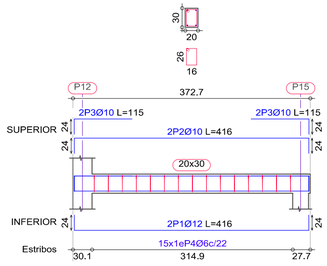
DETALLE DE ARMADURA DE VIGAS

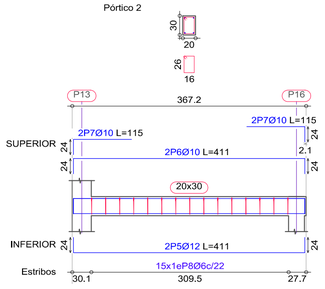
ESC. 1:50

Pórtico 1



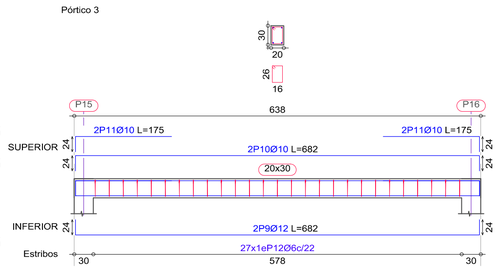
Resumen Acero TECHO DEL VESTIBULO Vigas		Long. total (m)	Peso+10% (kg)	Total
AH-400CN	Ø6	54.7	13	
	Ø10	46.4	31	
	Ø12	30.2	29	73

Pórtico 2



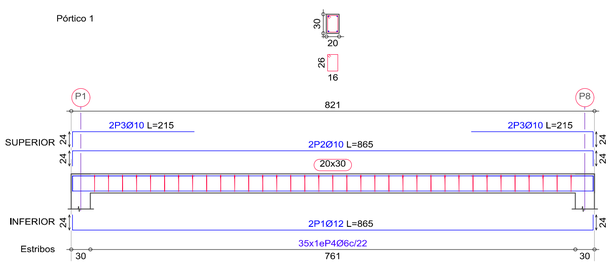
TECHO DEL VESTIBULO
Despiece de vigas
Hormigón: H-21 , Control Normal
Acero: AH-400 , Control Normal
Escala: 1:50

Pórtico 3



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-400CN (kg)
Pórtico 1	1	Ø12	2	416	832	7,4
	2	Ø10	2	416	832	5,1
	3	Ø10	4	115	460	2,8
	4	Ø6	15	96	1440	3,2
					Total+10%:	20,4
Pórtico 2	5	Ø12	2	411	822	7,3
	6	Ø10	2	411	822	5,1
	7	Ø10	4	115	460	2,8
	8	Ø6	15	96	1440	3,2
					Total+10%:	20,2
Pórtico 3	9	Ø12	2	682	1364	12,1
	10	Ø10	2	682	1364	8,4
	11	Ø10	4	175	700	4,3
	12	Ø6	27	96	2592	5,8
					Total+10%:	33,7
					Ø6:	13,5
					Ø10:	31,4
					Ø12:	29,4
					Total:	74,3

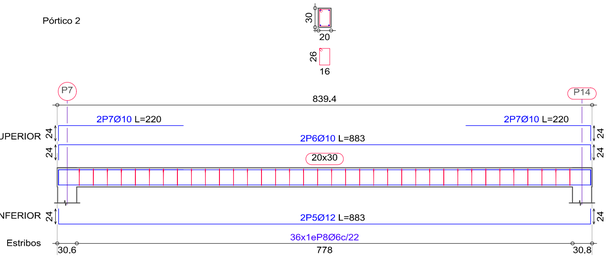
Pórtico 1



TECHO DE LA IGLESIA
Despiece de vigas
Hormigón: H-21 , Control Normal
Acero: AH-400 , Control Normal
Escala: 1:50

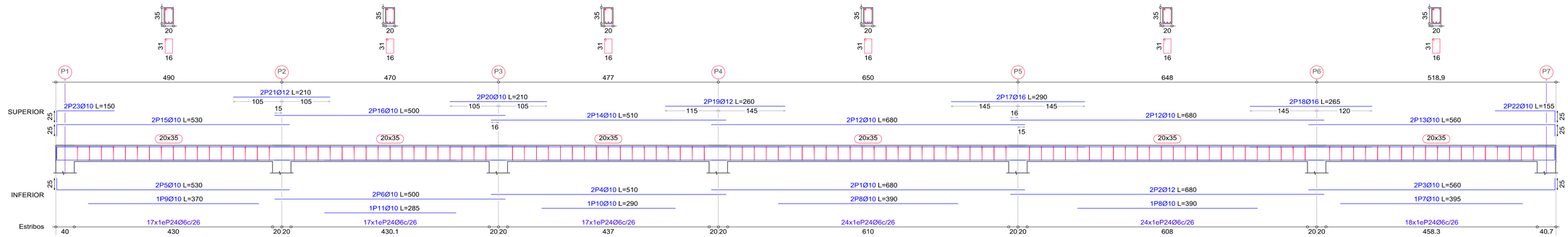
Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-400CN (kg)
Pórtico 1	1	Ø12	2	865	1730	15,4
	2	Ø10	2	865	1730	10,7
	3	Ø10	4	215	860	5,3
	4	Ø6	35	96	3360	7,5
					Total+10%:	42,8
Pórtico 2	5	Ø12	2	863	1766	15,7
	6	Ø10	2	883	1766	10,9
	7	Ø10	4	220	880	5,4
	8	Ø6	36	96	3456	7,7
					Total+10%:	43,7
					Ø6:	16,8
					Ø10:	35,5
					Ø12:	34,2
					Total:	86,5

Pórtico 2



Resumen Acero TECHO DE LA IGLESIA Vigas		Long. total (m)	Peso+10% (kg)	Total
AH-400CN	Ø6	315.1	77	
	Ø10	367.8	249	
	Ø12	79.7	78	
	Ø16	27.3	47	451

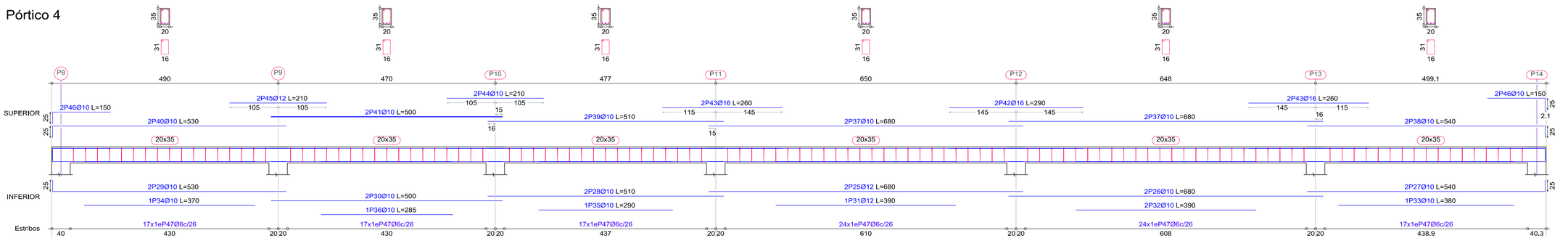
Pórtico 3



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-400CN (kg)
Pórtico 3	1	Ø10	2	680	1360	8,4
	2	Ø12	2	680	1360	12,1
	3	Ø10	2	540	1080	6,7
	4	Ø10	2	510	1020	6,3
	5	Ø10	2	530	1060	6,5
	6	Ø10	2	500	1000	6,2
	7	Ø10	1	395	395	2,4
	8	Ø10	3	390	1170	7,2
	9	Ø10	1	370	370	2,3
	10	Ø10	1	290	290	1,8
	11	Ø10	1	285	285	1,8
	12	Ø16	4	280	1120	6,9
	13	Ø10	2	560	1120	6,9
	14	Ø10	2	510	1020	6,3
	15	Ø10	2	530	1060	6,5
	16	Ø10	2	500	1000	6,2
	17	Ø16	2	290	580	9,2
	18	Ø16	2	265	530	8,4
	19	Ø10	2	210	420	2,6
	20	Ø10	2	210	420	3,7
	21	Ø12	2	210	420	3,7
	22	Ø10	2	150	310	1,9
	23	Ø10	2	150	300	1,8
	24	Ø6	117	106	12402	27,5
					Total+10%:	180,7
Pórtico 4	25	Ø12	2	680	1360	12,1
	26	Ø10	2	680	1360	8,4
	27	Ø10	2	540	1080	6,7
	28	Ø10	2	510	1020	6,3
	29	Ø10	2	530	1060	6,5
	30	Ø10	2	500	1000	6,2
	31	Ø12	1	390	390	3,5
	32	Ø10	1	390	780	4,8
	33	Ø10	3	370	1110	6,9
	34	Ø10	1	370	370	2,3
	35	Ø10	1	290	290	1,8
	36	Ø10	1	285	285	1,8
	37	Ø10	4	680	2720	16,8
	38	Ø10	2	540	1080	6,7
	39	Ø10	2	510	1020	6,3
	40	Ø10	2	530	1060	6,5
	41	Ø10	2	500	1000	6,2
	42	Ø16	2	290	580	9,2
	43	Ø16	4	260	1040	16,4
	44	Ø10	2	210	420	2,6
	45	Ø12	2	210	420	3,7
	46	Ø10	4	150	600	3,7
	47	Ø6	116	106	12296	27,3
					Total+10%:	184,9
					Ø6:	60,2
					Ø10:	214,2
					Ø12:	43,6
					Ø16:	47,6
					Total:	365,6

TECHO DE LA IGLESIA
Despiece de vigas
Hormigón: H-21 , Control Normal
Acero: AH-400 , Control Normal
Escala: 1:50

Pórtico 4



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

PROYECTO:
ALTERNATIVA ESTRUCTURAL DE RESTAURACIÓN "IGLESIA SAN JUAN"

CONTENIDO:
DESPIECE DE VIGAS

UNIVERSITARIO:
UNIV: FLORENCIO YEVARA MARTÍNEZ

DOCENTE GUÍA:
ING: ARTURO JUAN J. DUBRAVCIC ALAIZA

ESCALA:
1:50

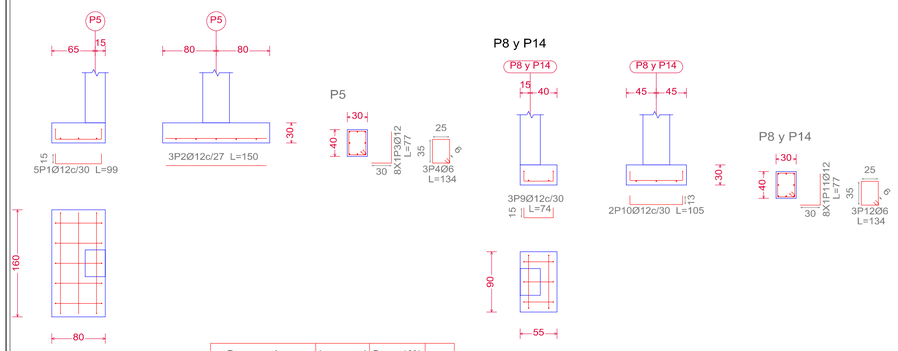
LAMINA:
10/12

MATERIA:
CIV-502 PROYECTO DE INGENIERÍA CIVIL II

FECHA:
JUL./2019

DESPIECE DE ZAPATAS

P5

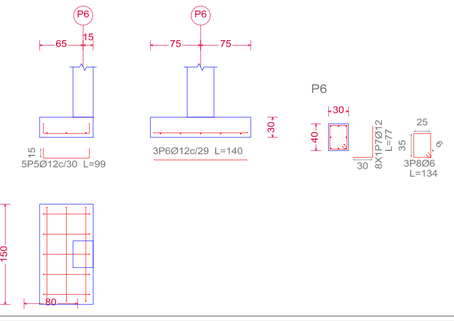


P8 y P14

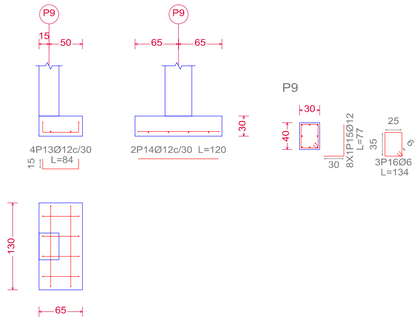
Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-400CN (kg)
P5	1	Ø12	5	99	495	4.4
	2	Ø12	3	150	450	4.0
	3	Ø12	8	77	616	5.5
	4	Ø6	3	134	402	0.9
				Total+10%:		16.3
P6	5	Ø12	5	99	495	4.4
	6	Ø12	3	140	420	3.7
	7	Ø12	8	77	616	5.5
	8	Ø6	3	134	402	0.9
				Total+10%:		16.0
P8=P14	9	Ø12	3	74	222	2.0
	10	Ø12	2	105	210	1.9
	11	Ø12	8	77	616	5.5
	12	Ø6	3	134	402	0.9
				Total+10%:		11.3
				(x2):		22.6
P9	13	Ø12	4	84	336	3.0
	14	Ø12	2	120	240	2.1
	15	Ø12	8	77	616	5.5
	16	Ø6	3	134	402	0.9
				Total+10%:		12.7
				Ø6:		5.0
				Ø12:		62.6
				Total		67.6

Resumen Acero Cimentación Despiece cimentación		Long. total (m)	Peso+10% (kg)	Total
AH-400CN	Ø6	62.5	15	
	Ø12	219.9	215	230

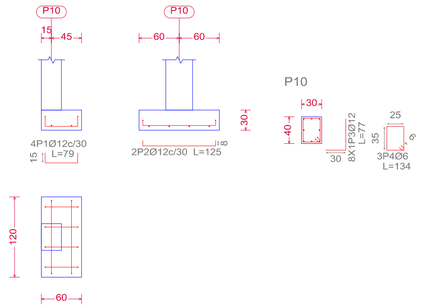
P6



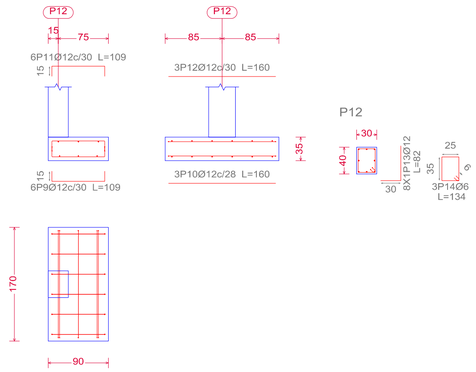
P9



P10



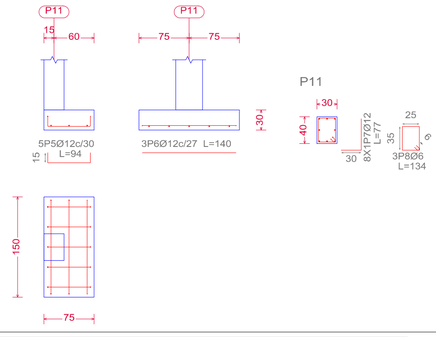
P12



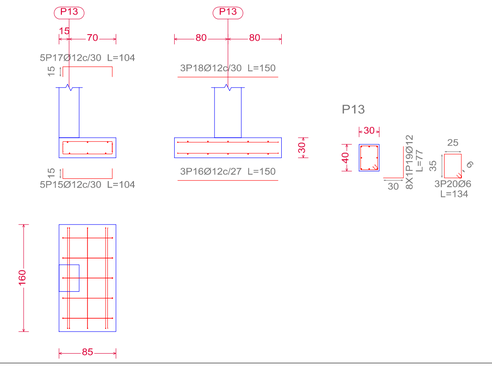
Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-400CN (kg)
P10	1	Ø12	4	79	316	2.8
	2	Ø12	2	125	250	2.2
	3	Ø12	8	77	616	5.5
	4	Ø6	3	134	402	0.9
				Total+10%:		12.5
P11	5	Ø12	5	94	470	4.2
	6	Ø12	3	140	420	3.7
	7	Ø12	8	77	616	5.5
	8	Ø6	3	134	402	0.9
				Total+10%:		15.7
P12	9	Ø12	6	109	654	5.8
	10	Ø12	3	160	480	4.3
	11	Ø12	6	109	654	5.8
	12	Ø12	3	160	480	4.3
	13	Ø12	6	82	656	5.8
	14	Ø6	3	134	402	0.9
				Total+10%:		29.6
P13	15	Ø12	5	104	520	4.6
	16	Ø12	3	150	450	4.0
	17	Ø12	5	104	520	4.6
	18	Ø12	3	150	450	4.0
	19	Ø12	8	77	616	5.5
	20	Ø6	3	134	402	0.9
				Total+10%:		26.0
				Ø6:		3.9
				Ø12:		79.9
				Total		83.8

Resumen Acero Cimentación Despiece cimentación		Long. total (m)	Peso+10% (kg)	Total
AH-400CN	Ø6	62.5	15	
	Ø12	219.9	215	230

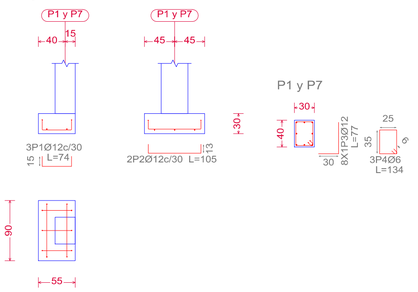
P11



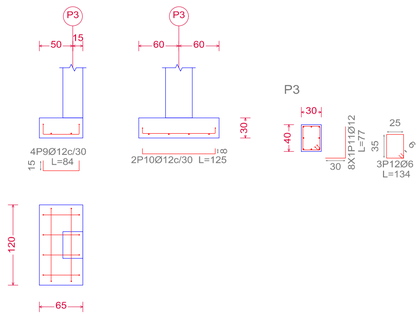
P13



P1 y P7



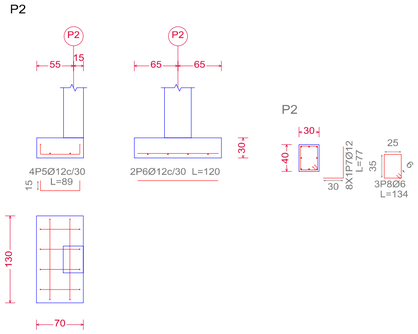
P3



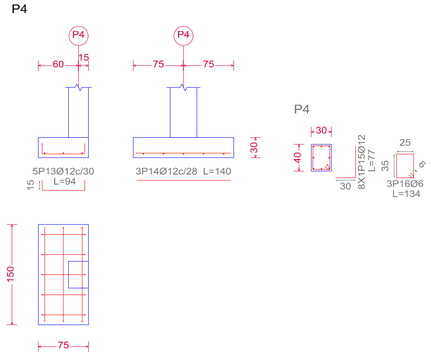
Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-400CN (kg)
P1=P7	1	Ø12	3	74	222	2.0
	2	Ø12	2	105	210	1.9
	3	Ø12	8	77	616	5.5
	4	Ø6	3	134	402	0.9
				Total+10%:		11.3
				(x2):		22.6
P2	5	Ø12	4	89	356	3.2
	6	Ø12	2	120	240	2.1
	7	Ø12	8	77	616	5.5
	8	Ø6	3	134	402	0.9
				Total+10%:		12.9
P3	9	Ø12	4	84	336	3.0
	10	Ø12	2	125	250	2.2
	11	Ø12	8	77	616	5.5
	12	Ø6	3	134	402	0.9
				Total+10%:		12.8
P4	13	Ø12	5	94	470	4.2
	14	Ø12	3	140	420	3.7
	15	Ø12	8	77	616	5.5
	16	Ø6	3	134	402	0.9
				Total+10%:		15.7
				Ø6:		5.0
				Ø12:		59.0
				Total:		64.0

Resumen Acero Cimentación Despiece cimentación		Long. total (m)	Peso+10% (kg)	Total
AH-400CN	Ø6	62.5	15	
	Ø12	219.9	215	230

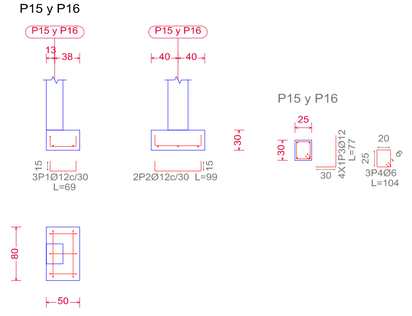
P2



P4



P15 y P16



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-400CN (kg)
P15=P16	1	Ø12	3	69	207	1.8
	2	Ø12	2	99	198	1.8
	3	Ø12	4	77	308	2.7
	4	Ø6	3	104	312	0.7
				Total+10%:		7.7
				(x2):		15.4
				Ø6:		1.6
				Ø12:		13.8
				Total		15.4

Resumen Acero Cimentación Despiece cimentación		Long. total (m)	Peso+10% (kg)	Total
AH-400CN	Ø6	62.5	15	
	Ø12	219.9	215	230

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

PROYECTO: ALTERNATIVA ESTRUCTURAL DE RESTAURACIÓN "IGLESIA SAN JUAN"

CONTENIDO: DESPIECE DE ZAPATAS

UNIVERSITARIO: UNIV: FLORENCIO YEVARA MARTÍNEZ

DOCENTE GUÍA: ING: ARTURO JUAN J. DUBRAVCIC ALAIZA

ESCALA: 1:25

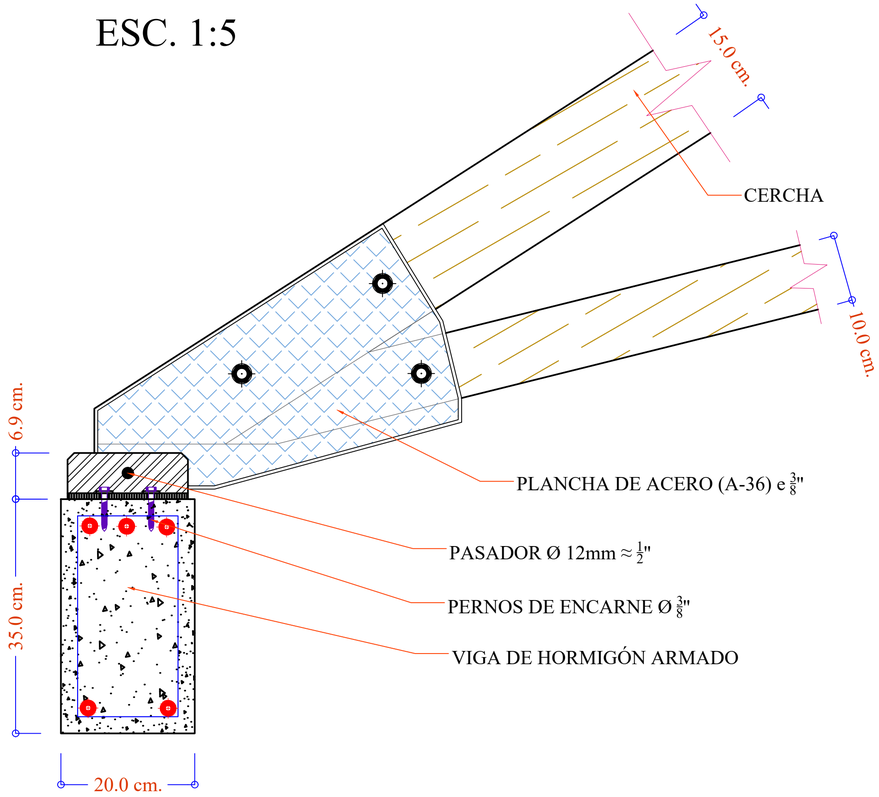
LAMINA: 11/12

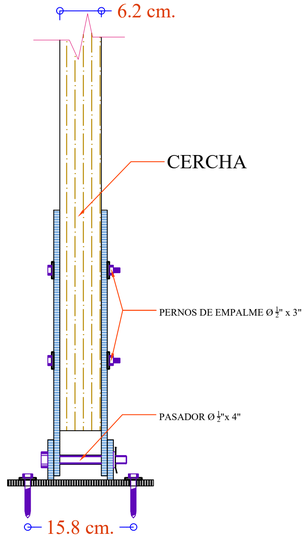
MATERIA: CIV-502 PROYECTO DE INGENIERÍA CIVIL II

FECHA: JUL./2019

APOYO FIJO

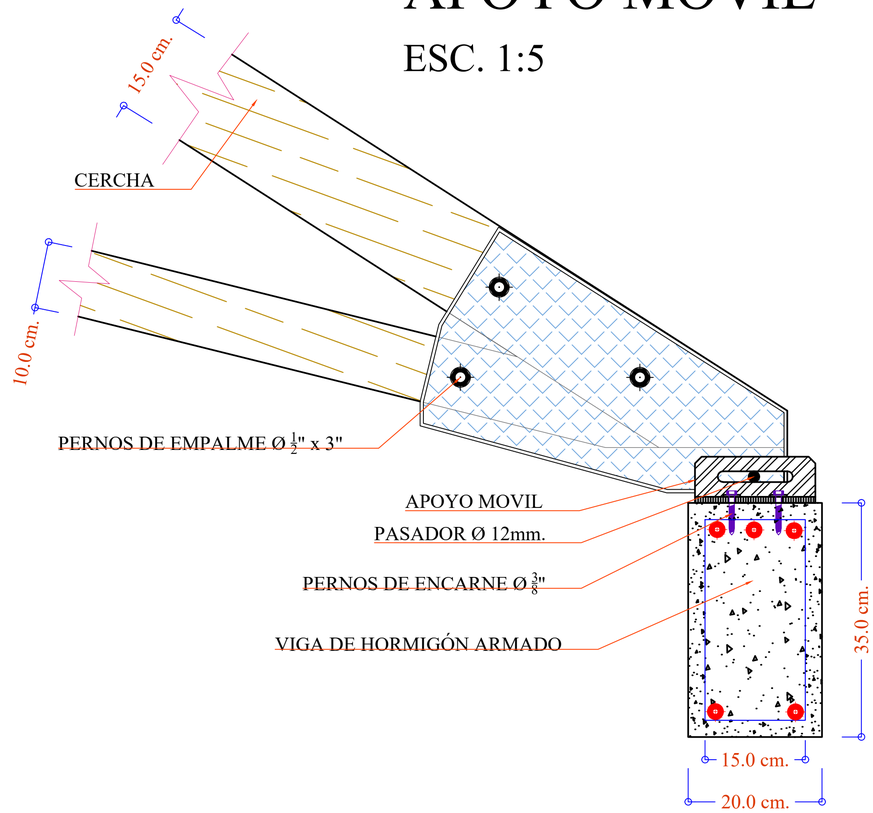
ESC. 1:5





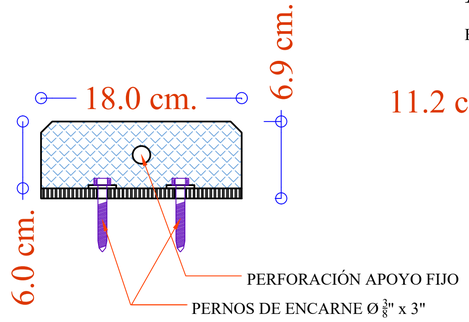
APOYO MÓVIL

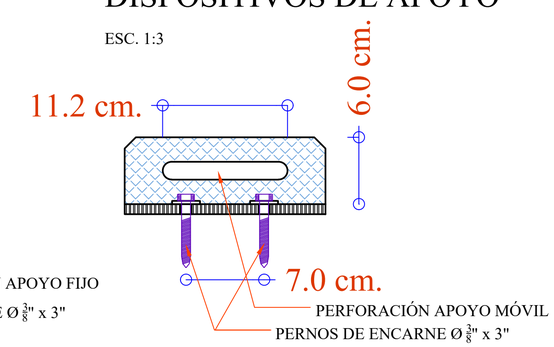
ESC. 1:5

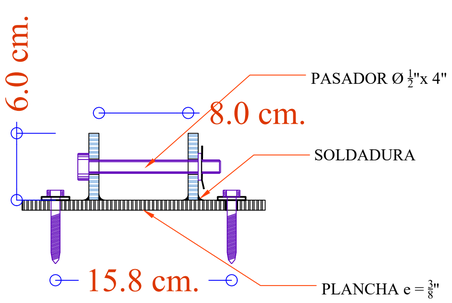


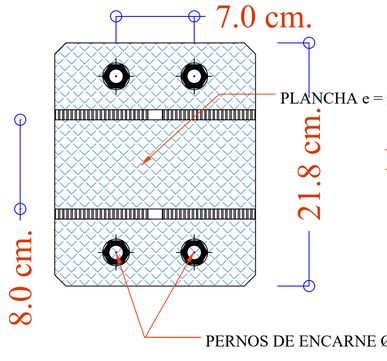
DISPOSITIVOS DE APOYO

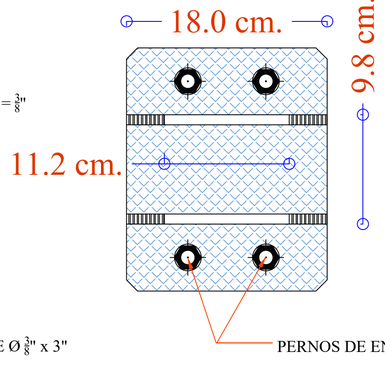
ESC. 1:3





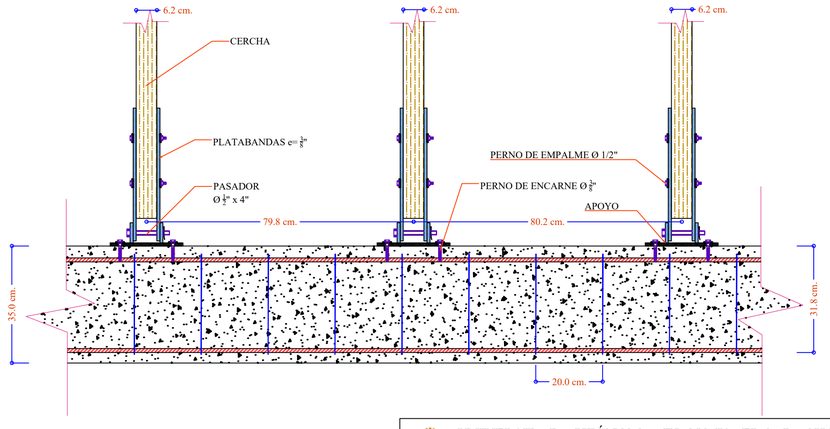






SEPARACIÓN DE CERCHAS

ESC. 1:10



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

PROYECTO: ALTERNATIVA ESTRUCTURAL DE RESTAURACIÓN "IGLESIA SAN JUAN"

CONTENIDO: DISPOSITIVOS DE APOYO DE CERCHAS

UNIVERSITARIO: UNIV: FLORENCIO YEVARA MARTÍNEZ

DOCENTE GUÍA: ING: ARTURO JUAN J. DUBRAVCIC ALAIZA

ESCALA: INDICADA

LAMINA: 12/12

MATERIA: CIV-502 PROYECTO DE INGENIERÍA CIVIL II

FECHA: JUL./2019