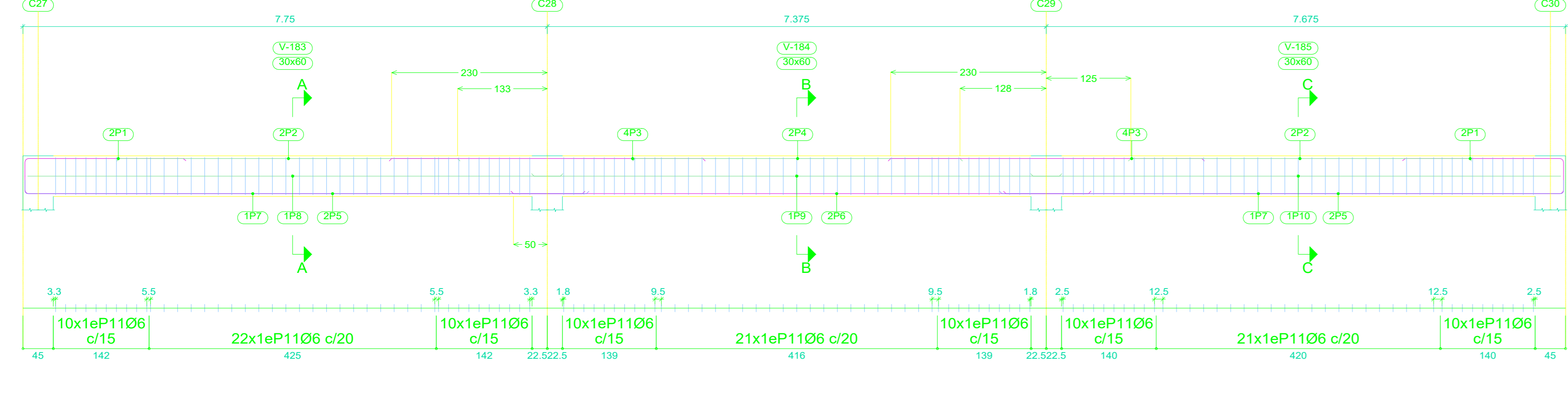
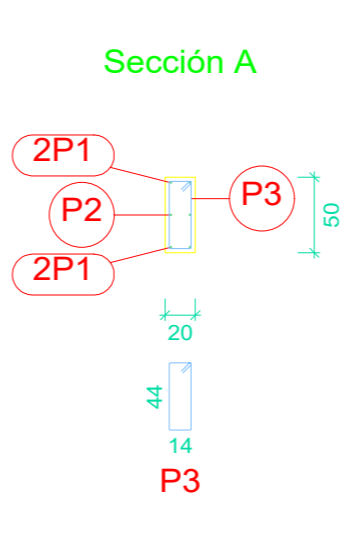
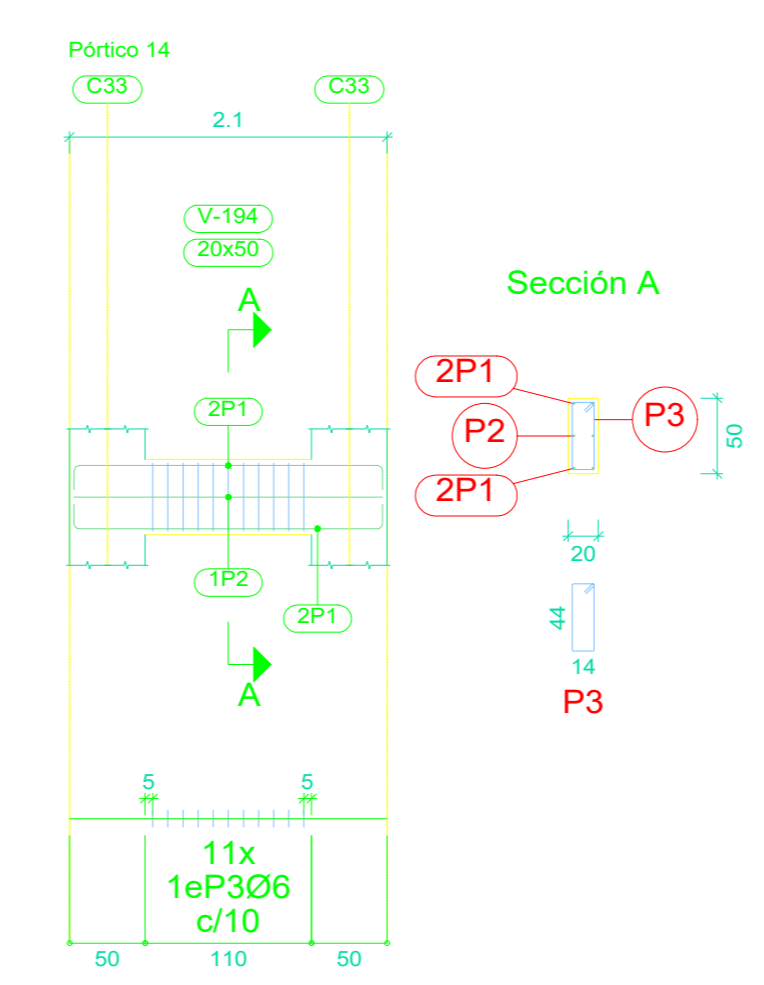
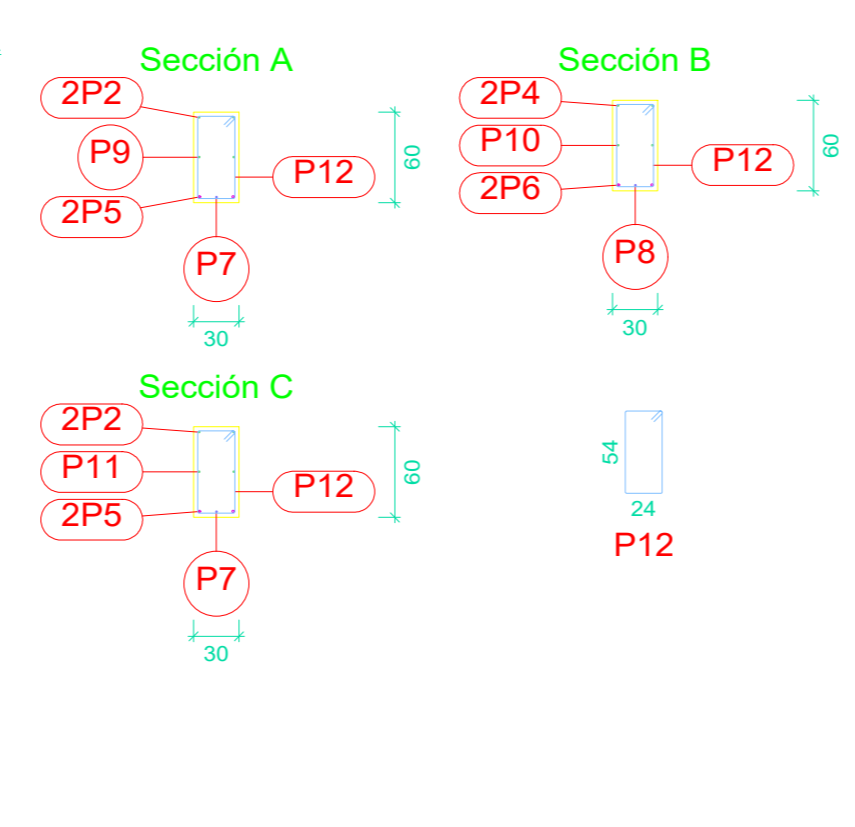
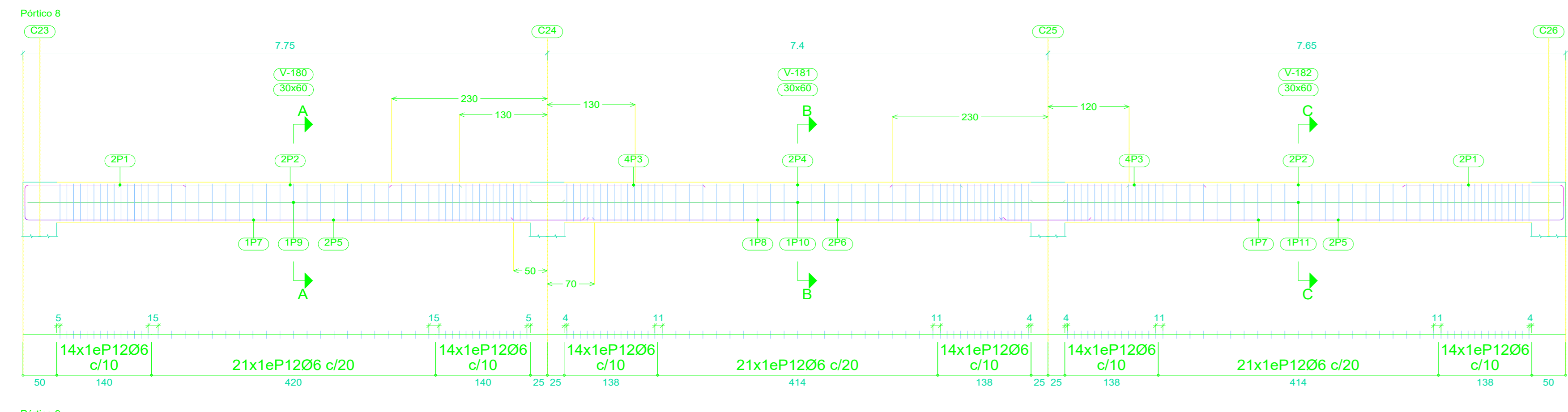
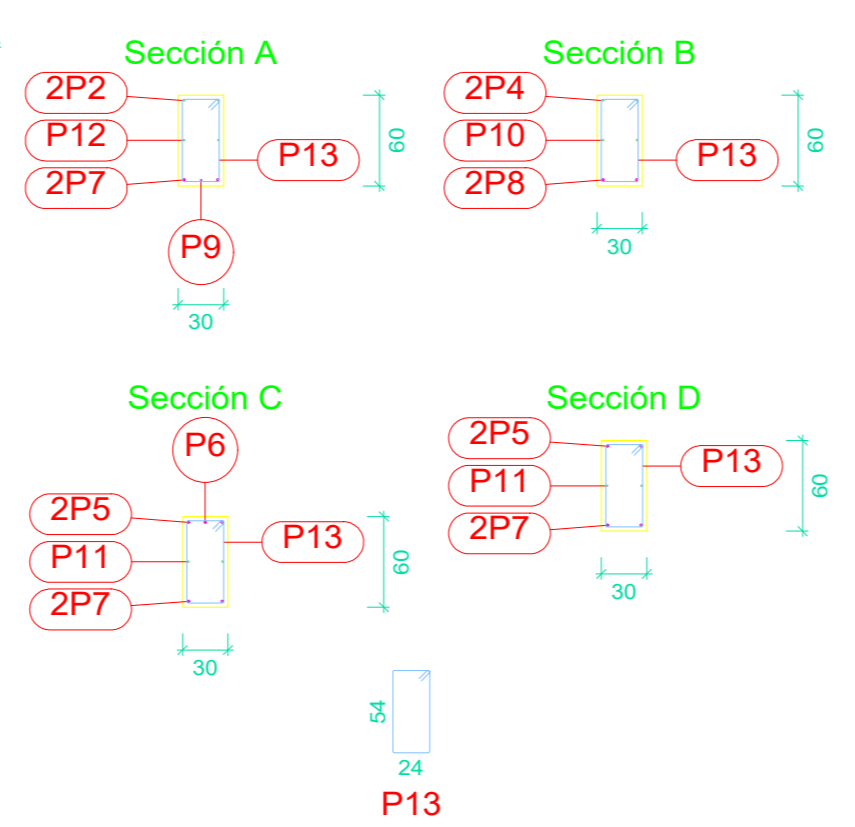
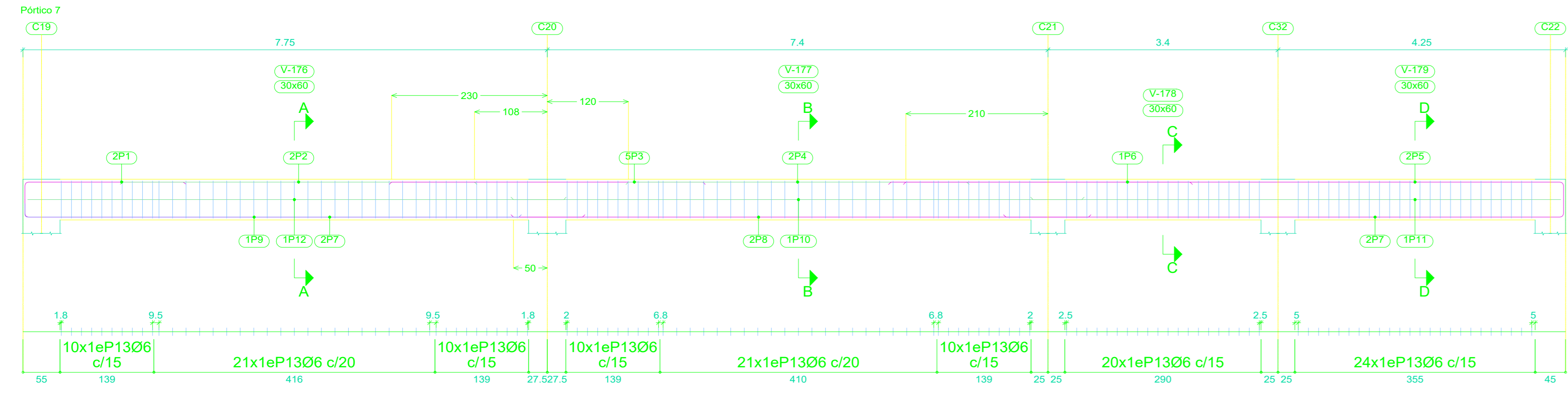
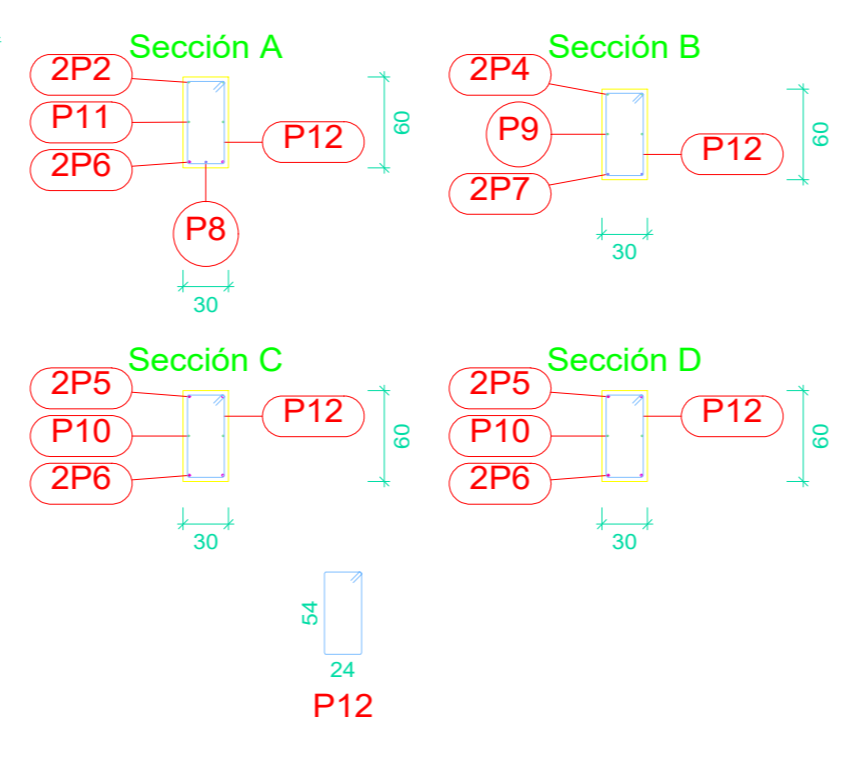
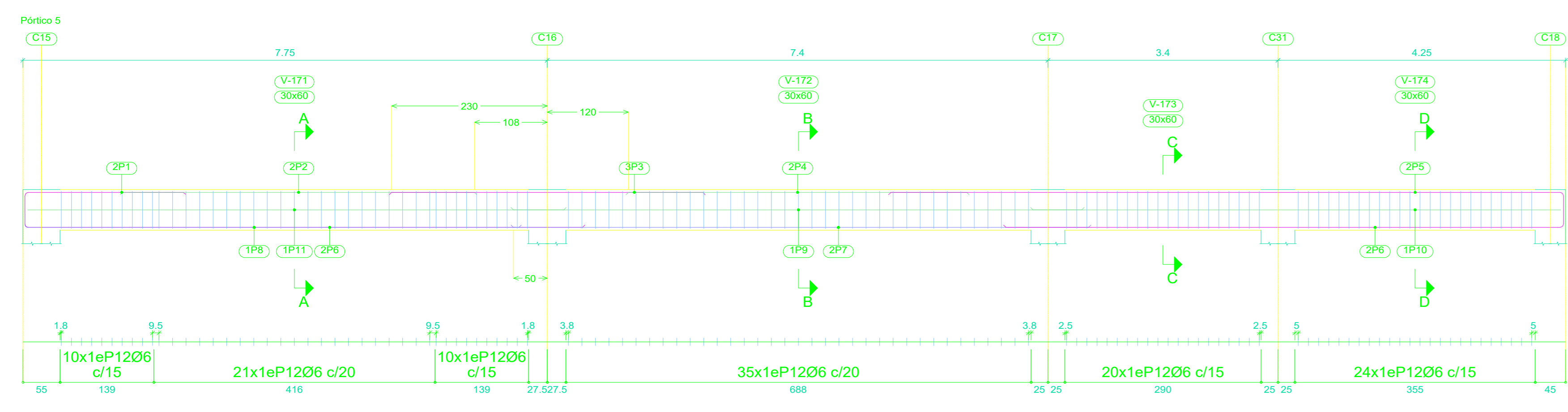
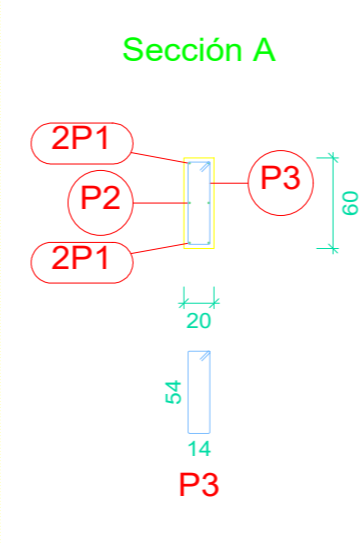
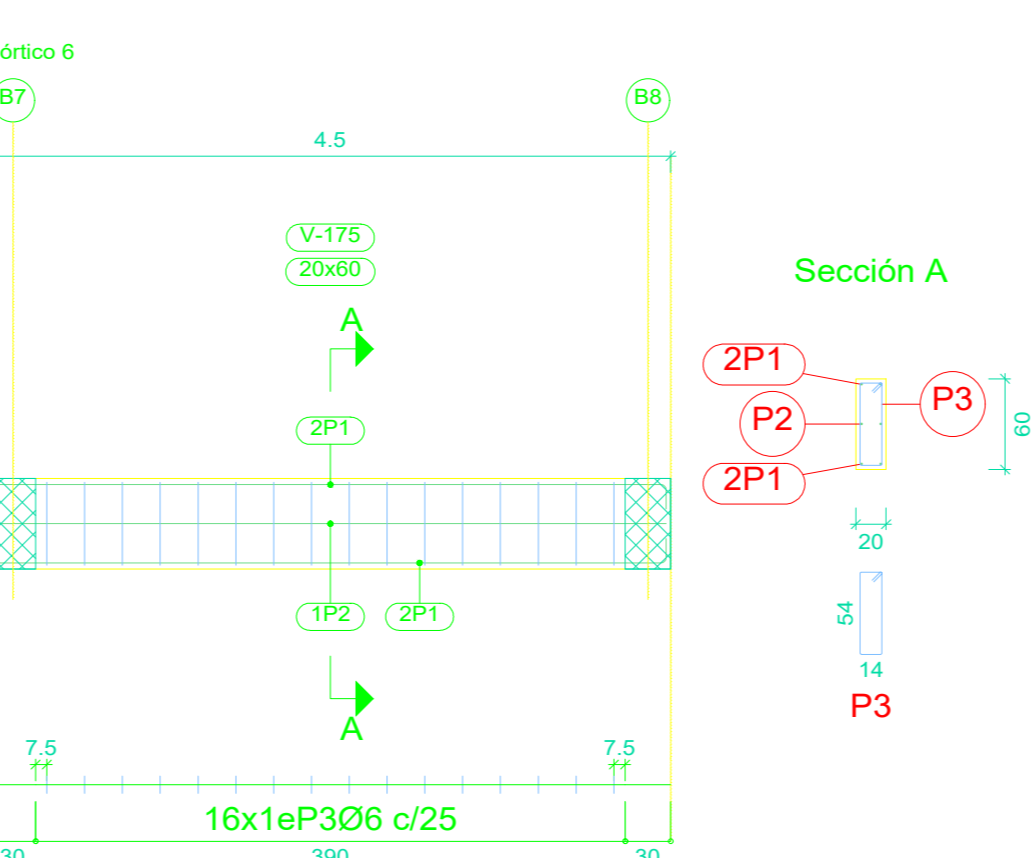
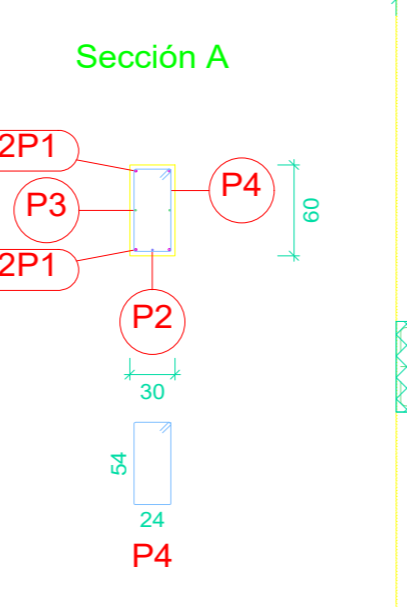
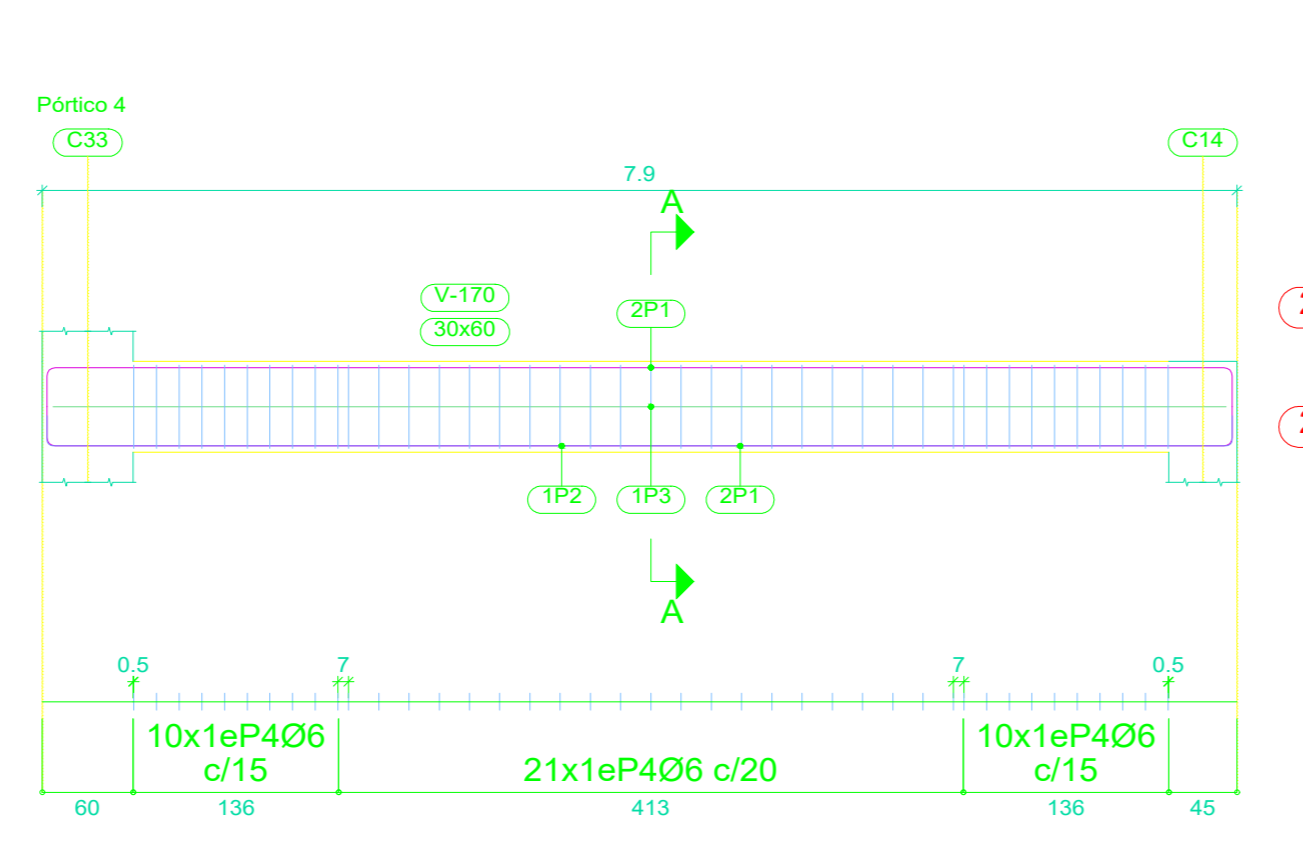
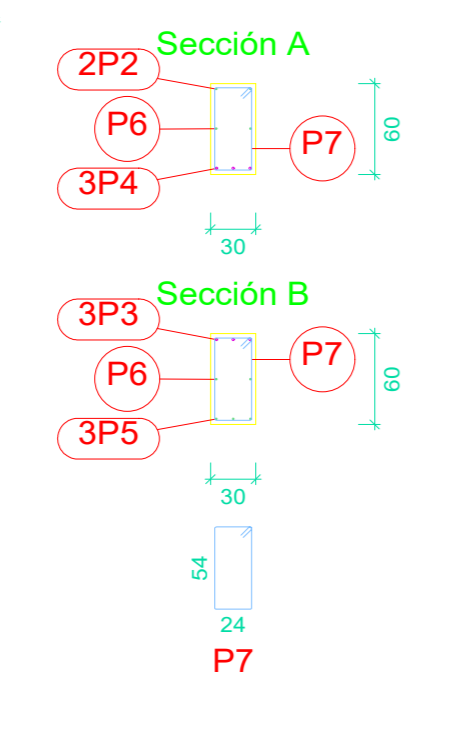
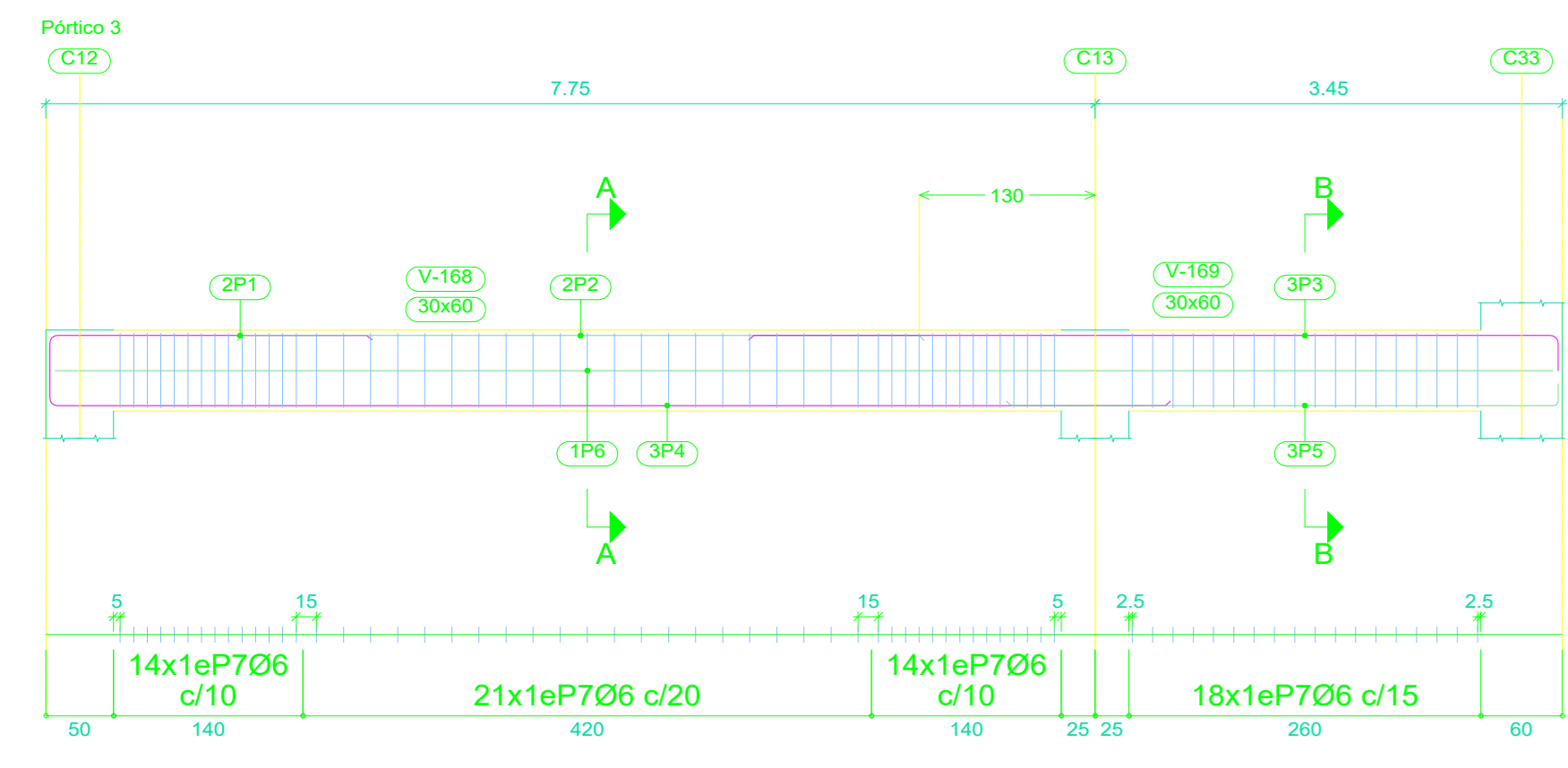
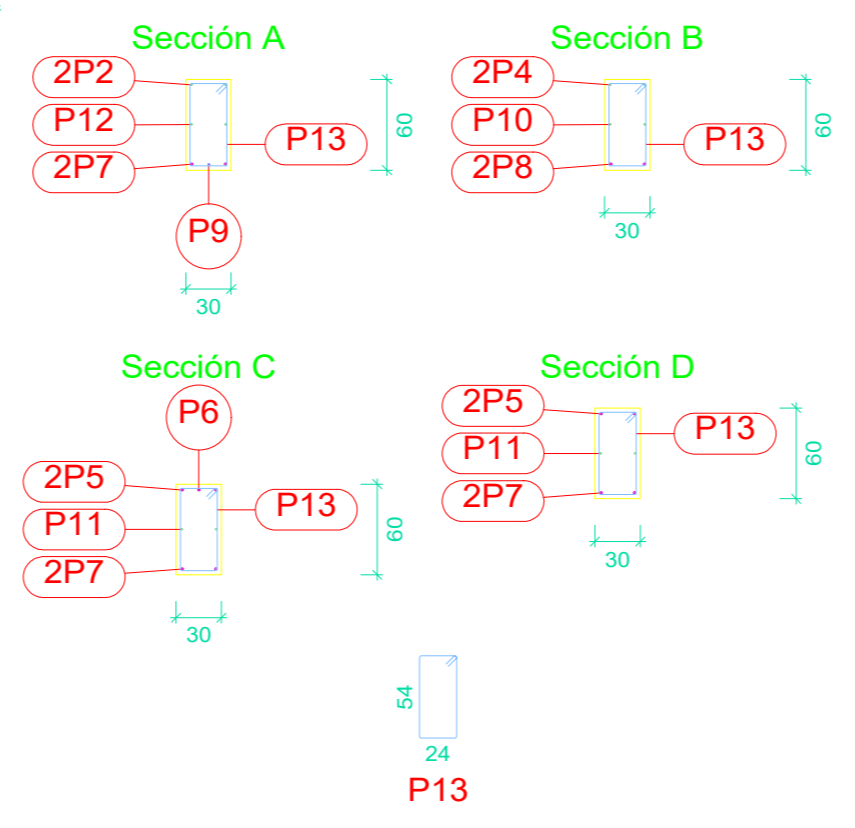
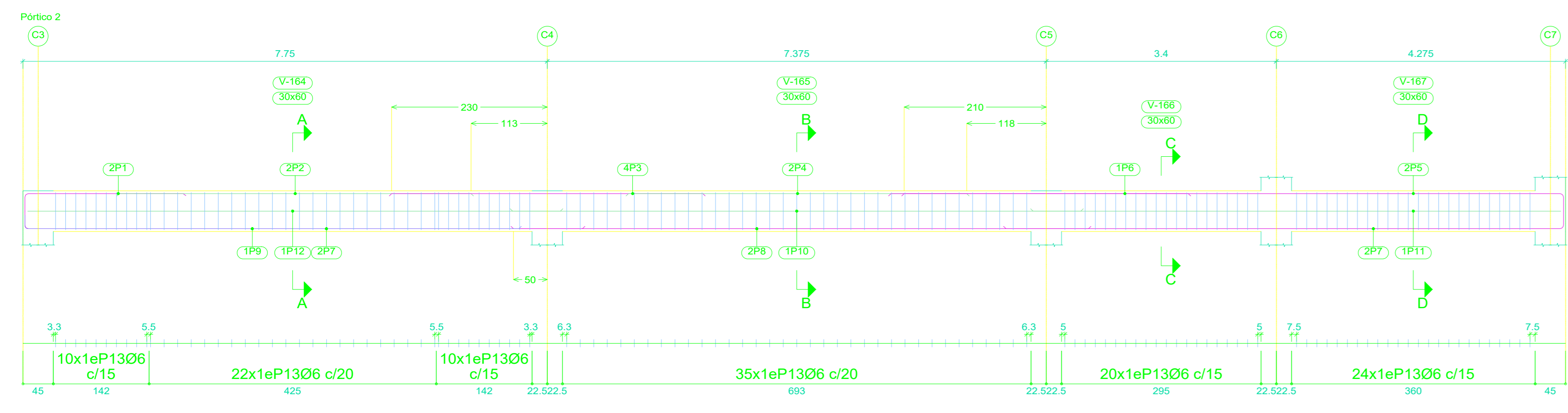
PROYECTO:
 HOSPITAL DE SEGUNDO NIVEL YACUIBA

CARACTER:
 DESPIECE DE VIGAS MÓDULO 2

FECHA:
 Marzo - 2023

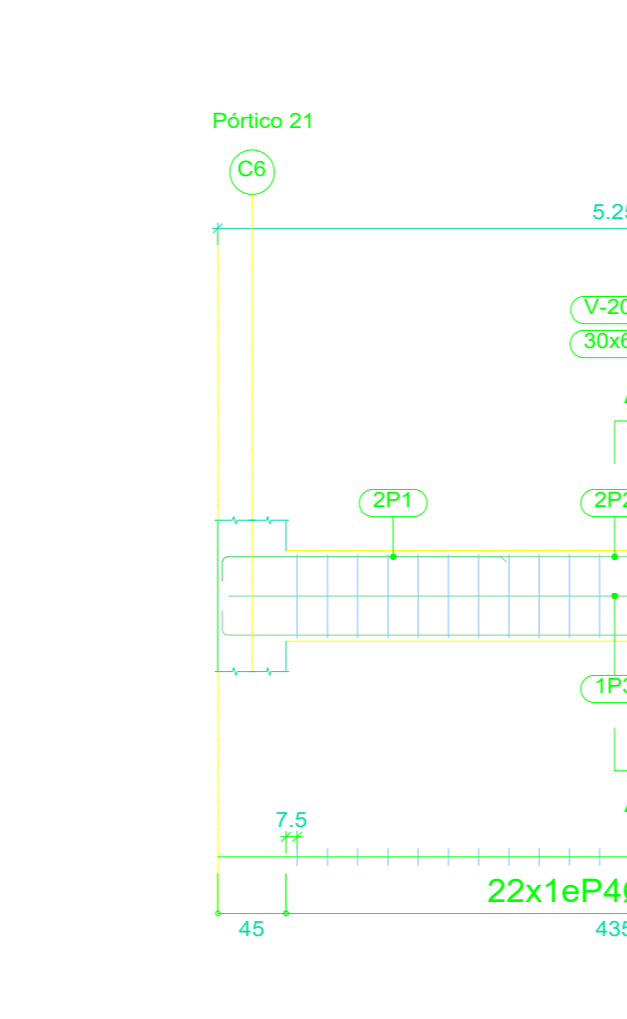
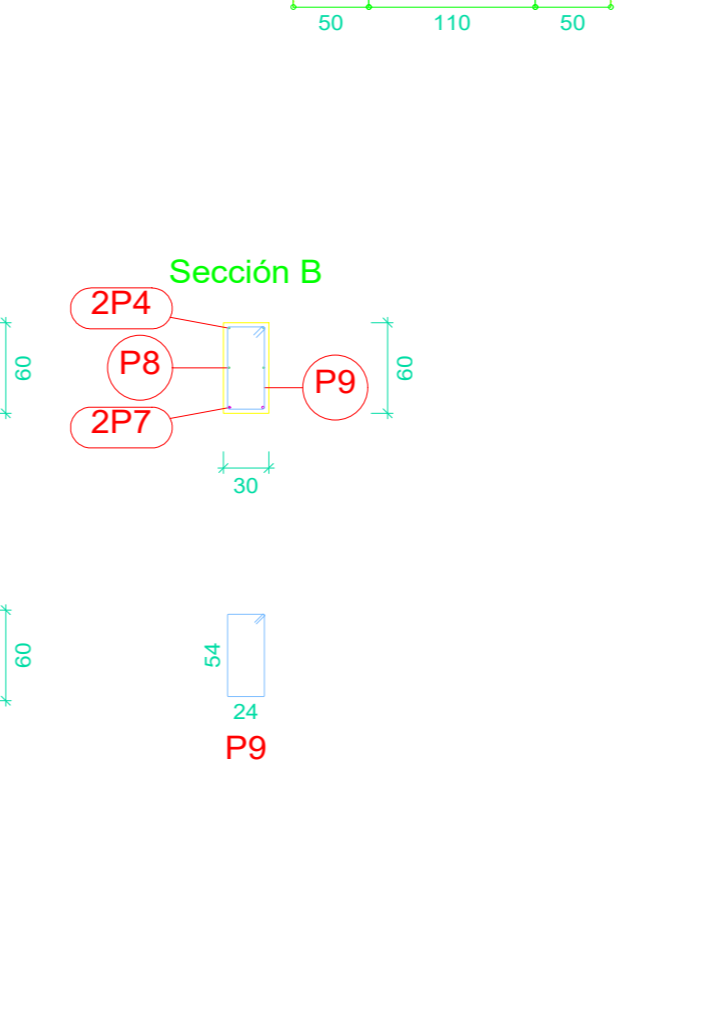
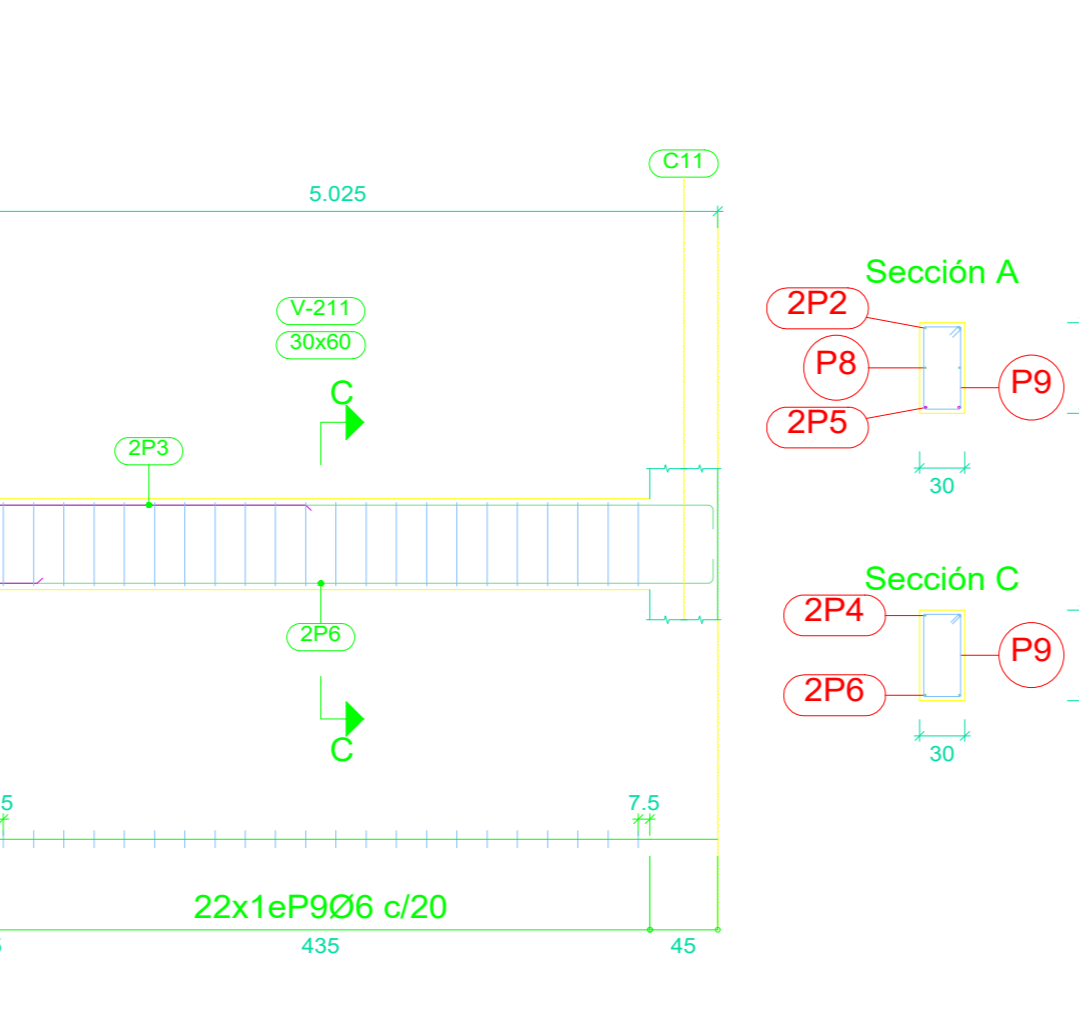
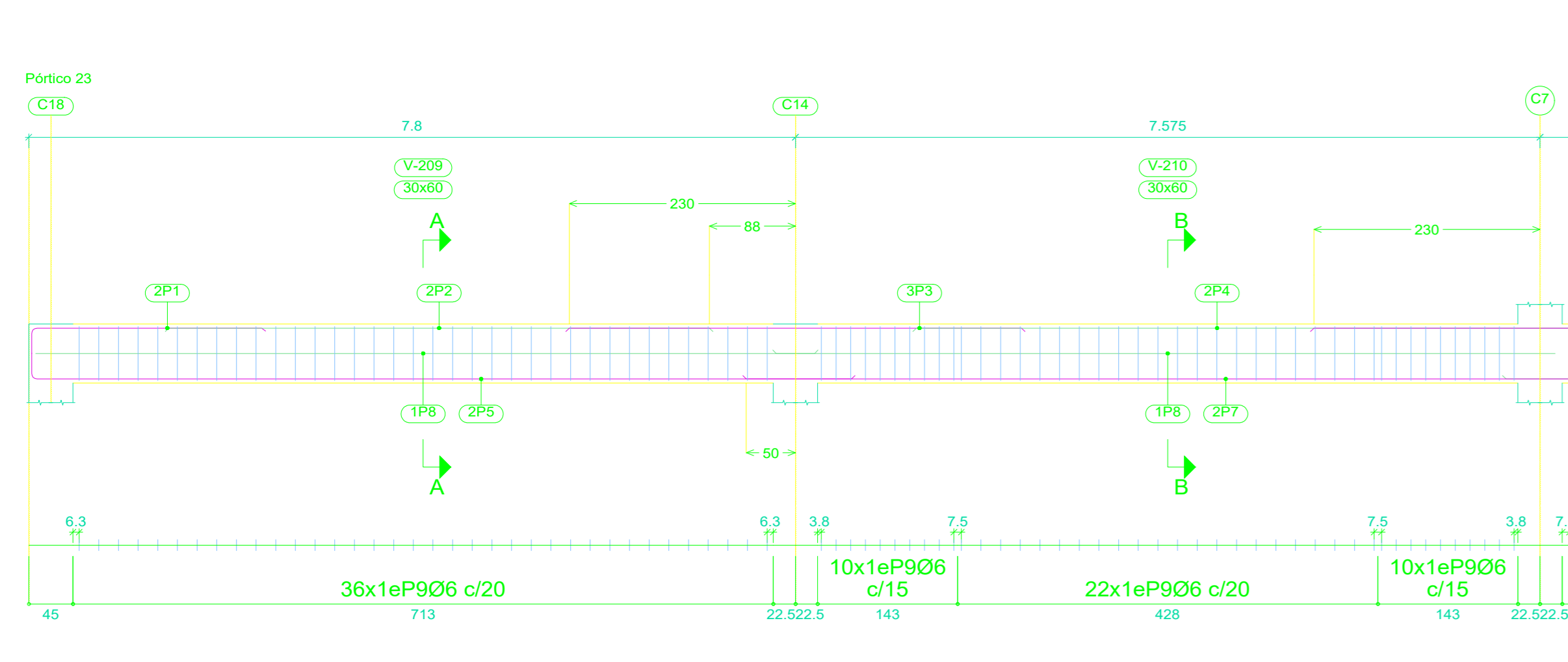
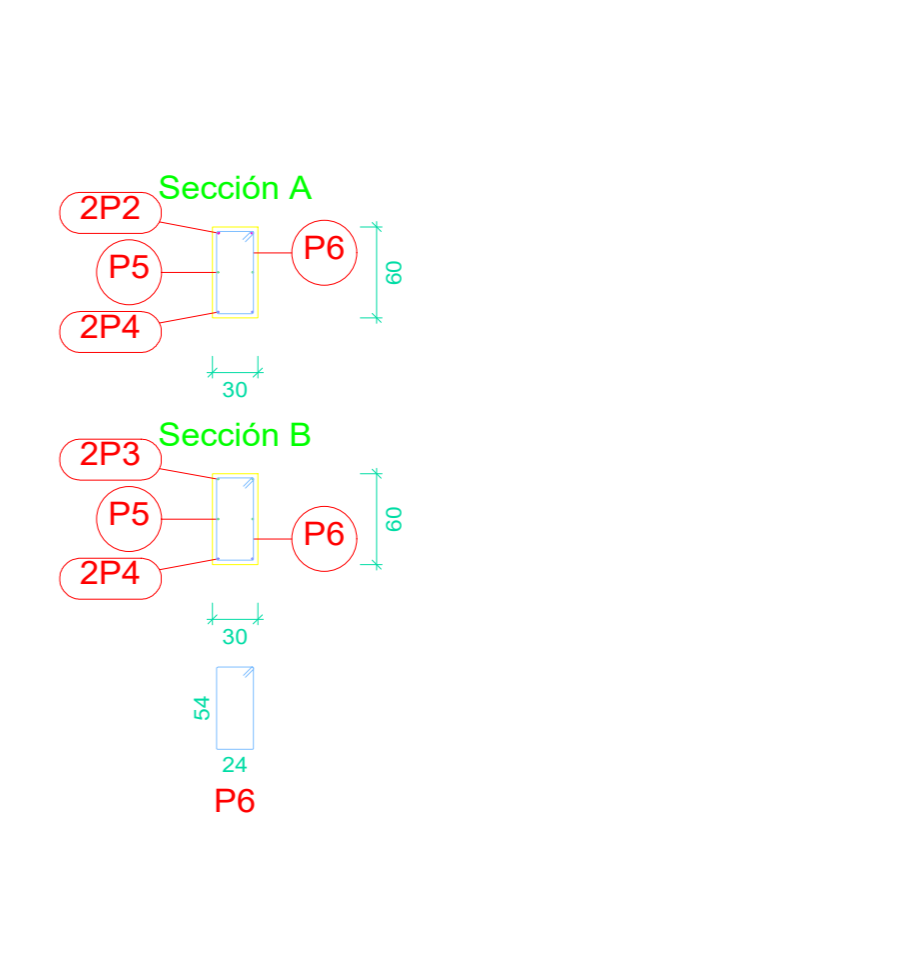
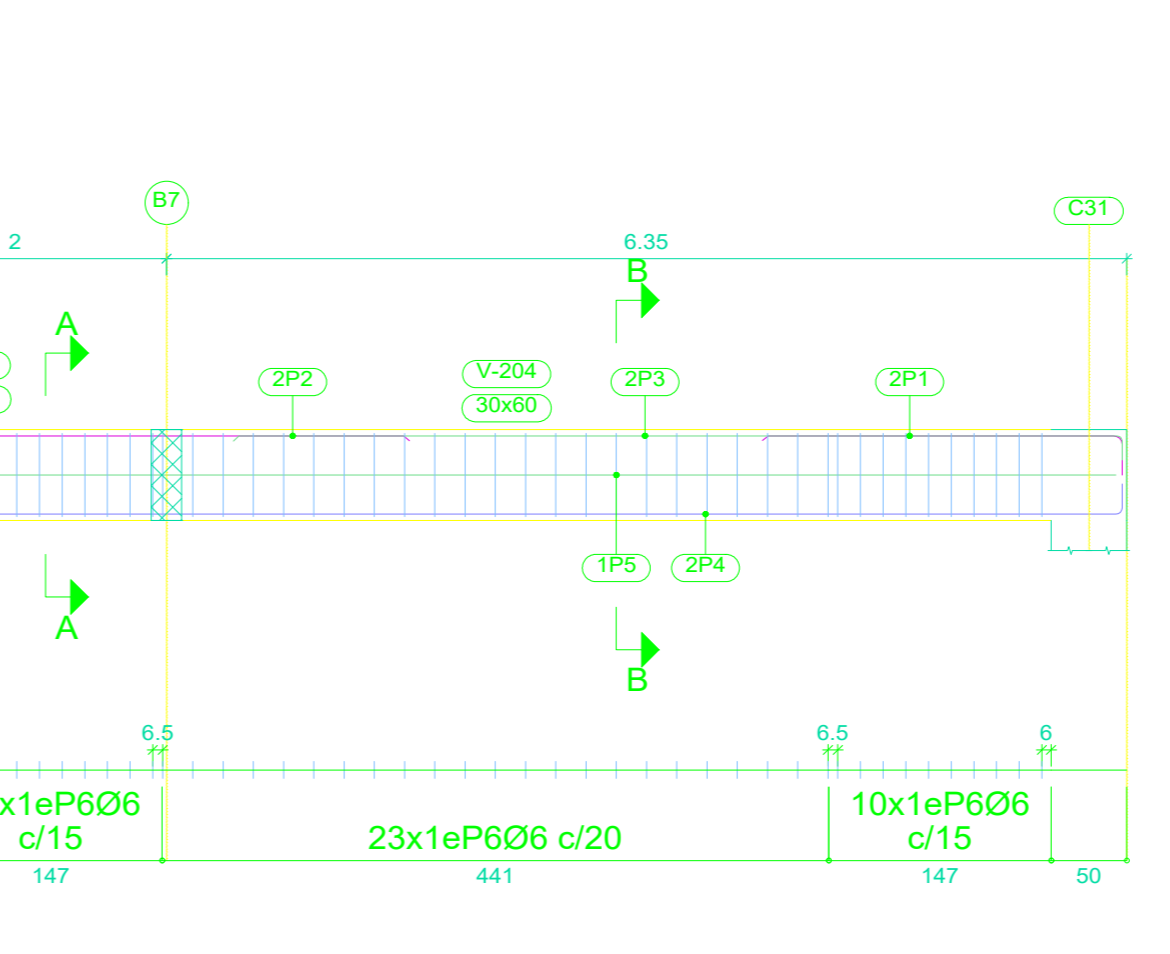
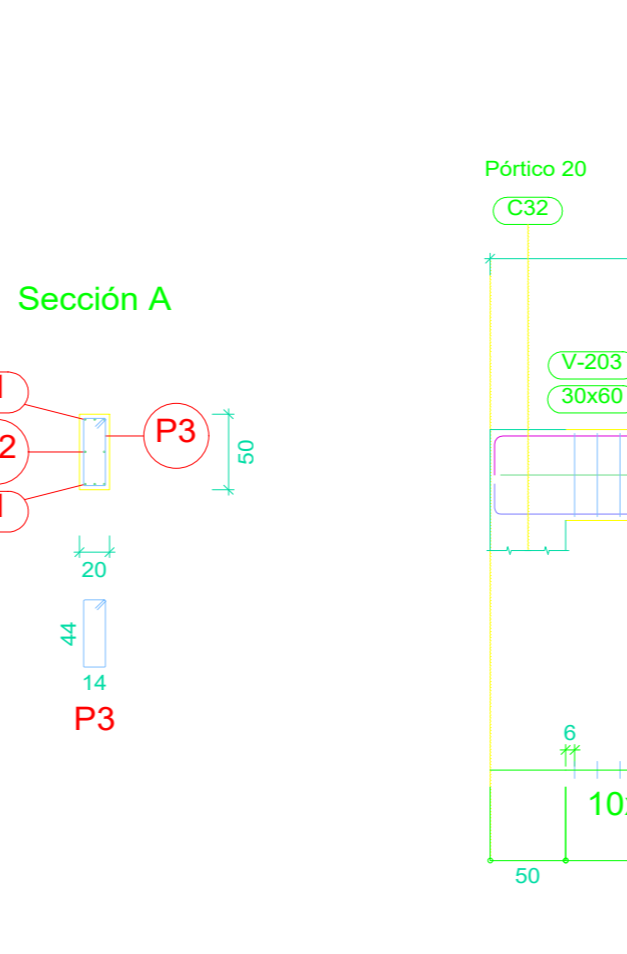
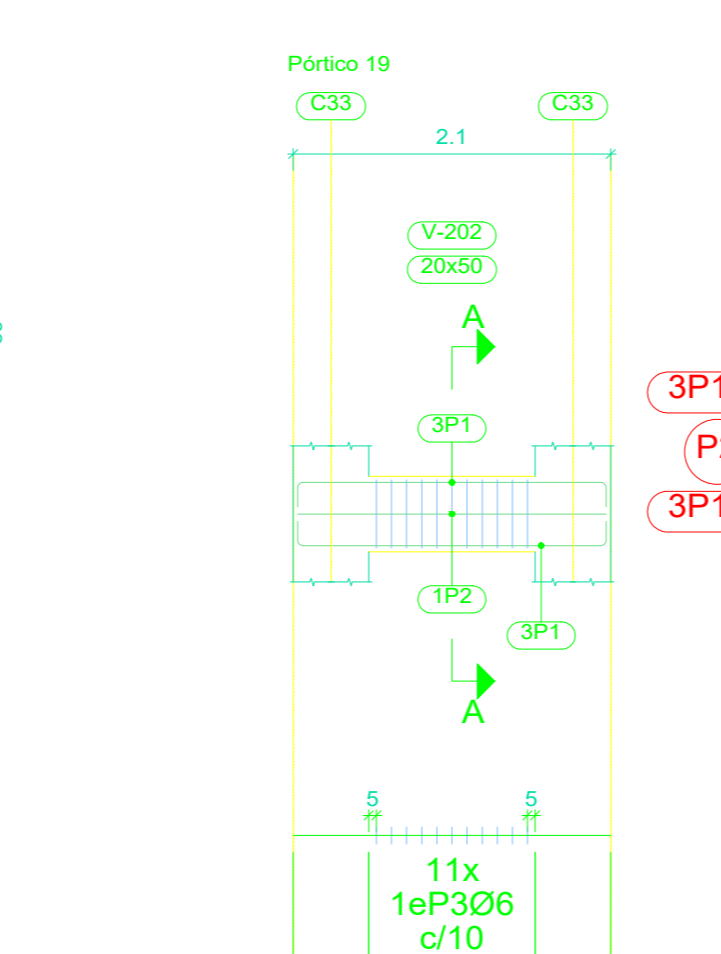
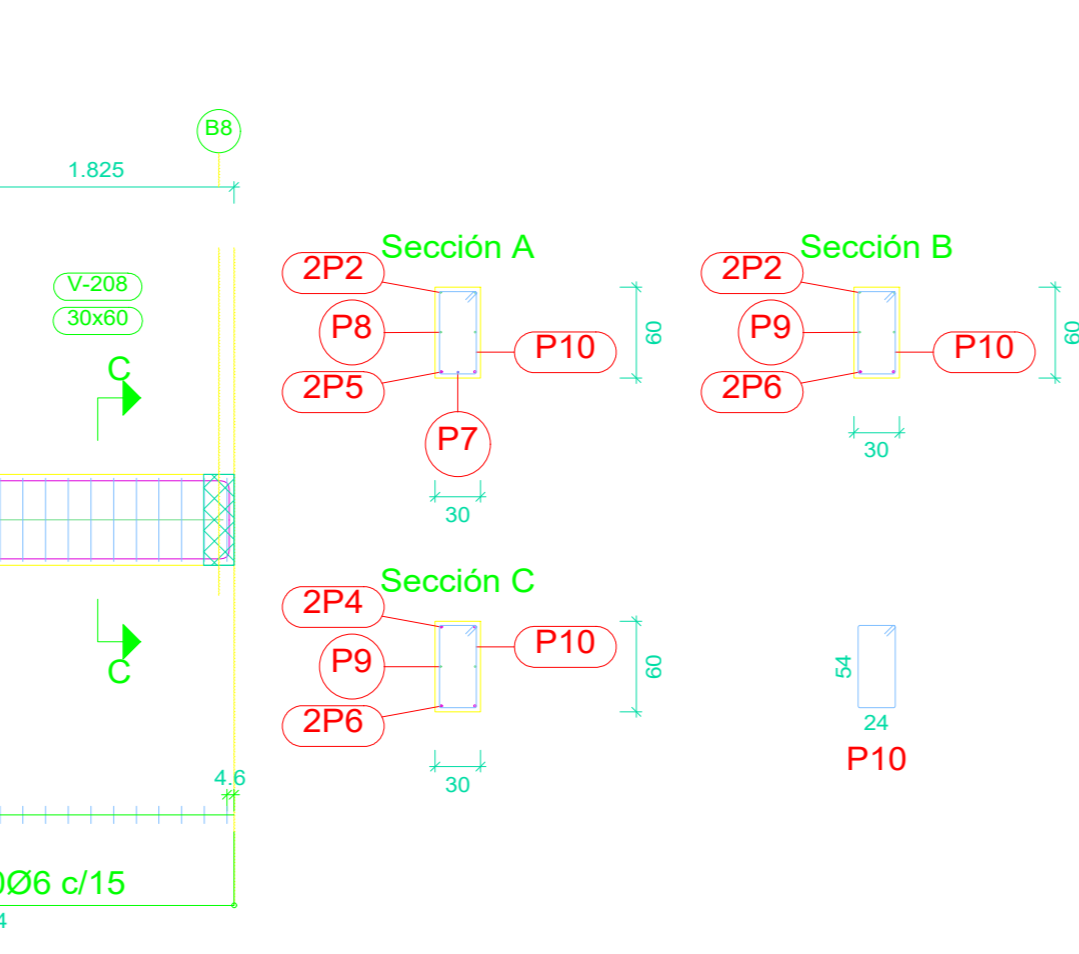
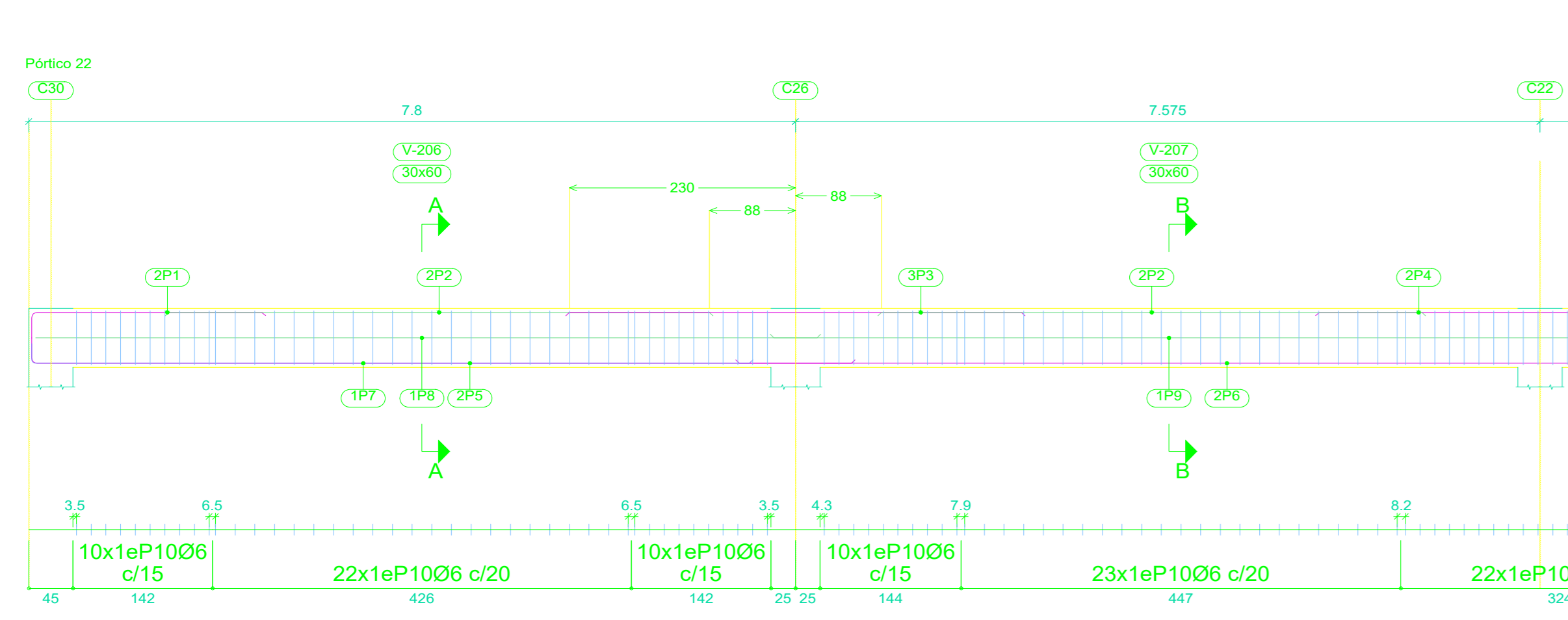
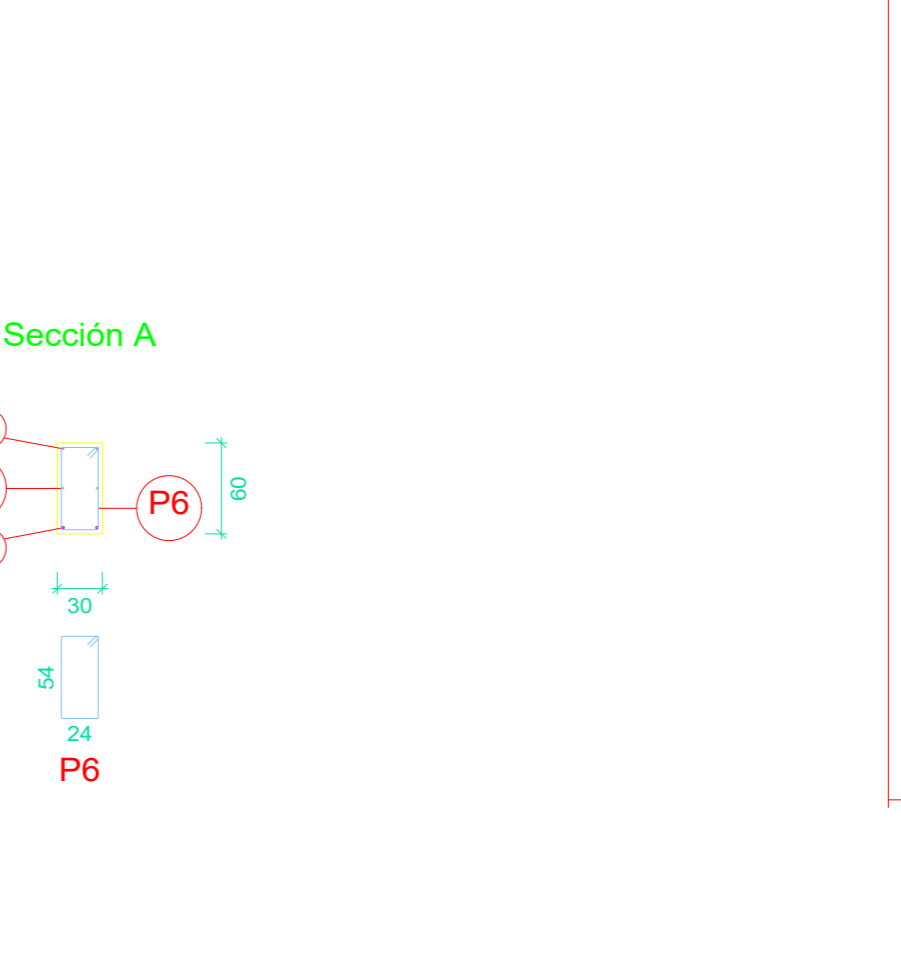
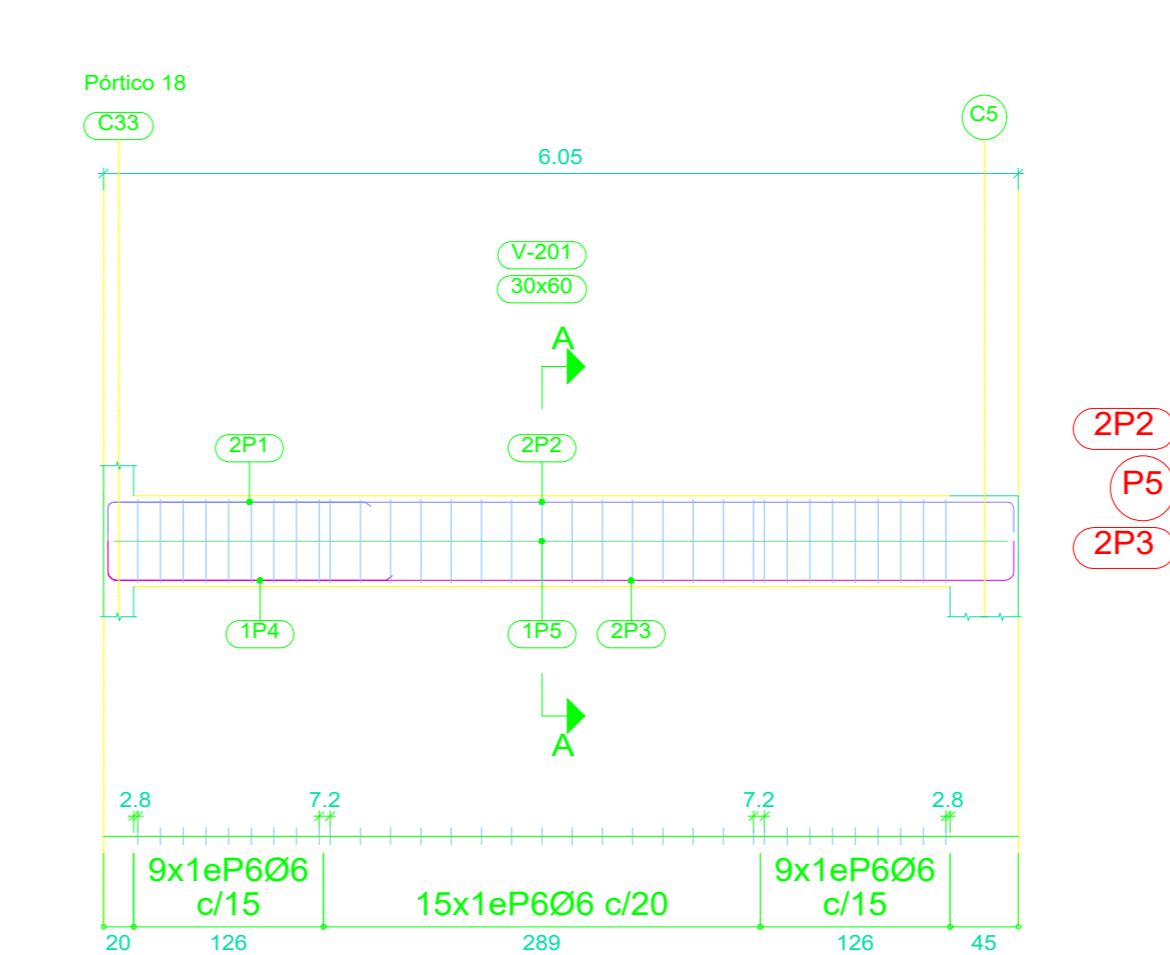
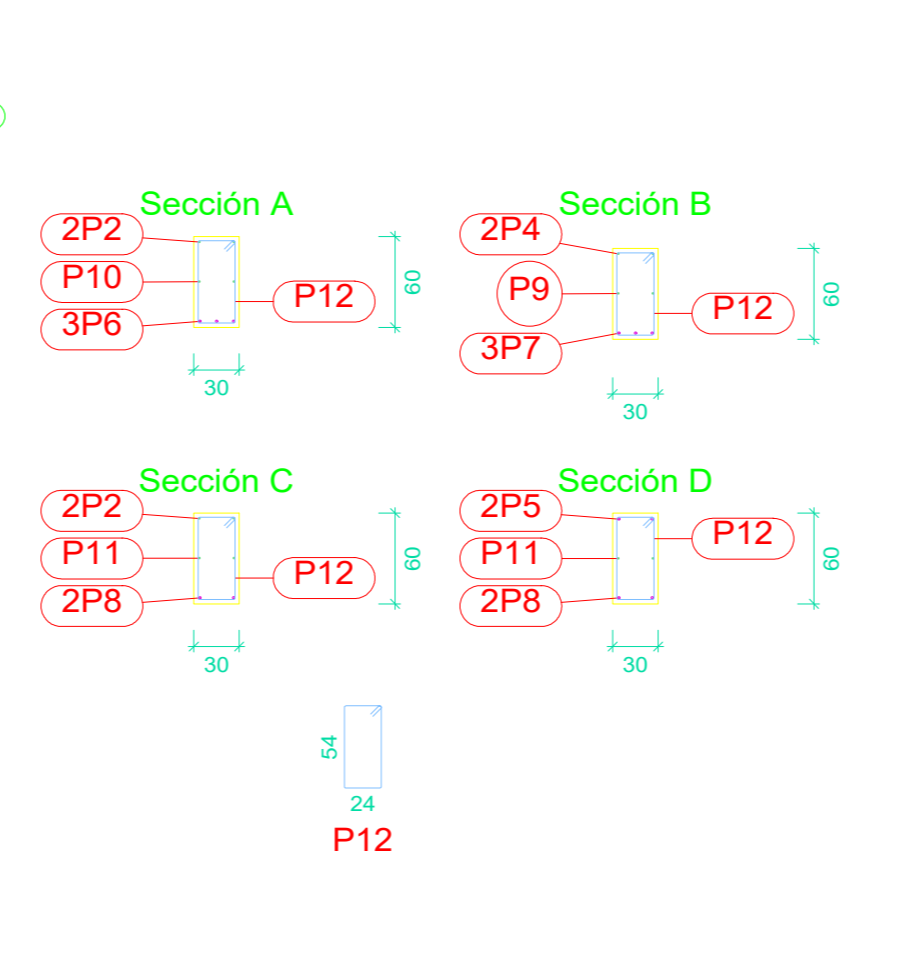
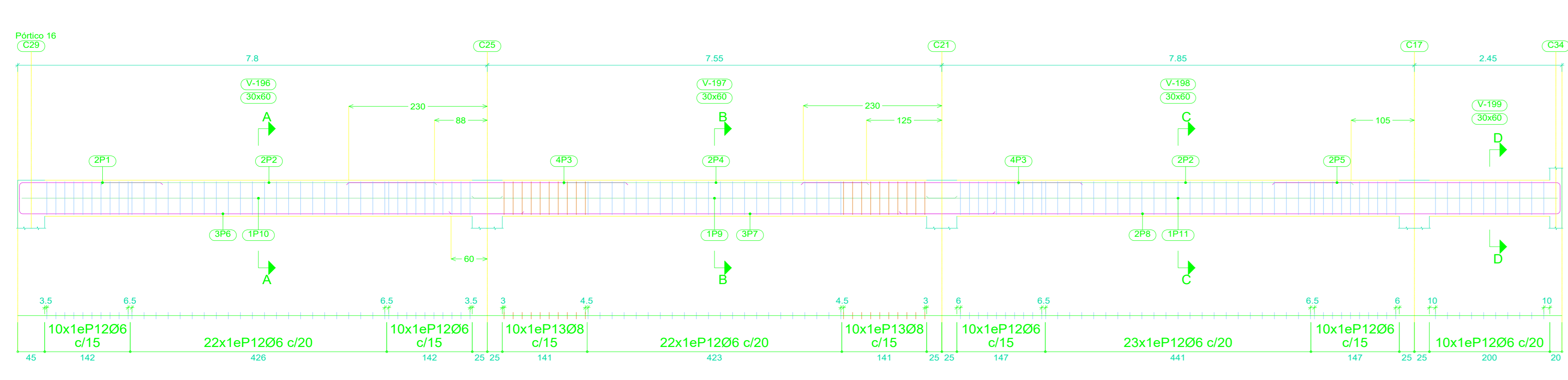
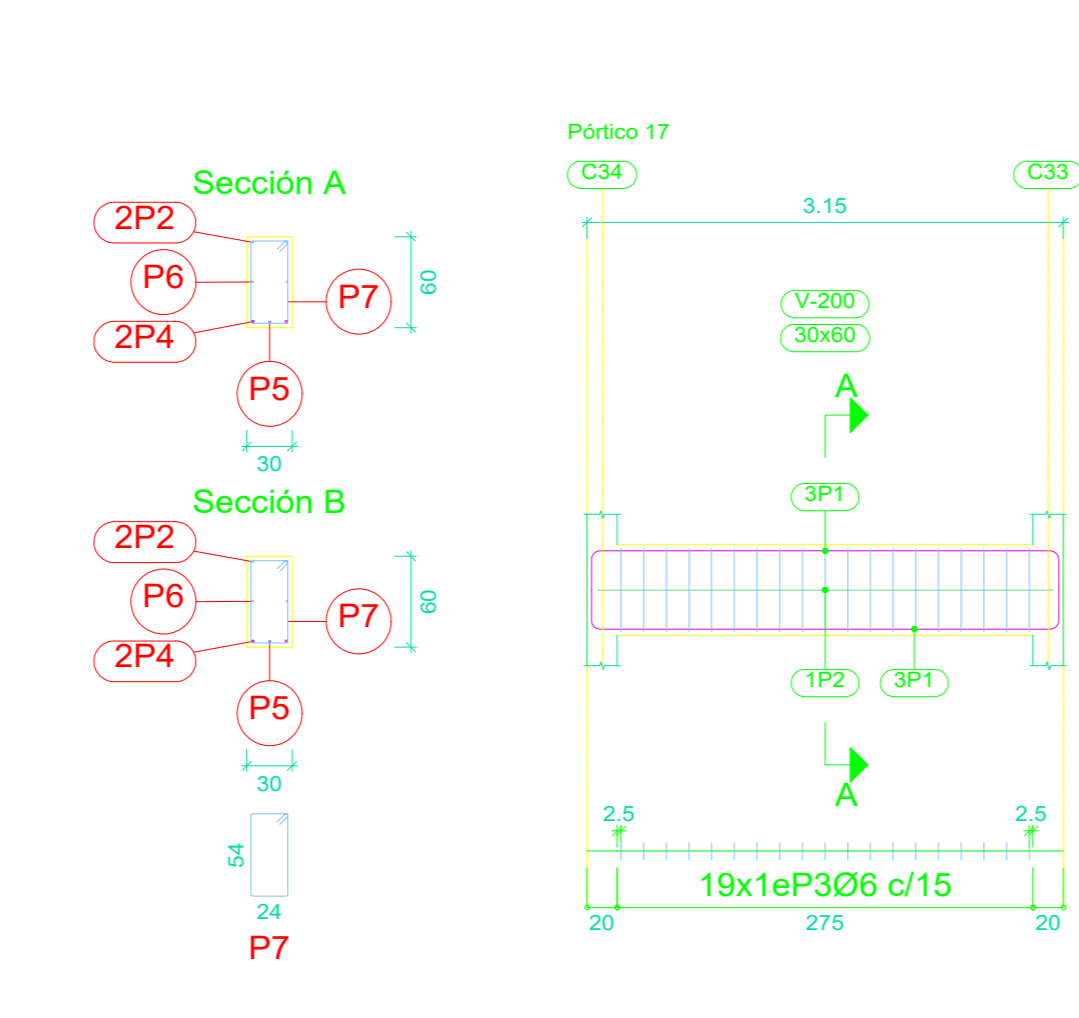
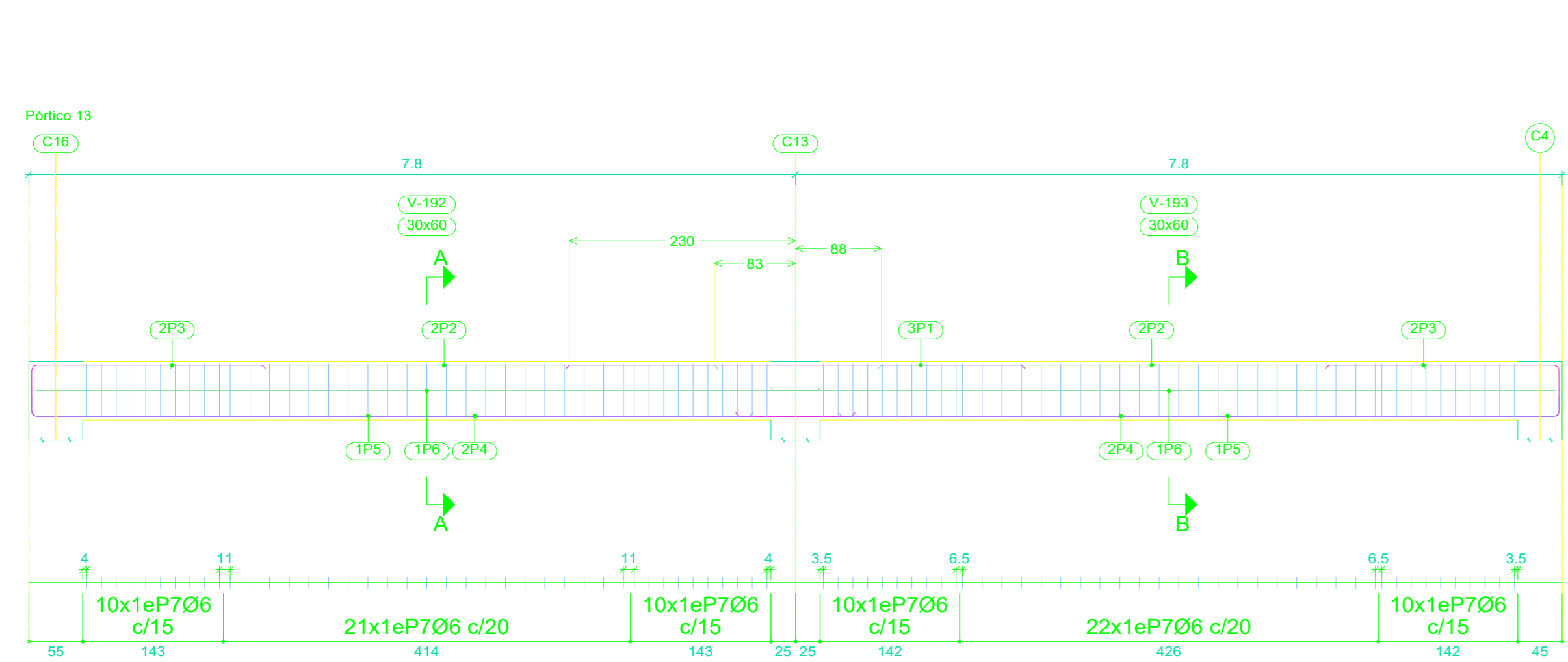
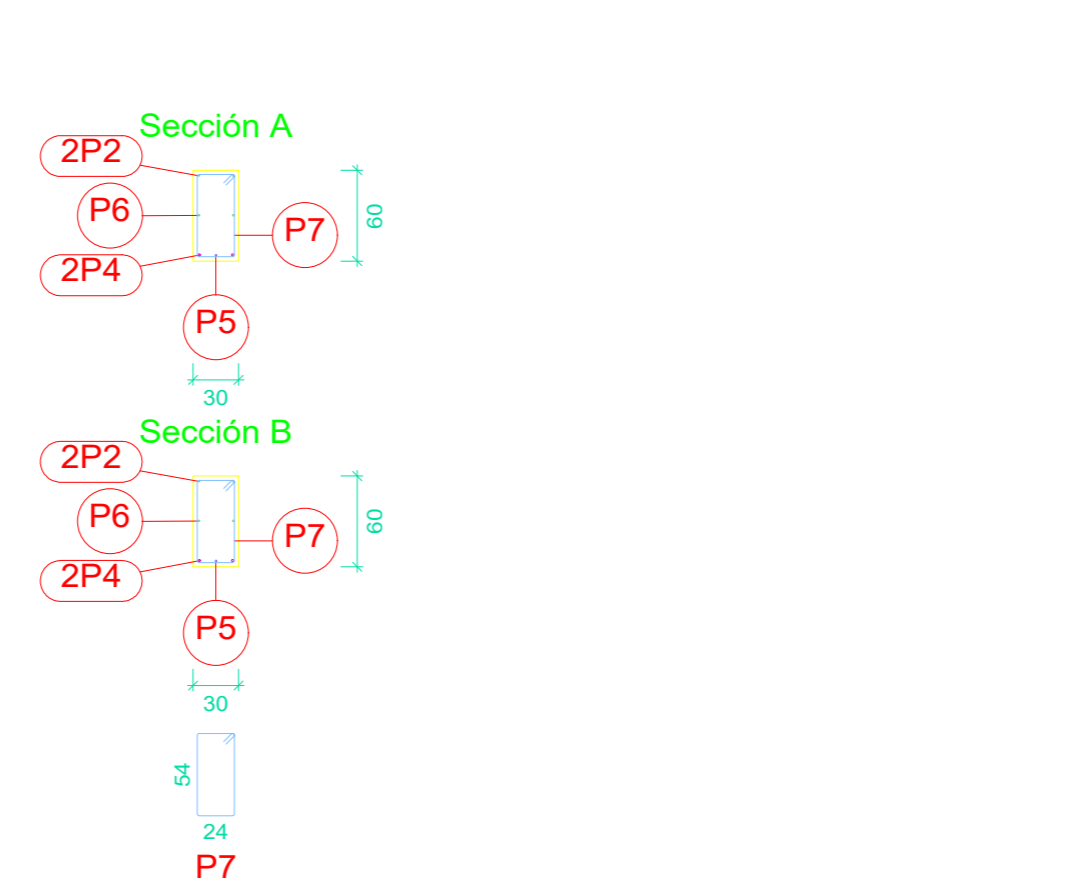
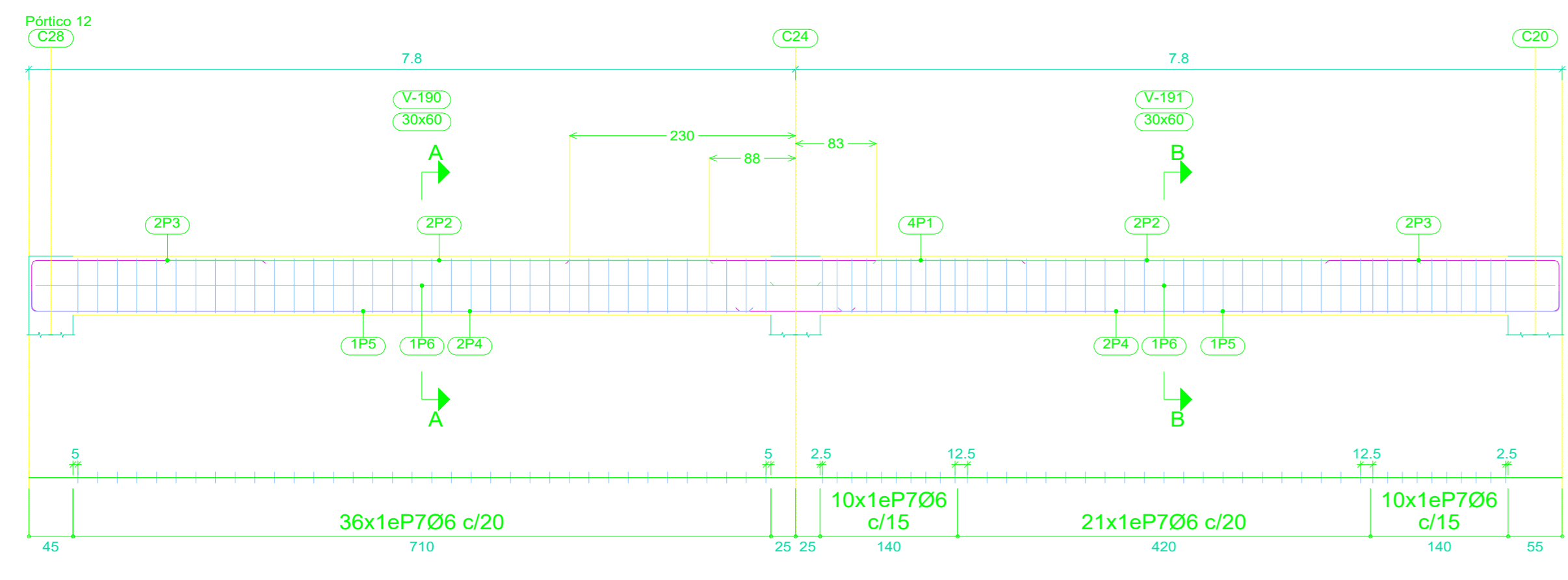
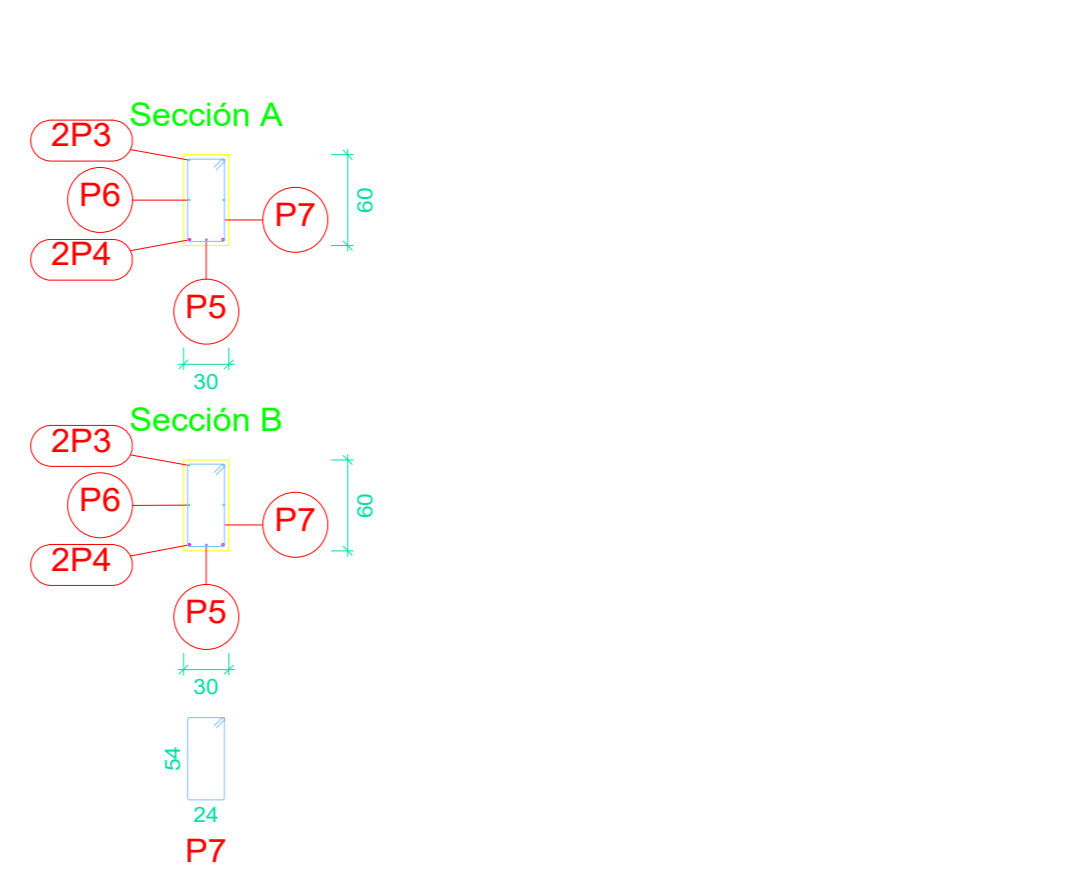
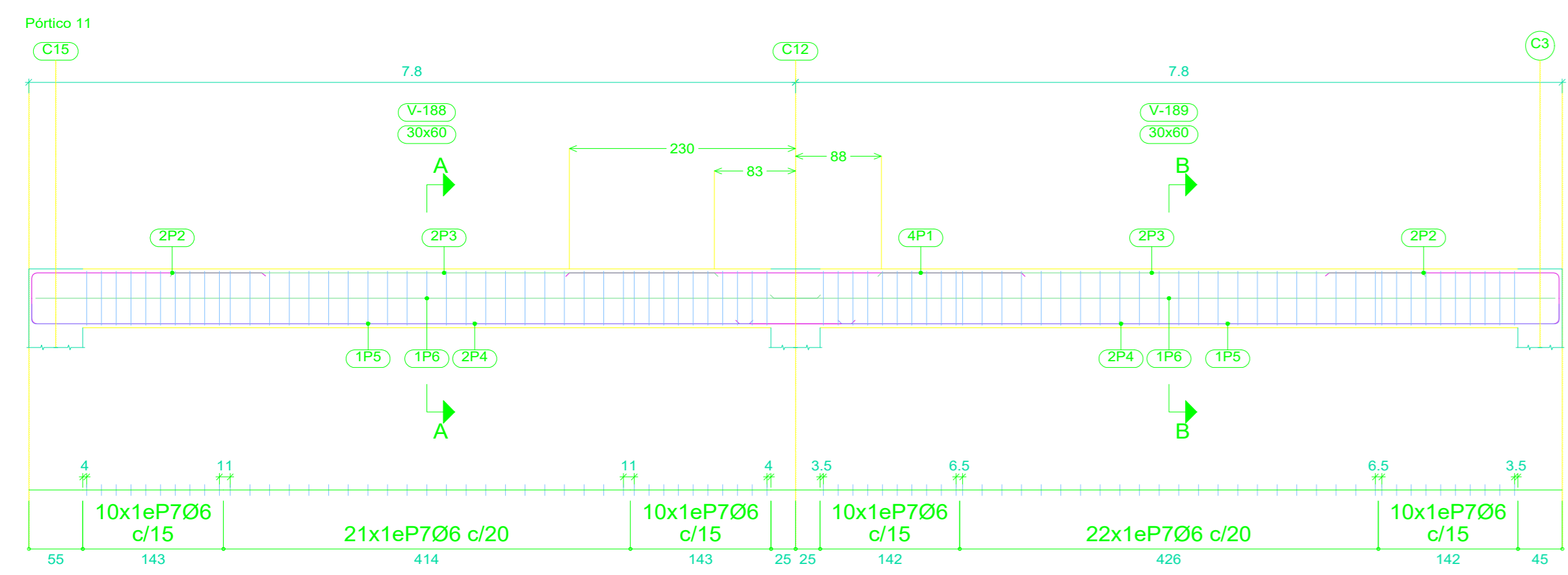
ESCALA:
 Indicada

LAMINA:
 34/65



Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 2	1	Ø16	2	234	260	520	8.2
	2	Ø10	2	520	520	1040	6.4
	3	Ø16	4	460	460	1840	29.0
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	2	994	1020	2040	32.2
	6	Ø16	1	420	420	420	6.6
	7	Ø16	4	824	850	3400	53.7
	8	Ø16	2	850	850	1700	26.8
	9	Ø12	1	730	750	750	6.7
	10	Ø10	2	840	840	1680	10.4
	11	Ø10	2	784	800	1600	9.9
	12	Ø10	2	792	808	1616	10.0
	Total+10%:						
Pórtico 5	1	Ø16	2	234	260	520	8.2
	2	Ø10	2	520	520	1040	6.4
	3	Ø16	3	460	460	1380	21.8
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	2	994	1020	2040	32.2
	6	Ø16	4	824	850	3400	53.7
	7	Ø12	2	850	850	1700	15.1
	8	Ø12	1	730	750	750	6.7
	9	Ø10	2	840	840	1680	10.4
	10	Ø10	2	784	800	1600	9.9
	11	Ø10	2	797	813	1626	10.0
	Total+10%:						
Pórtico 8	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	8	460	460	3680	58.1
	4	Ø10	2	480	480	960	5.9
	5	Ø16	4	824	850	3400	53.7
	6	Ø16	2	850	850	1700	26.8
	7	Ø12	2	830	850	1700	15.1
	8	Ø12	1	600	600	600	5.3
	9	Ø10	2	794	810	1620	10.0
	10	Ø10	2	784	784	1568	9.7
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	147	7	172	25284	56.1
Total+10%:							307.2
Pórtico 10	1	Ø16	3	480	460	1380	21.8
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	234	260	1040	16.4
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	2	730	750	1500	13.3
	6	Ø10	4	799	815	3260	20.1
	7	Ø6	83	7	172	14276	31.7
Total+10%:							188.3

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 3	1	Ø16	2	234	260	520	8.2
	2	Ø10	2	500	500	1000	6.2
	3	Ø16	3	594	620	1860	29.4
	4	Ø16	3	824	850	2550	40.2
	5	Ø10	3	404	420	1260	7.8
	6	Ø10	2	1114	1146	2292	14.1
	7	Ø6	67	7	172	11524	25.6
Total+10%:							144.7
Pórtico 4	1	Ø16	4	784	836	3344	52.8
	2	Ø12	1	784	824	824	7.3
	3	Ø10	2	784	816	1632	10.1
	4	Ø6	41	7	172	7052	15.6
Total+10%:							94.4
Pórtico 6	1	Ø10	4	444	476	1904	11.7
	2	Ø10	2	444	444	888	5.5
	3	Ø6	16	7	152	2432	5.4
Total+10%:							24.9
Pórtico 7	1	Ø16	2	234	260	520	8.2
	2	Ø10	2	520	520	1040	6.4
	3	Ø16	5	460	460	2300	36.3
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	2	994	1020	2040	32.2
	6	Ø16	1	420	420	420	6.6
	7	Ø16	4	824	850	3400	53.7
	8	Ø16	2	850	850	1700	26.8
	9	Ø12	1	730	750	750	6.7
	10	Ø10	2	840	840	1680	10.4
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	126	7	172	21672	48.1
	Total+10%:						
Pórtico 9	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	8	460	460	3680	58.1
	4	Ø10	2	480	480	960	5.9
	5	Ø16	4	824	850	3400	53.7
	6	Ø16	2	850	850	1700	26.8
	7	Ø12	2	830	850	1700	15.1
	8	Ø10	2	792	808	1616	10.0
	9	Ø10	2	777	777	1554	9.6
	10	Ø10	2	784	800	1600	9.9
	11	Ø6	124	7	172	21328	47.3
Total+10%:							291.6
Pórtico 14	1	Ø10	4	204	236	944	5.8
	2	Ø10	2	204	204	408	2.5
	3	Ø6	11	7	132	1452	3.2
Total+10%:							12.7
Pórtico 15	1	Ø10	5	234	266	1330	8.2
	2	Ø10	2	234	234	468	2.9
	3	Ø6	14	7	132	1848	4.1
Total+10%:							16.7



Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 11	1	Ø16	4	460	460	1840	29.0
	2	Ø16	4	234	260	1040	16.4
	3	Ø10	4	550	550	2200	13.6
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	2	730	750	1500	13.3
	6	Ø10	4	799	815	3260	20.1
	7	Ø6	83	24	172	14276	31.7
Total+10%:							196.2
Pórtico 16	1	Ø16	2	234	260	520	8.2
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	8	460	460	3680	58.1
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	2	474	500	1000	15.8
	6	Ø16	3	834	860	2580	40.7
	7	Ø16	3	900	900	2700	42.6
	8	Ø16	2	1094	1120	2240	35.4
	9	Ø10	2	799	799	1598	9.9
	10	Ø10	2	799	815	1630	10.0
	11	Ø10	2	1049	1065	2130	13.1
	12	Ø6	117	24	172	20124	44.7
	13	Ø8	20	10	176	3520	13.9
Total+10%:							343.4

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 12	1	Ø16	4	460	460	1840	29.0
	2	Ø10	4	550	550	2200	13.6
	3	Ø16	4	234	260	1040	16.4
	4	Ø16	4	834	860	3440	54.3
	5	Ø12	2	730	750	1500	13.3
	6	Ø10	4	799	815	3260	20.1
	7	Ø6	77	24	172	13244	29.4
Total+10%:							193.7
Pórtico 17	1	Ø16	6	309	361	2166	34.2
	2	Ø10	2	309	341	682	4.2
	3	Ø6	19	172	172	3268	7.3
Total+10%:							50.3
Pórtico 18	1	Ø12	2	170	200	400	3.6
	2	Ø12	2	599	639	1278	11.3
	3	Ø16	2	599	651	1302	20.5
	4	Ø16	1	184	210	210	3.3
	5	Ø10	2	599	631	1262	7.8
	6	Ø6	33	172	172	5676	12.6
Total+10%:							65.0
Pórtico 19	1	Ø10	6	204	236	1416	8.7
	2	Ø10	2	204	204	408	2.5
	3	Ø6	11	132	132	1452	3.2
Total+10%:							15.8

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	
Pórtico 13	1	Ø16	3	460	460	1380	21.8	
	2	Ø10	4	550	550	2200	13.6	
	3	Ø16	4	234	260	1040	16.4	
	4	Ø16	4	834	860	3440	54.3	
	5	Ø12	2	730	750	1500	13.3	
	6	Ø10	4	799	815	3260	20.1	
	7	Ø6	83	24	172	14276	31.7	
	Total+10%:							188.3
	Pórtico 20	1	Ø16	2	234	260	520	8.2
		2	Ø16	2	354	380	760	12.0
3		Ø10	2	584	600	1200	7.4	
4		Ø12	2	829	869	1738	15.4	
5		Ø10	2	829	861	1722	10.6	
6		Ø6	43	172	172	7396	16.4	
Total+10%:							77.0	
Pórtico 21	1	Ø10	2	184	200	400	2.5	
	2	Ø10	4	519	551	2204	13.6	
	3	Ø10	2	519	551	1102	6.8	
	4	Ø6	22	172	172	3784	8.4	
Total+10%:							34.4	
Pórtico 22	1	Ø16	2	234	260	520	8.2	
	2	Ø10	4	550	550	2200	13.6	
	3	Ø16	3	460	460	1380	21.8	
	4	Ø16	2	404	430	860	13.6	
	5	Ø16	2	834	860	1720	27.1	
	6	Ø16	2	994	1020	2040	32.2	
	7	Ø12	1	730	750	750	6.7	
	8	Ø10	2	799	815	1630	10.0	
	9	Ø10	2	959	975	1950	12.0	
	10	Ø6	97	172	172	16684	37.0	
Total+10%:							200.4	
Pórtico 23	1	Ø16	2	234	260	520	8.2	
	2	Ø10	2	550	550	1100	6.8	
	3	Ø16	5	460	460	2300	36.3	
	4	Ø10	2	1134	1150	2300	14.2	
	5	Ø16	2	834	860	1720	27.1	
	6	Ø10	2	534	550	1100	6.8	
	7	Ø16	2	860	860	1720	27.1	
	8	Ø10	4	797	813	3252	20.0	
	9	Ø6	100	172	172	17200	38.2	
Total+10%:							203.2	



UNIVERSIDAD:
JUAN MISAEL SARACHO



UNIVERSITARIO:
MARCELO CRUZ CAIHUARA

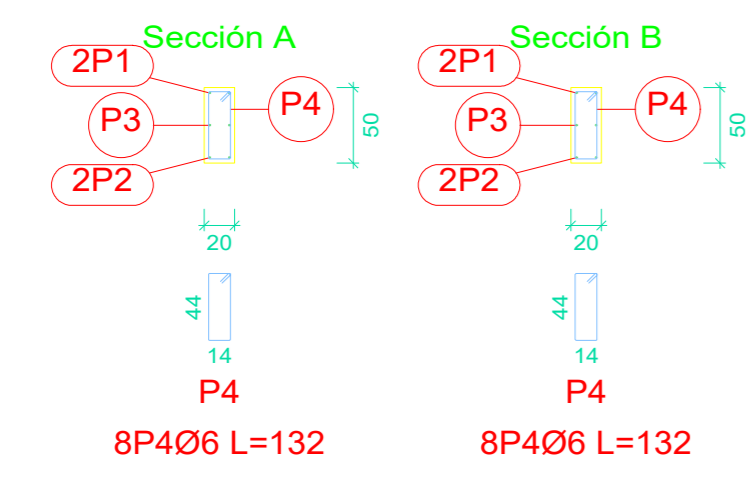
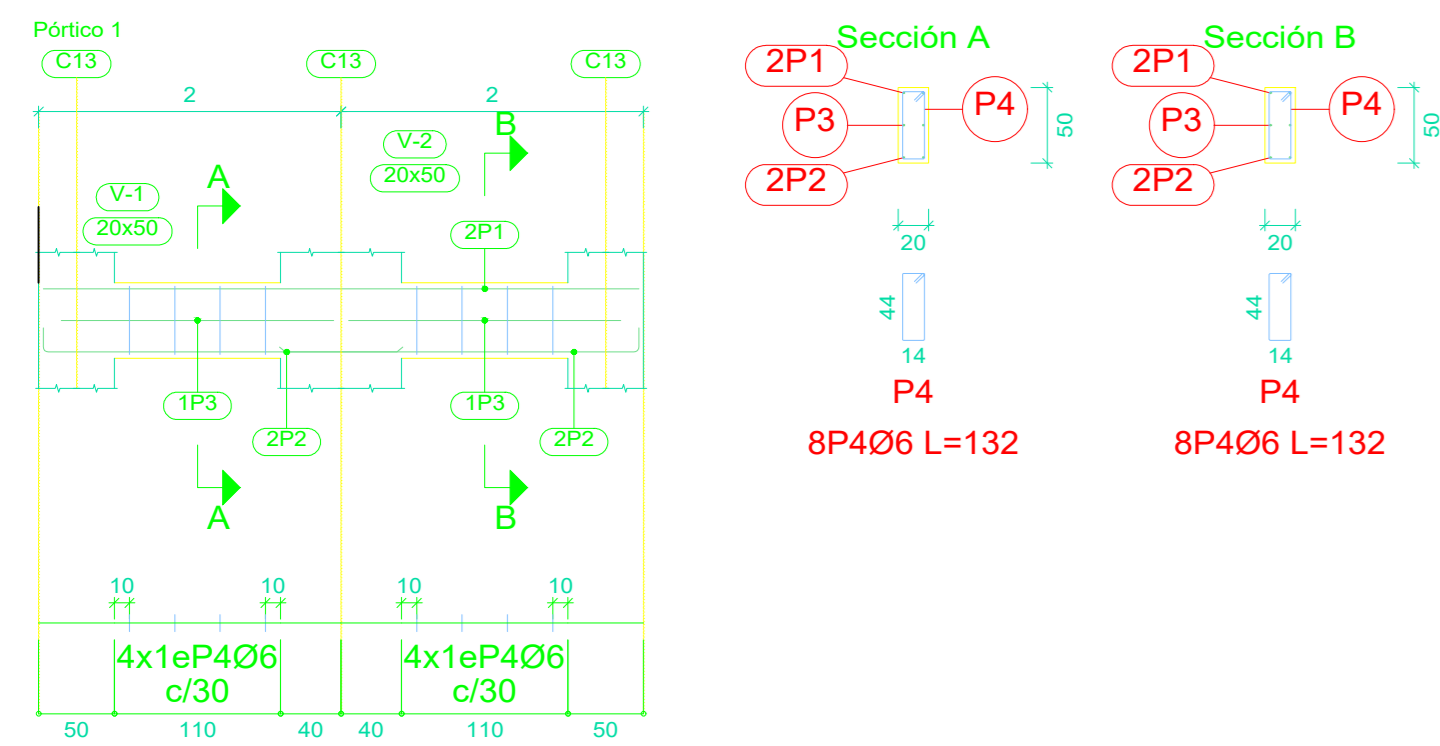
PROYECTO:
HOSPITAL DE SEGUNDO NIVEL YACUIBA

CARACTER:
DESPIECE DE VIGAS MÓDULO 2

FECHA:
Marzo - 2023

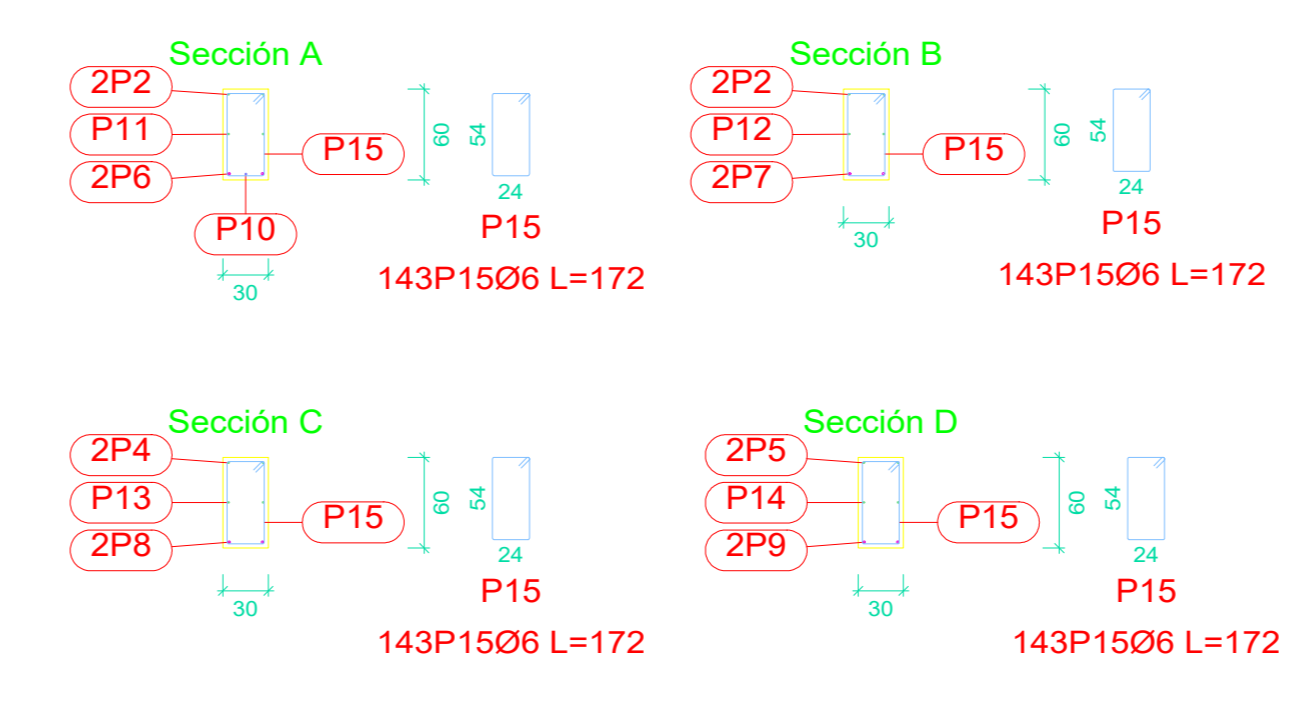
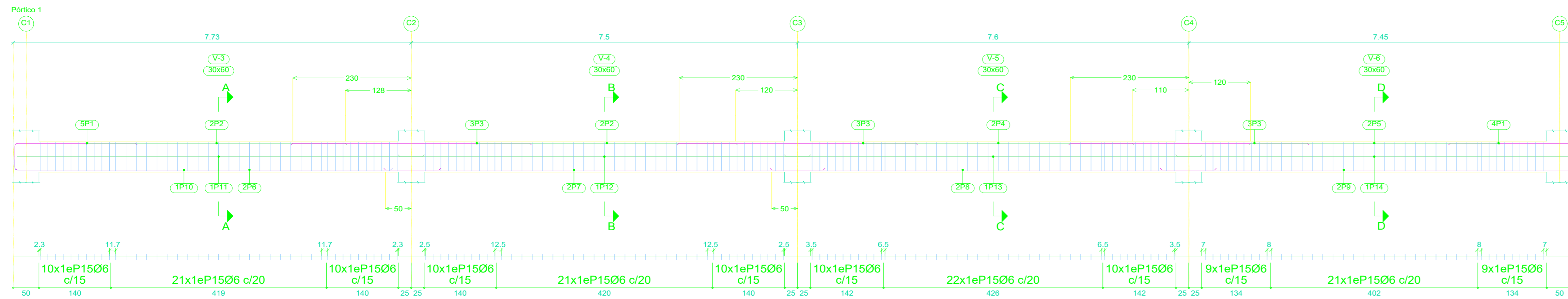
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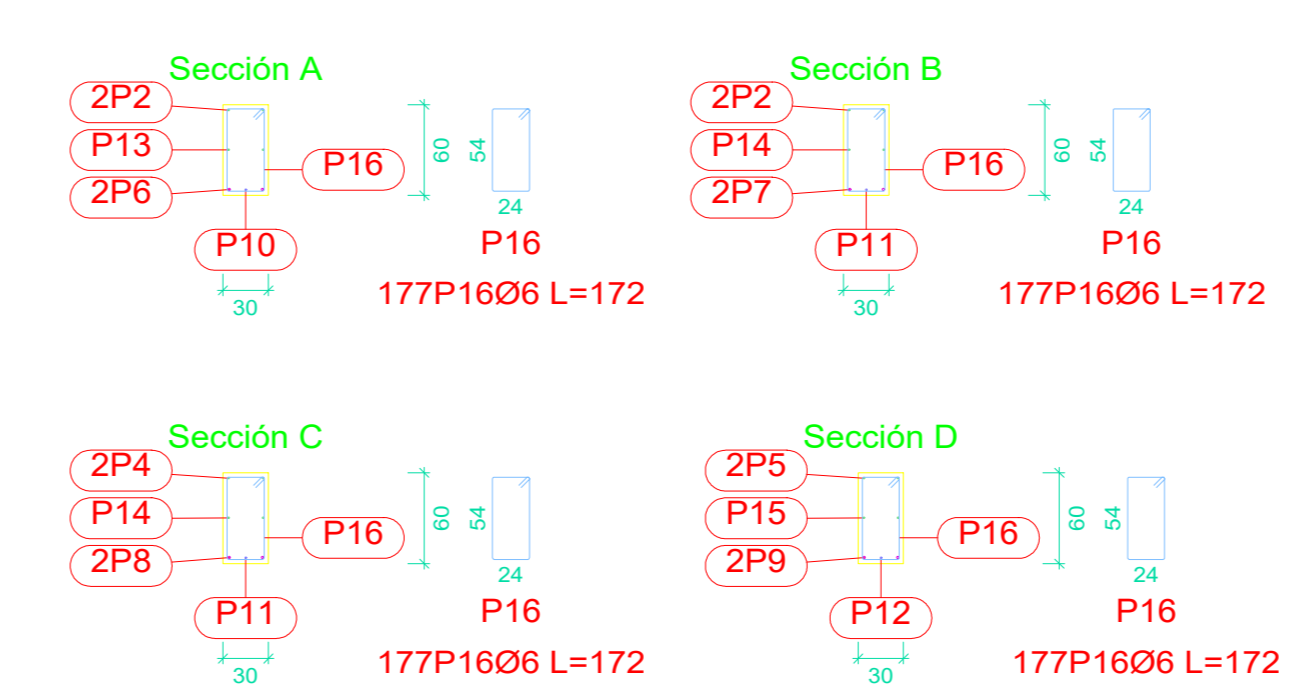
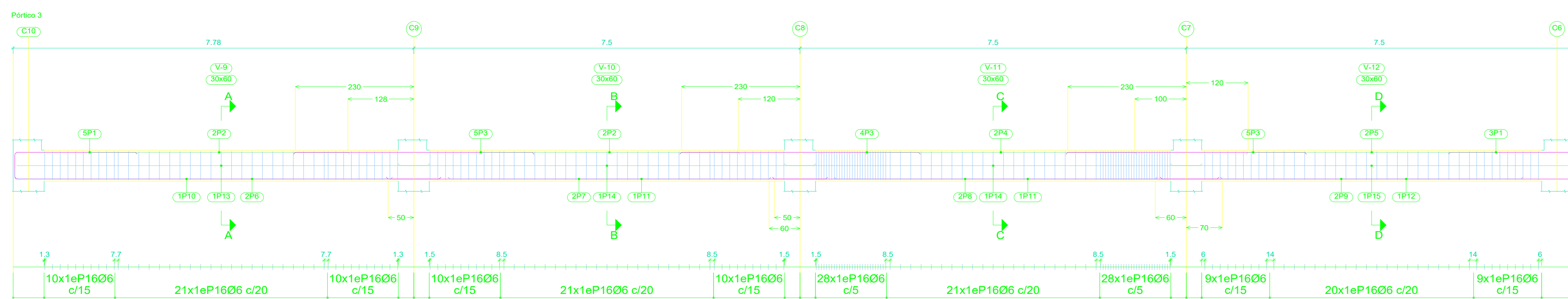
SÓTANO
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Acero en estribos: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1	1	Ø10	2	394	394	788	4.9
	2	Ø10	4	234	250	1000	6.2
	3	Ø10	4	180	180	720	4.4
	4	Ø6	8	14	132	1056	2.3
Total+10%:							19.6

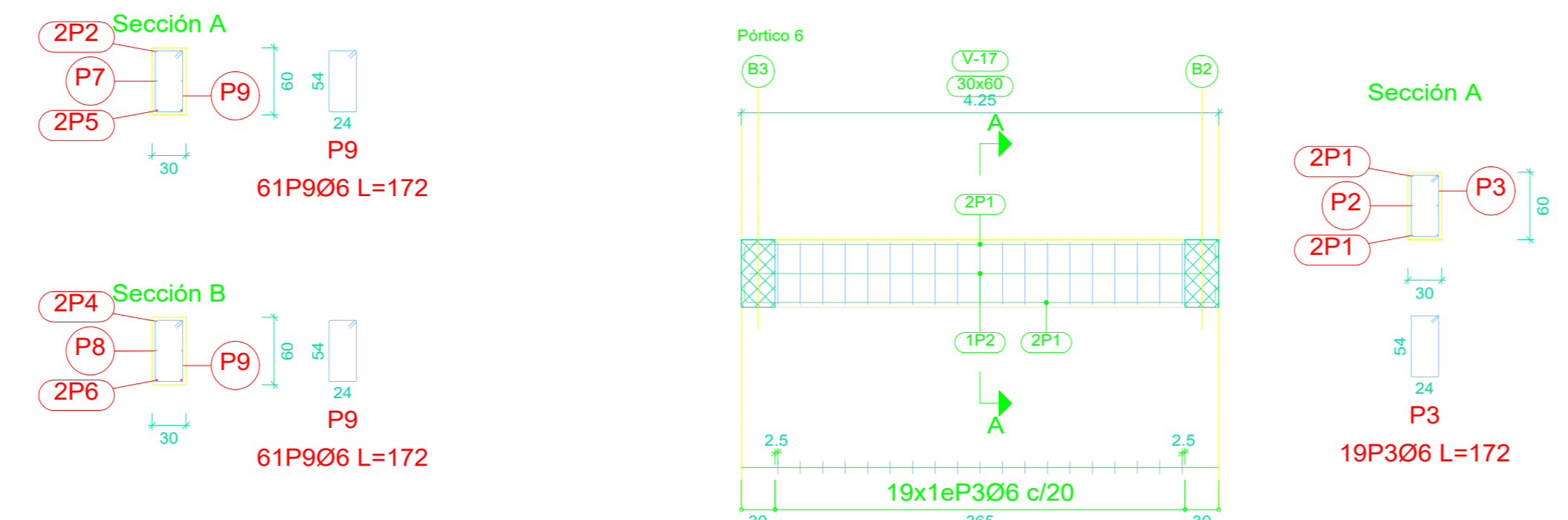
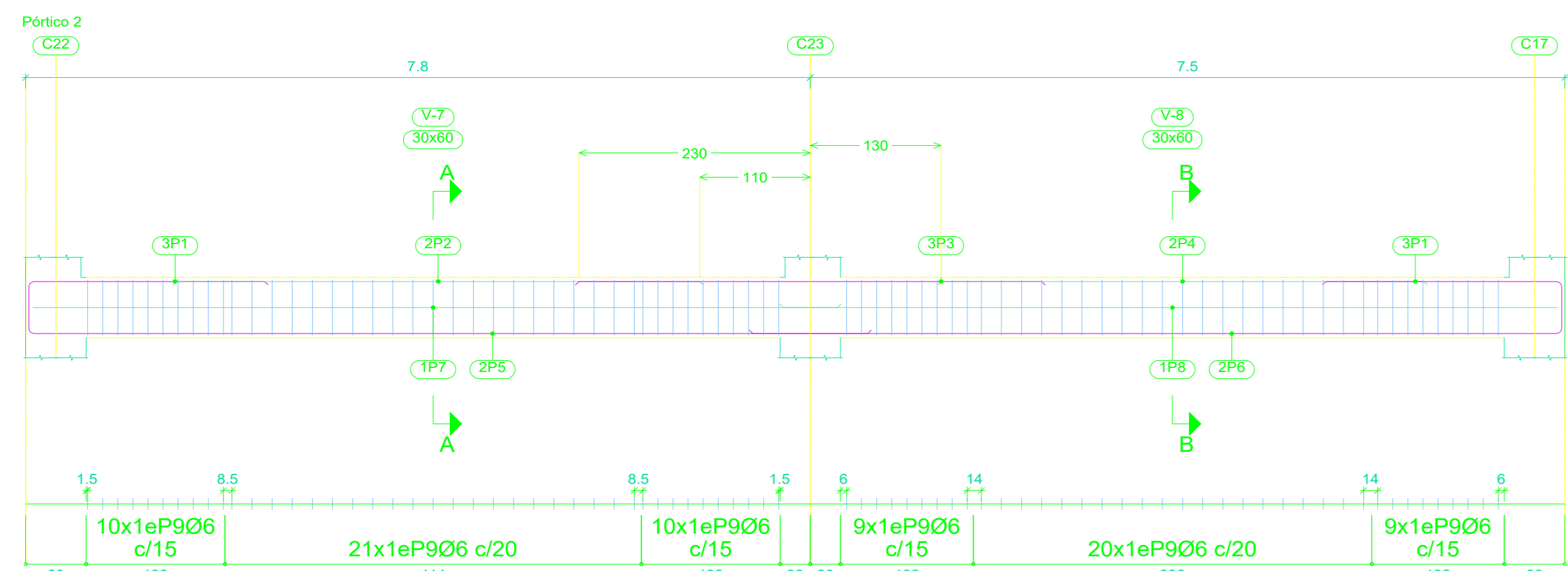


PLANTA BAJA
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Acero en estribos: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

Pórtico 1	1	Ø16	9	234	260	2340	36.9
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	9	460	460	4140	65.3
	4	Ø10	2	520	520	1040	6.4
	5	Ø10	2	480	480	960	5.9
	6	Ø16	2	824	850	1700	26.8
	7	Ø16	2	850	850	1700	26.8
	8	Ø16	2	860	860	1720	27.1
	9	Ø16	2	794	820	1640	25.9
	10	Ø12	1	730	750	750	6.7
	11	Ø10	2	792	808	1616	10.0
	12	Ø10	2	794	794	1588	9.8
	13	Ø10	2	804	804	1608	9.9
	14	Ø10	2	764	780	1560	9.6
	15	Ø6	163	24	172	28036	62.2
Total+10%:							375.8



Pórtico 2	1	Ø16	6	234	260	1560	24.6
	2	Ø10	2	520	520	1040	6.4
	3	Ø16	3	460	460	1380	21.8
	4	Ø10	2	480	480	960	5.9
	5	Ø16	2	834	860	1720	27.1
	6	Ø16	2	804	830	1660	26.2
	7	Ø10	2	804	820	1640	10.1
	8	Ø10	2	774	790	1580	9.7
	9	Ø6	79	24	172	13588	30.2
Total+10%:							178.2

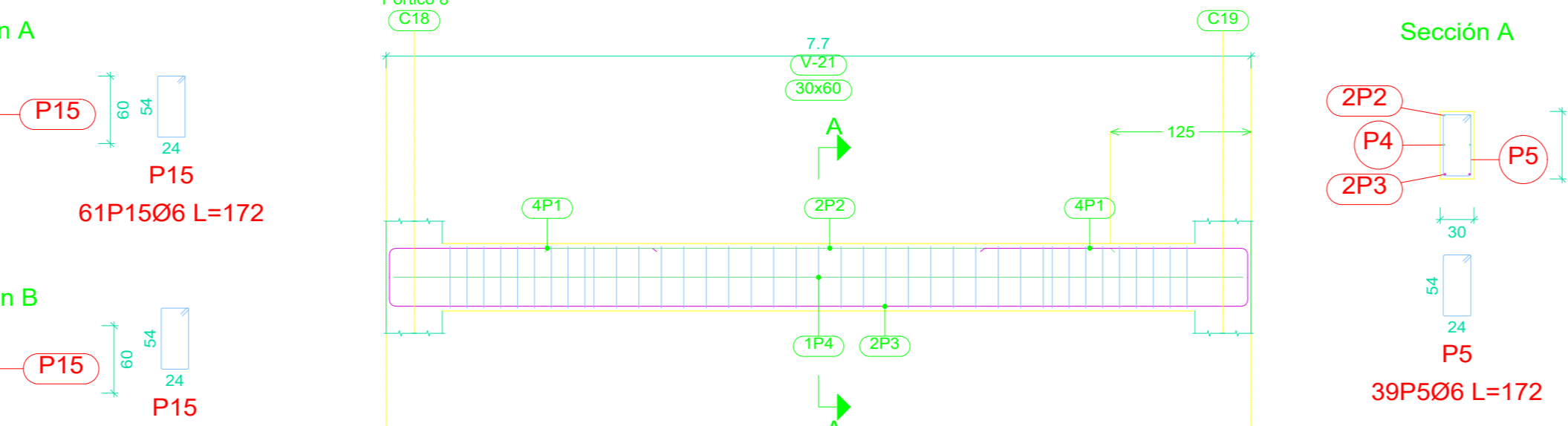
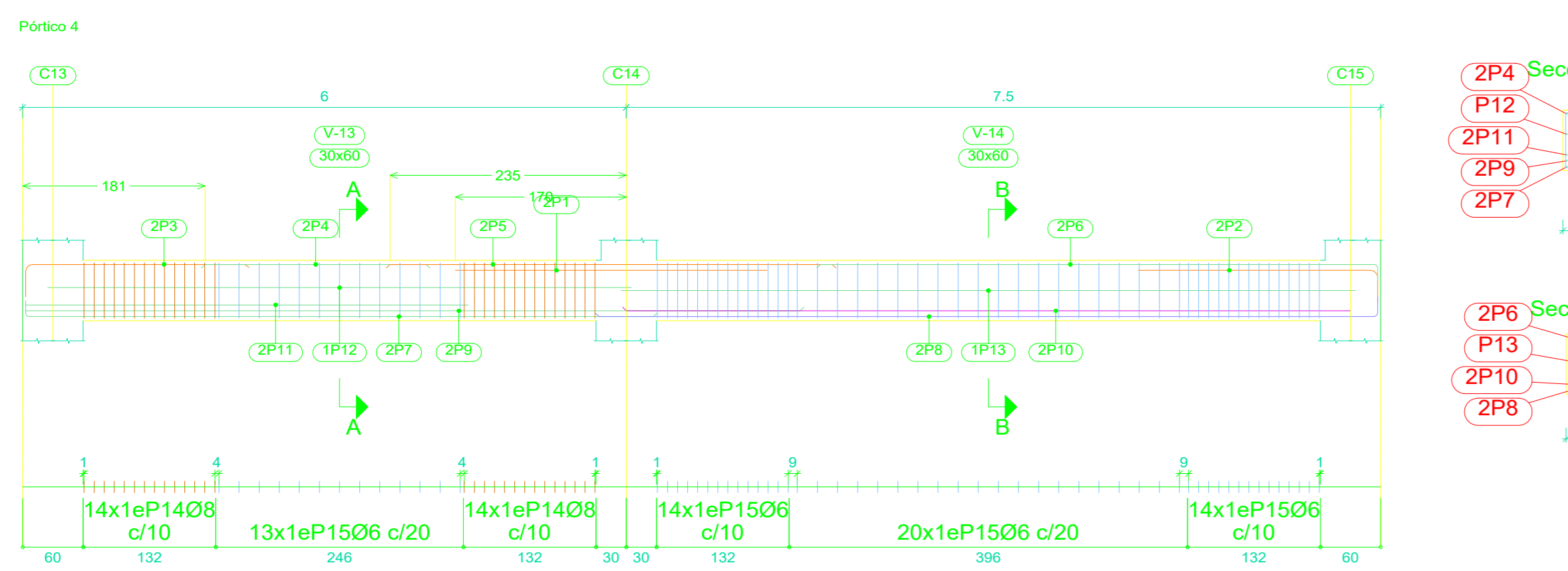


Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 8	1	Ø16	8	234	260	2080	32.8
	2	Ø10	2	500	500	1000	6.2
	3	Ø16	2	764	816	1632	25.8
	4	Ø10	2	764	796	1592	9.8
	5	Ø6	39	24	172	6708	14.9
Total+10%:							98.5

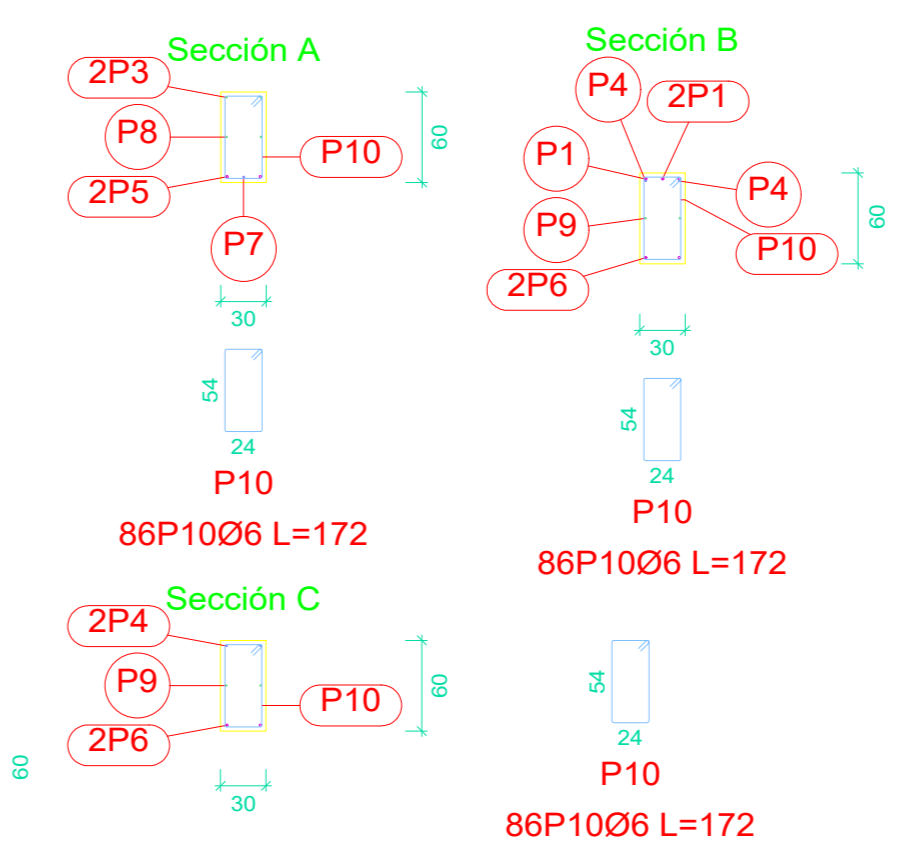
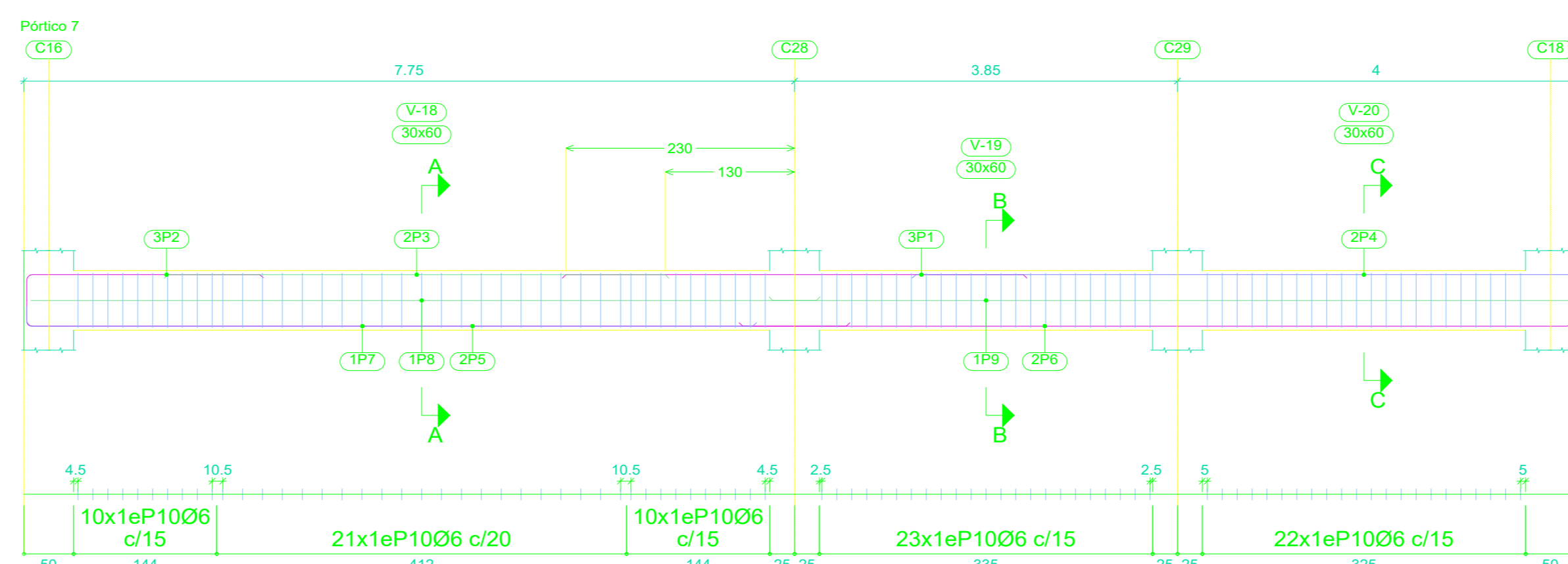
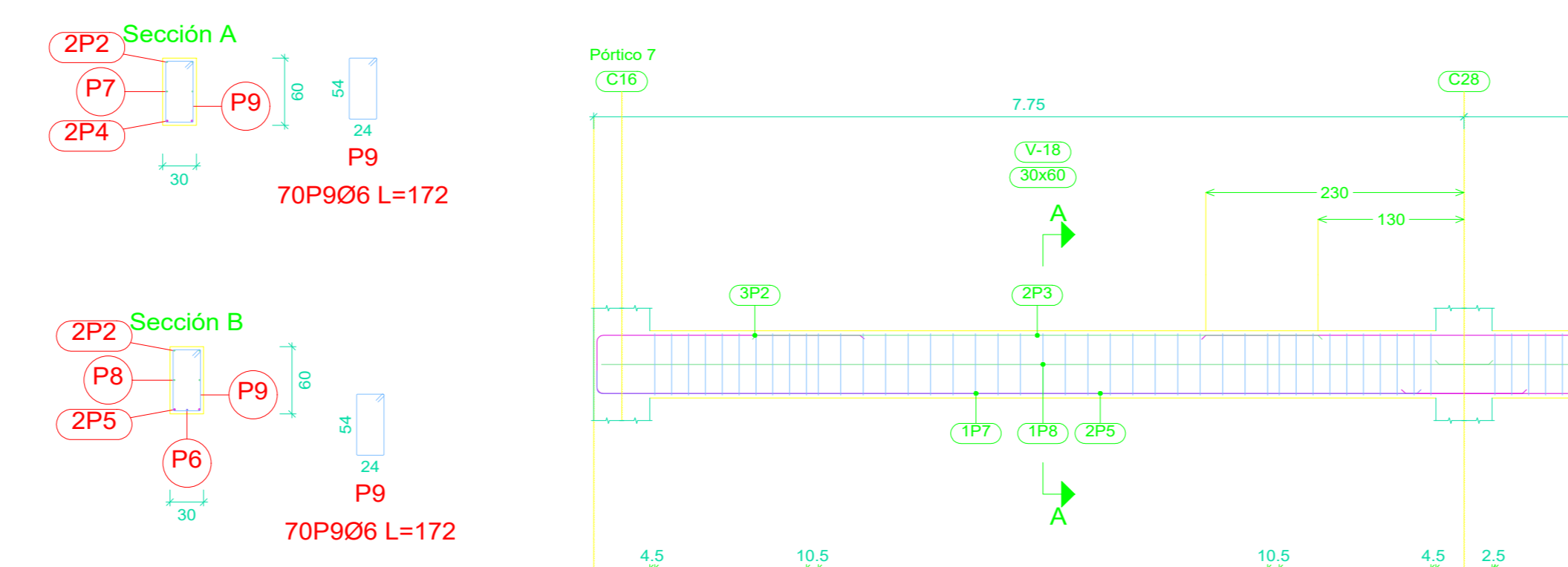
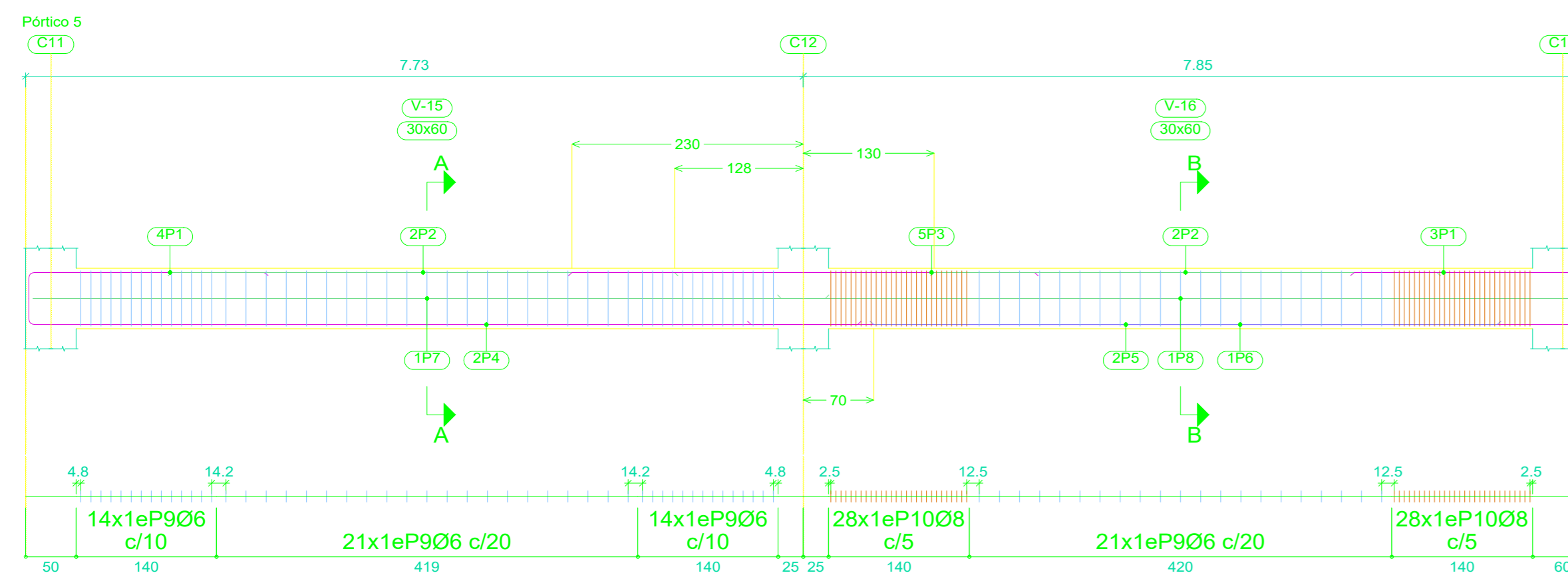
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	2	Ø10	2	419	455	910	5.6
	3	Ø6	19	24	172	3268	7.3
Total+10%:							26.4

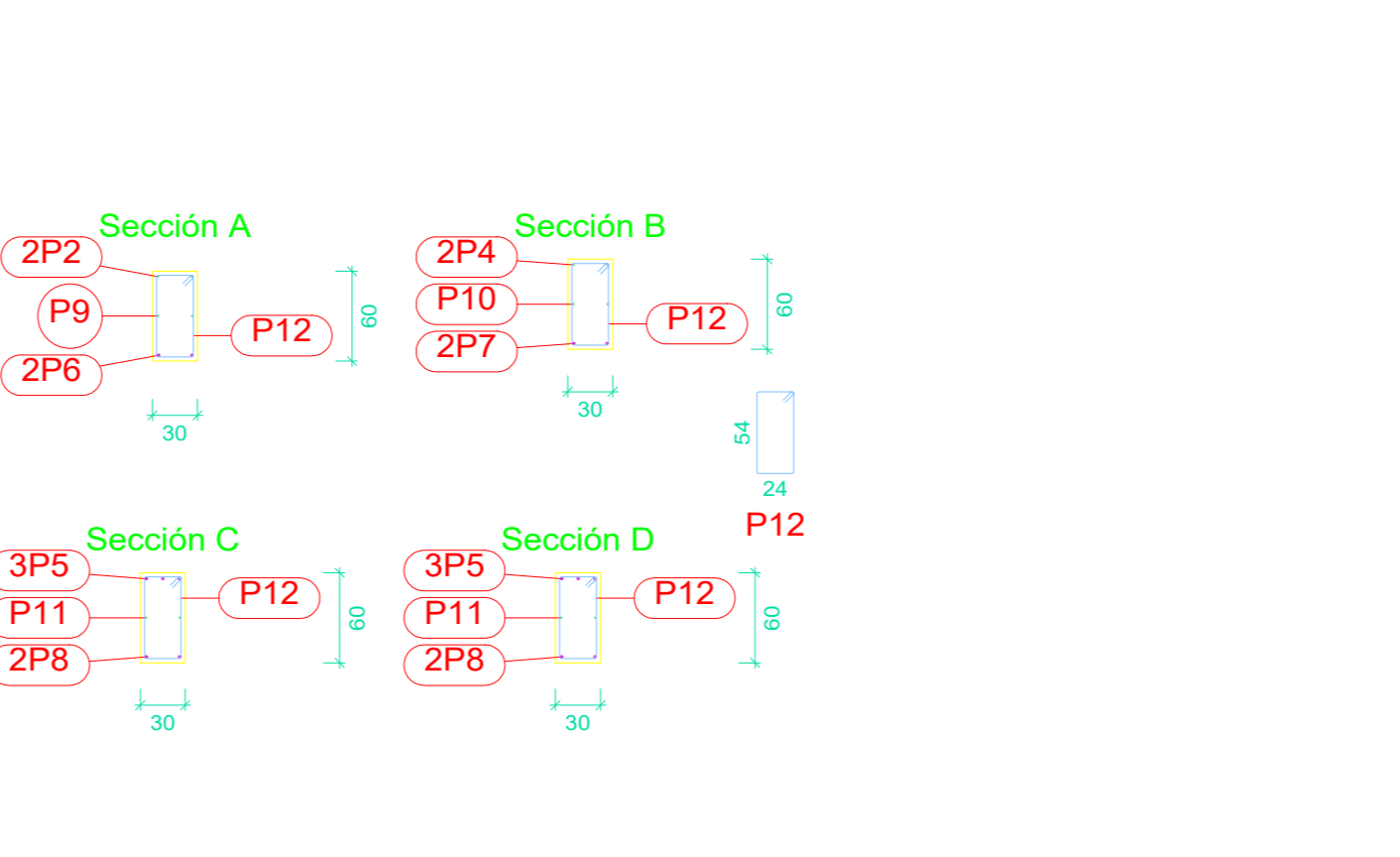
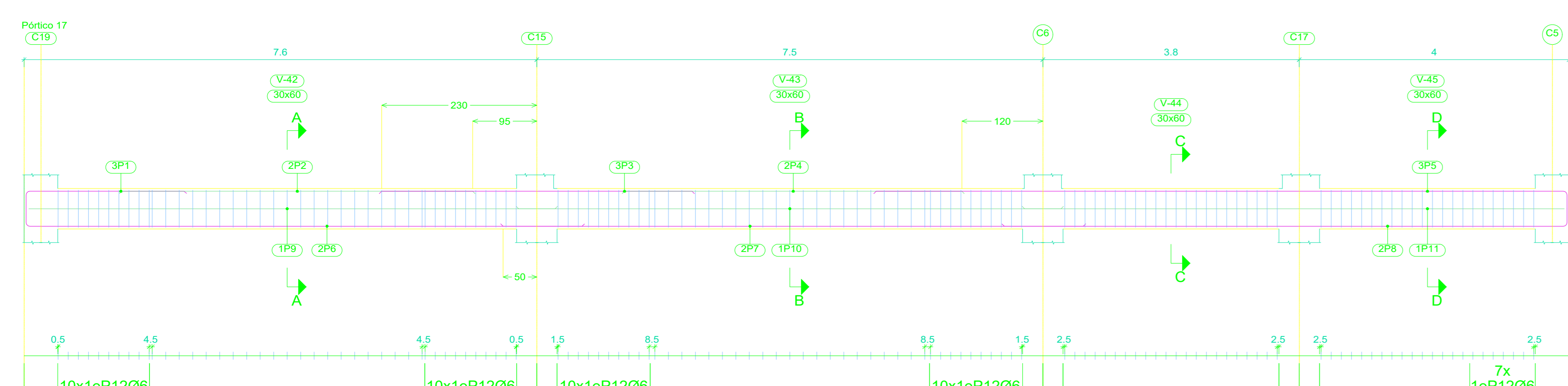
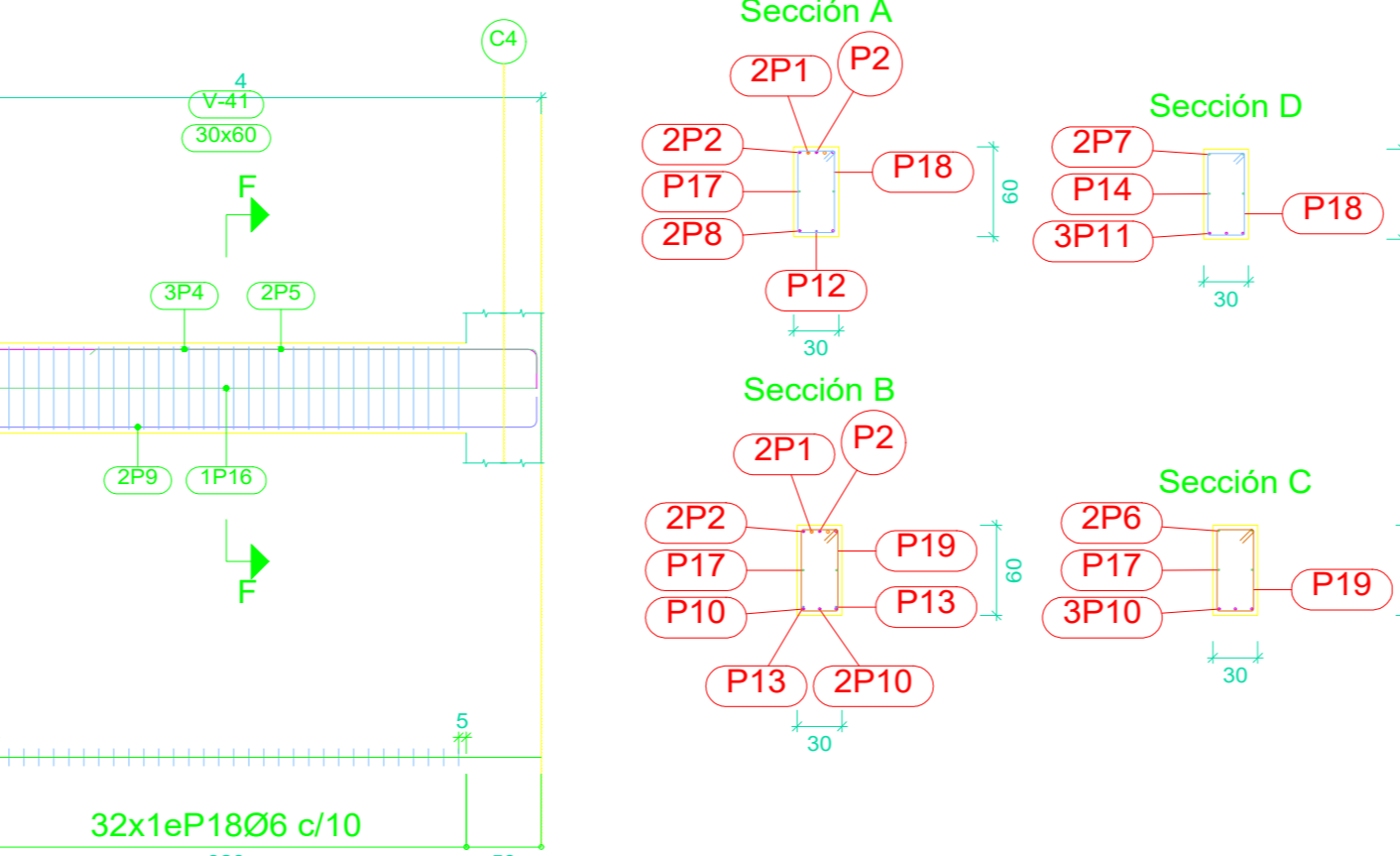
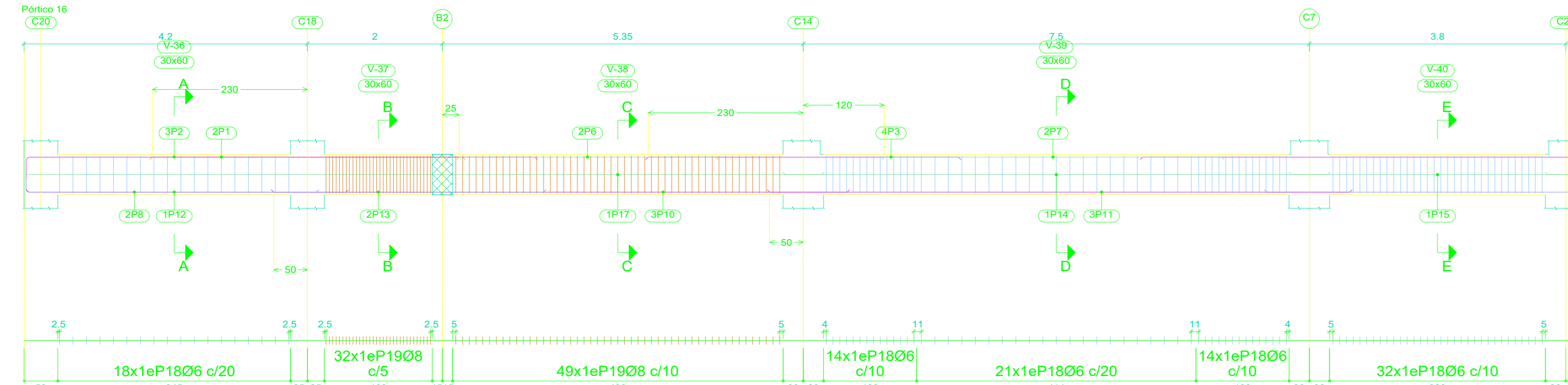
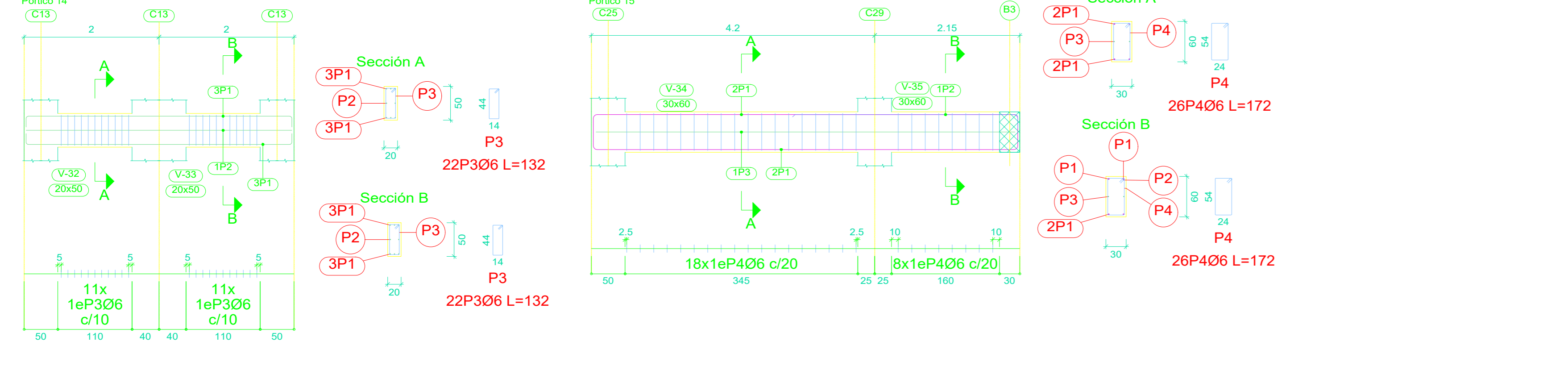
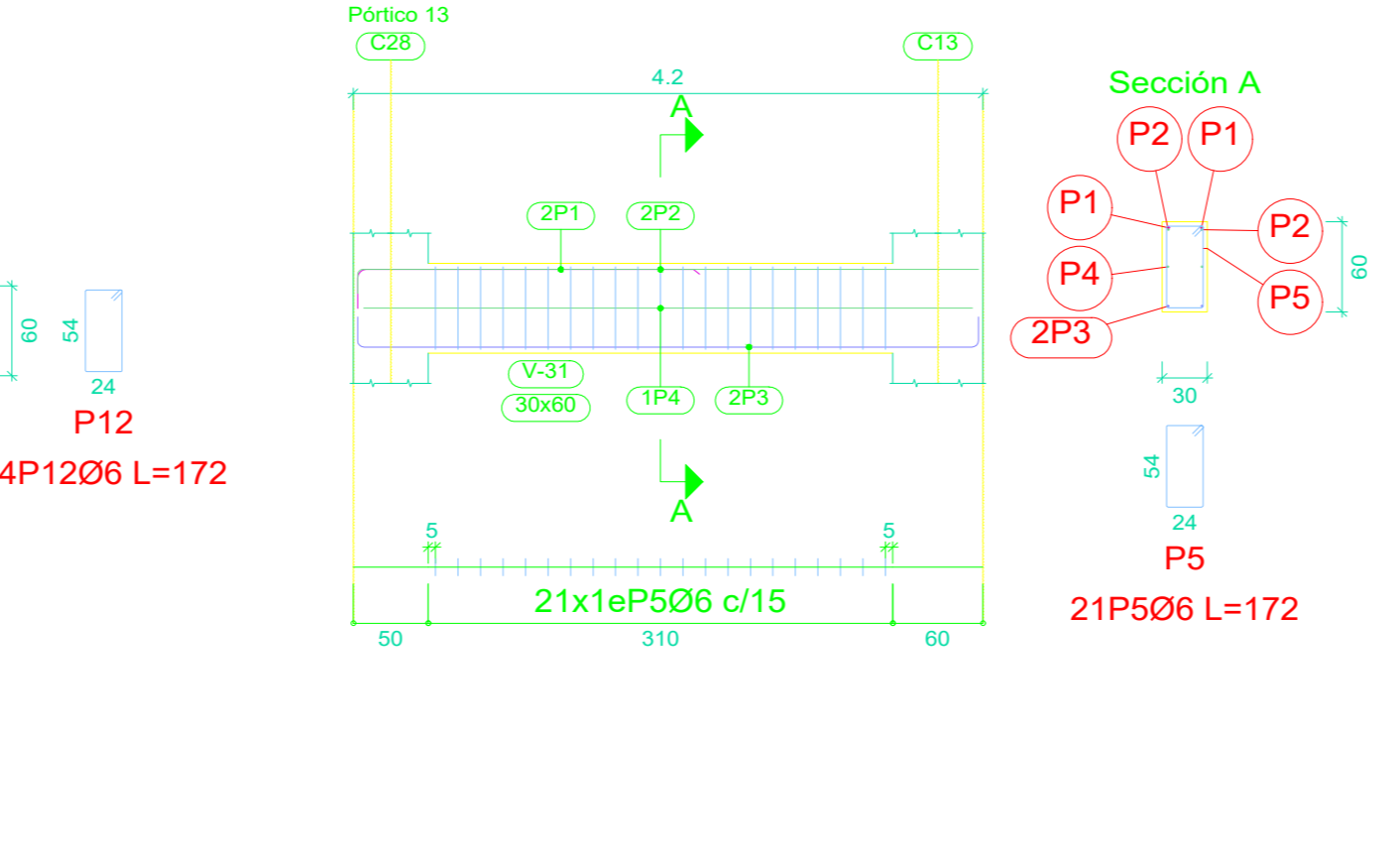
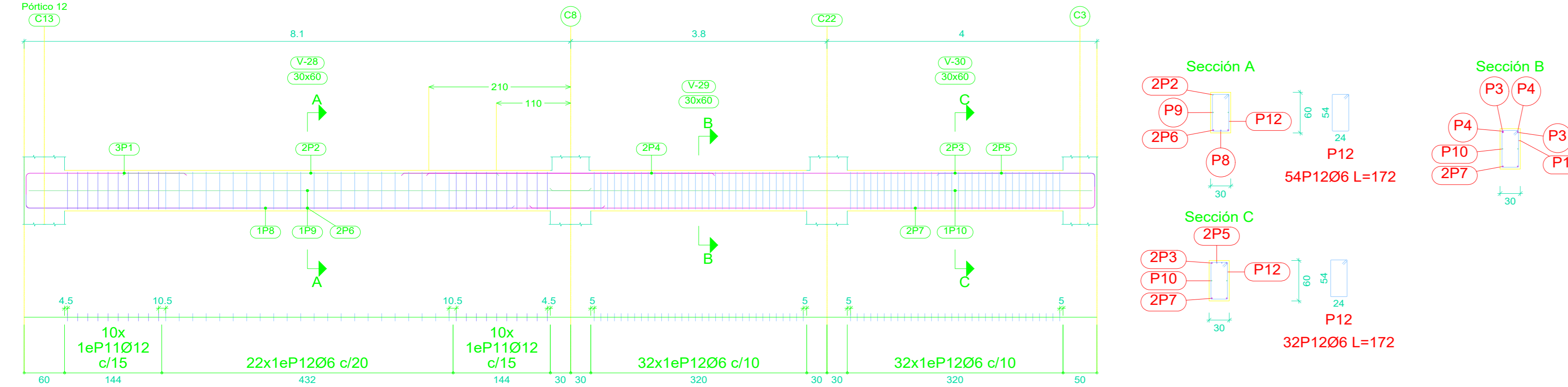
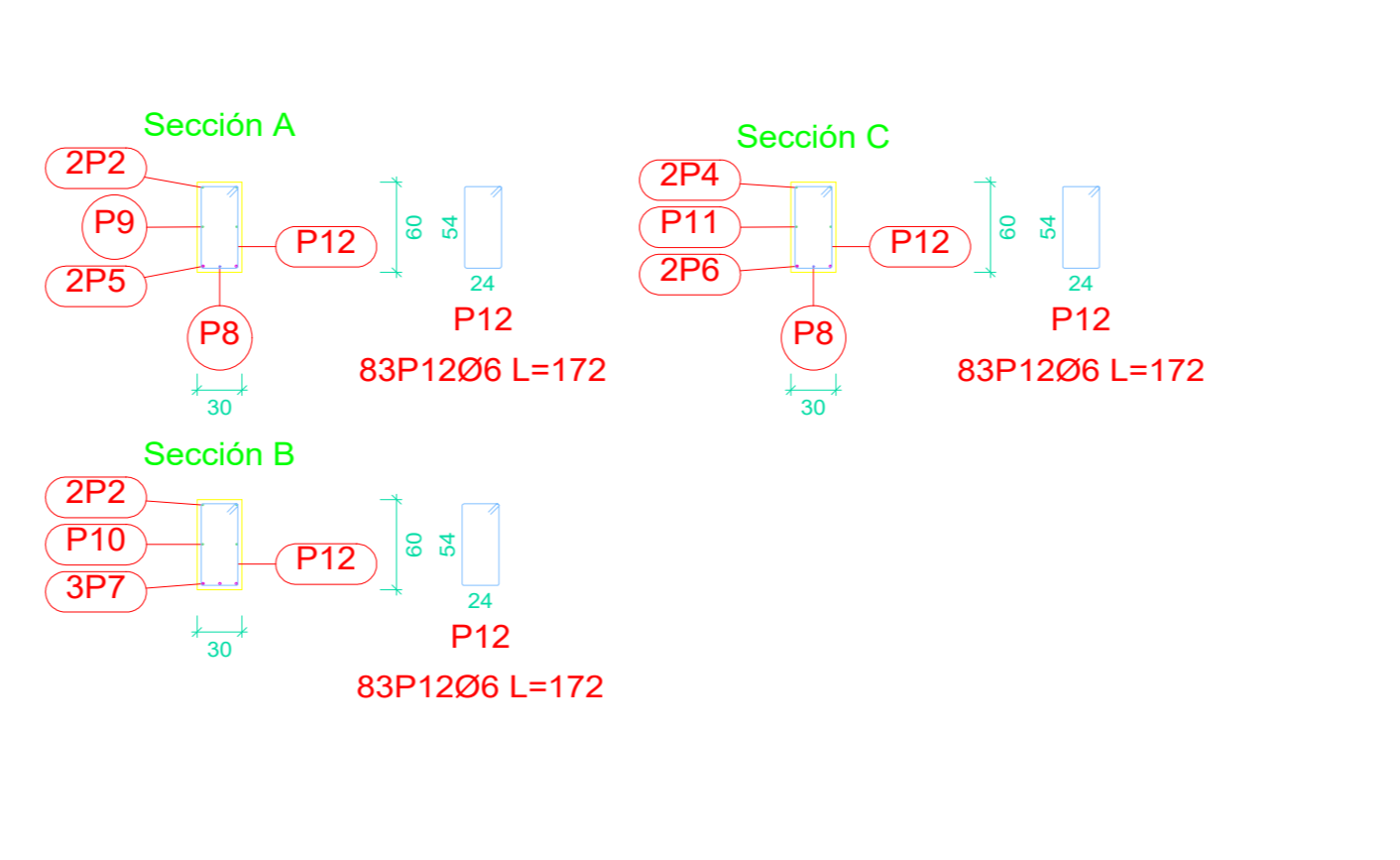
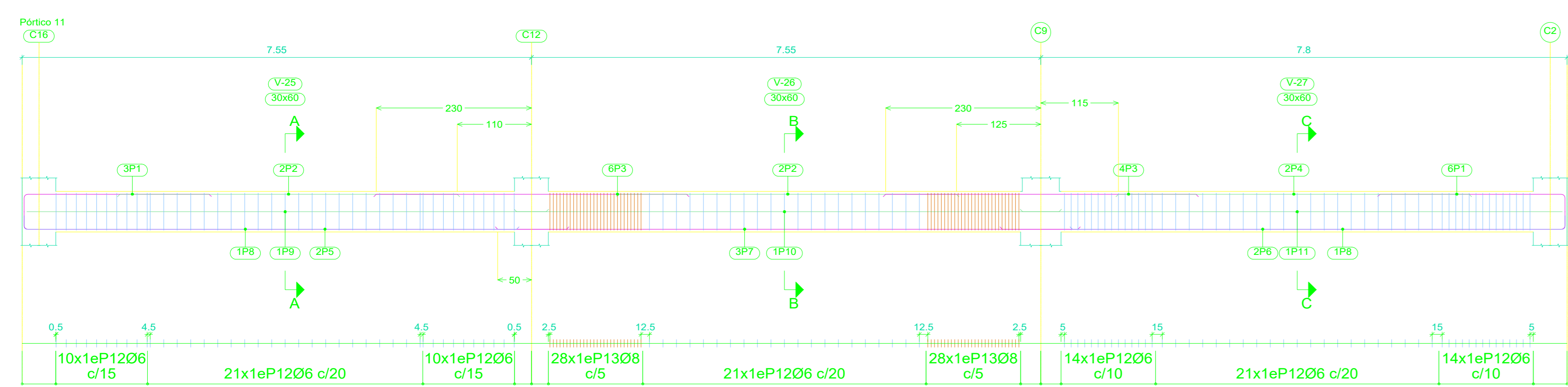
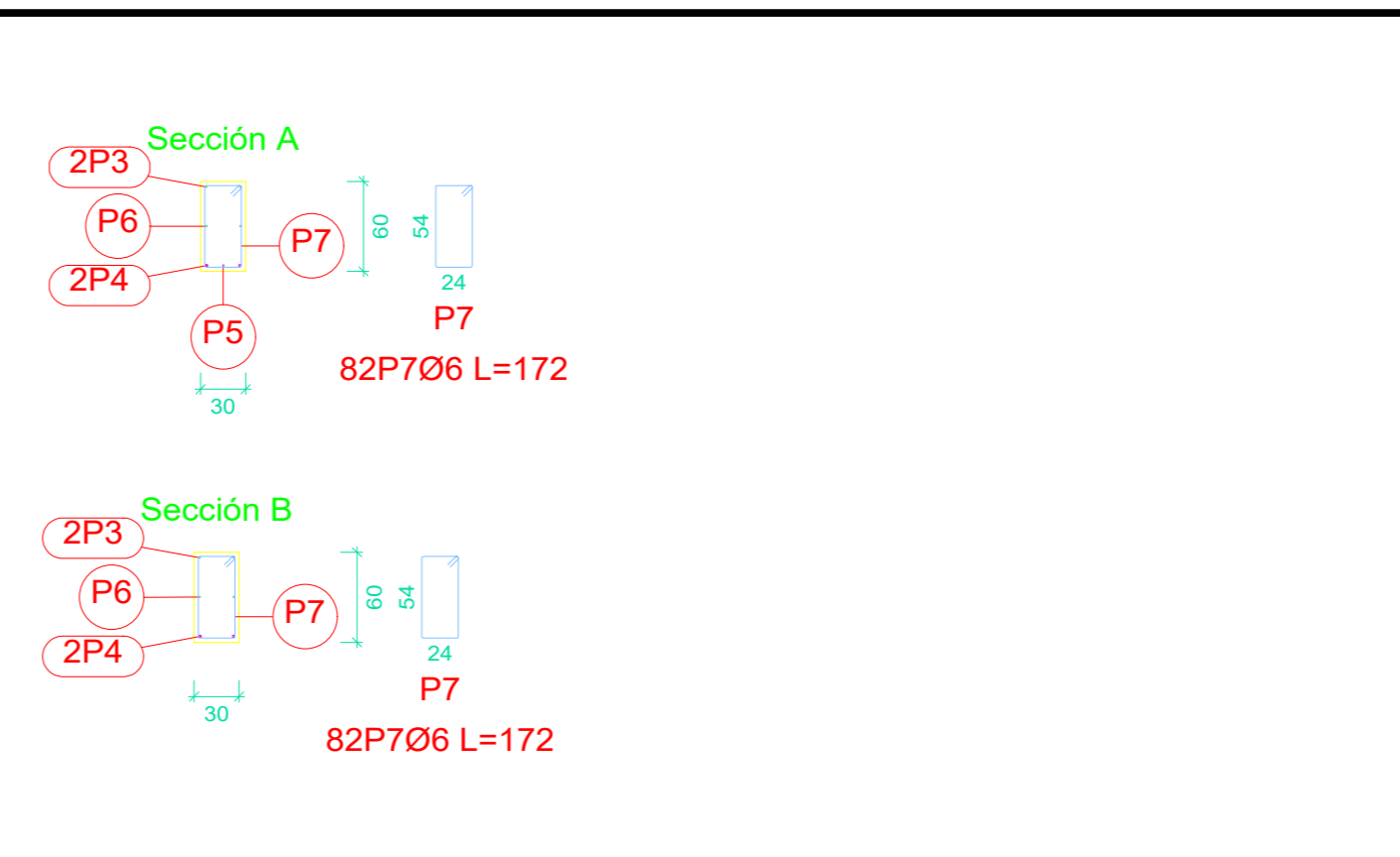
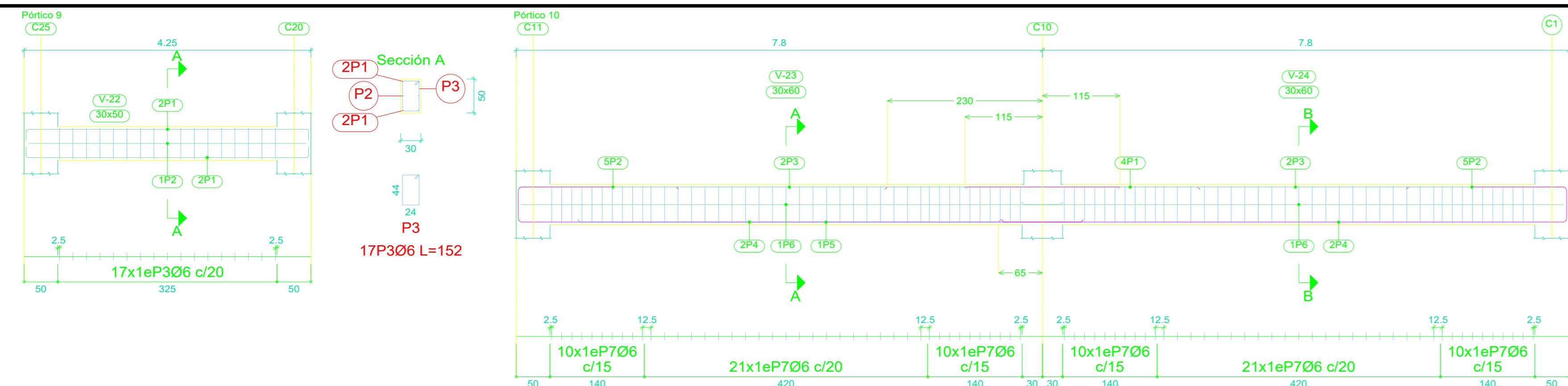
Pórtico 7	1	Ø16	3	460	460	1380	21.8
	2	Ø16	3	234	260	780	12.3
	3	Ø10	2	500	500	1000	6.2
	4	Ø12	2	660	680	1360	12.1
	5	Ø16	2	824	850	1700	26.8
	6	Ø16	2	834	860	1720	27.1
	7	Ø12	1	730	750	750	6.7
	8	Ø10	2	794	810	1620	10.0
	9	Ø10	2	804	820	1640	10.1
	10	Ø6	86	24	172	14792	32.8
Total+10%:							182.5

Pórtico 3	1	Ø16	8	234	260	2080	32.8
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	14	460	460	6440	101.6
	4	Ø10	2	520	520	1040	6.4
	5	Ø10	2	480	480	960	5.9
	6	Ø16	2	824	850	1700	26.8
	7	Ø16	2	850	850	1700	26.8
	8	Ø16	2	860	860	1720	27.1
	9	Ø16	2	794	820	1640	25.9
	10	Ø12	1	730	750	750	6.7
	11	Ø12	1	620	620	1240	11.0
	12	Ø12	1	580	580	580	5.1
	13	Ø10	2	802	818	1636	10.1
	14	Ø10	4	804	804	3216	19.8
	15	Ø10	2	774	790	1580	9.7
	16	Ø6	197	24	172	33884	75.2
Total+10%:							443.5



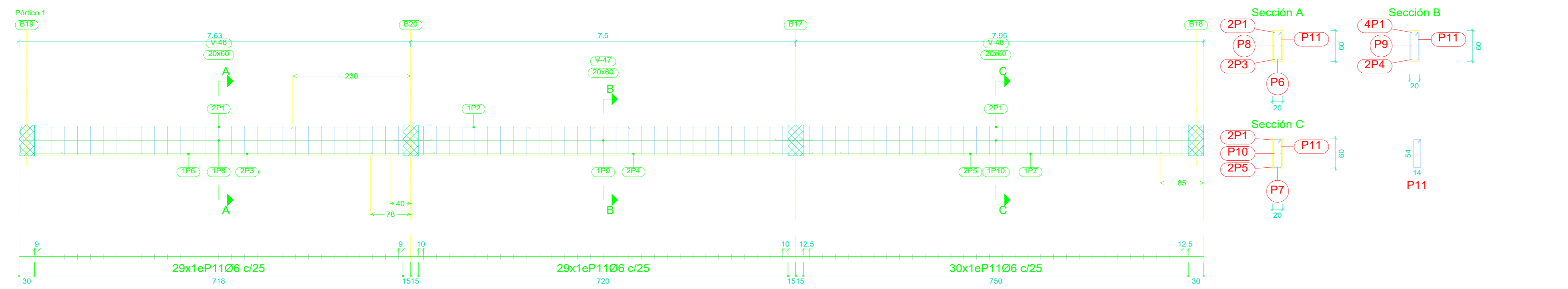
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	2	Ø20	2	238	270	540	13.3
	3	Ø20	2	218	250	500	12.3
	4	Ø10	2	220	220	440	2.7
	5	Ø20	2	440	440	880	21.7
	6	Ø10	2	554	570	1140	7.0
	7	Ø10	2	624	640	1280	7.9
	8	Ø12	2	774	794	1588	14.1
	9	Ø10	2	770	770	1540	9.5
	10	Ø16	2	720	720	1440	22.7
11	Ø10	2	440	440	880	5.4	
12	Ø10	2	580	580	1160	7.2	
13	Ø10	2	730	730	1460	9.0	
14	Ø8	28	24	176	4928	19.4	
15	Ø6	61	24	172	10492	23.3	
Total+10%:							209.9



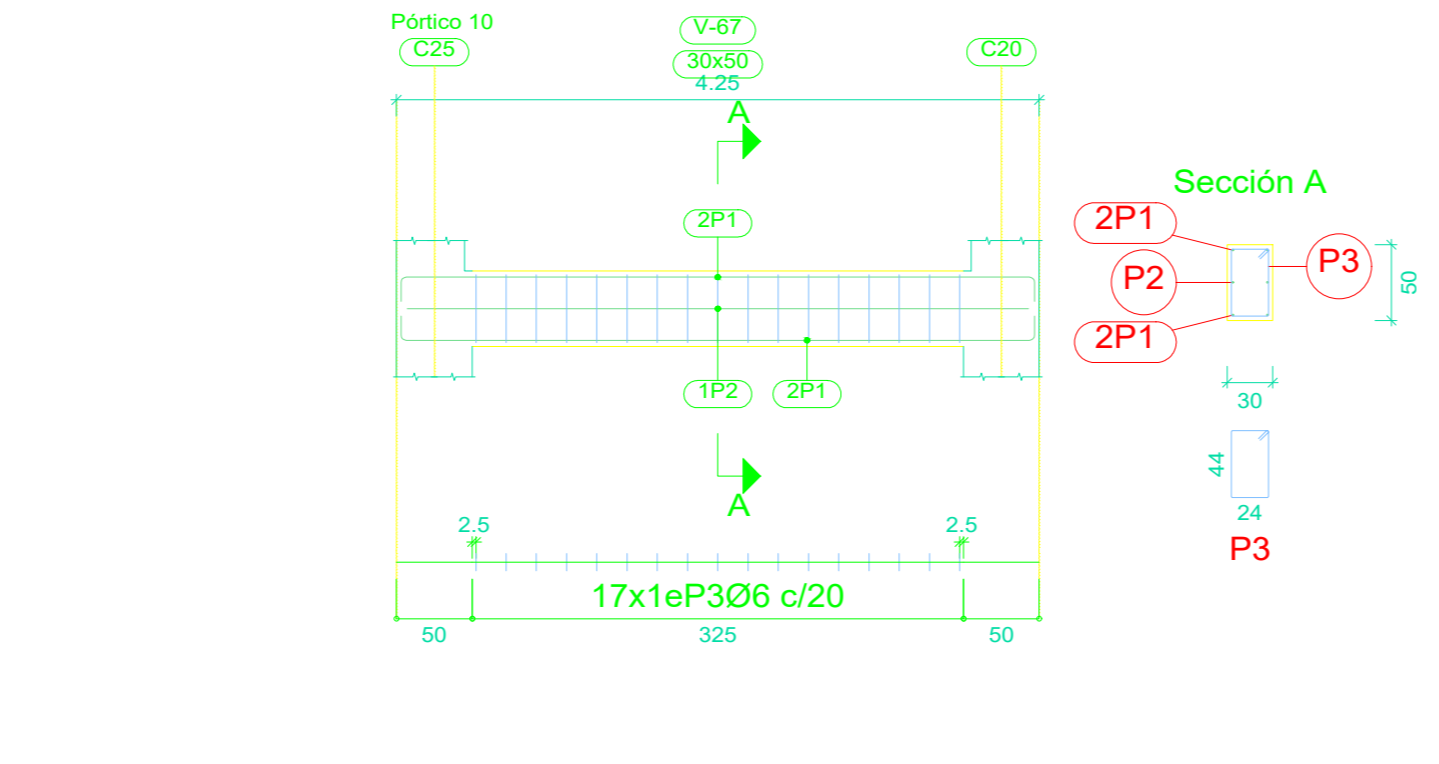
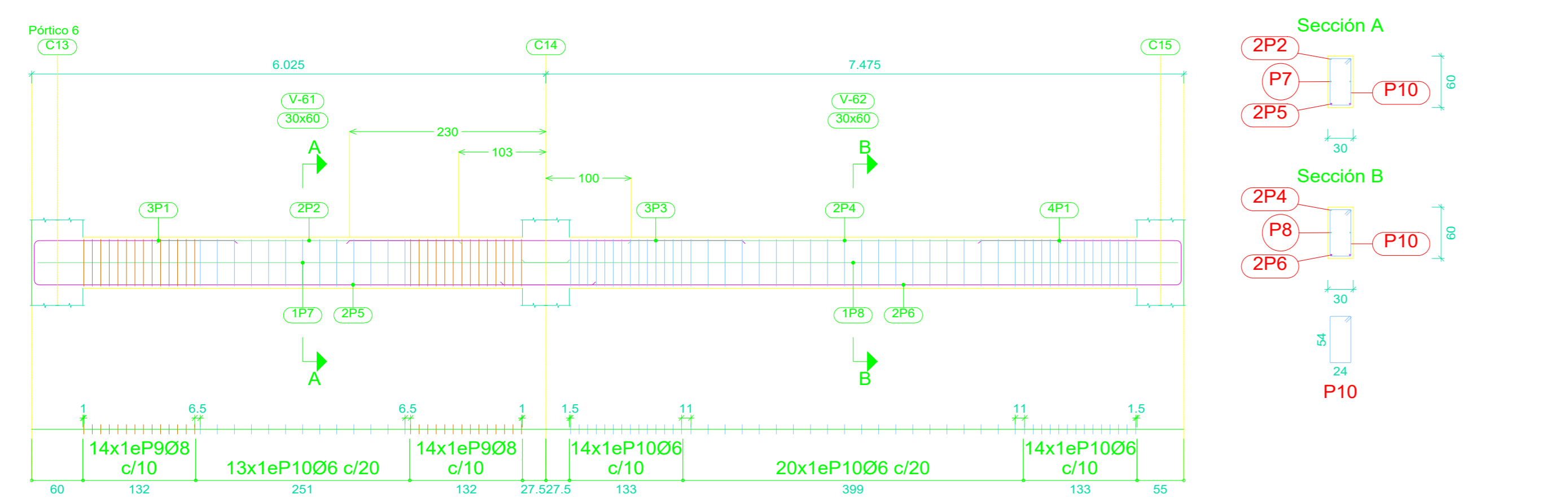
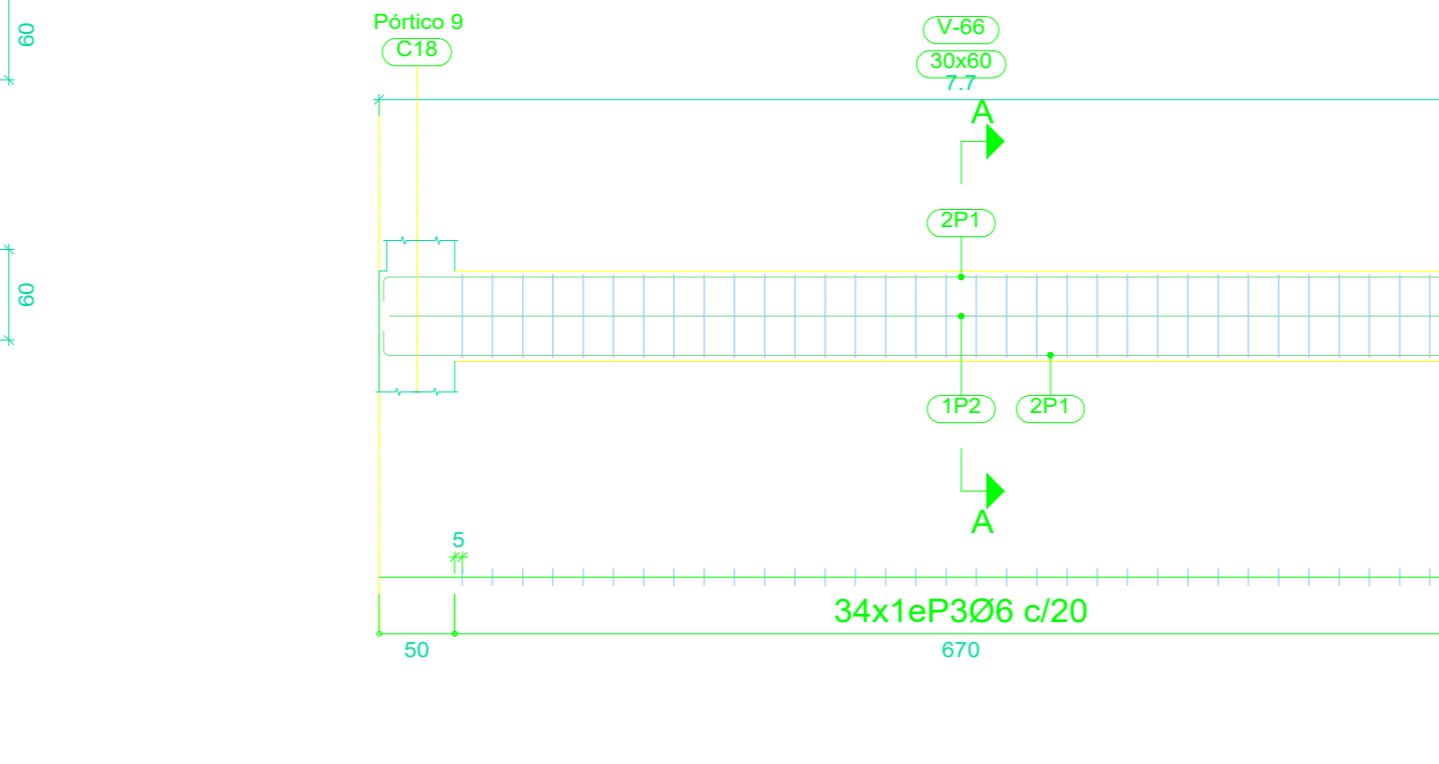
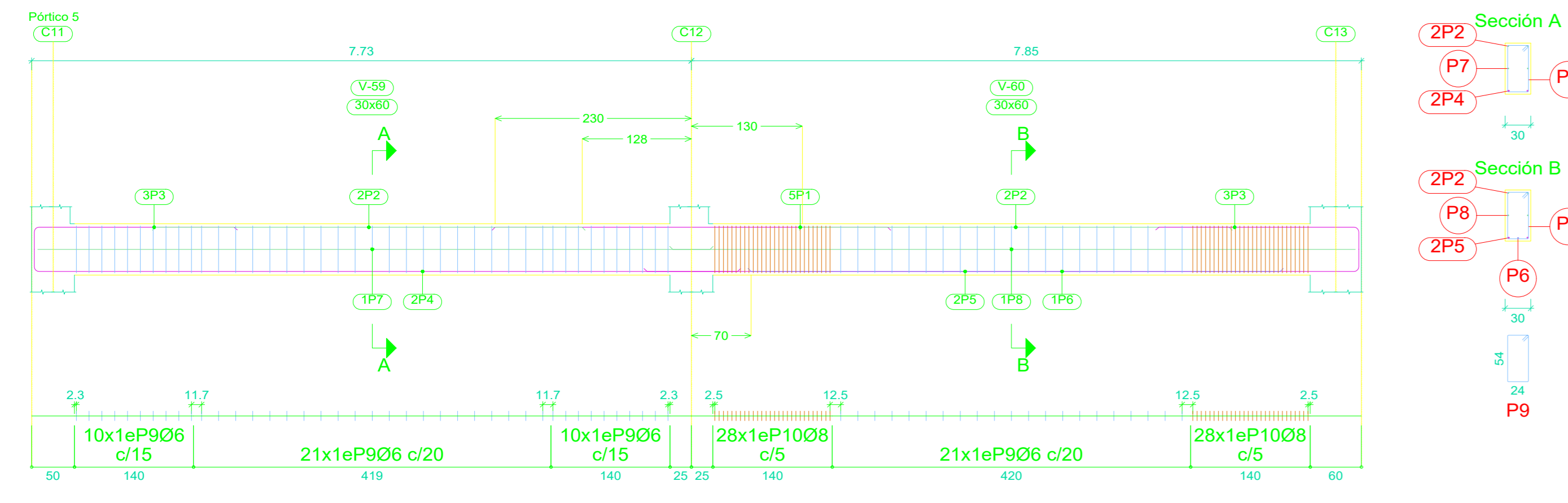
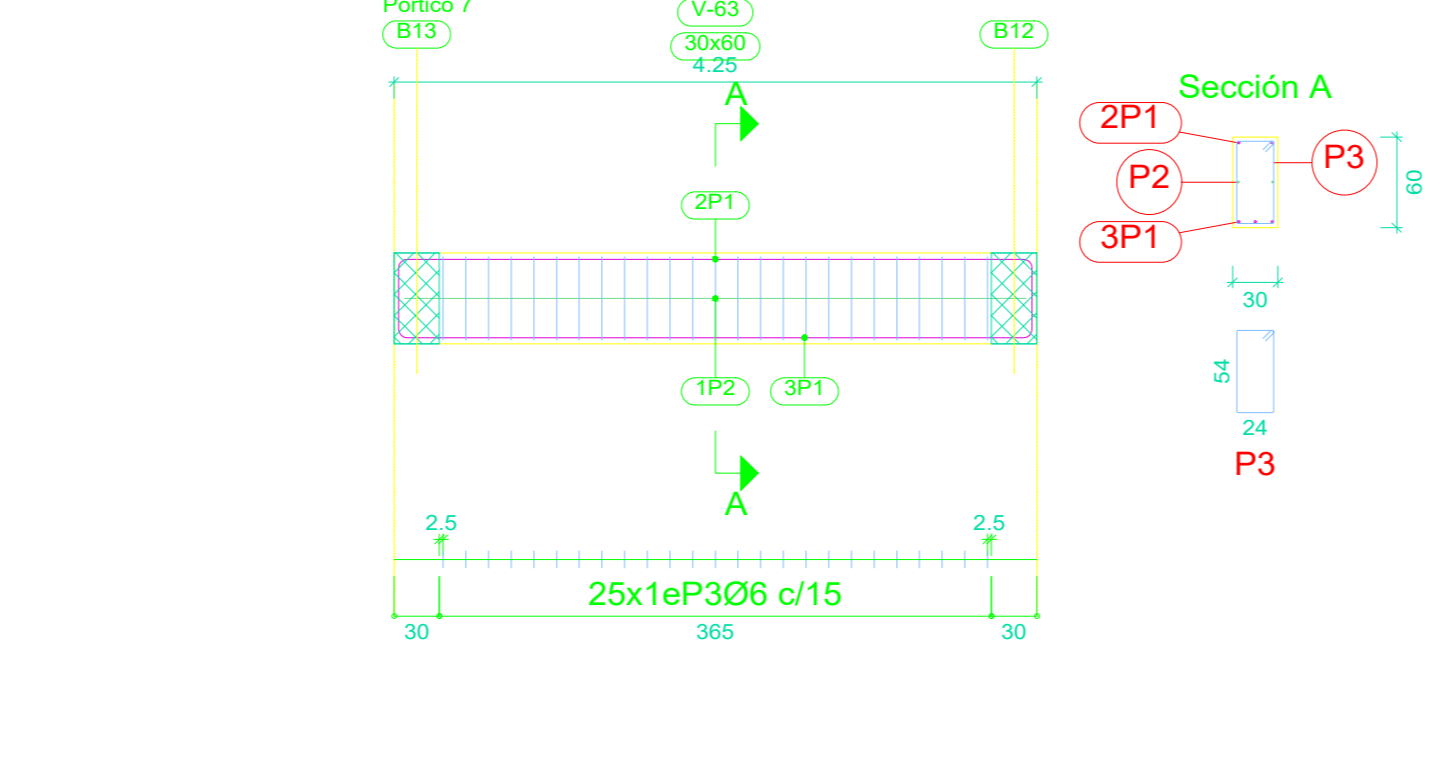
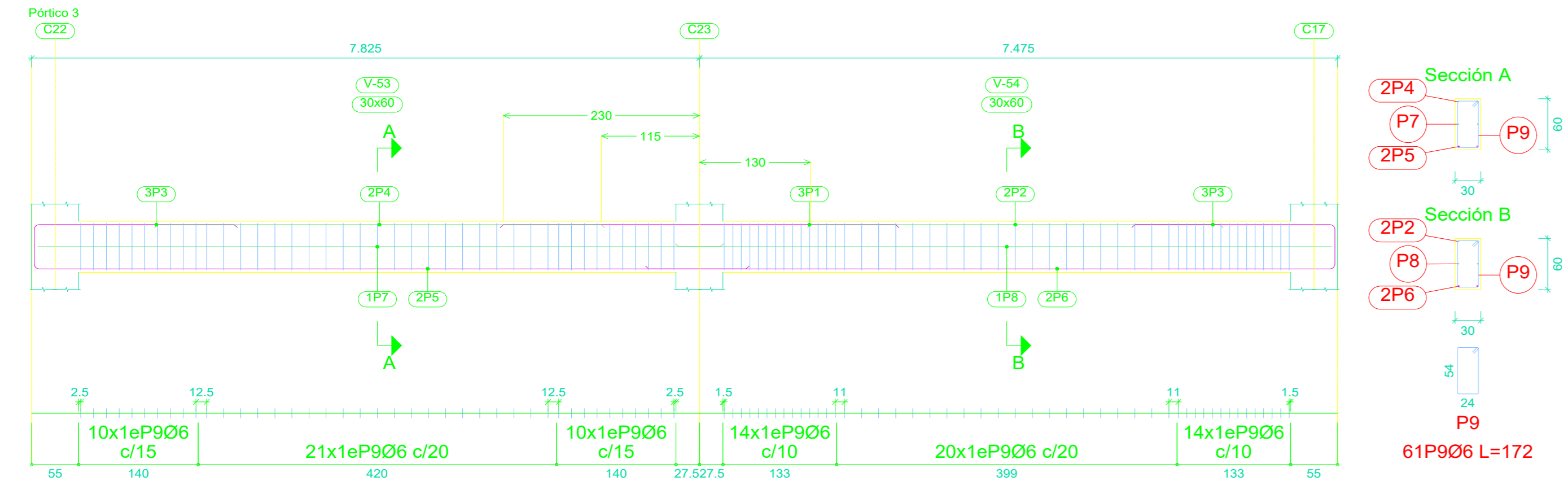
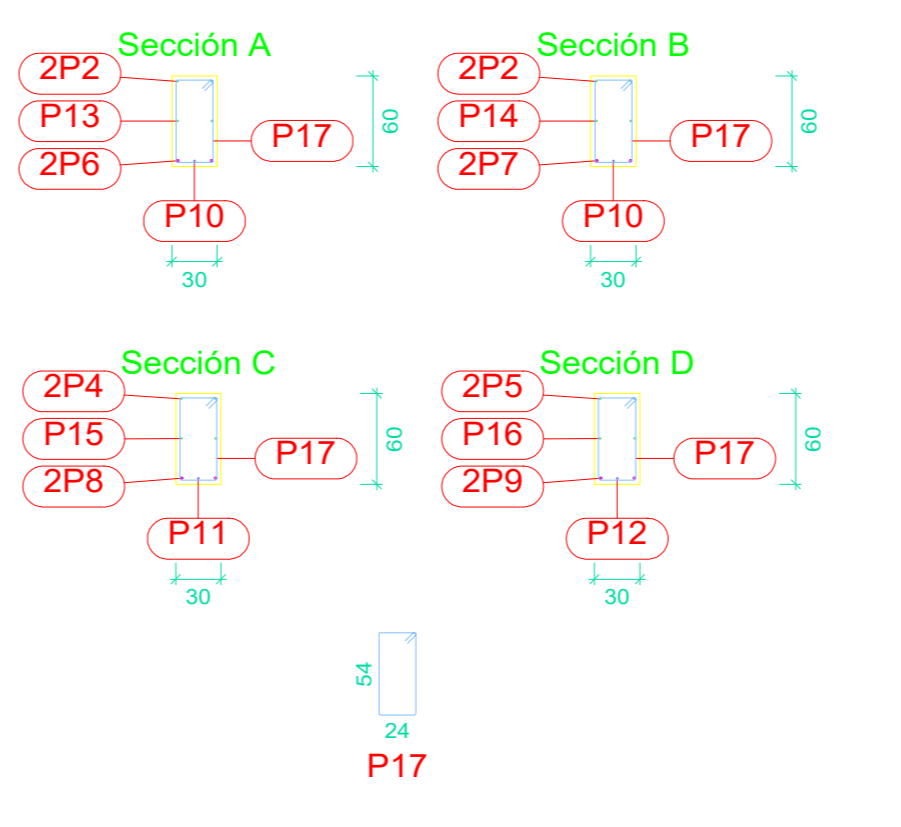
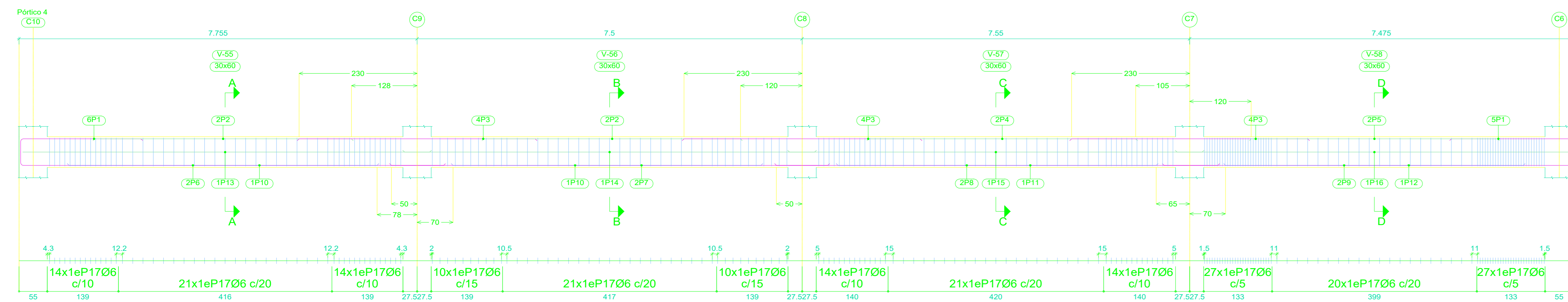
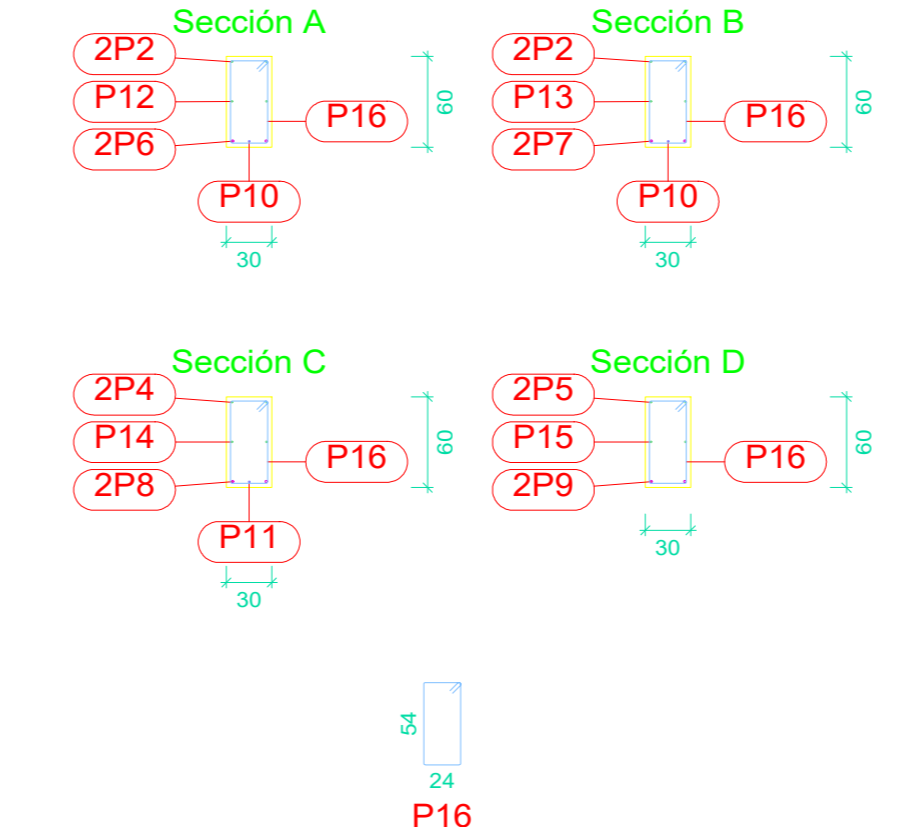
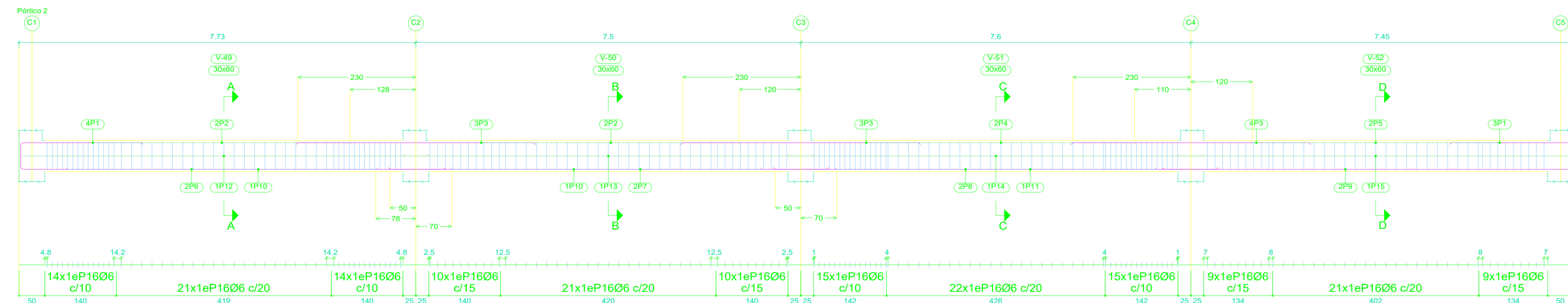


Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 11	1	Ø16	9	274	300	2700	42.6
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	10	460	460	4600	72.6
	4	Ø10	2	520	520	1040	6.4
	5	Ø16	2	804	830	1660	26.2
	6	Ø16	2	834	860	1720	27.1
	7	Ø16	3	860	860	2580	40.7
	8	Ø12	2	730	750	1500	13.3
	9	Ø10	2	774	790	1580	9.7
	10	Ø10	2	804	804	1608	9.9
	11	Ø10	2	804	820	1640	10.1
	12	Ø6	111	7	172	19092	42.4
	13	Ø8	56	10	176	9856	38.9
Total+10%:							387.4
Pórtico 15	1	Ø16	4	629	661	2724	43.0
	2	Ø12	1	330	350	350	3.1
	3	Ø10	2	629	661	1322	8.2
	4	Ø6	26	7	172	4472	9.9
Total+10%:							70.6
Pórtico 17	1	Ø16	3	234	260	780	12.3
	2	Ø10	2	520	520	1040	6.4
	3	Ø16	3	460	460	1380	21.8
	4	Ø10	2	500	500	1000	6.2
	5	Ø16	3	1024	1050	3150	49.7
	6	Ø16	2	824	850	1700	26.8
	7	Ø16	2	860	860	1720	27.1
	8	Ø16	2	834	860	1720	27.1
	9	Ø10	2	784	800	1600	9.9
	10	Ø10	2	804	804	1608	9.9
	11	Ø10	2	804	820	1640	10.1
	12	Ø6	126	7	172	21672	48.1
Total+10%:							280.9

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	
Pórtico 9	1	Ø10	4	419	451	1804	11.1	
	2	Ø10	2	419	451	902	5.6	
Pórtico 10	3	Ø6	17	7	152	2584	5.7	
	Total+10%:							24.6
	1	Ø16	4	460	460	1840	29.0	
	2	Ø16	10	234	260	2600	41.0	
	3	Ø10	4	520	520	2080	12.8	
	4	Ø16	4	834	860	3440	54.3	
	5	Ø12	1	620	620	620	5.5	
6	Ø10	4	804	820	3280	20.2		
7	Ø6	82	7	172	14104	31.3		
Total+10%:							213.5	
Pórtico 12	1	Ø16	3	234	260	780	12.3	
	2	Ø10	2	550	550	1100	6.8	
	3	Ø16	2	1024	1050	2100	33.1	
	4	Ø16	2	420	420	840	13.3	
	5	Ø12	2	230	250	500	4.4	
	6	Ø16	2	854	880	1760	27.8	
	7	Ø16	2	834	860	1720	27.1	
	8	Ø12	1	720	740	740	6.6	
	9	Ø10	2	834	850	1700	10.5	
	10	Ø10	2	804	820	1640	10.1	
	11	Ø12	20	14	184	3680	32.7	
	12	Ø6	86	7	172	14792	32.8	
Total+10%:							239.3	
Pórtico 13	1	Ø16	2	224	250	500	7.9	
	2	Ø10	2	414	430	860	5.3	
	3	Ø12	2	414	454	908	8.1	
	4	Ø10	2	414	446	892	5.5	
	5	Ø6	21	7	172	3612	8.0	
Total+10%:							38.3	
Pórtico 14	1	Ø10	6	394	426	2556	15.8	
	2	Ø10	2	394	394	788	4.9	
	3	Ø6	22	14	132	2904	6.4	
Total+10%:							29.8	
Pórtico 16	1	Ø20	2	460	460	920	22.7	
	2	Ø16	3	754	780	2340	36.9	
	3	Ø16	4	460	460	1840	29.0	
	4	Ø16	3	1024	1050	3150	49.7	
	5	Ø10	2	294	310	620	3.8	
	6	Ø10	2	380	380	760	4.7	
	7	Ø10	2	500	500	1000	6.2	
	8	Ø16	2	474	500	1000	15.8	
	9	Ø12	2	840	860	1720	15.3	
	10	Ø16	3	850	850	2550	40.2	
	11	Ø16	3	860	860	2580	40.7	
	12	Ø12	1	430	450	450	4.0	
	13	Ø12	2	400	400	800	7.1	
	14	Ø10	2	804	804	1608	9.9	
	15	Ø10	2	434	434	868	5.4	
	16	Ø10	2	424	424	848	5.2	
	17	Ø10	2	1179	1179	2358	14.5	
	18	Ø6	131	7	172	22532	50.0	
	19	Ø8	81	10	176	14256	56.3	
Total+10%:							459.1	



PRIMERA PLANTA
Despiece de vigas
Hormigón: 25 Mpas
Acero en barras: AH-500
Escala pórticos 1:50
Escala secciones 1:50
Escala huecos 1:50



Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)		
Pórtico 4	1	Ø16	11	234	260	2880	45.1		
	2	Ø10	4	500	500	2000	12.3		
	3	Ø16	12	460	460	5520	87.1		
	4	Ø10	2	520	520	1040	6.4		
	5	Ø10	2	480	480	960	5.9		
	6	Ø16	2	824	850	1700	26.8		
	7	Ø16	2	850	850	1700	26.8		
	8	Ø16	2	860	860	1720	27.1		
	9	Ø16	2	794	820	1640	25.9		
	10	Ø12	1	600	600	1200	10.7		
	11	Ø12	1	620	620	620	5.5		
	12	Ø12	1	580	580	580	5.1		
	13	Ø10	2	797	813	1626	10.0		
	14	Ø10	2	799	799	1598	9.9		
	15	Ø10	2	804	804	1608	9.9		
	16	Ø10	2	769	785	1570	9.7		
	17	Ø6	213			172	36636	81.3	
Total+10%:							446.1		
Pórtico 5	1	Ø16	5	460	460	2300	36.3		
	2	Ø10	4	500	500	2000	12.3		
	3	Ø16	6	234	260	1560	24.6		
4	Ø16	2	824	850	1700	26.8			
5	Ø16	2	834	860	1720	27.1			
6	Ø12	1	620	620	620	5.5			
7	Ø10	2	792	808	1616	10.0			
8	Ø10	2	804	820	1640	10.1			
9	Ø6	62			172	10664	23.7		
10	Ø8	56			176	9856	38.9		
Total+10%:							236.8		
Pórtico 7	1	Ø16	5	419	460	2355	37.2		
	2	Ø10	2	419	455	910	5.6		
3	Ø6	25			172	4300	9.5		
Total+10%:							57.5		
Pórtico 9	1	Ø10	4	764	796	3184	19.6		
	2	Ø10	2	764	796	1592	9.8		
	3	Ø6	34			172	5848	13.0	
	Total+10%:							46.6	
	Pórtico 10	1	Ø10	4	419	451	1804	11.1	
		2	Ø10	2	419	451	902	5.6	
		3	Ø6	17			152	2584	5.7
		Total+10%:							24.6



UNIVERSIDAD:

JUAN MISAEL SARACHO



UNIVERSITARIO:

MARCELO CRUZ CAIHUARA

PROYECTO:

HOSPITAL DE SEGUNDO NIVEL YACUIBA

CARACTER:

DESPIECE DE VIGAS MÓDULO 3

FECHA:

Marzo - 2023

ESCALA:

Indicada

LAMINA:

39/65