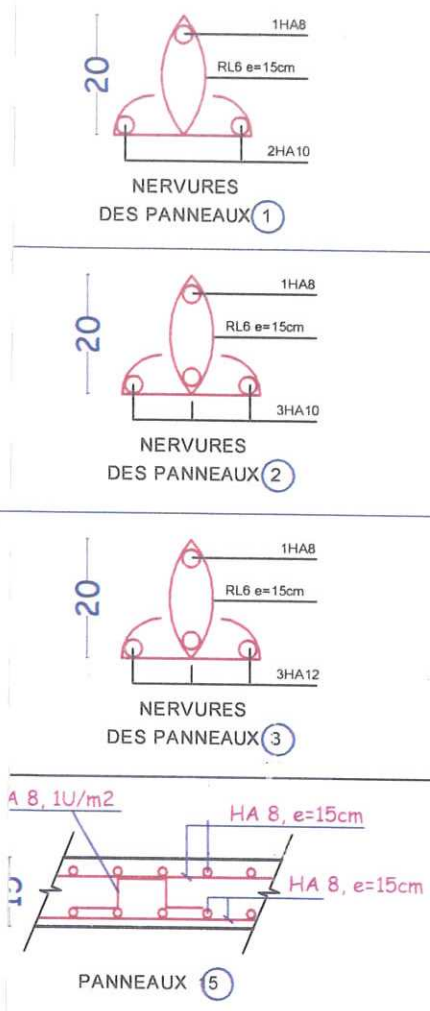
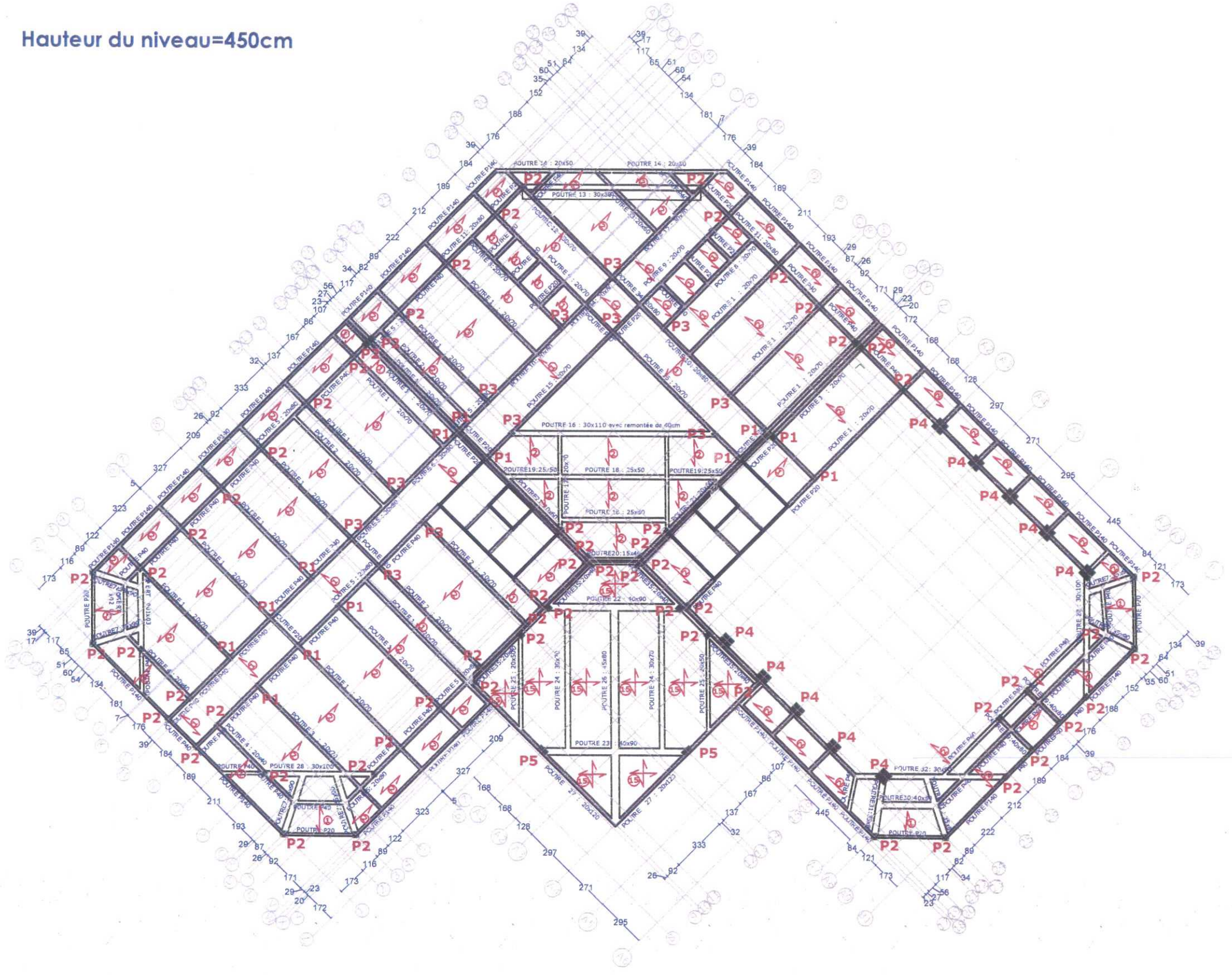


TRAVAUX DE CONSTRUCTION DU BATIMENT PRINCIPAL ET DES PLATEFORMES TECHNIQUES DU CERME

DETAILS DES DALLES



Hauteur du niveau=450cm



NOMENCLATURE DES POTEAUX

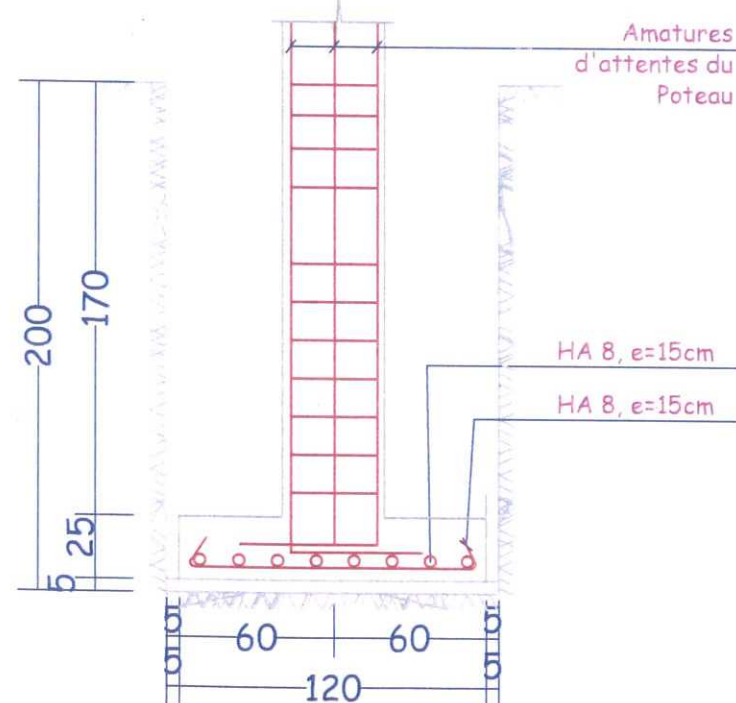
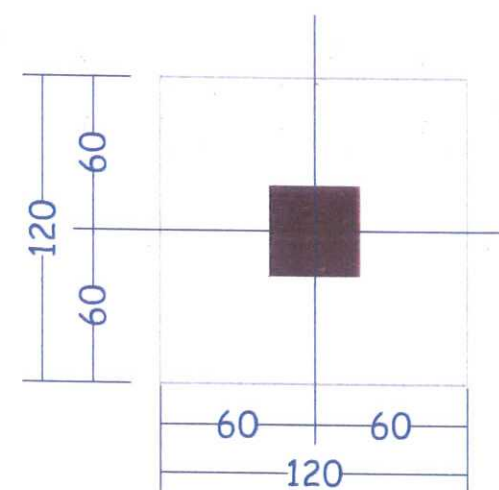
- P1: 35x35
- P2: 40x40
- P3: 40x40
- P4: 70x70
- P5: 35x60



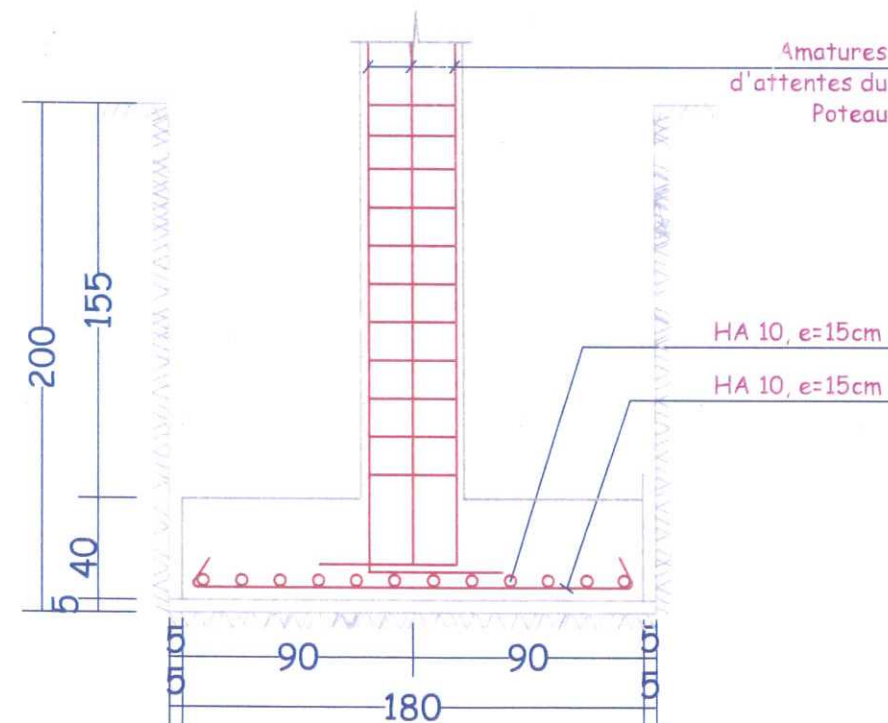
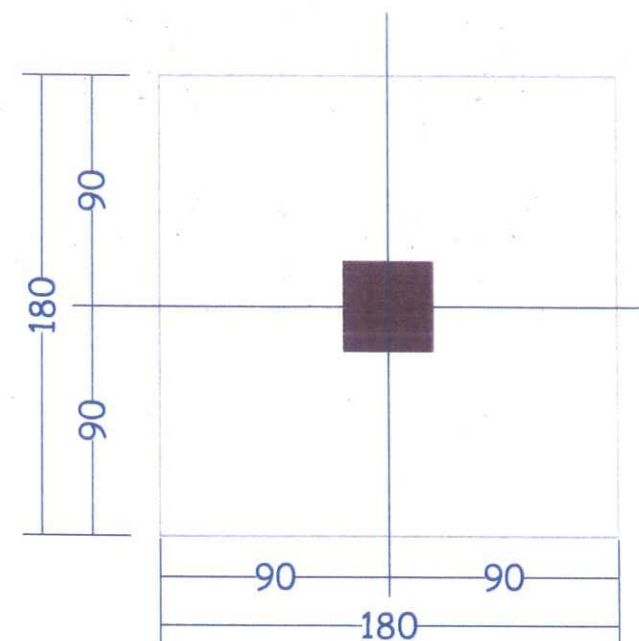
PLANS D'EXECUTION DU GROS OEUVRE

REPUBLIQUE TOGOLAISE Travail - Liberté - Patrie	FINANCEMENT	MAITRE D'OUVRAGE	MAITRE D'OEUVRE	ENTREPRISE	NOM DU PLAN	VISA	Sep 202
					PLAN DE COFFRAGE DU PLANCHER HAUT DU RDC		PL N

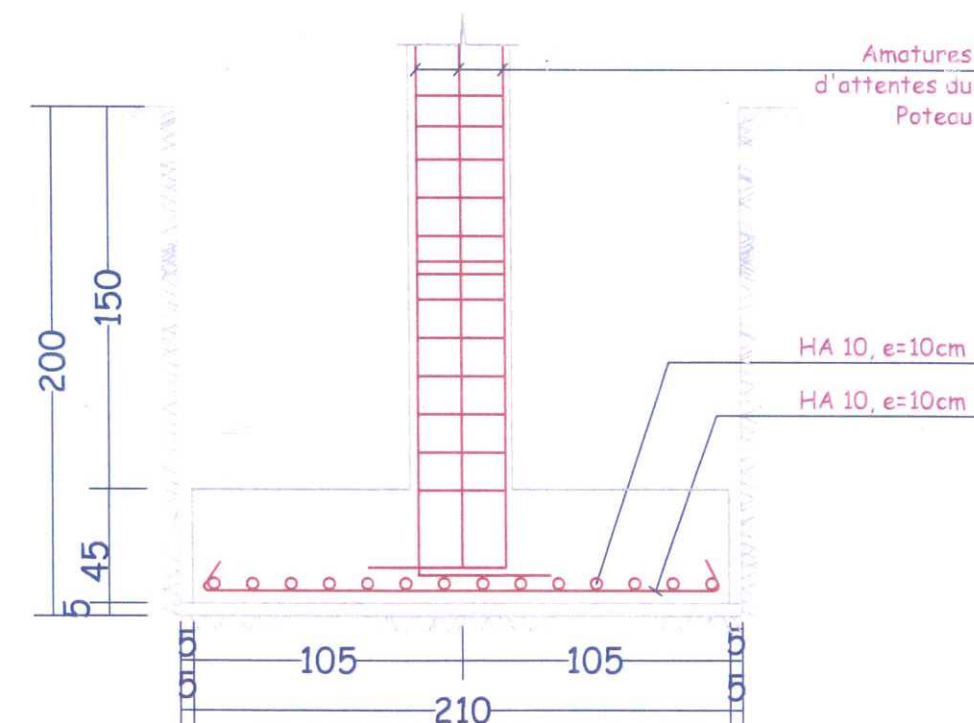
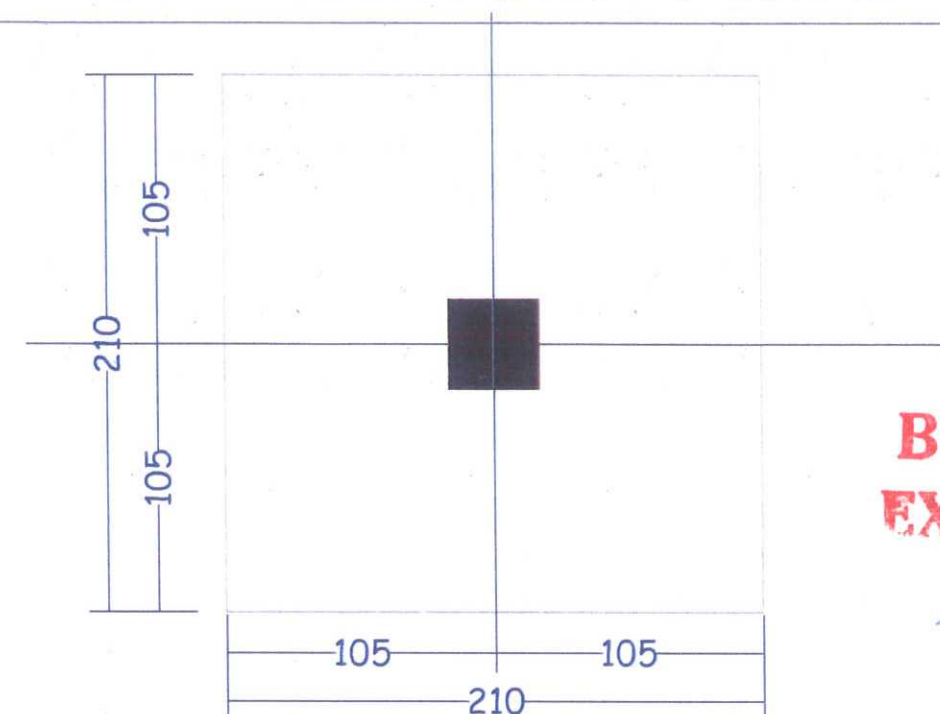
TRAVAUX DE CONSTRUCTION DU BATIMENT PRINCIPAL ET DES PLATEFORMES TECHNIQUES DU CERME



**PLAN DE FERRAILLAGE
DE LA SEMELLE S1: 120x120x25**



**PLAN DE FERRAILLAGE
DE LA SEMELLE S2: 180x180x40**



**PLAN DE FERRAILLAGE
DE LA SEMELLE S3: 210x210x45**

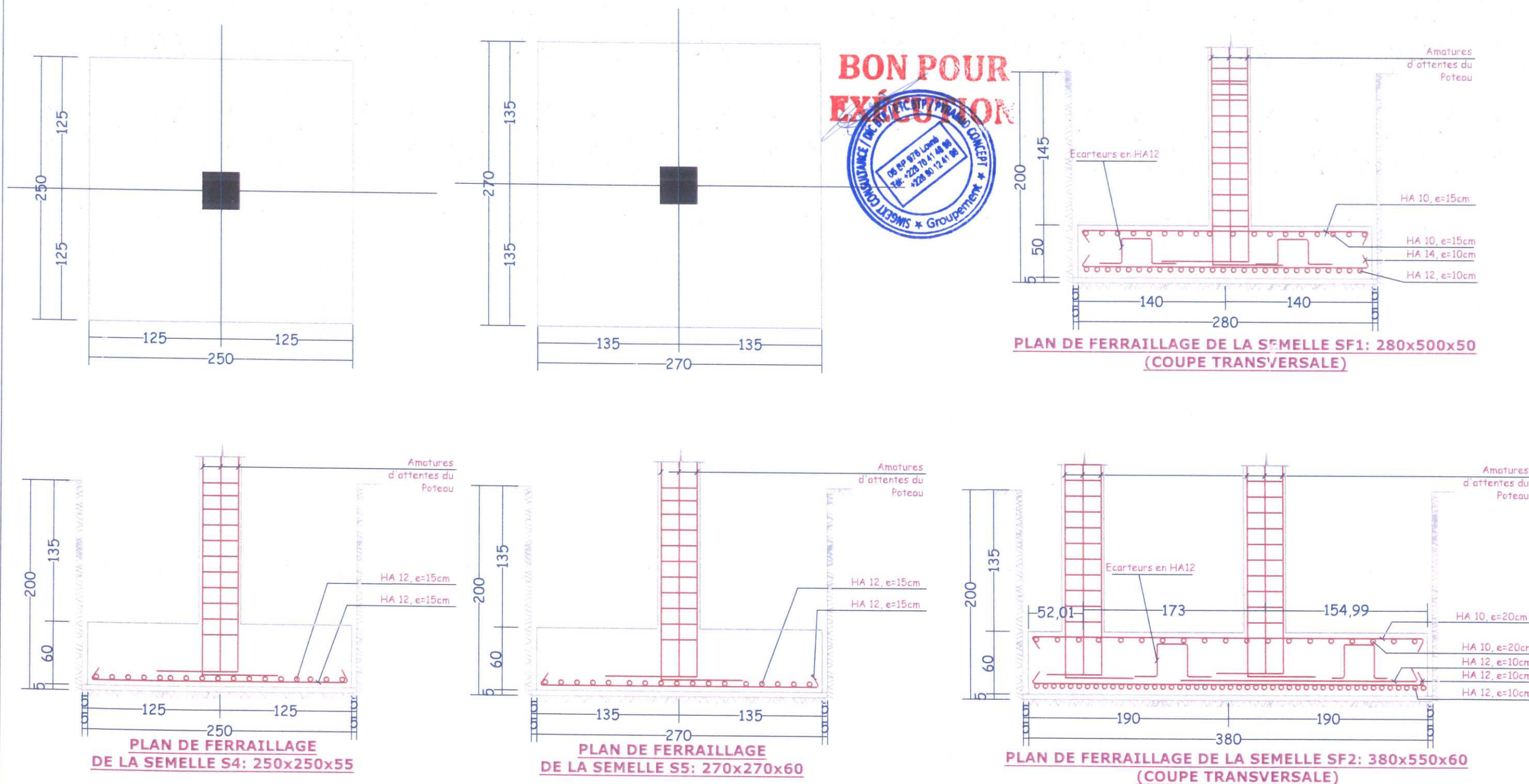
**BON POUR
EXÉCUTION**



PLANS D'EXECUTION DU GROS OEUVRE

REPUBLICQUE TOGOLAISE Travail - Liberté - Patrie	FINANCEMENT	MAITRE D'OUVRAGE	MAITRE D'OEUVRE	ENTREPRISE	NOM DU PLAN	VISA	
			 GROUPEMENT 	 Groupeement 	PLAN DE COFFRAGE ET DE FERRAILLAGE DES SEMELLES S1; S2 ET S3		Sept 2023 PL N°
			SINGEXT CONSULTANCE / ETC BTP / DIC BTP / PYRAMAD CONCEPT				

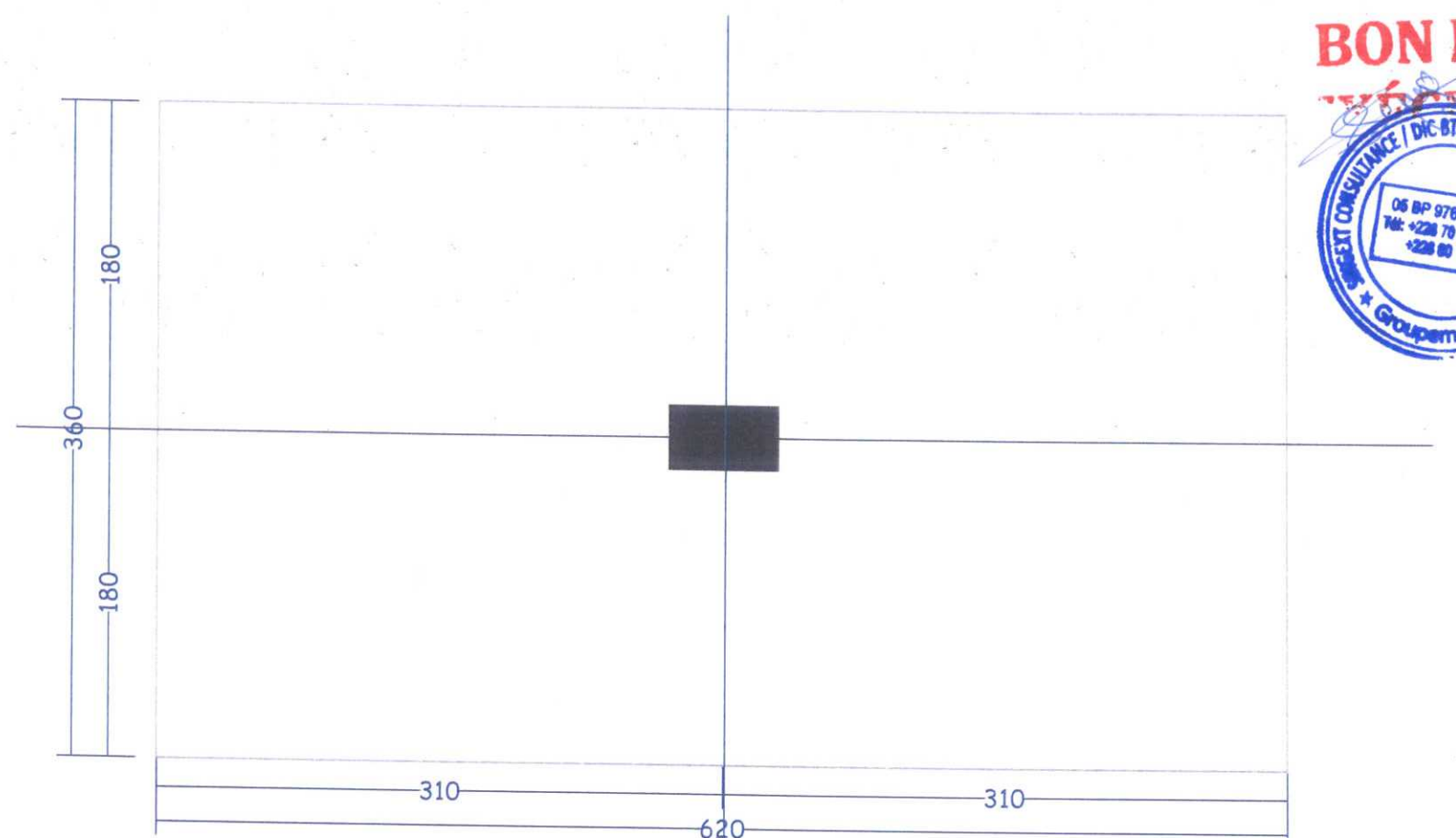
TRAVAUX DE CONSTRUCTION DU BATIMENT PRINCIPAL ET DES PLATEFORMES TECHNIQUES DU CERME



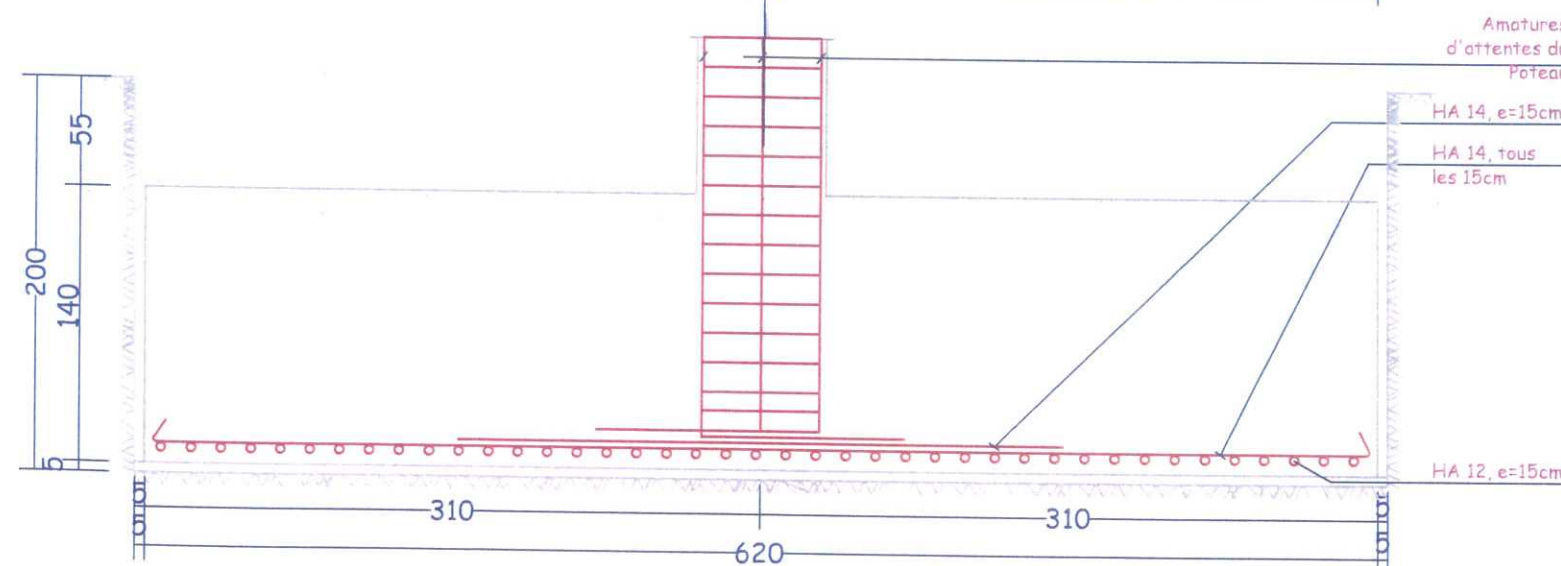
PLANS D'EXECUTION DU GROS OEUVRE

REPUBLIQUE TOGOLAISE Travail - Liberté - Patrie 	FINANCEMENT 	MAITRE D'OUVRAGE  	MAITRE D'OEUVRE GROUPEMENT 	ENTREPRISE Groupeement 	NOM DU PLAN PLAN DE COFFRAGE ET DE FERRAILLAGE DES SEMELLES S4; S5 ET SF2	VISA 	Sept 2023 PL N°
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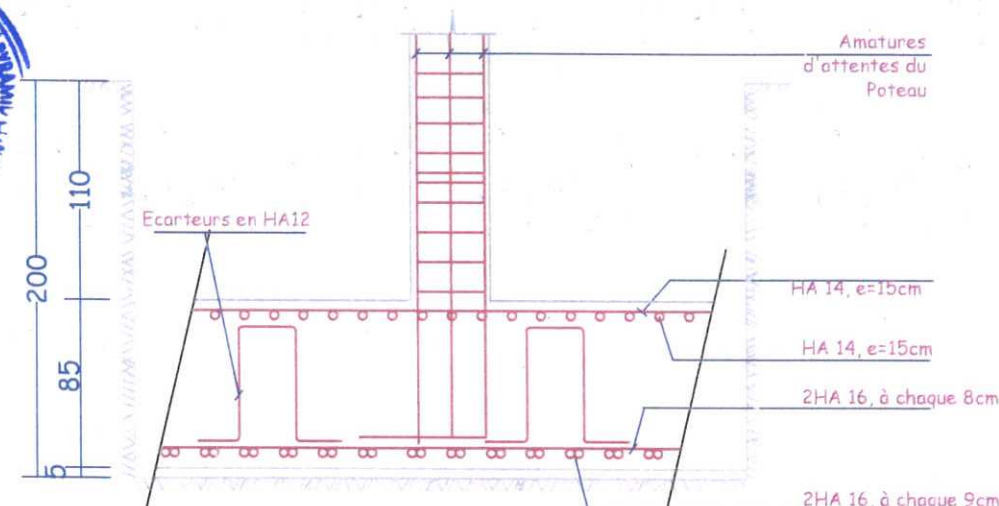
TRAVAUX DE CONSTRUCTION DU BATIMENT PRINCIPAL ET DES PLATEFORMES TECHNIQUES DU CERME



PLAN DE FERRAILAGE DE LA SEMELLE S6: 360x620x140



BON POUR



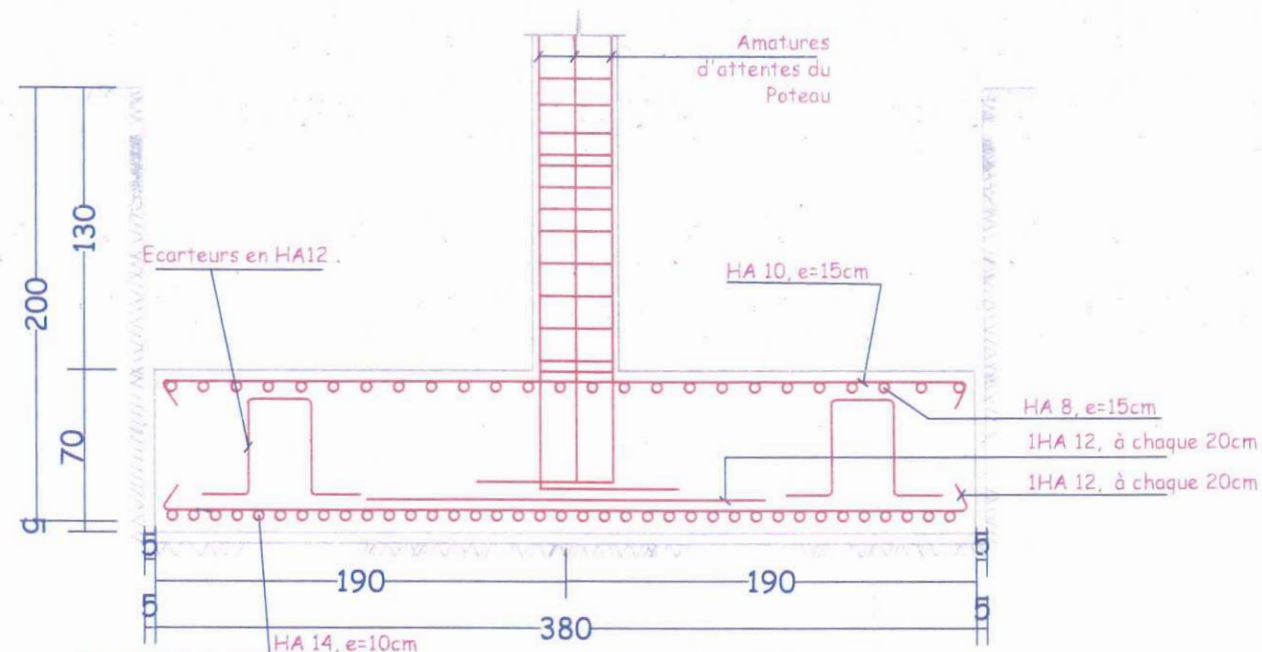
PLAN DE FERRAILAGE DE LA SEMELLE SF10
(COUPE TRANSVERSALE)

PLAN DE FERRAILAGE DE LA SEMELLE SF11
(COUPE TRANSVERSALE)

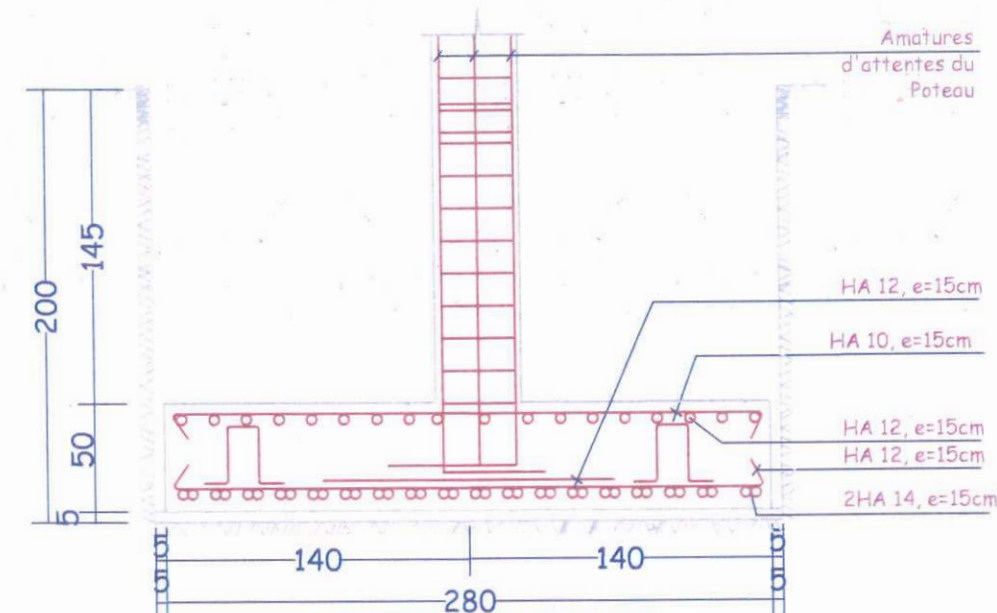
PLANS D'EXECUTION DU GROS OEUVRE

REPUBLICQUE TOGOLAISE Travail - Liberté - Patrie	FINANCEMENT	MAITRE D'OUVRAGE	MAITRE D'OEUVRE	ENTREPRISE	NOM DU PLAN	VISA	Sept 2023
			 SINGEXT CONSULTANCE / ETC BTP / DIC BTP / PYRAMID CONCEPT	 AG SERVICE NAD BTP	PLAN DE COFFRAGE ET DE FERRAILAGE DES SEMELLES S6; SF10 ET SF11		PL N°

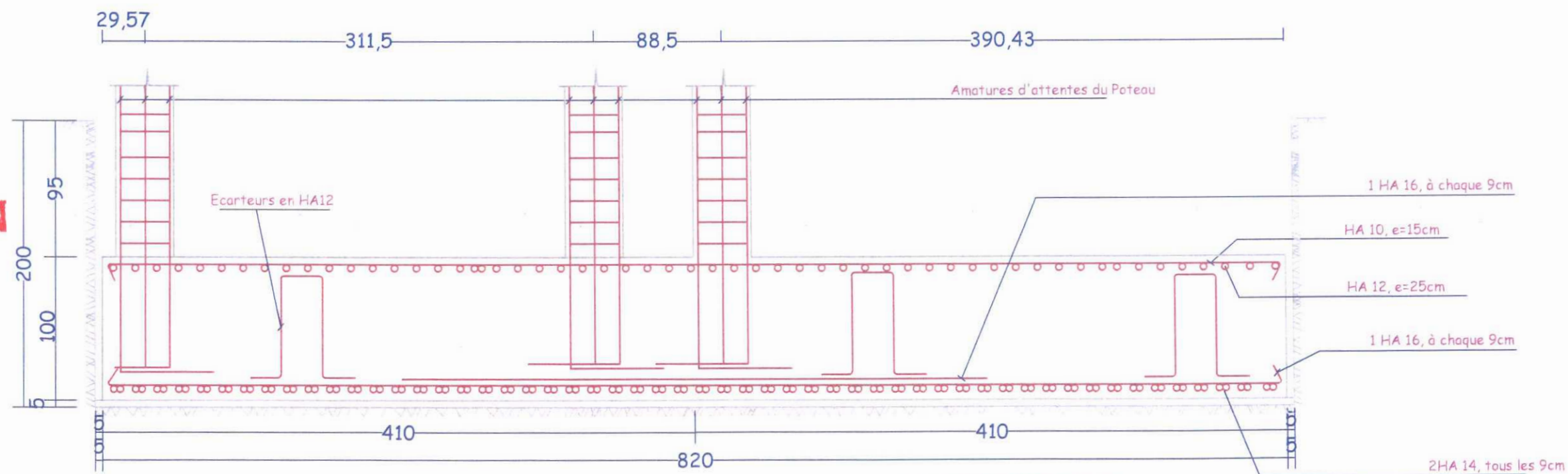
TRAVAUX DE CONSTRUCTION DU BATIMENT PRINCIPAL ET DES PLATEFORMES TECHNIQUES DU CERME



**PLAN DE FERRAILAGE DE LA SEMELLE SF4: 310x640x70
(COUPE TRANSVERSALE)**



**PLAN DE FERRAILAGE
DE LA SEMELLE SF5: 300x540x50
(COUPE TRANSVERSALE)**



PLAN DE FERRAILAGE DE LA SEMELLE SF3: 820x1830x100 (COUPE TRANSVERSALE)

**BON POUR
EXÉCUTION**

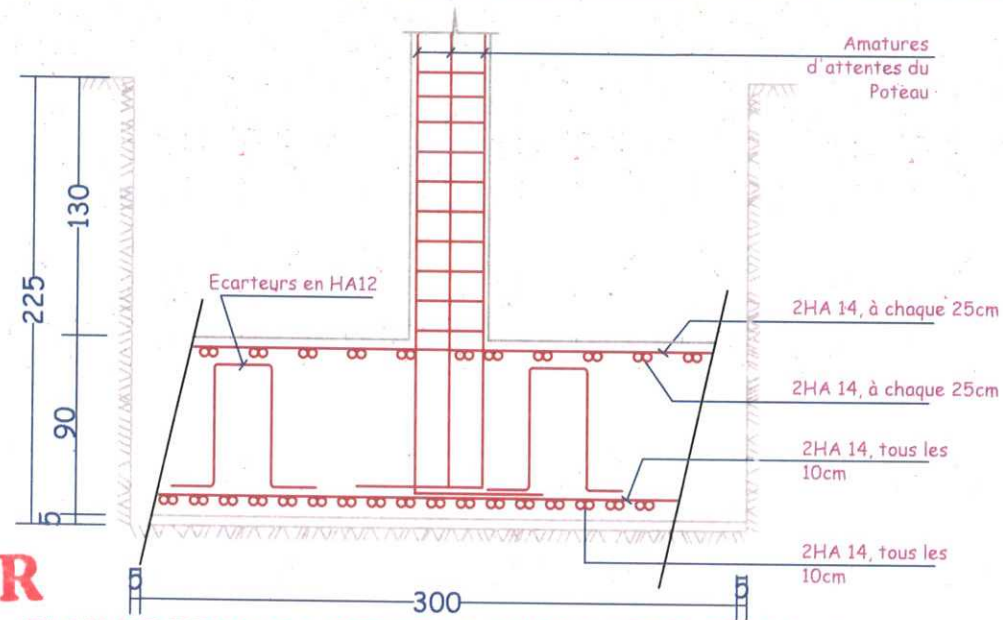


PLANS D'EXECUTION DU GROS OEUVRE

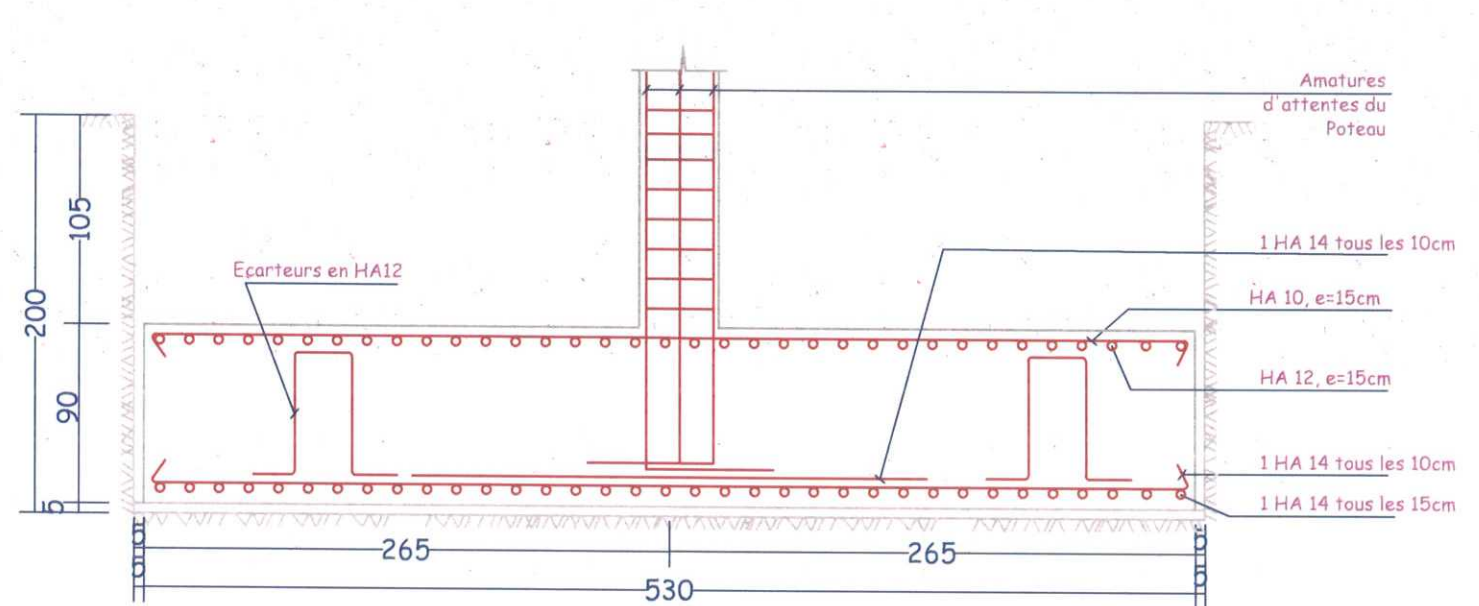
REPUBLICQUE TOGOLAISE Travail - Liberté - Patrie	FINANCEMENT	MAITRE D'OUVRAGE	MAITRE D'OEUVRE	ENTREPRISE	NOM DU PLAN	VISA	Sept 2023
			GROUPEMENT 	Groupement 	PLAN DE COFFRAGE ET DE FERRAILAGE DES SEMELLES SF3; SF4 ET SF5		PL N°

TRAVAUX DE CONSTRUCTION DU BATIMENT PRINCIPAL ET DES PLATEFORMES TECHNIQUES DU CERME

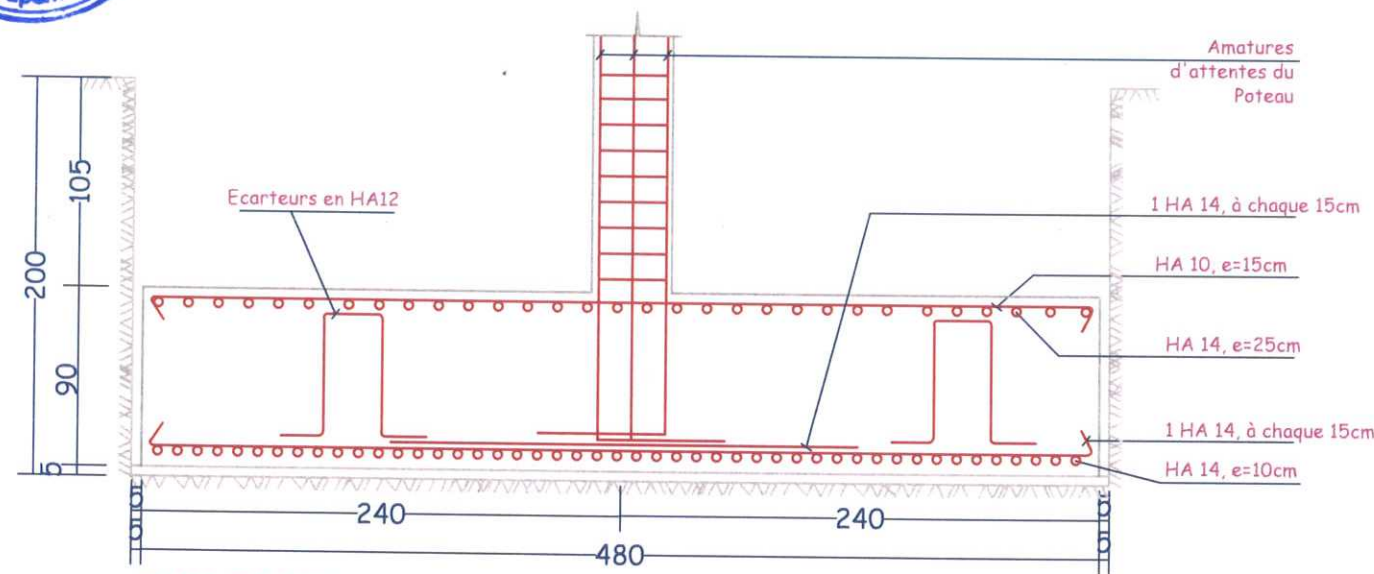
**BON POUR
EXECUTION**



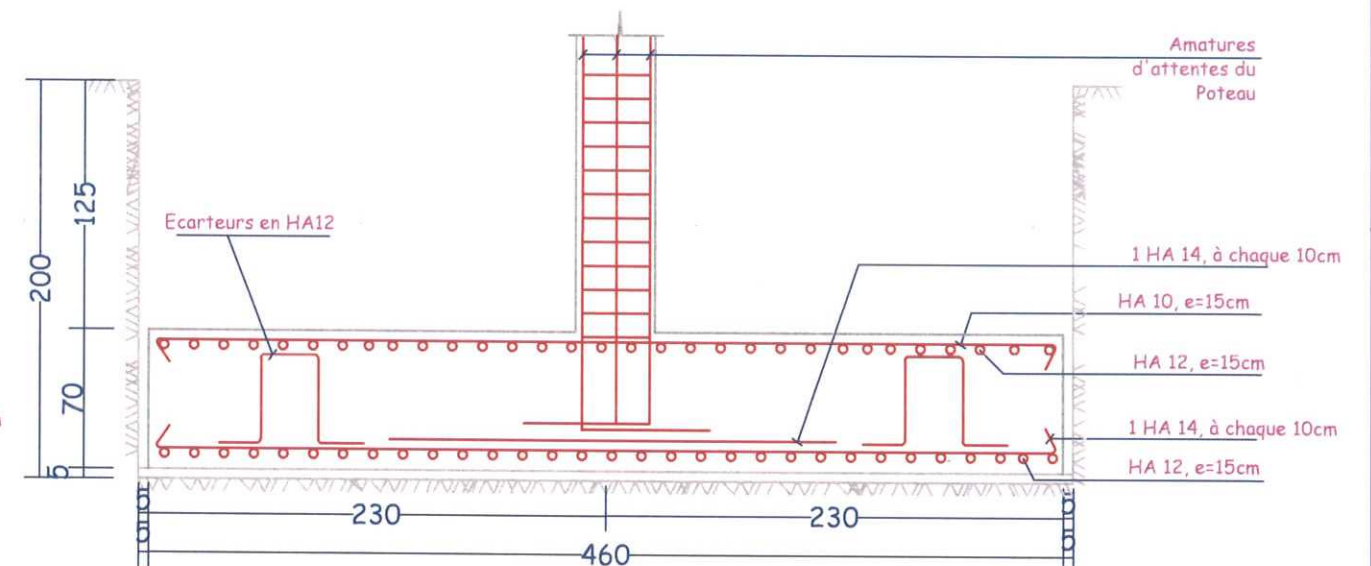
**PLAN DE FERRAILLAGE DE LA SEMELLE SF6: 77,88m²x90cm
(COUPE TRANSVERSALE)**



**PLAN DE FERRAILLAGE DE LA SEMELLE SF7: 530x1850x90
(COUPE TRANSVERSALE)**



**PLAN DE FERRAILLAGE DE LA SEMELLE SF8: 174,6m²x90cm
(COUPE TRANSVERSALE)**



**PLAN DE FERRAILLAGE DE LA SEMELLE SF9: 460x1140x70
(COUPE TRANSVERSALE)**

PLANS D'EXECUTION DU GROS OEUVRE

REPUBLIQUE TOGOLAISE
Travail - Liberté - Patrie



FINANCEMENT



MAITRE D'OUVRAGE



MAITRE D'OEUVRE



ENTREPRISE



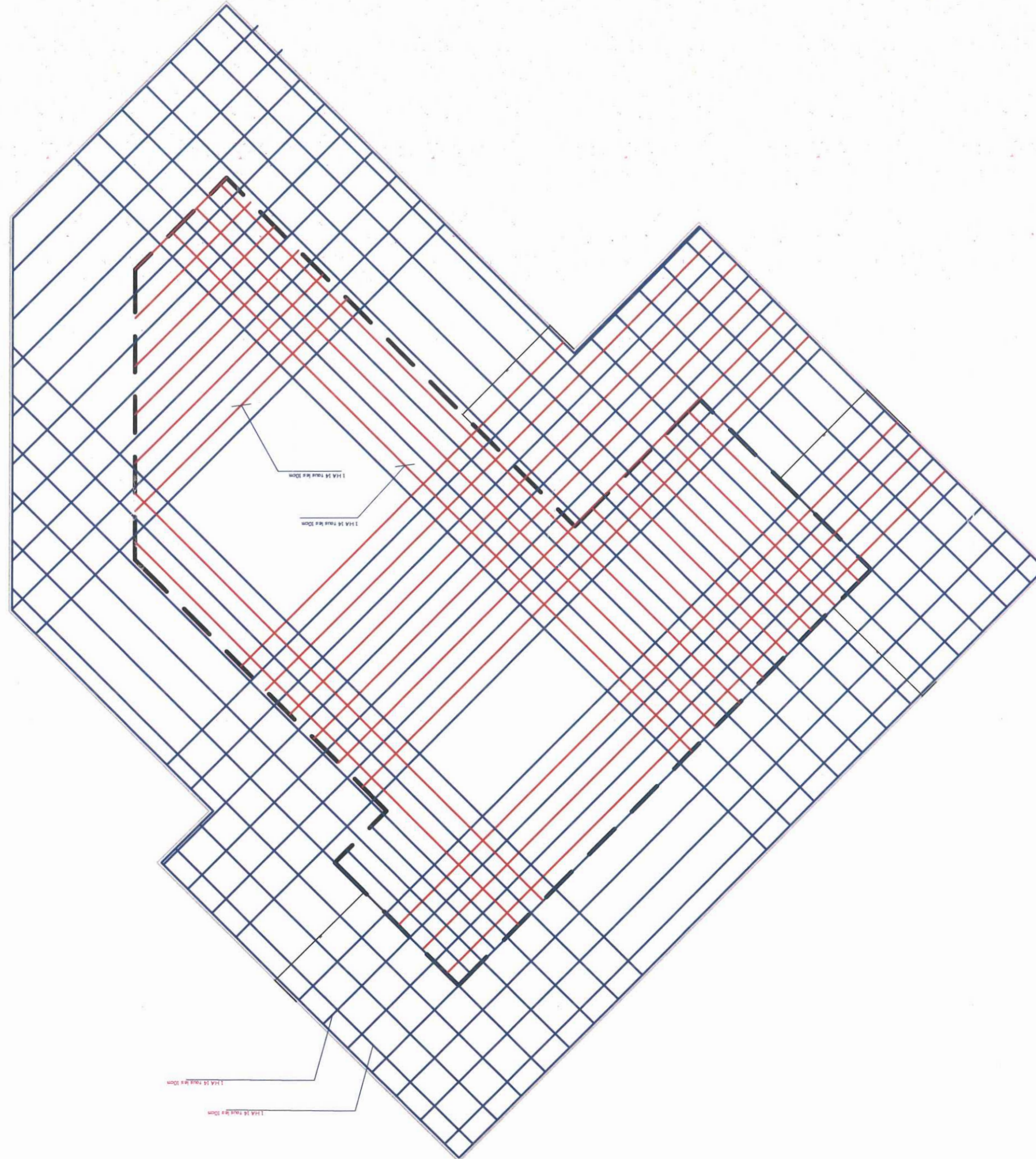
NOM DU PLAN

PLAN DE
COFFRAGE ET DE
FERRAILLAGE DES
SEMELLES SF6;
SF7; SF8 ET SF9

VISA

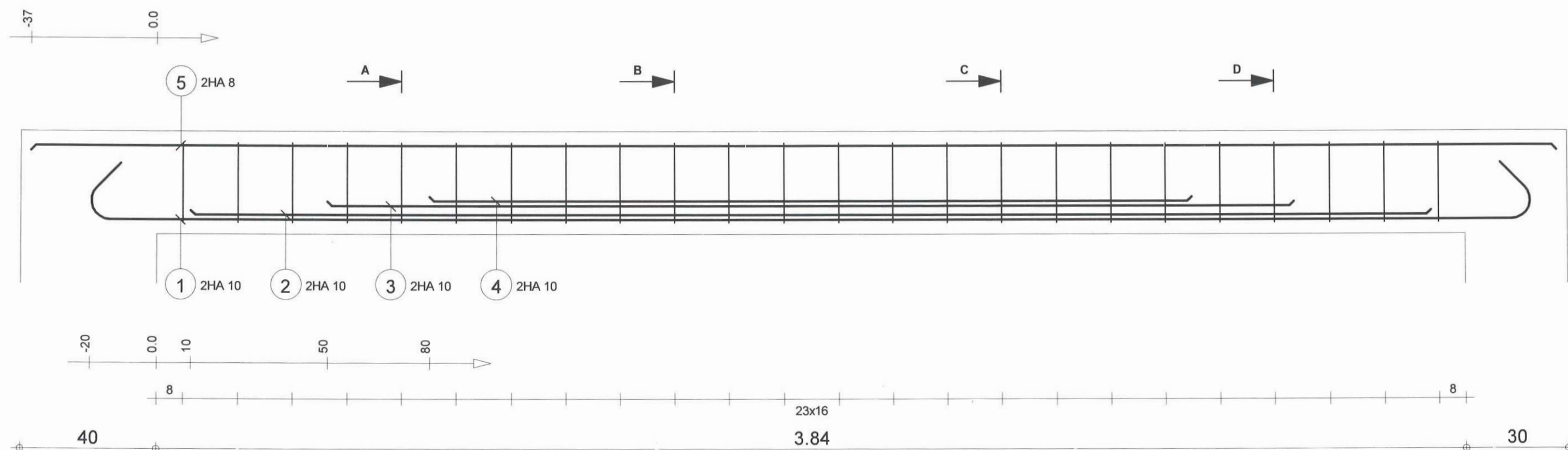
Sept
2023

PL N°

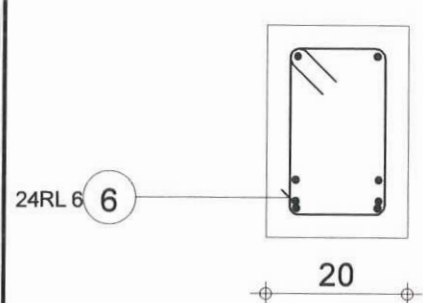


**BON POUR
EXÉCUTION**

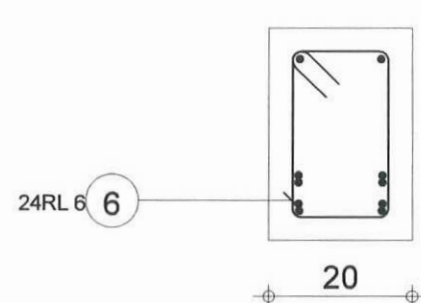




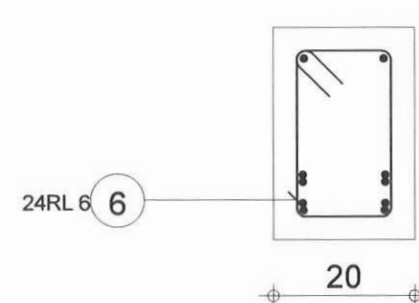
A-A



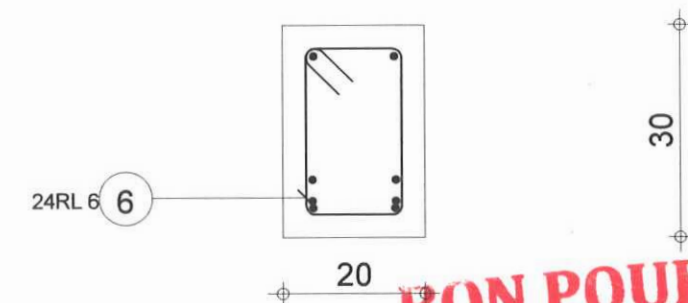
B-B



C-C



D-D



**BON POUR
EXÉCUTION**



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	2HA 10	l=4.57	00	4	2HA 10	l=2.23	00
2	2HA 10	l=3.64	00	5	2HA 8	l=4.48	00
3	2HA 10	l=2.84	00	6	24RL 6	l=88	31

FONDATION
PROJET CERME_PLANS D'EXECUTION

LONGRINE ISOSTATIQUE DE PORTEE MAXIMALE EGALE A 3,84m

Section 20x30

Nombre 1

Béton : BETON25 = 0.272 m3

Enrobage inférieur 3 cm

Densité = 90.44 kg/ m3

Surface du coffrage = 3.61 m2

Acier HA 400 = 19.9 kg

Acier RL 235 = 4.66 kg

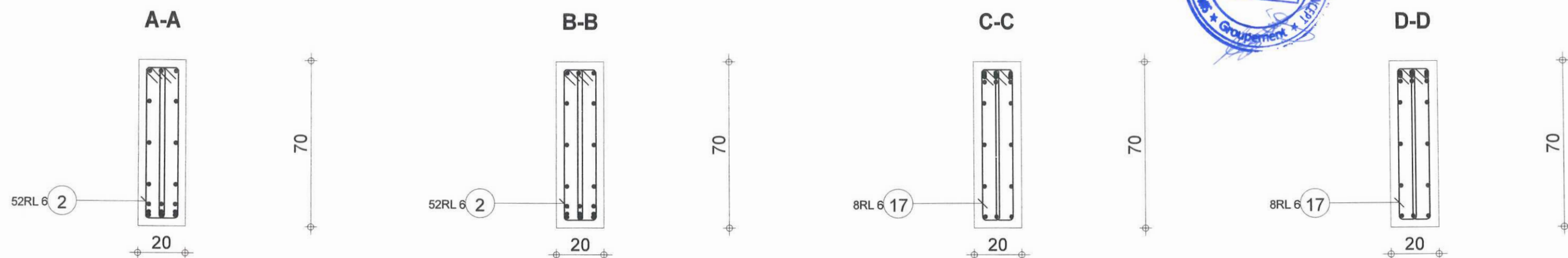
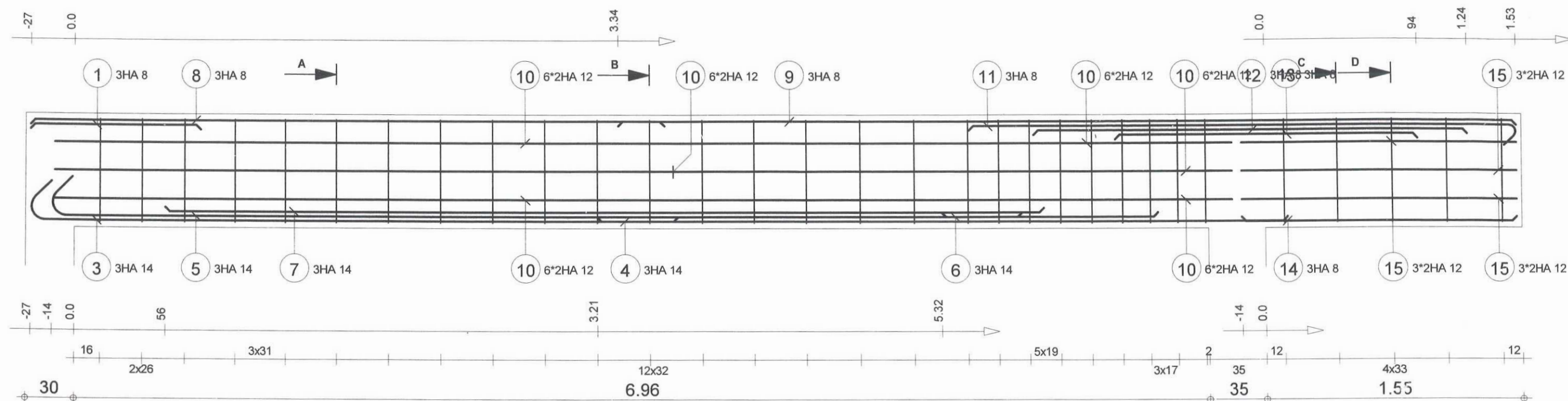
Enrobage supérieur 3 cm

Echelle pour la vue 7.81cm/m

Echelle pour la section 9.34cm/m

Enrobage latéral 3 cm

Page 1/1



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 8	I=1.04	00	④	3HA 14	I=4.24	00	⑦	3HA 14	I=5.38	00	⑩	6*2HA 12	I=3.79	00	⑬	3HA 8	I=1.86	00
②	52RL 6	I=1.56	31	⑤	3HA 14	I=6.20	00	⑧	3HA 8	I=3.89	00	⑪	3HA 8	I=3.48	00	⑭	3HA 8	I=1.67	00
③	3HA 14	I=4.21	00	⑥	3HA 14	I=1.33	00	⑨	3HA 8	I=5.49	00	⑫	3HA 8	I=2.66	00	⑮	3*2HA 12	I=1.67	00

RDC

PROJET CERME_PLANS

POUTRE 1

Section 20x70

Tél.

Fax

Nombre 1

Béton : BETON25 = 1.28 m3

Enrobage inférieur 3 cm

Densité = 134.4 kg/ m3

Surface du coffrage = 14.8 m2

Acier HA 400 = 151 kg

Acier RL 235 = 21.5 kg

Enrobage supérieur 3 cm

Echelle pour la vue 3.97cm/m

Echelle pour la section 5.71cm/m

Enrobage latéral 3 cm

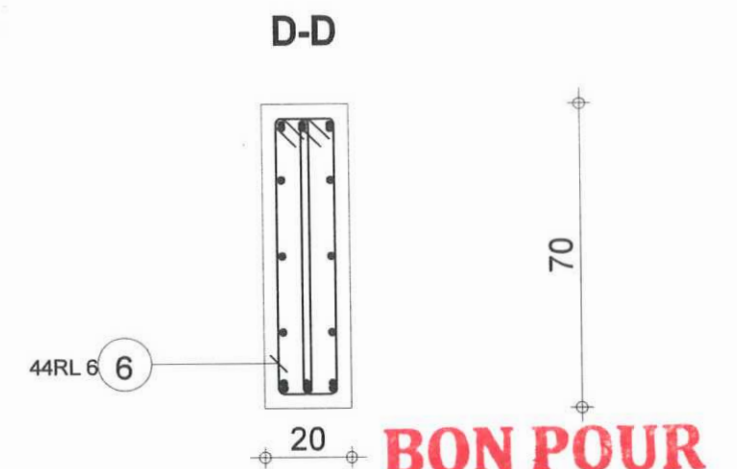
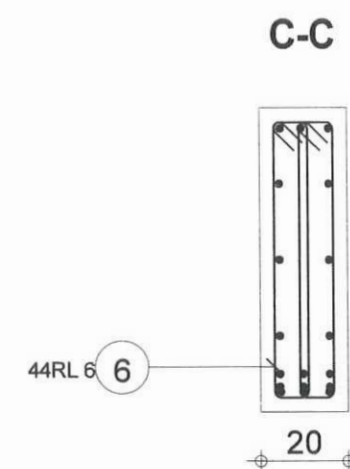
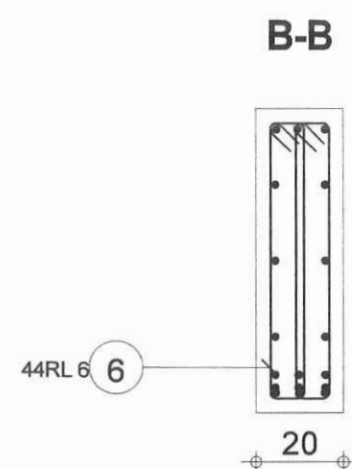
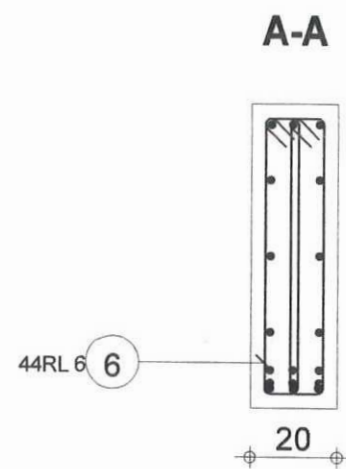
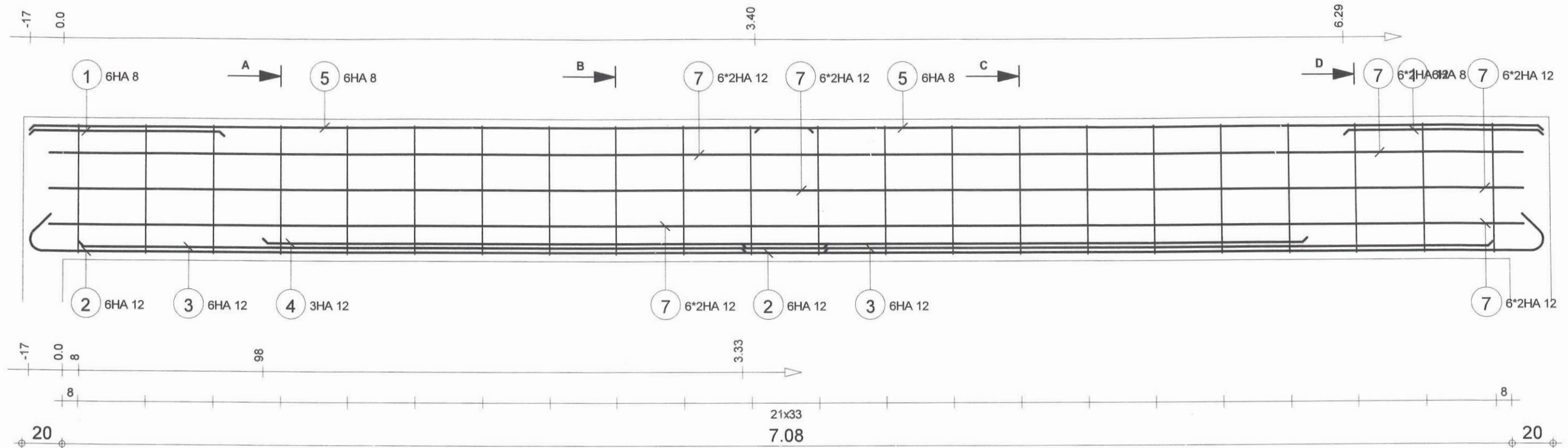
Page 1/2

Pos.	Armature		Code	Forme
16	2RL 6	l=1.56	31	
17	8RL 6	l=1.55	31	

**BON POUR
EXÉCUTION**

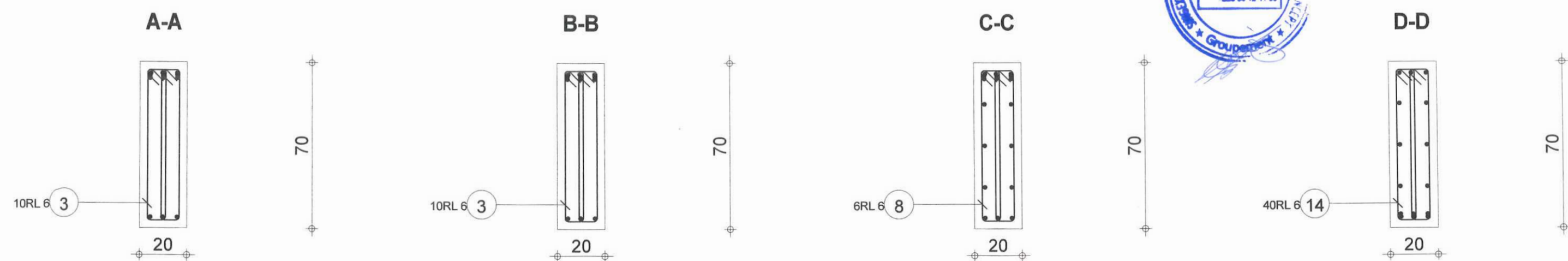
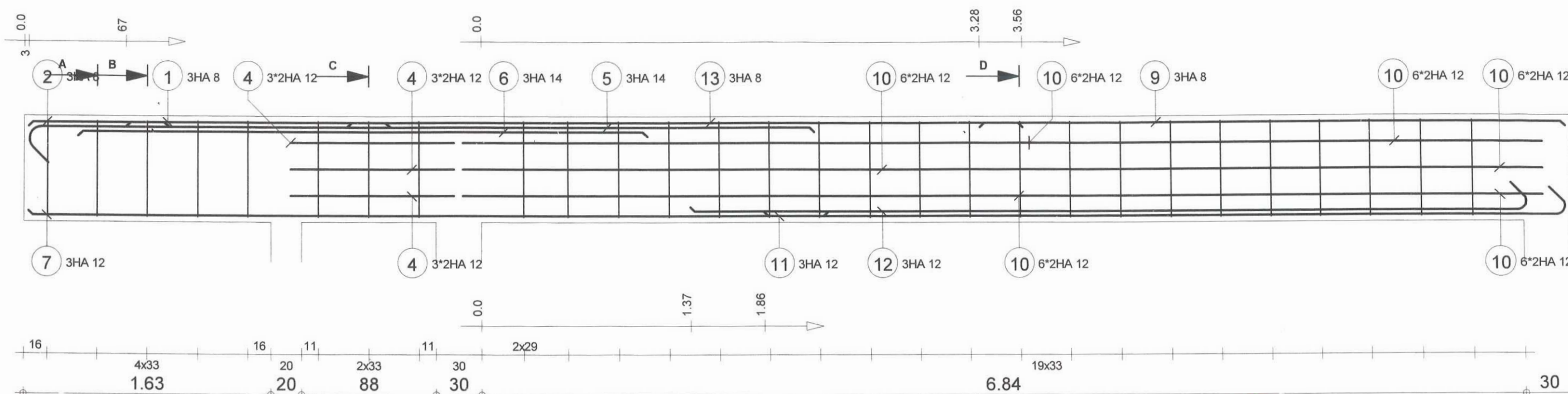


Tél.		Fax			
RDC PROJET CERME PLANS	POUTRE 1 Section 20x70	Nombre 1	Béton : BETON25 = 1.28 m3		Acier HA 400 = 151 kg
					Acier RL 235 = 21.5 kg
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm
			Enrobage latéral 3 cm		
		Densité = 134.4 kg/ m3			
		Surface du coffrage = 14.8 m2		Page 2/2	

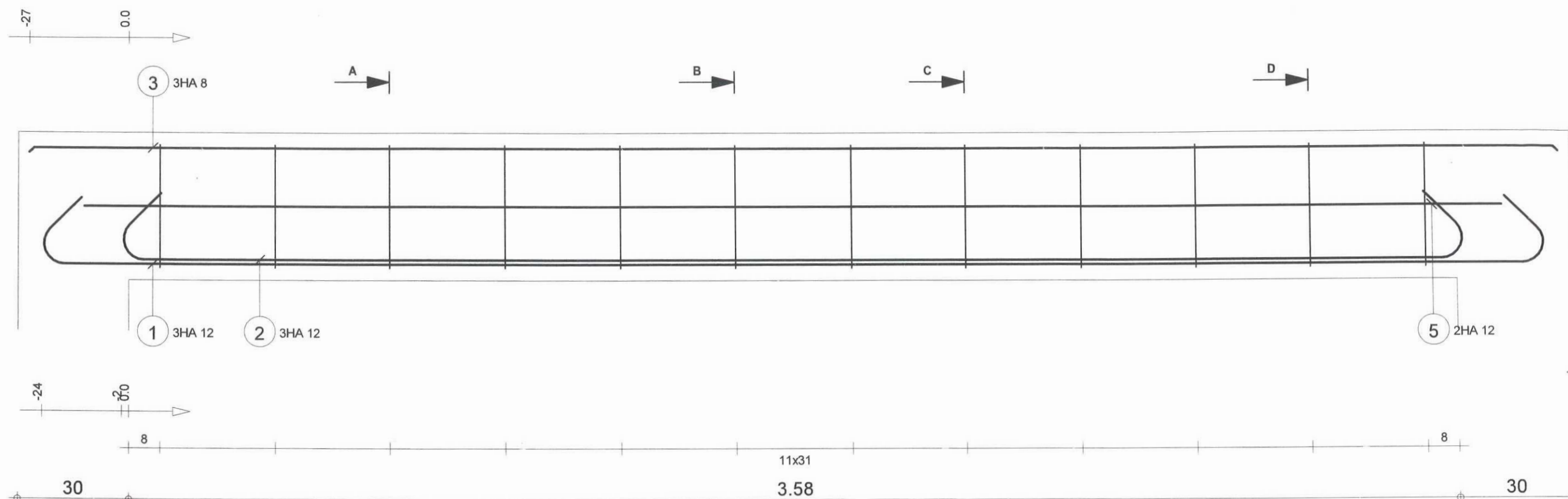


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
1	6HA 8	I=96	00	96	4	3HA 12	I=5.12	00	5.12	7	6*2HA 12	I=3.79	00	3.79
2	6HA 12	I=4.11	00	3.92	5	6HA 8	I=3.85	00	3.85					
3	6HA 12	I=3.67	00	3.67	6	44RL 6	I=1.56	31	8 8					

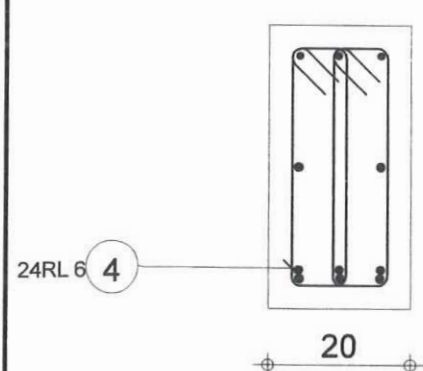
RDC		POUTRE 2		Section 20x70		Nombre 1		Béton : BETON25 = 1.05 m3		Acier HA 400 = 107 kg	
PROJET CERME_PLANS								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
								Densité = 116.2 kg/ m3		Echelle pour la vue 4.83cm/m	
								Surface du coffrage = 12.2 m2		Echelle pour la section 5.71cm/m	
										Enrobage latéral 3 cm	
										Page 1/1	



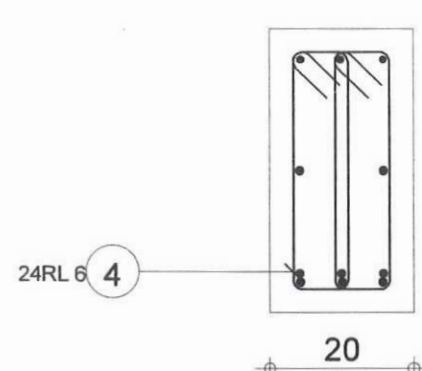
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②	3HA 8	I=93	00	93	⑤	3HA 14	I=5.42	00	5.17	⑧	6RL 6	I=1.56	31	1.56	⑪	3HA 12	I=5.45	00	5.26		
③	10RL 6	I=1.56	31	1.56	⑥	3HA 14	I=3.74	00	3.74	⑨	3HA 8	I=3.83	00	3.83	⑫	3HA 12	I=5.68	00	5.49		
												Tél.		Fax				Acier HA 400 = 135 kg			
RDC PROJET CERME_PLANS												POUTRE 3 Section 20x70		Nombre 1		Béton : BETON25 = 1.42 m3		Acier RL 235 = 19.4 kg			
																Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
																Densité = 108.5 kg/ m3		Echelle pour la vue 3.59cm/m			
																Surface du coffrage = 16.4 m2		Echelle pour la section 5.71cm/m		Page 1/1	



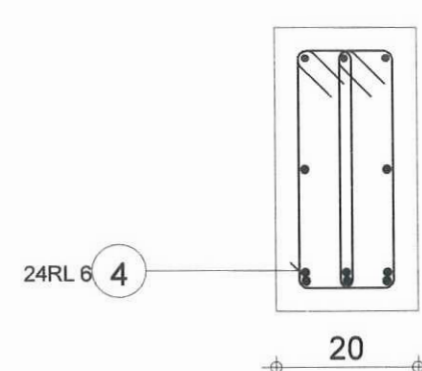
A-A



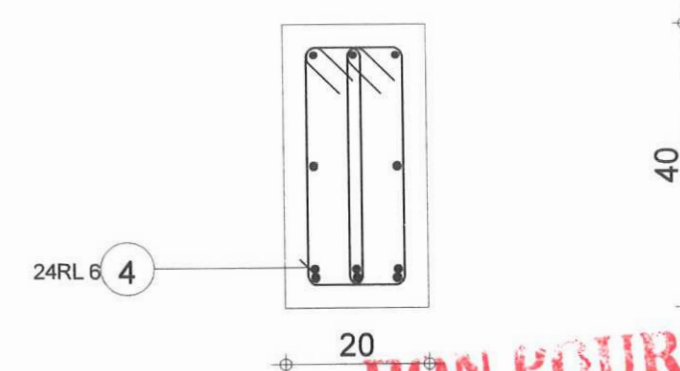
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	3HA 12	I=4.43	00	4	24RL 6	I=96	31
2	3HA 12	I=4.00	00	5	2HA 12	I=3.82	00
3	3HA 8	I=4.12	00				



RDC

PROJET CERME_PLANS

POUTREE 4

Section 20x40

Tél.

Fax

Nombre 1

Béton : BETON25 = 0.334 m3

Enrobage inférieur 3 cm

Densité = 117.4 kg/ m3

Surface du coffrage = 4.22 m2

Acier HA 400 = 34.1 kg

Acier RL 235 = 5.11 kg

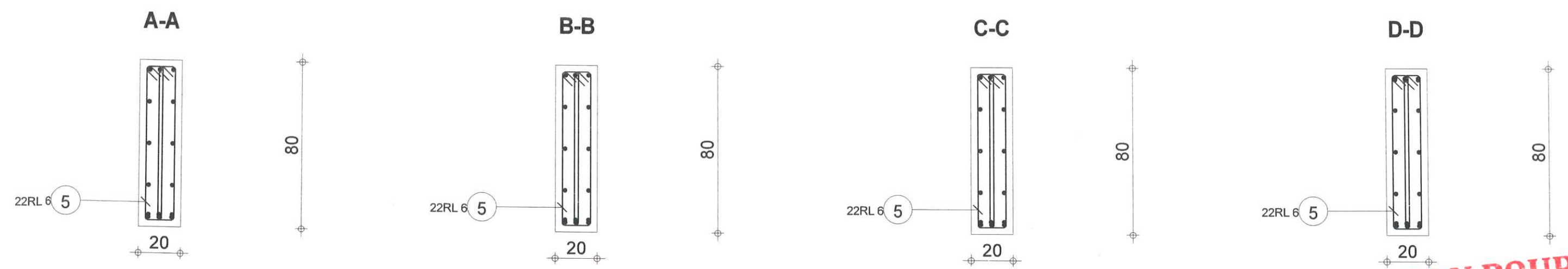
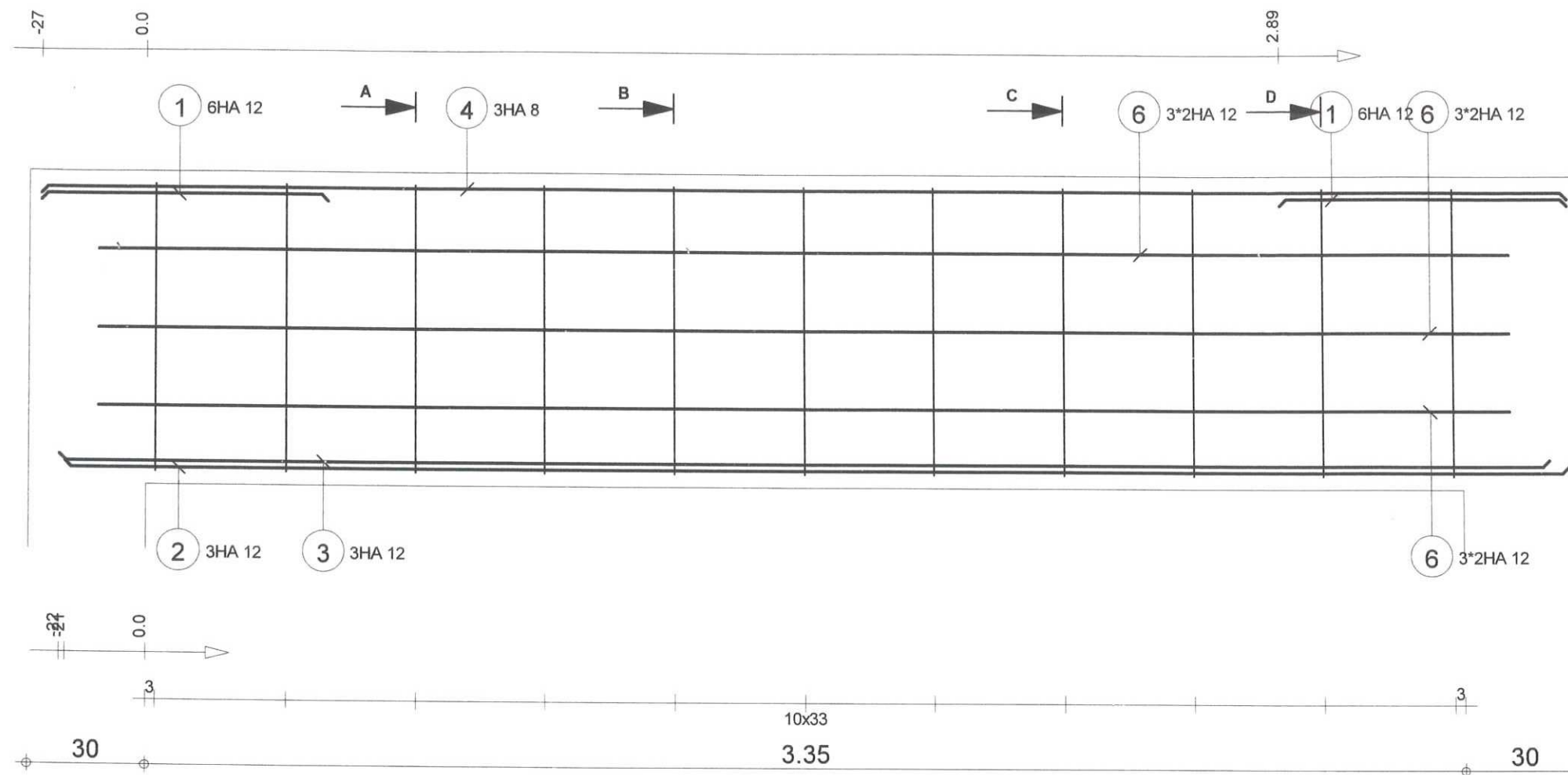
Enrobage supérieur 3 cm

Echelle pour la vue 8.45cm/m

Echelle pour la section 9.34cm/m

Enrobage latéral 3 cm

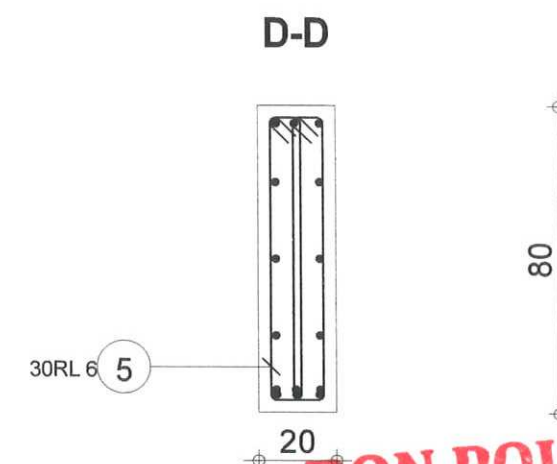
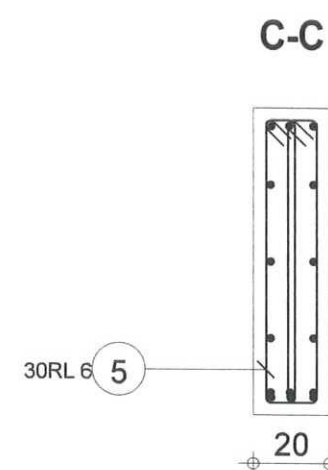
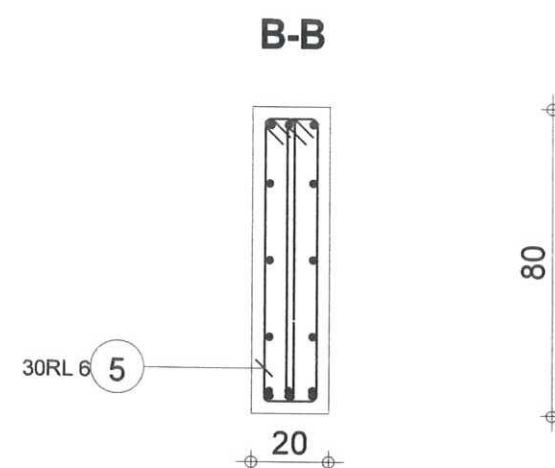
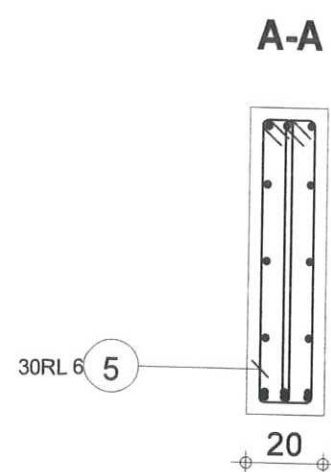
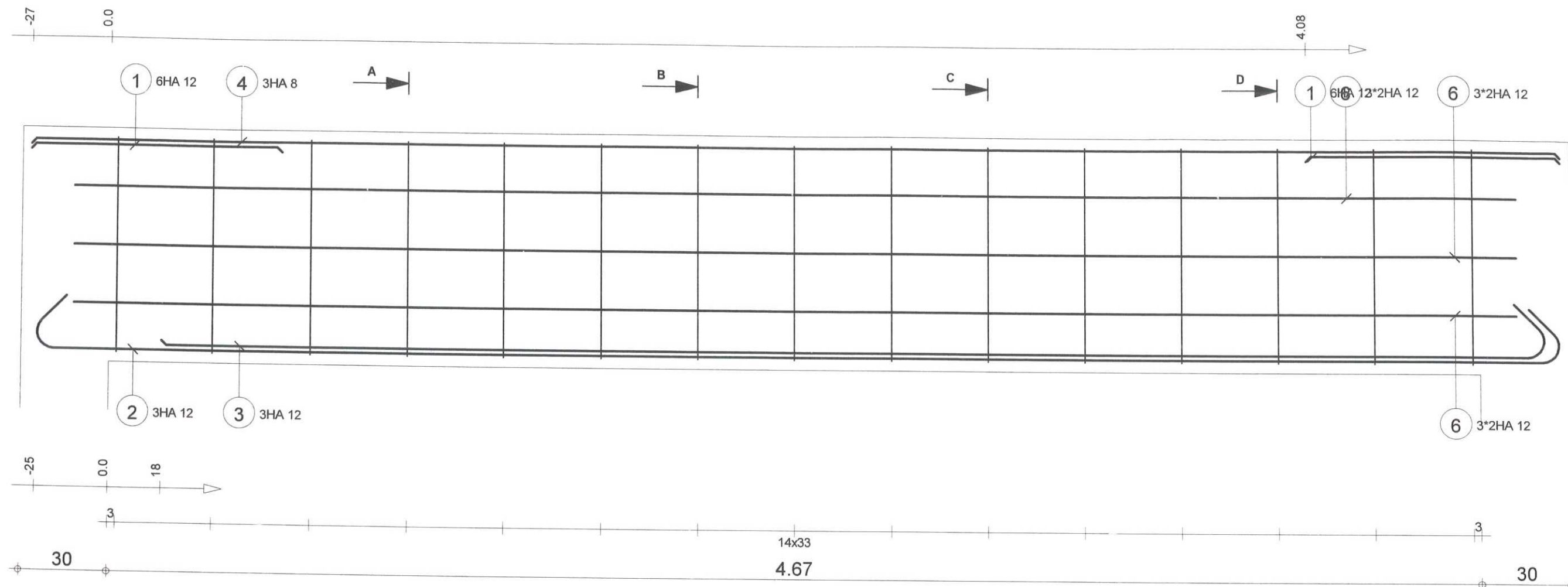
Page 1/1



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	6HA 12	l=73	00	73	④	3HA 8	l=3.89	00	3.89
②	3HA 12	l=3.83	00	3.83	⑤	22RL 6	l=1.76	31	
③	3HA 12	l=3.79	00	3.79	⑥	3*2HA 12	l=3.59	00	3.59

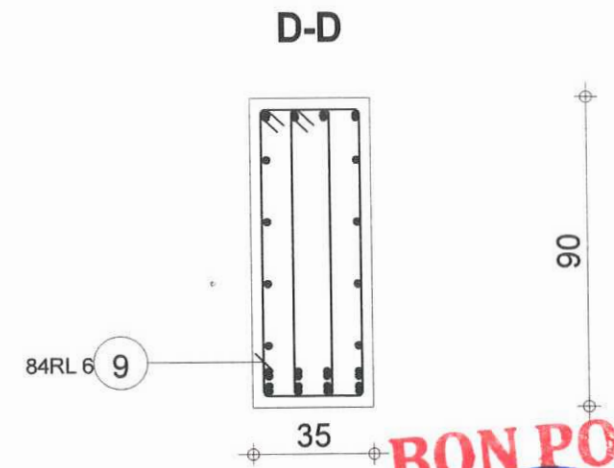
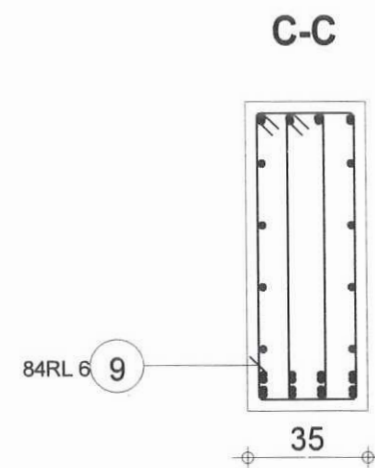
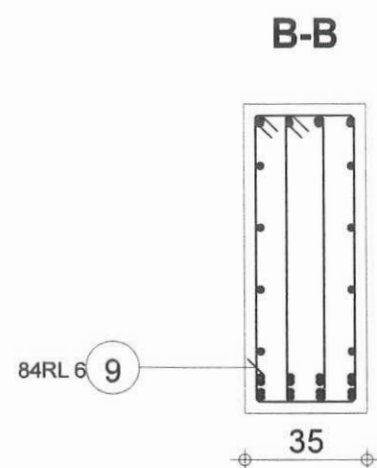
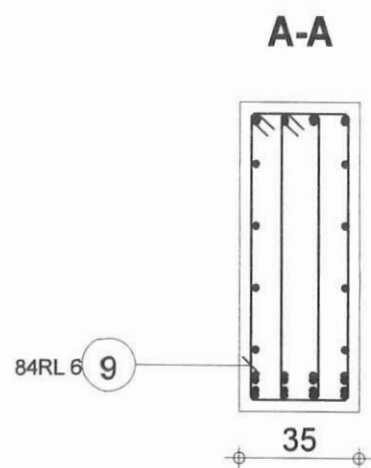
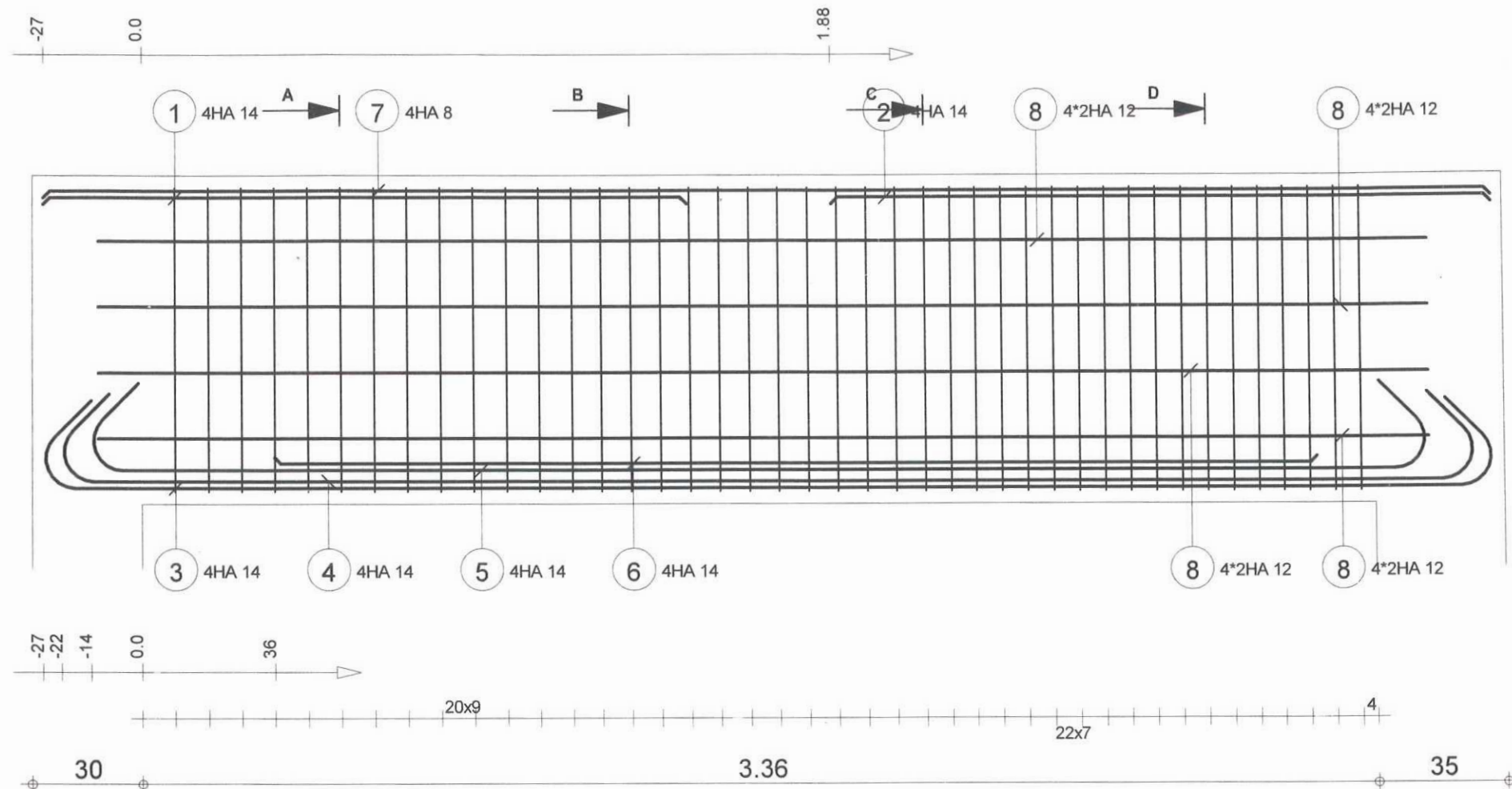


RDC PROJET CERME_PLANS	POUTRE 5 Section 20x80	Nombre 1	Tél.	Fax			
					Béton : BETON25 = 0.632 m3	Acier HA 400 = 47.9 kg	
					Acier RL 235 = 8.59 kg		
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm
			Densité = 89.4 kg/ m3		Echelle pour la vue 6.6cm/m		Page 1/1
Surface du coffrage = 7.31 m2		Echelle pour la section 5.05cm/m					



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 12 I=86	00		④	3HA 8 I=5.21	00	
②	3HA 12 I=5.57	00		⑤	30RL 6 I=1.76	31	
③	3HA 12 I=4.90	00		⑥	3*2HA 12 I=4.91	00	

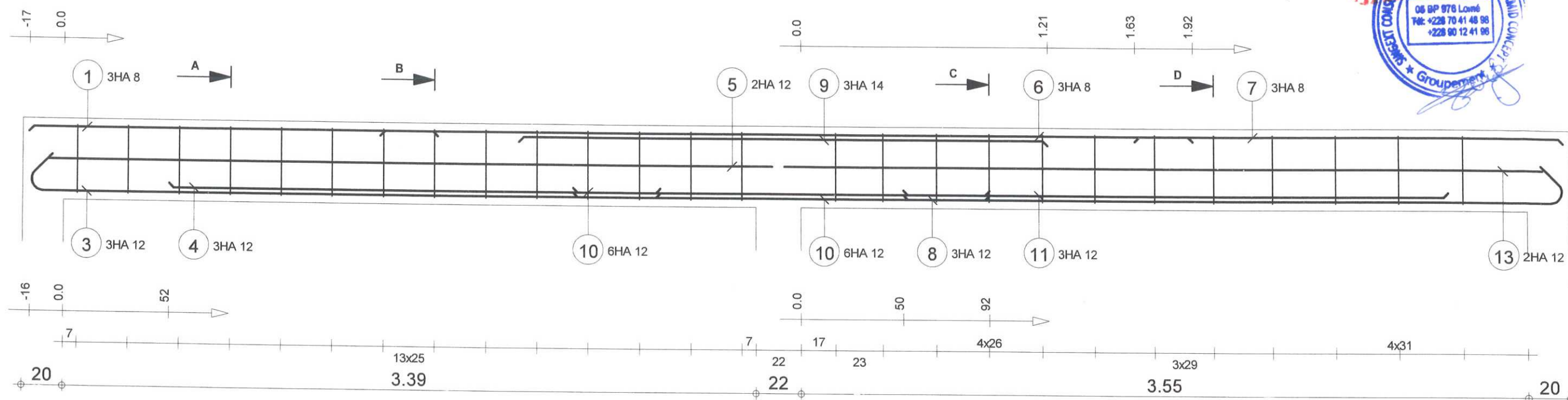
RDC PROJET CERME_PLANS	POUTRE 6 Section 20x80	Nombre 1	Tél.		Fax			
			Béton : BETON25 = 0.843 m3		Acier HA 400 = 64.8 kg Acier RL 235 = 11.7 kg			
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
			Densité = 90.75 kg/ m3 Surface du coffrage = 9.69 m2		Echelle pour la vue 6.6cm/m Echelle pour la section 5.05cm/m		Page 1/1	



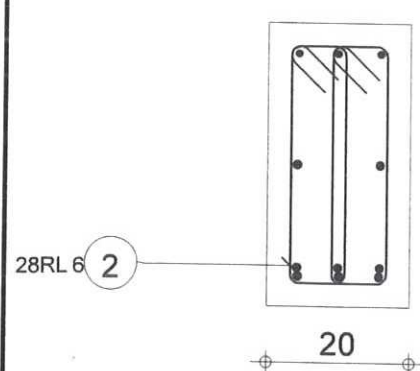
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	4HA 14	I=1.75	00	1.75	④	4HA 14	I=4.34	00	3.85	⑦	4HA 8	I=3.95	00	3.95
②	4HA 14	I=1.80	00	1.80	⑤	4HA 14	I=4.13	00	3.64	⑧	4*2HA 12	I=3.63	00	3.62
③	4HA 14	I=4.44	00	3.95	⑥	4HA 14	I=2.84	00	2.84	⑨	84RL 6	I=2.20	31	20 8

RDC		POUTRE 7		Tél.		Fax		Nombre 1		Béton : BETON25 = 1.26 m3		Acier HA 400 = 125 kg	
PROJET CERME_PLANS		Section 35x90								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 131.7 kg/ m3		Echelle pour la vue 6.04cm/m	
										Surface du coffrage = 9.02 m2		Echelle pour la section 4.52cm/m	
												Enrobage latéral 3 cm	
												Page 1/1	

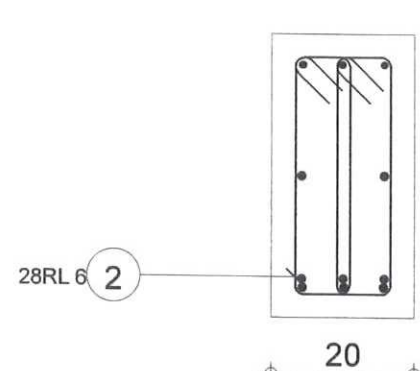




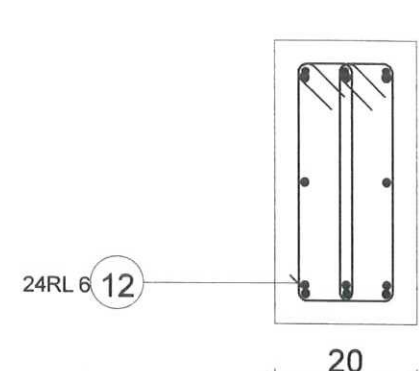
A-A



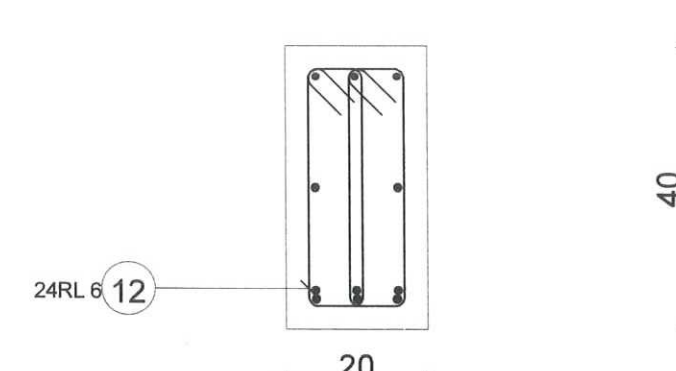
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme					
①	3HA 8	I=2.00	00		④	3HA 12	I=2.40	00		⑦	3HA 8	I=2.09	00		⑩	6HA 12	I=2.03	00		⑬	2HA 12	I=3.70	00	
②	28RL 6	I=96	31		⑤	2HA 12	I=3.54	00		⑧	3HA 12	I=3.41	00		⑪	3HA 12	I=2.67	00						
③	3HA 12	I=3.27	00		⑥	3HA 8	I=3.97	00		⑨	3HA 14	I=2.58	00		⑫	24RL 6	I=96	31						

RDC

PROJET CERME_PLANS

POUTRE 8

Section 20x40

Nombre 1

Béton : BETON25 = 0.605 m3

Enrobage inférieur 3 cm

Densité = 140.5 kg/ m3

Surface du coffrage = 7.59 m2

Acier HA 400 = 73.9 kg

Acier RL 235 = 11.1 kg

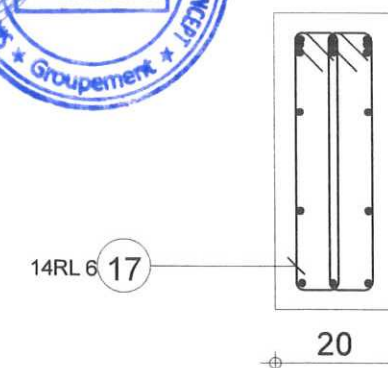
Enrobage supérieur 3 cm

Echelle pour la vue 4.78cm/m

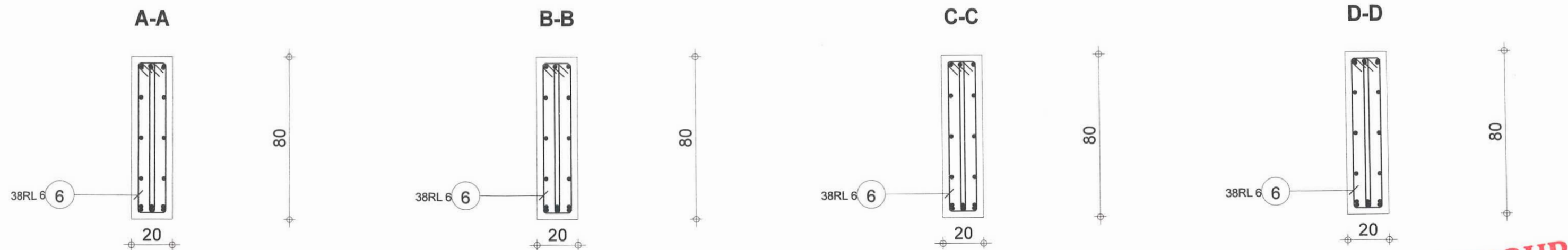
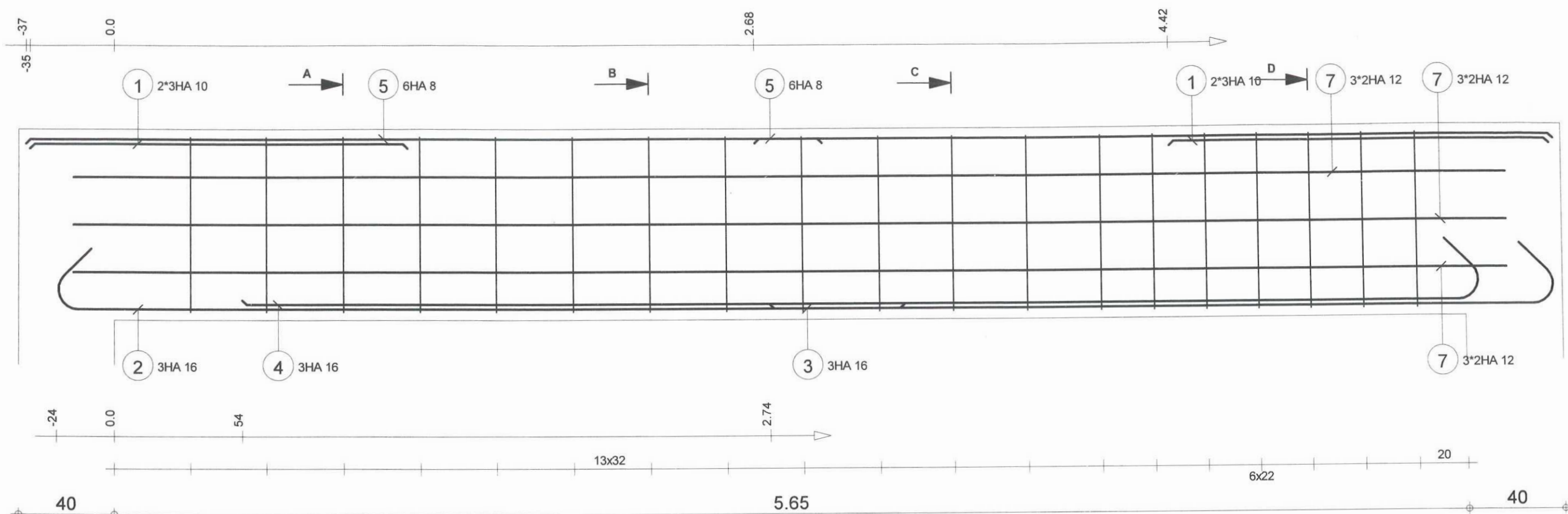
Echelle pour la section 9.34cm/m

Enrobage latéral 3 cm

Page 1/1



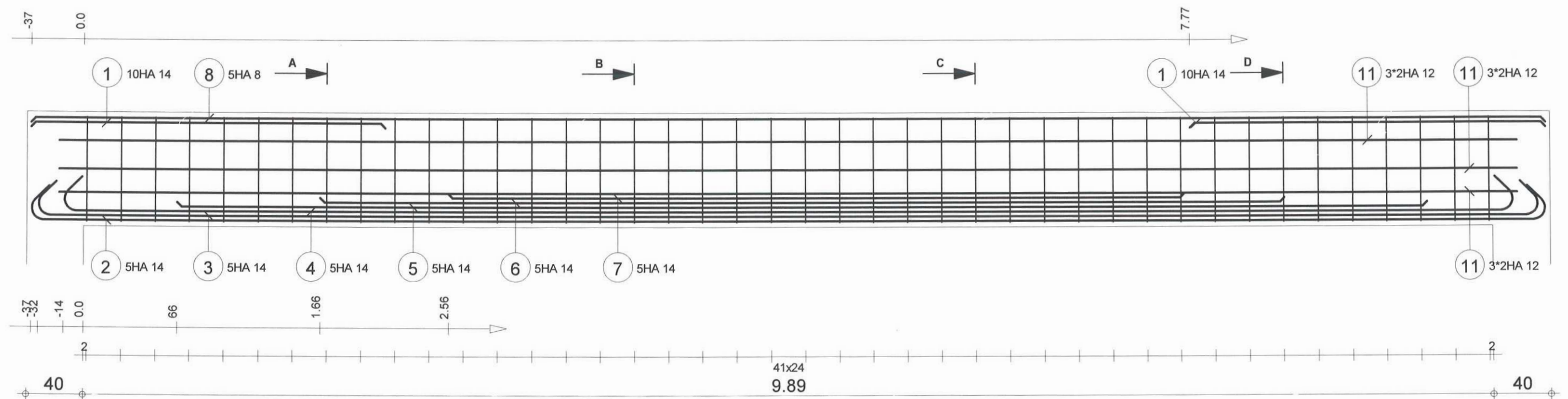
RDC PROJET CERME_PLANS	POUTRE 9 Section 20x50	Nombre 1	Béton : BETON25 = 0.916 m3	Acier HA 400 = 105 kg	Page 1/2	
			Enrobage inférieur 3 cm	Acier RL 235 = 15.9 kg		Enrobage supérieur 3 cm
			Densité = 131 kg/ m3	Echelle pour la vue 3.97cm/m		Enrobage latéral 3 cm
			Surface du coffrage = 11 m2	Echelle pour la section 7.8cm/m		



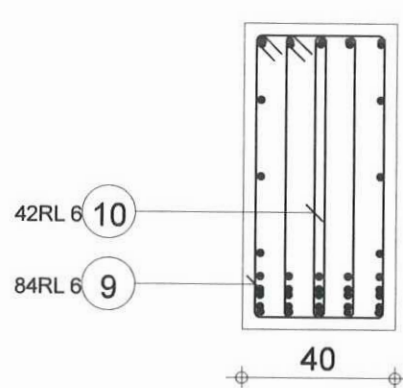
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	2*3HA 10	I=1.58	00	1.58	④	3HA 16	I=5.44	00	5.17	⑦	3*2HA 12	I=5.99	00	5.99
②	3HA 16	I=3.81	00	3.55	⑤	6HA 8	I=3.34	00	3.34					
③	3HA 16	I=3.54	00	3.28	⑥	38RL 6	I=1.76	31	8 74 8					



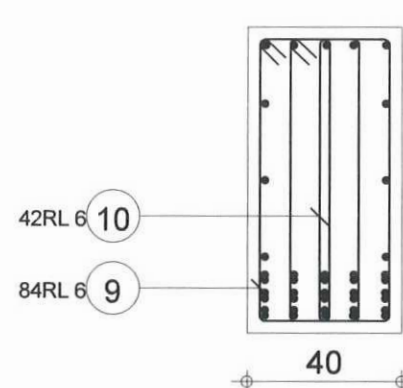
RDC		POUTRE 10		Nombre 1		Béton : BETON25 = 1.03 m3		Acier HA 400 = 106 kg	
PROJET CERME_PLANS		Section 20x80				Enrobage inférieur 3 cm		Acier RL 235 = 14.9 kg	
						Densité = 117.5 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 11.8 m2		Echelle pour la vue 5.57cm/m	
								Echelle pour la section 5.05cm/m	
								Page 1/1	



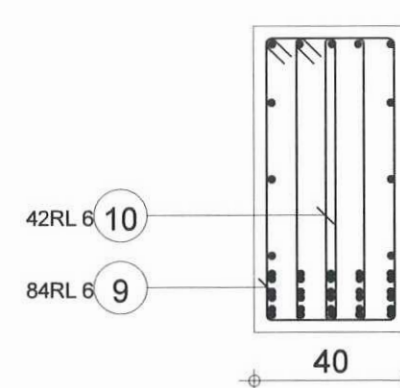
A-A



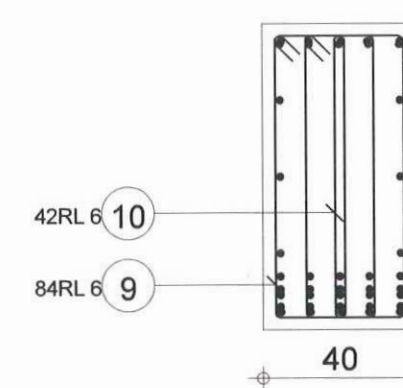
B-B



C-C



D-D



**BON POUR
EXÉCUTION**



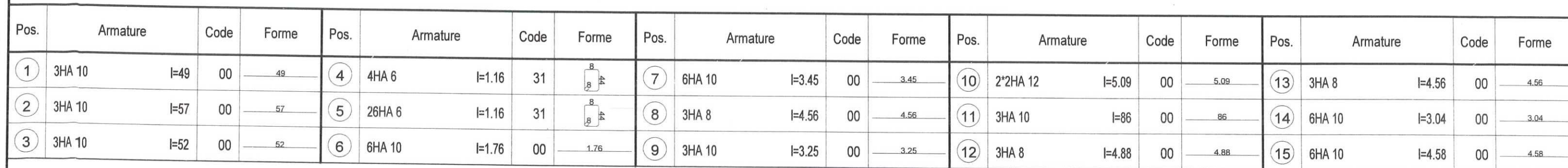
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	10HA 14	I=2.49	00	④	5HA 14	I=10.66	00	⑦	5HA 14	I=5.17	00	⑩	42RL 6	I=1.60	
②	5HA 14	I=11.12	00	⑤	5HA 14	I=8.77	00	⑧	5HA 8	I=10.63	00	⑪	3*2HA 12	I=10.23	00
③	5HA 14	I=11.02	00	⑥	5HA 14	I=6.77	00	⑨	84RL 6	I=2.12	31				

RDC
PROJET CERME_PLANS D'EXECUTION

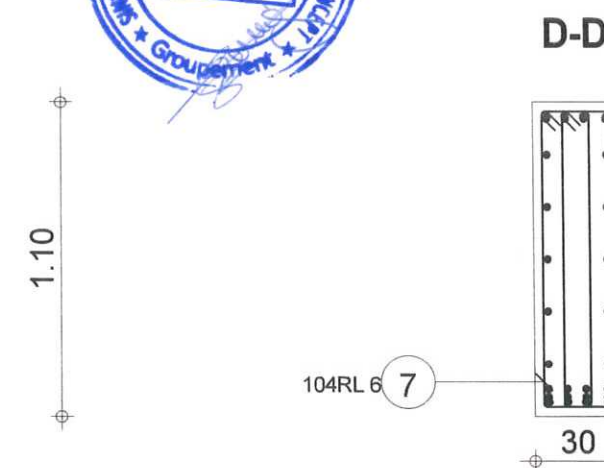
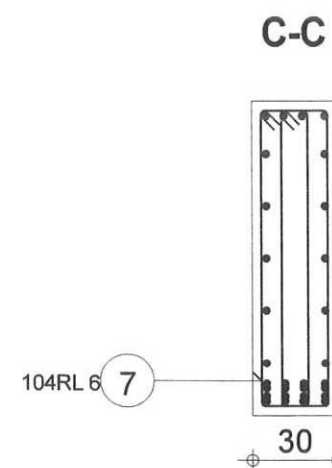
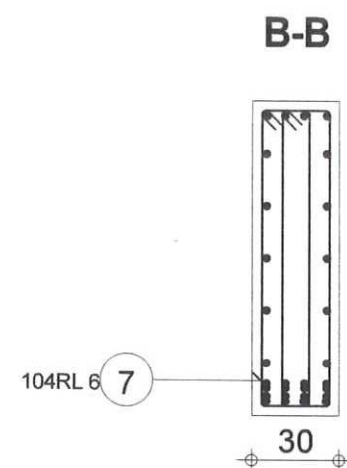
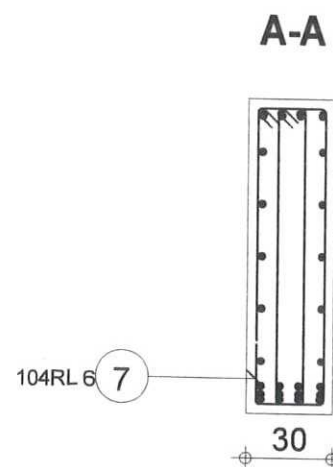
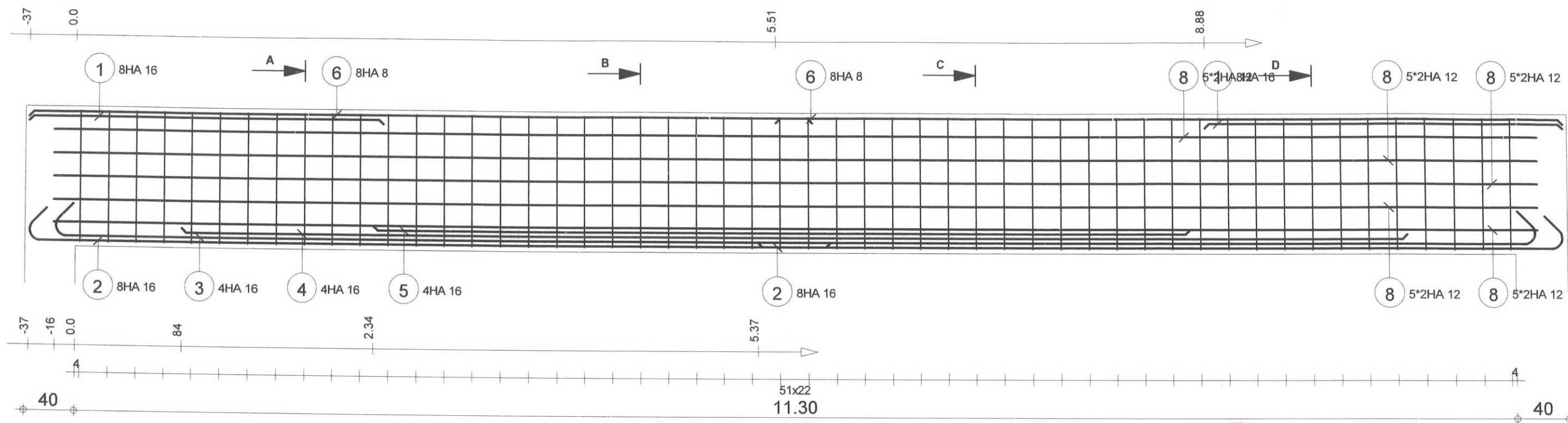
POUTRE 13
Section 40x80

Nombre 1

Béton : BETON25 = 3.42 m3	Acier HA 400 = 429 kg
Enrobage inférieur 3 cm	Acier RL 235 = 54.4 kg
Densité = 141.2 kg/ m3	Enrobage supérieur 3 cm
Surface du coffrage = 21.7 m2	Enrobage latéral 3 cm
	Echelle pour la vue 3.42cm/m
	Echelle pour la section 5.05cm/m



Page 1/2



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	8HA 16	I=2.79	00	2.79	④	4HA 16	I=9.62	00	9.62	⑦	104RL 6	I=2.53	31	
②	8HA 16	I=6.57	00	6.57	⑤	4HA 16	I=6.42	00	6.42	⑧	5*2HA 12	I=11.64	00	11.64
③	4HA 16	I=12.15	00	11.62	⑥	8HA 8	I=6.16	00	6.16					

RDC
PROJET CERME_PLANS

POUTRE 16 AVEC REMONTEE DE 35CM
Section 30x110

Nombre 1

Béton : BETON25 = 3.99 m3
Enrobage inférieur 3 cm
Densité = 119.5 kg/ m3
Surface du coffrage = 30.7 m2

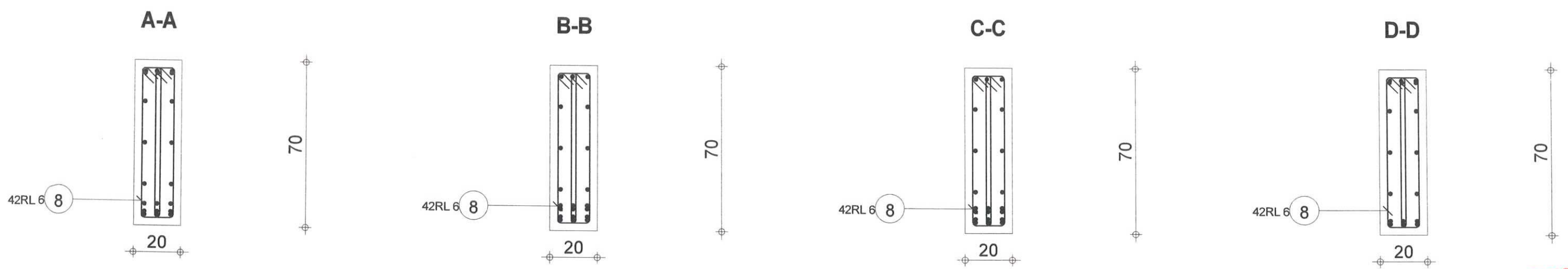
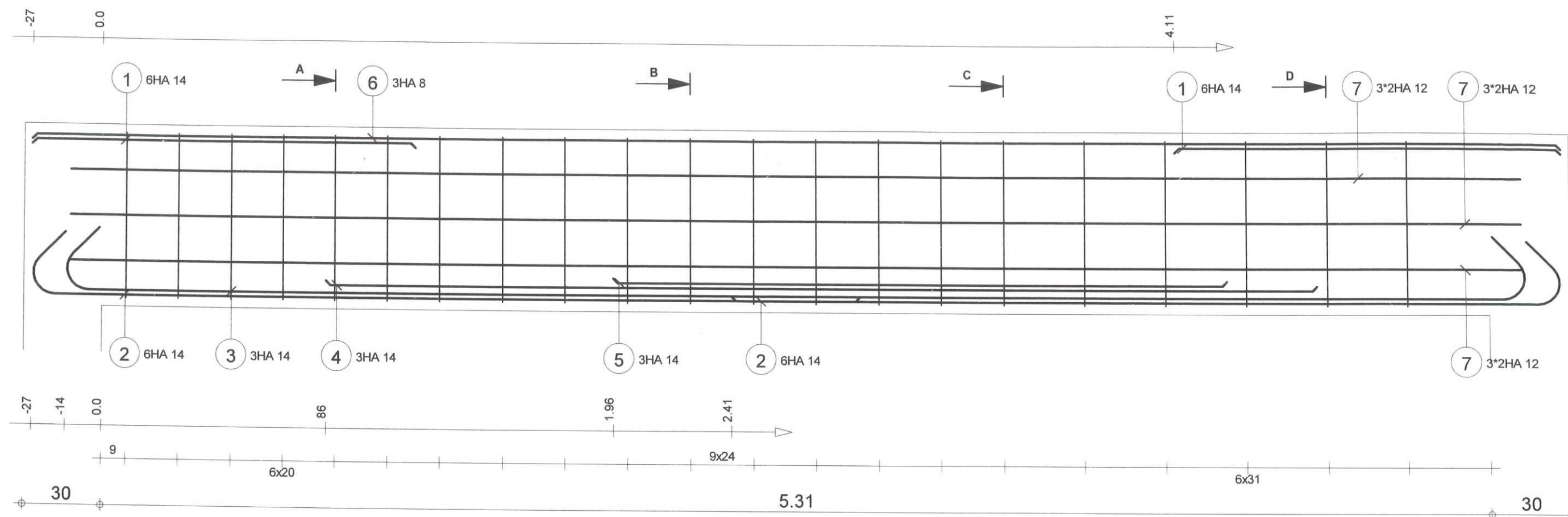
Acier HA 400 = 419 kg
Acier RL 235 = 58.5 kg

Enrobage supérieur 3 cm

Echelle pour la vue 3.03cm/m
Echelle pour la section 3.76cm/m

Enrobage latéral 3 cm

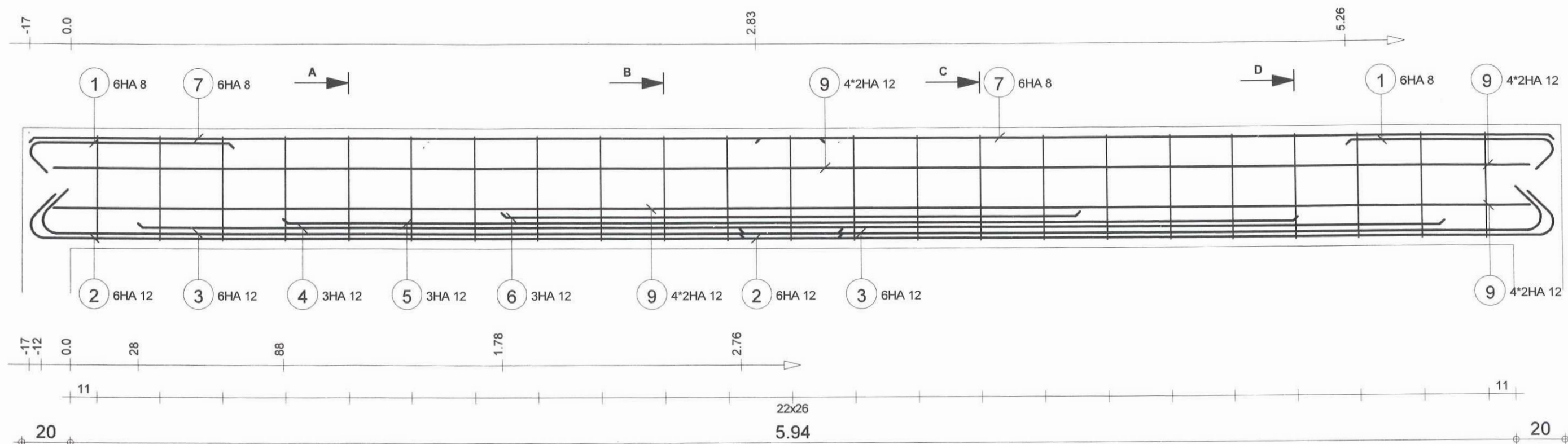
Page 1/1



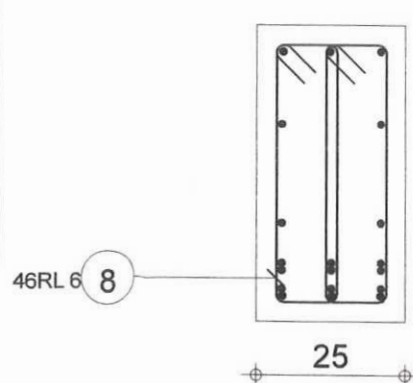
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 14	l=1.47	00	④	3HA 14	l=3.79	00	⑦	3*2HA 12	l=5.55	00
②	6HA 14	l=3.42	00	⑤	3HA 14	l=2.35	00	⑧	42RL 6	l=1.56	31
③	3HA 14	l=6.08	00	⑥	3HA 8	l=5.85	00				



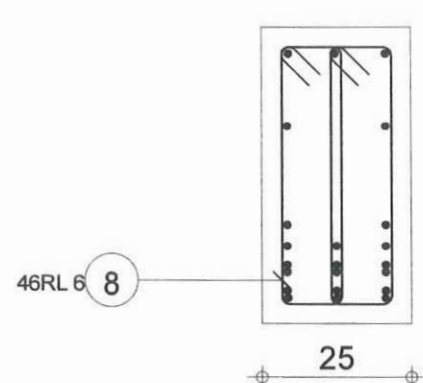
RDC		POUTRE 17		Tél.		Fax		Nombre 1		Béton : BETON25 = 0.828 m3		Acier HA 400 = 116 kg	
PROJET CERME_PLANS		Section 20x70								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 158.2 kg/ m3		Echelle pour la vue 6.05cm/m	
										Surface du coffrage = 9.62 m2		Echelle pour la section 5.71cm/m	
												Enrobage latéral 3 cm	
												Page 1/1	



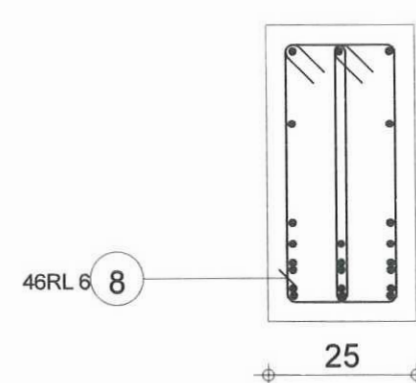
A-A



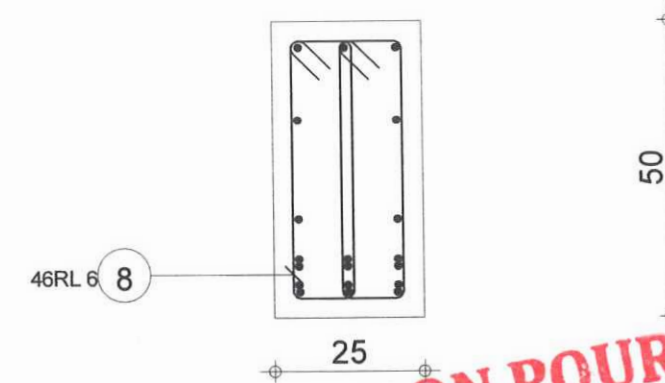
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 8	I=97	00	4	3HA 12	I=5.38	00	7	6HA 8	I=3.28	00
2	6HA 12	I=3.54	00	5	3HA 12	I=4.18	00	8	46RL 6	I=1.21	31
3	6HA 12	I=3.49	00	6	3HA 12	I=2.38	00	9	4*2HA 12	I=3.22	00

Tél.

Fax

Nombre 1

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POUTRE 18
Section 25x50

Béton : BETON25 = 0.792 m3
Enrobage inférieur 3 cm
Densité = 145.2 kg/ m3
Surface du coffrage = 8.07 m2

Acier HA 400 = 102 kg
Acier RL 235 = 12.3 kg

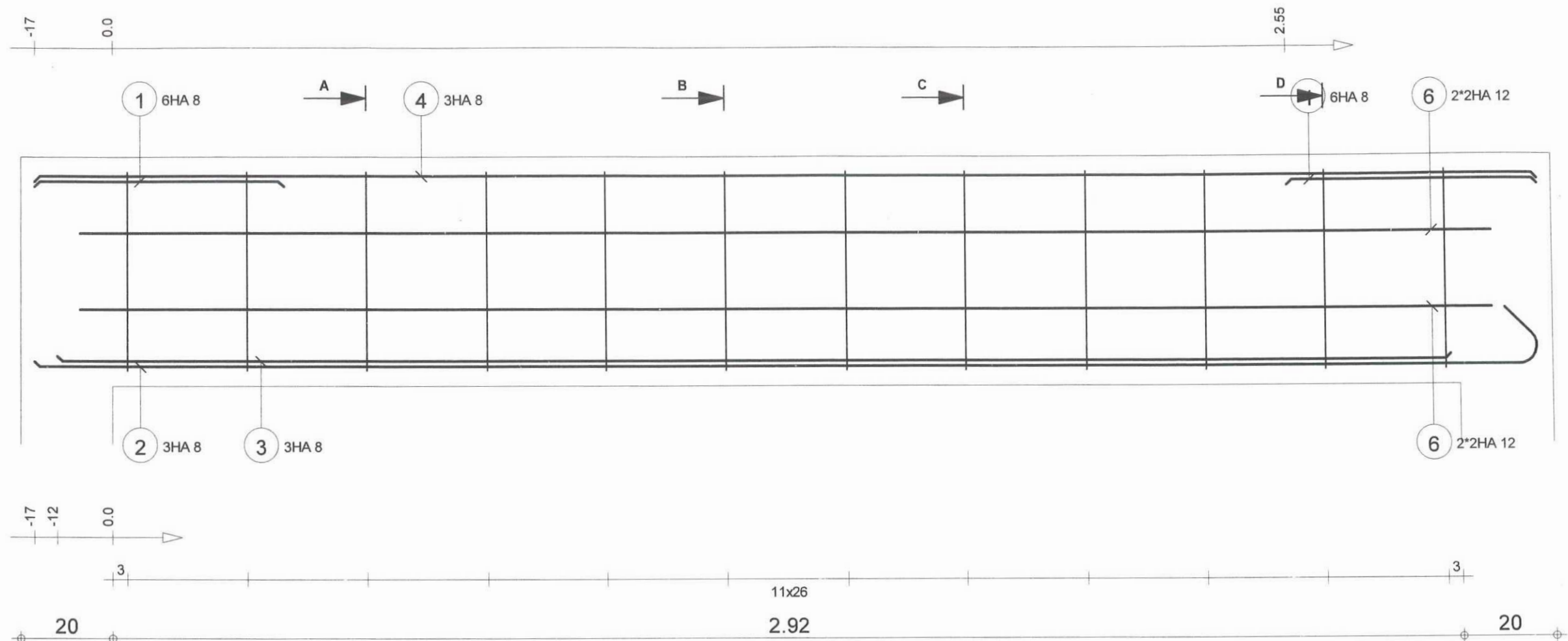
Enrobage supérieur 3 cm

Echelle pour la vue 5.67cm/m
Echelle pour la section 7.8cm/m

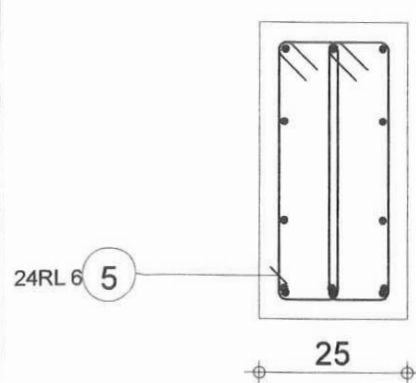
Enrobage latéral 3 cm

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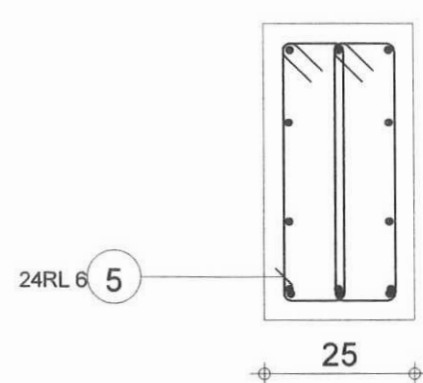




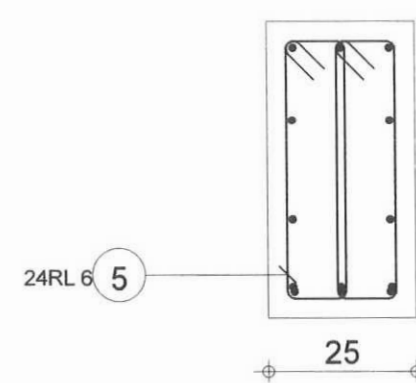
A-A



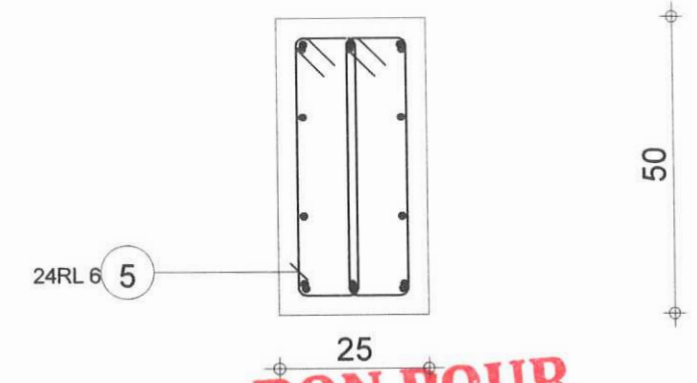
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme		
①	6HA 8	I=54	00	54	④	3HA 8	I=3.26	00	3.26
②	3HA 8	I=3.39	00	3.26	⑤	24RL 6	I=1.21	31	11 4 8
③	3HA 8	I=3.02	00	3.02	⑥	2*2HA 12	I=3.06	00	3.06

RDC
PROJET CERME_PLANS

POUTRE 19
Section 25x50

Tél.

Fax

Nombre 1

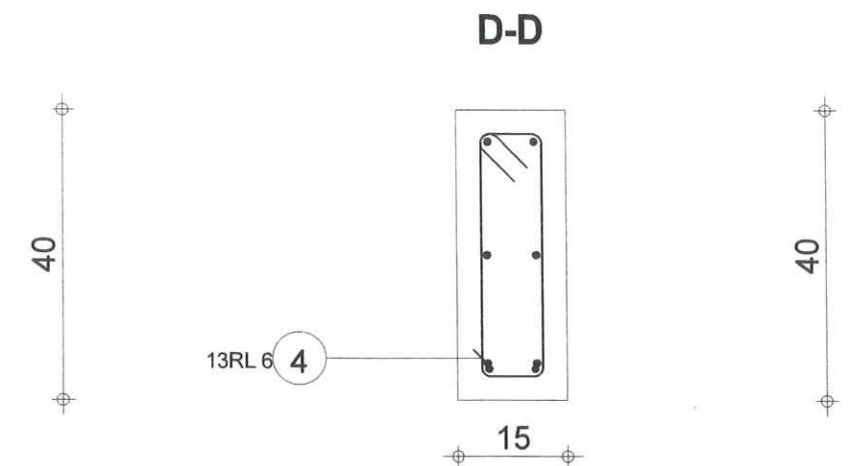
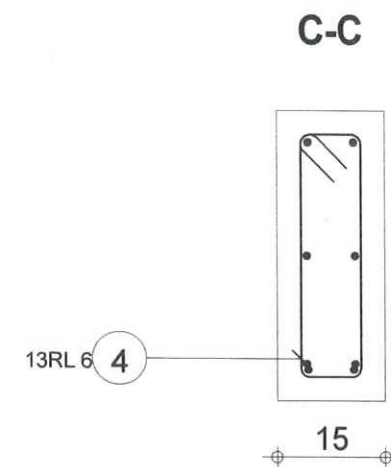
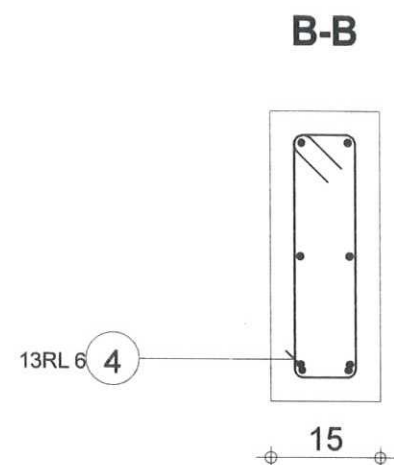
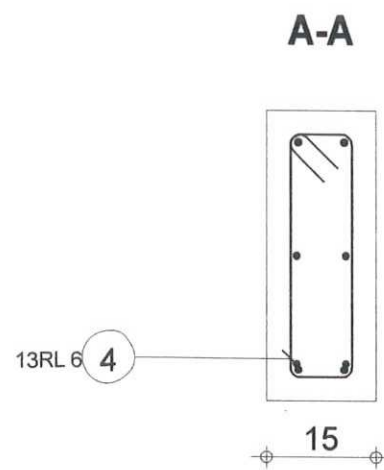
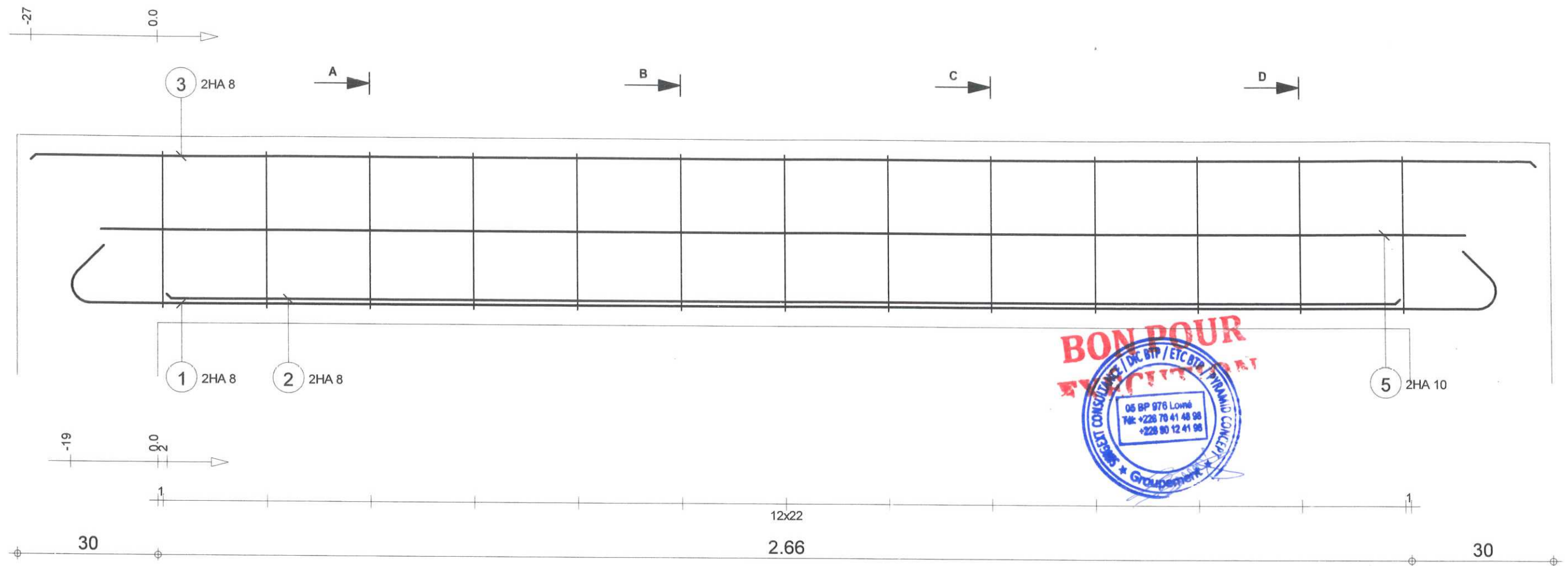
Béton : BETON25 = 0.415 m3
Enrobage inférieur 3 cm
Densité = 72.29 kg/ m3
Surface du coffrage = 4.3 m2

Acier HA 400 = 23.6 kg
Acier RL 235 = 6.42 kg
Enrobage supérieur 3 cm
Echelle pour la vue 9.33cm/m
Echelle pour la section 7.8cm/m

Enrobage latéral 3 cm

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Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	2HA 8	I=3.29	00	4	13RL 6	I=98	31
2	2HA 8	I=2.62	00	5	2HA 10	I=2.90	00
3	2HA 8	I=3.20	00				

RDC
PROJET CERME_PLANS

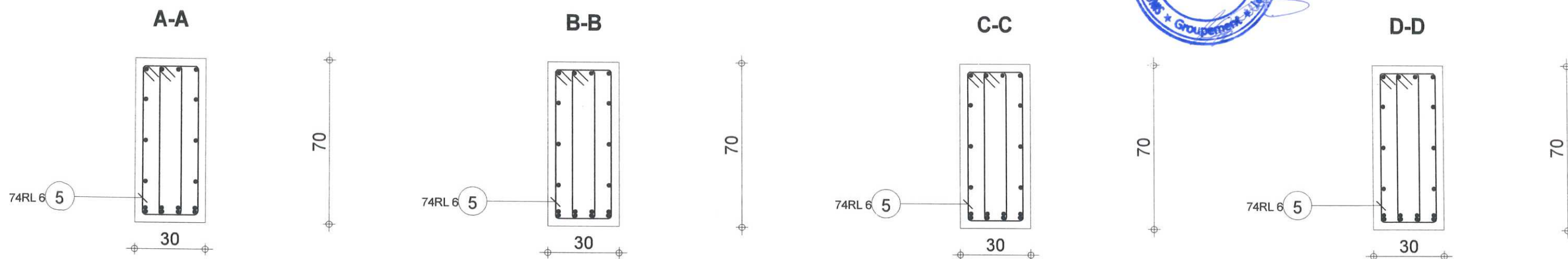
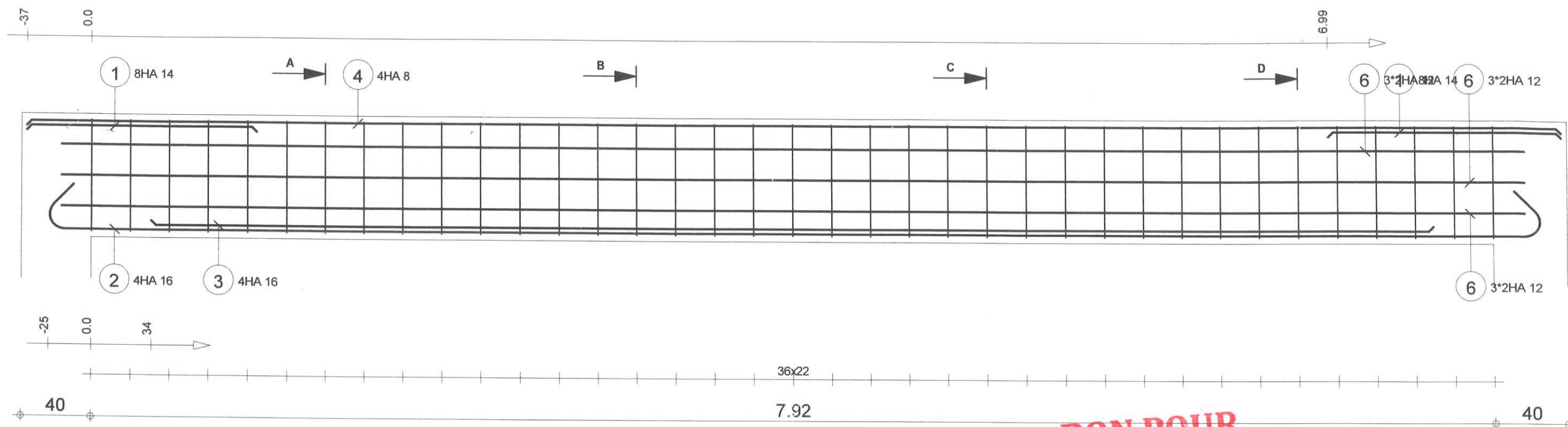
POUTRE 20
Section 15x40

Tél.

Fax

Nombre 1

Enrobage inférieur 3 cm	Acier HA 400 = 10.8 kg	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
Densité = 69.39 kg/ m3	Acier RL 235 = 2.81 kg	Echelle pour la vue 10.7cm/m	
Surface du coffrage = 3.13 m2		Echelle pour la section 9.55cm/m	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 14	l=1.30	00	④	4HA 8	l=8.66	00
②	4HA 16	l=8.96	00	⑤	74RL 6	l=1.73	31
③	4HA 16	l=7.24	00	⑥	3*2HA 12	l=8.26	00

RDC

PROJET CERME PLANS

POUTRE 24
Section 30x70

Nombre 1

Béton : BETON25 = 1.83 m3
Enrobage inférieur 3 cm
Densité = 109.8 kg/ m3
Surface du coffrage = 15 m2

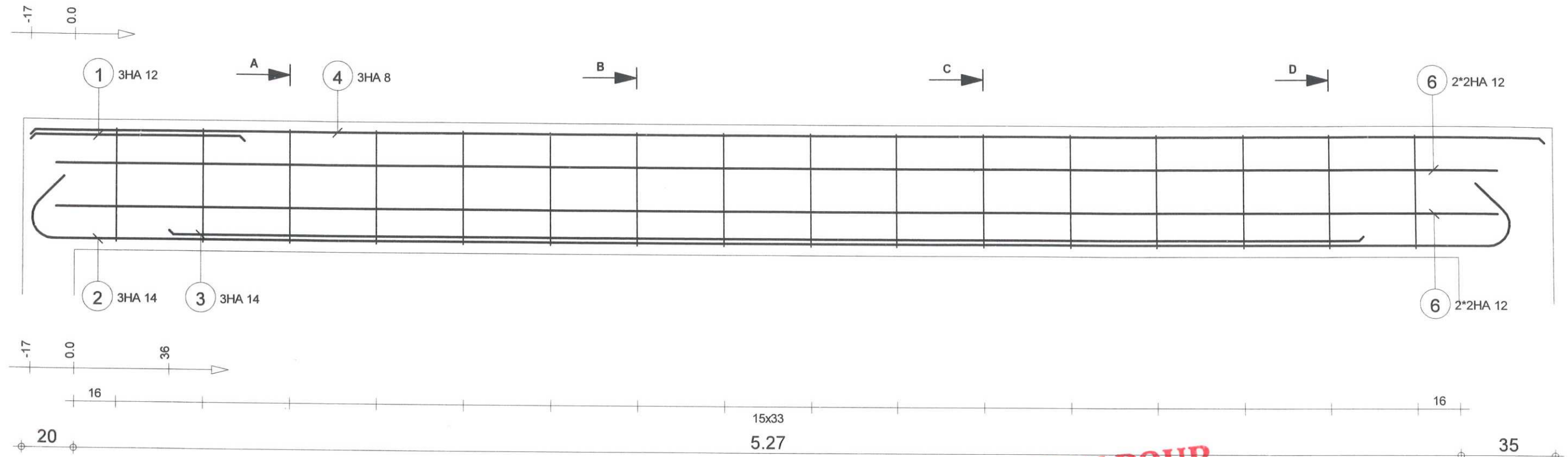
Acier HA 400 = 173 kg
Acier RL 235 = 28.5 kg

Enrobage supérieur 3 cm

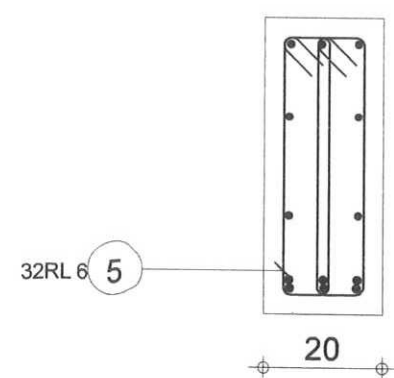
Echelle pour la vue 4.16cm/m
Echelle pour la section 5.71cm/m

Enrobage latéral 3 cm

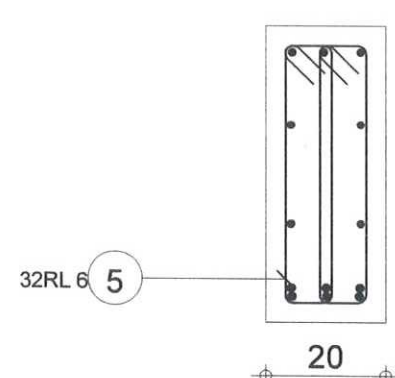
Page 1/1



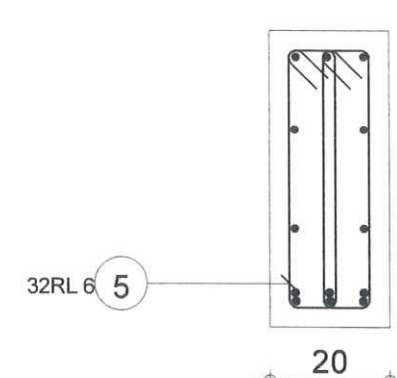
A-A



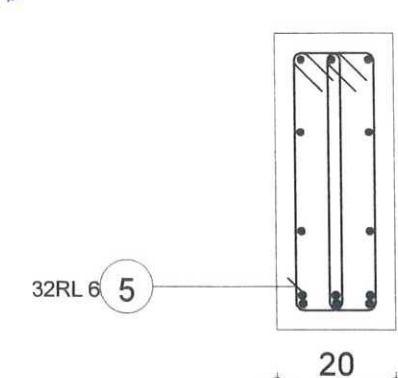
B-B



C-C



D-D



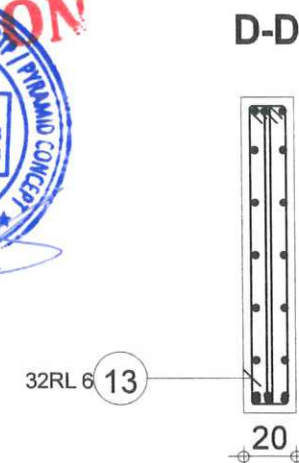
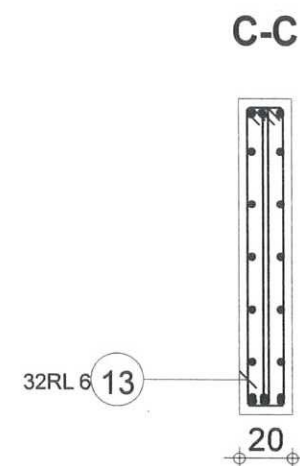
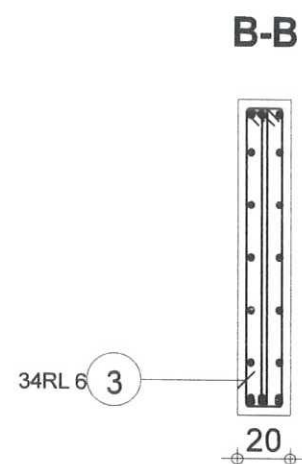
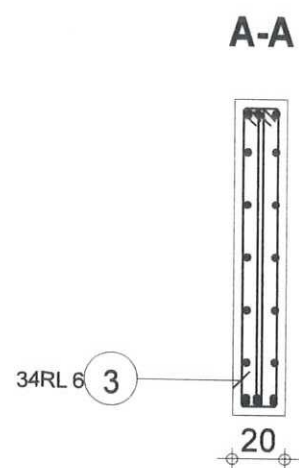
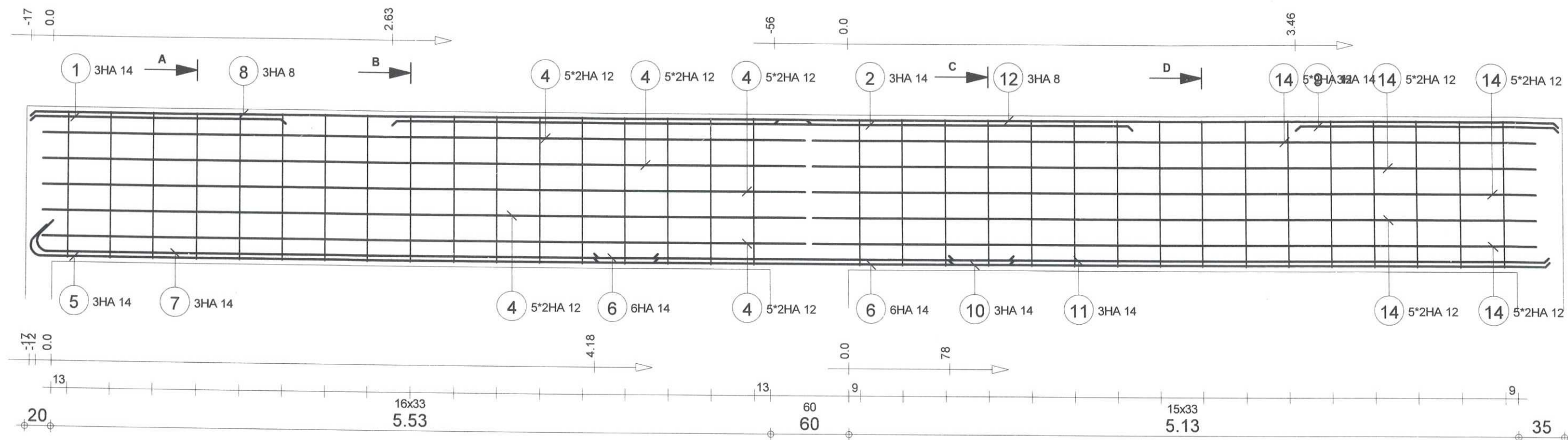
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	3HA 12	I=82	00	82	④	3HA 8	I=5.76	00	5.76
②	3HA 14	I=6.12	00	5.63	⑤	32RL 6	I=1.16	31	
③	3HA 14	I=4.55	00	4.55	⑥	2*2HA 12	I=5.48	00	5.48

RDC
PROJET CERME_PLANS

POUTRE 25
Section 20x50

Nombre 1

Béton : BETON25 = 0.582 m3	Acier HA 400 = 67.2 kg
Enrobage inférieur 3 cm	Acier RL 235 = 8.24 kg
Densité = 129.6 kg/ m3	Enrobage supérieur 3 cm
Surface du coffrage = 7.07 m2	Enrobage latéral 3 cm
	Echelle pour la vue 6.15cm/m
	Echelle pour la section 7.8cm/m



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	3HA 14	I=1.97	00	1.97	4	5*2HA 12	I=5.87	00	5.87	7	3HA 14	I=5.04	00	4.79	10	3HA 14	I=4.60	00	4.60
2	3HA 14	I=5.70	00	5.70	5	3HA 14	I=5.09	00	4.84	8	3HA 8	I=6.02	00	6.02	11	3HA 14	I=4.59	00	4.59
3	34RL 6	I=2.56	31	2.56	6	6HA 14	I=3.23	00	3.23	9	3HA 14	I=2.00	00	2.00	12	3HA 8	I=6.02	00	6.02

RDC
PROJET CERME_PLANS

POUTRE 27
Section 20x120

Nombre 1

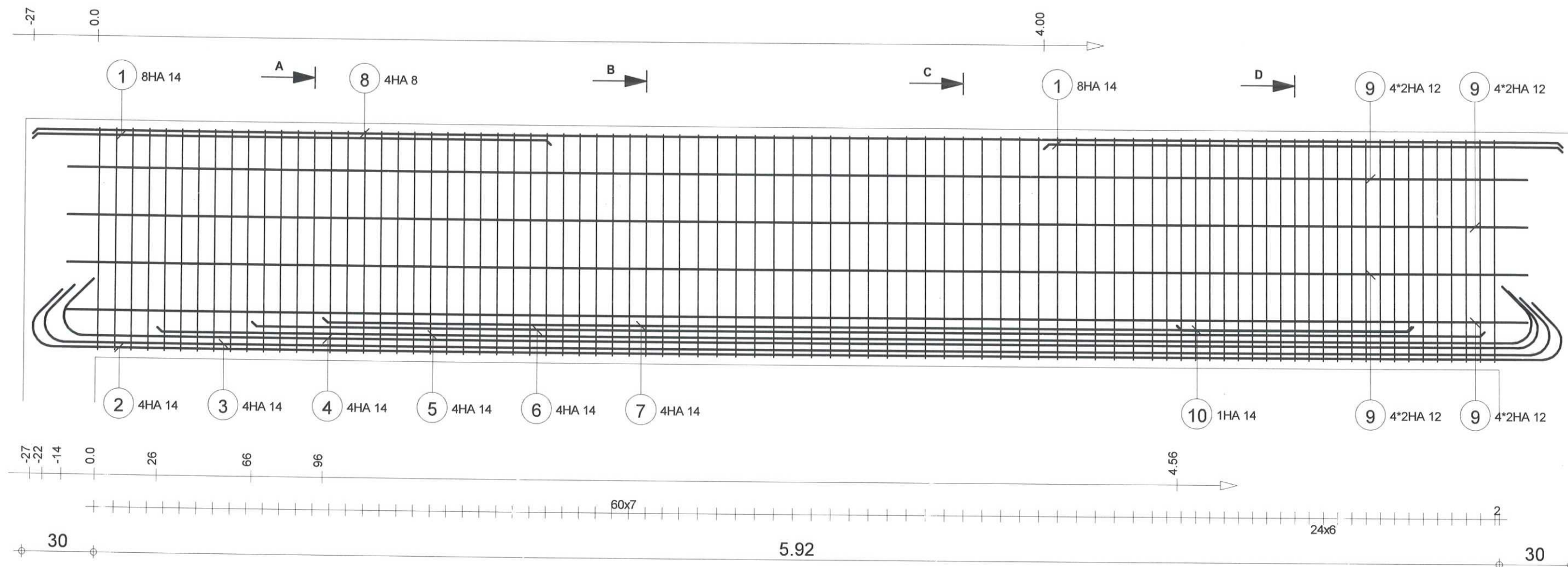
Béton : BETON25 = 2.84 m3
Enrobage inférieur 3 cm
Densité = 99.3 kg/ m3
Surface du coffrage = 31 m2

Acier HA 400 = 244 kg
Acier RL 235 = 37.5 kg

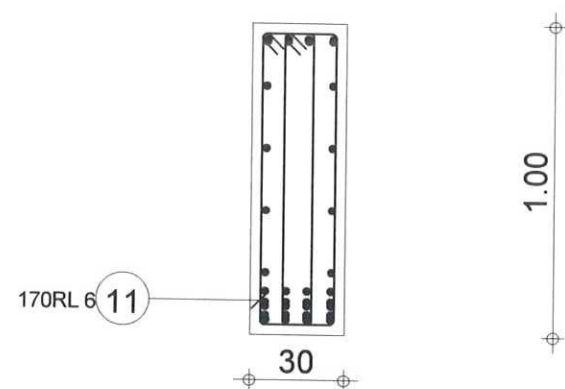
Enrobage supérieur 3 cm

Enrobage latéral 3 cm

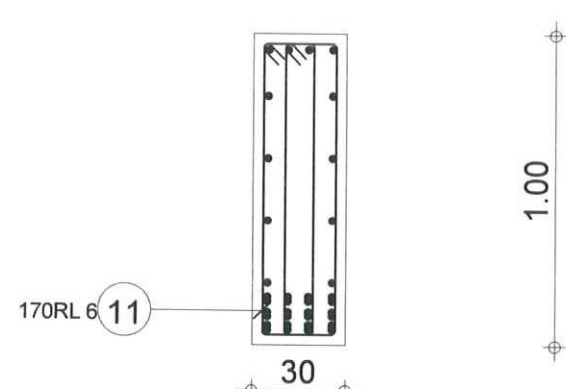
Echelle pour la vue 3.1cm/m
Echelle pour la section 3.46cm/m



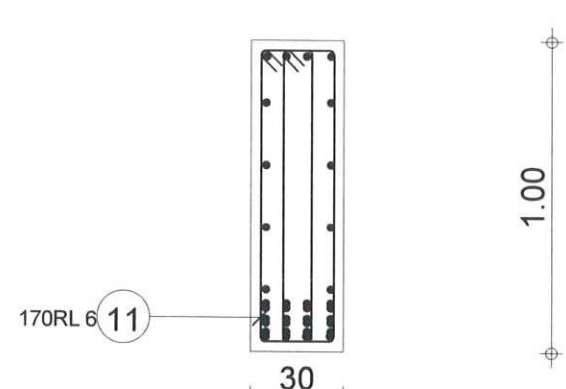
A-A



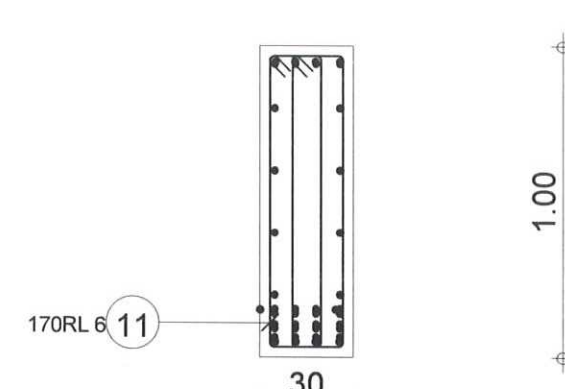
B-B



C-C



D-D



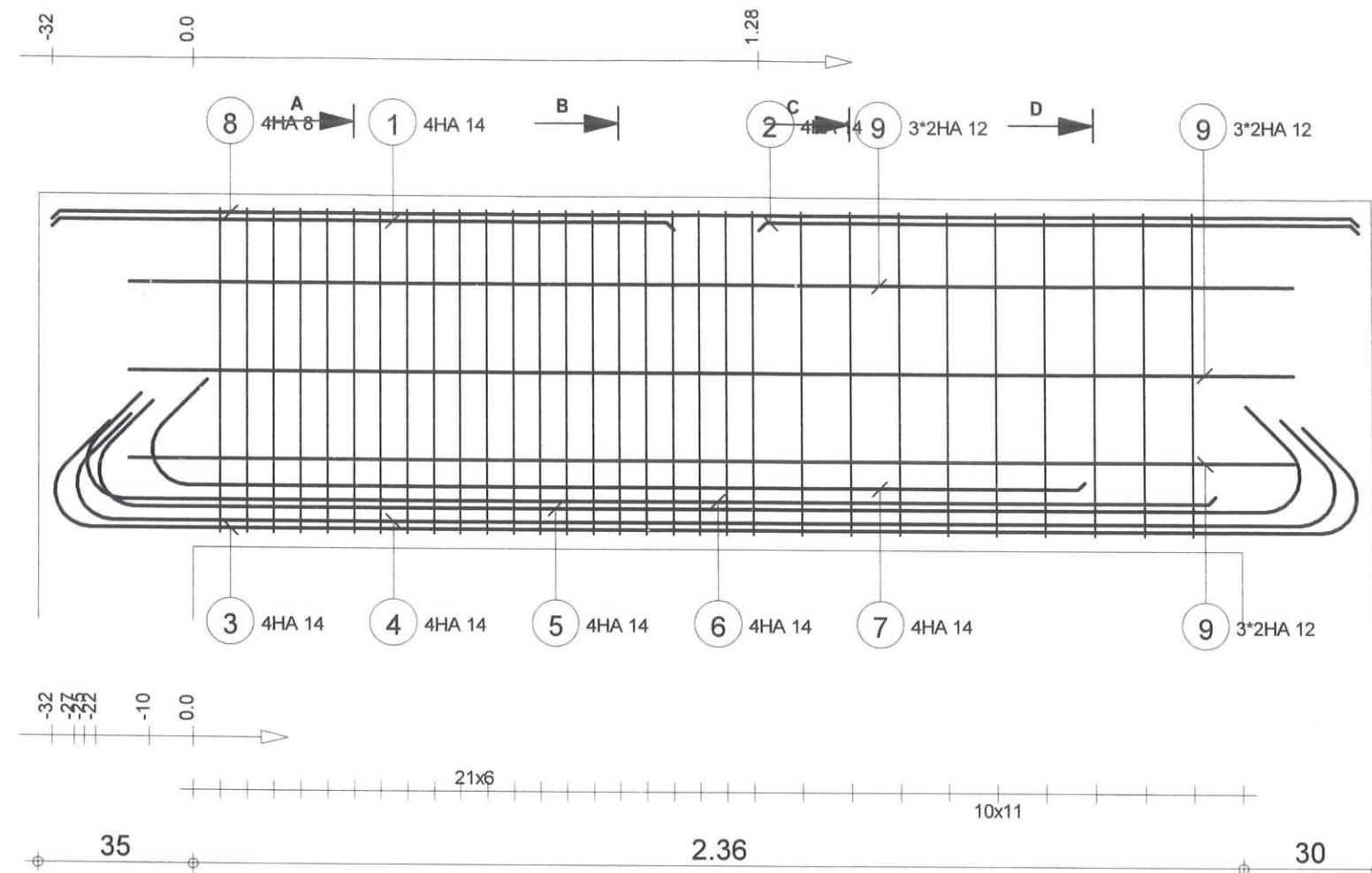
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 14	I=2.19	00	④	4HA 14	I=6.72	00	⑦	4HA 14	I=4.60	00	⑩	1HA 14	I=2.13	
②	4HA 14	I=6.95	00	⑤	4HA 14	I=6.04	00	⑧	4HA 8	I=6.46	00	⑪	170RL 6	I=2.33	31
③	4HA 14	I=6.85	00	⑥	4HA 14	I=5.20	00	⑨	4*2HA 12	I=6.16	00				

RDC
PROJET CERME_PLANS D'EXECUTION

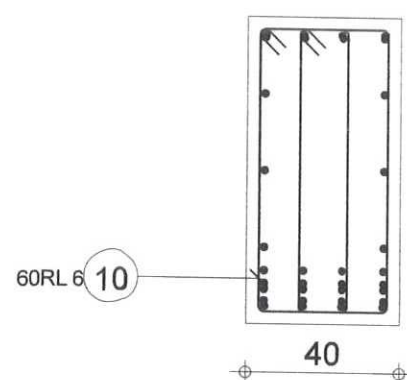
POUTRE 28
Section 30x100

Tél. Fax
Nombre 1

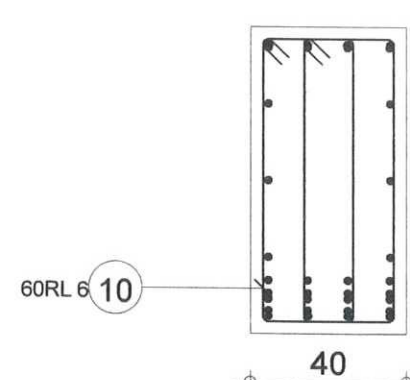
Béton : BETON25 = 1.96 m3	Acier HA 400 = 253 kg
Enrobage inférieur 3 cm	Acier RL 235 = 88 kg
Densité = 174 kg/ m3	Enrobage supérieur 3 cm
Surface du coffrage = 15.4 m2	Enrobage latéral 3 cm
	Echelle pour la vue 5.51cm/m
	Echelle pour la section 4.1cm/m



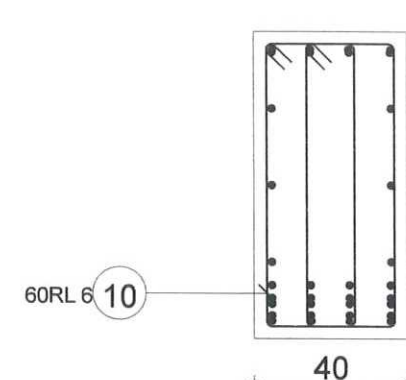
A-A



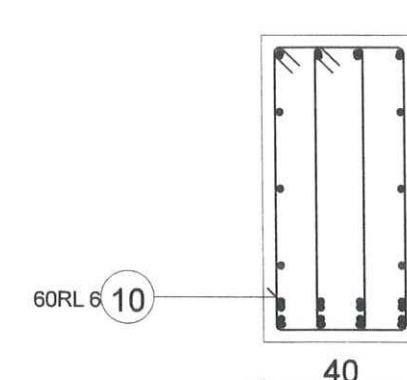
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 14	I=1.40	00	④	4HA 14	I=3.34	00	⑦	4HA 14	I=2.35	00	⑩	60RL 6	I=2.06	31
②	4HA 14	I=1.35	00	⑤	4HA 14	I=3.21	00	⑧	4HA 8	I=2.95	00				
③	4HA 14	I=3.44	00	⑥	4HA 14	I=2.79	00	⑨	3*2HA 12	I=2.63	00				

RDC

PROJET CERME_PLANS

POUTRE 29
Section 40x80

Nombre 1

Béton : BETON25 = 0.963 m3
Enrobage inférieur 3 cm
Densité = 138.1 kg/ m3
Surface du coffrage = 6.4 m2

Acier HA 400 = 105 kg
Acier RL 235 = 27.5 kg

Enrobage supérieur 3 cm

Echelle pour la vue 6.6cm/m
Echelle pour la section 5.05cm/m

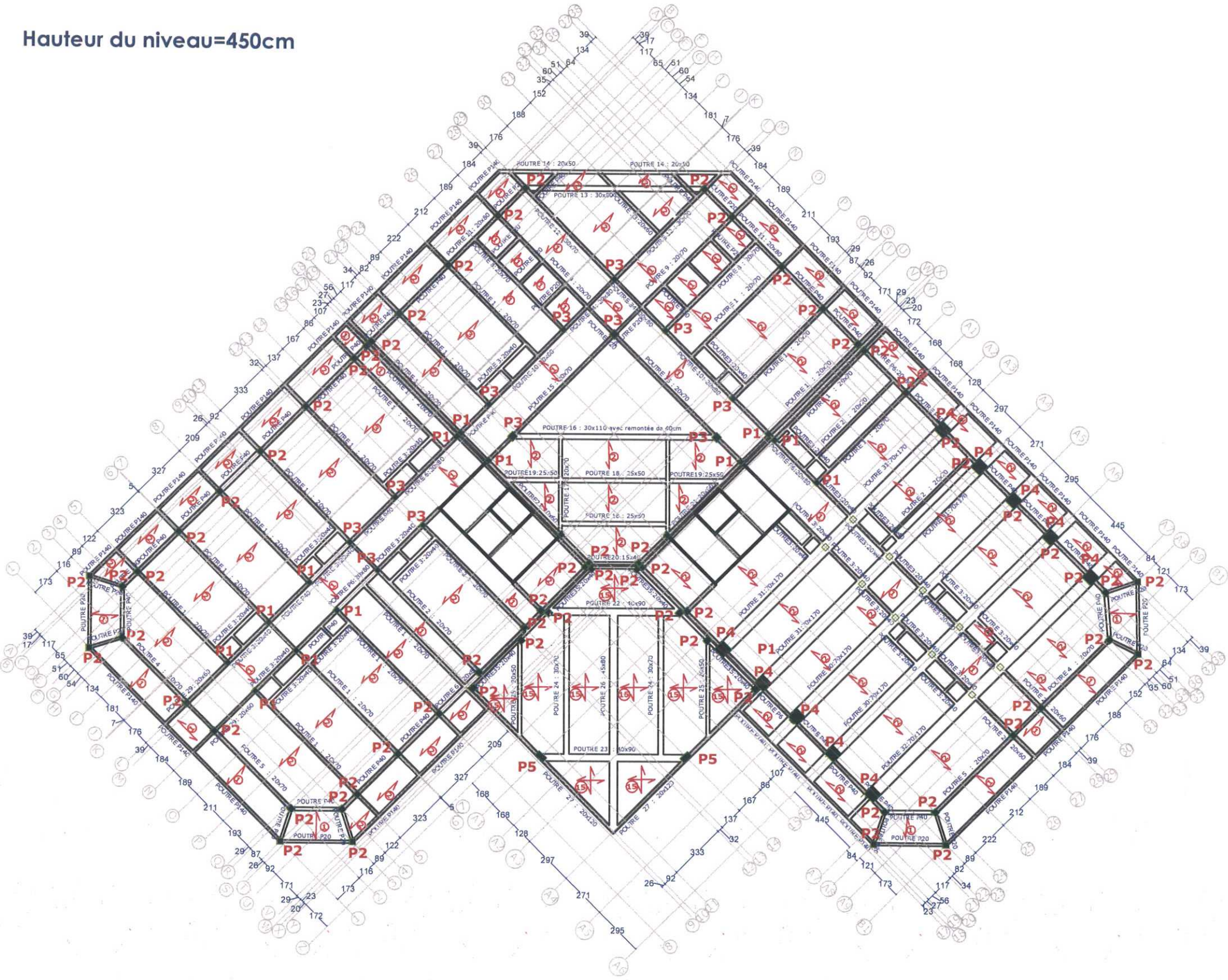
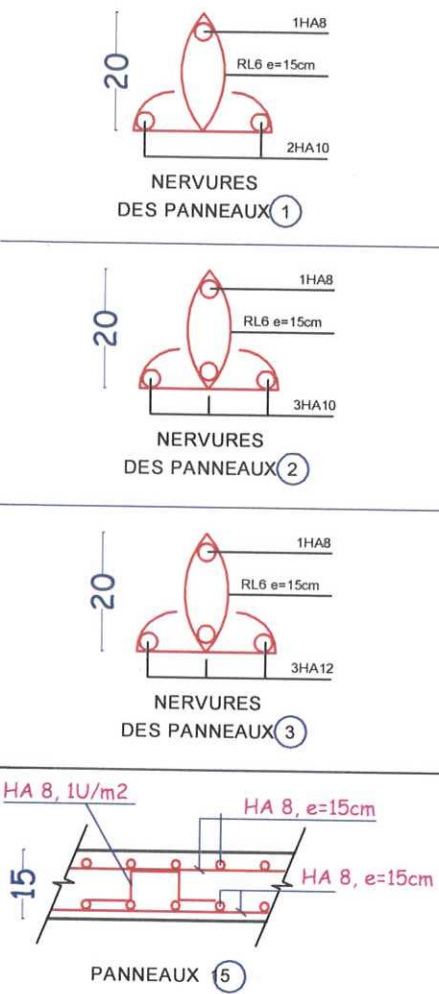
Enrobage latéral 3 cm

Page 1/1

TRAVAUX DE CONSTRUCTION DU BATIMENT PRINCIPAL ET DES PLATEFORMES TECHNIQUES DU CERME

DETAILS DES DALLES

Hauteur du niveau=450cm



NOMENCLATURE DES POTEaux

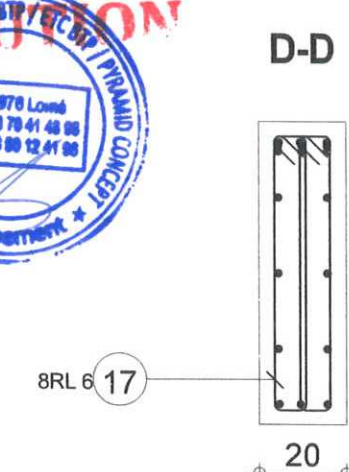
- P1: 35x35
- P2: 40x40
- P3: 40x40
- P4: 70x70
- P5: 35x60

BON POUR EXECUTION



PLANS D'EXECUTION DU GROS OEUVRE

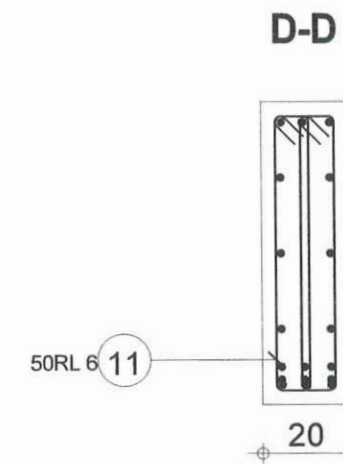
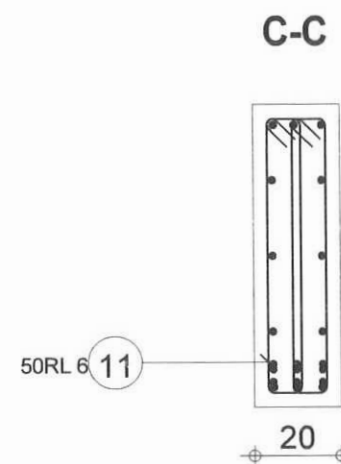
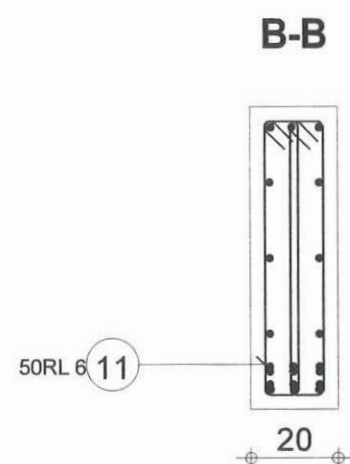
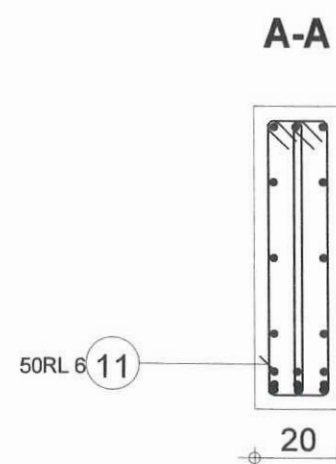
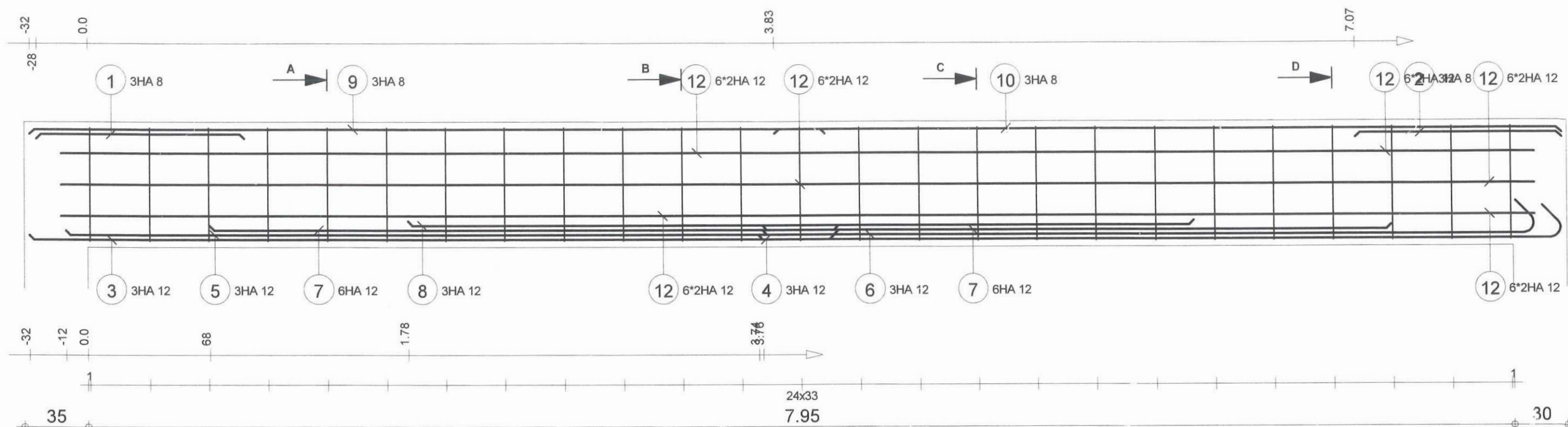
REPUBLICQUE TOGOLAISE Travail - Liberté - Patrie	FINANCEMENT	MAITRE D'OUVRAGE	MAITRE D'OEUVRE	ENTREPRISE	NOM DU PLAN	VISA	
					PLAN DE COFFRAGE DU PLANCHER HAUT DU R+1		Sep 202.
							PL N



Béton : BETON25 = 1.28 m3	Acier HA 400 = 177 kg	
	Acier RL 235 = 27 kg	
Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
Densité = 159.4 kg/ m3	Echelle pour la vue 3.97cm/m	Page 1/2

Pos.	Armature		Code	Forme
16	2RL 6	l=1.56	31	
17	8RL 6	l=1.55	31	





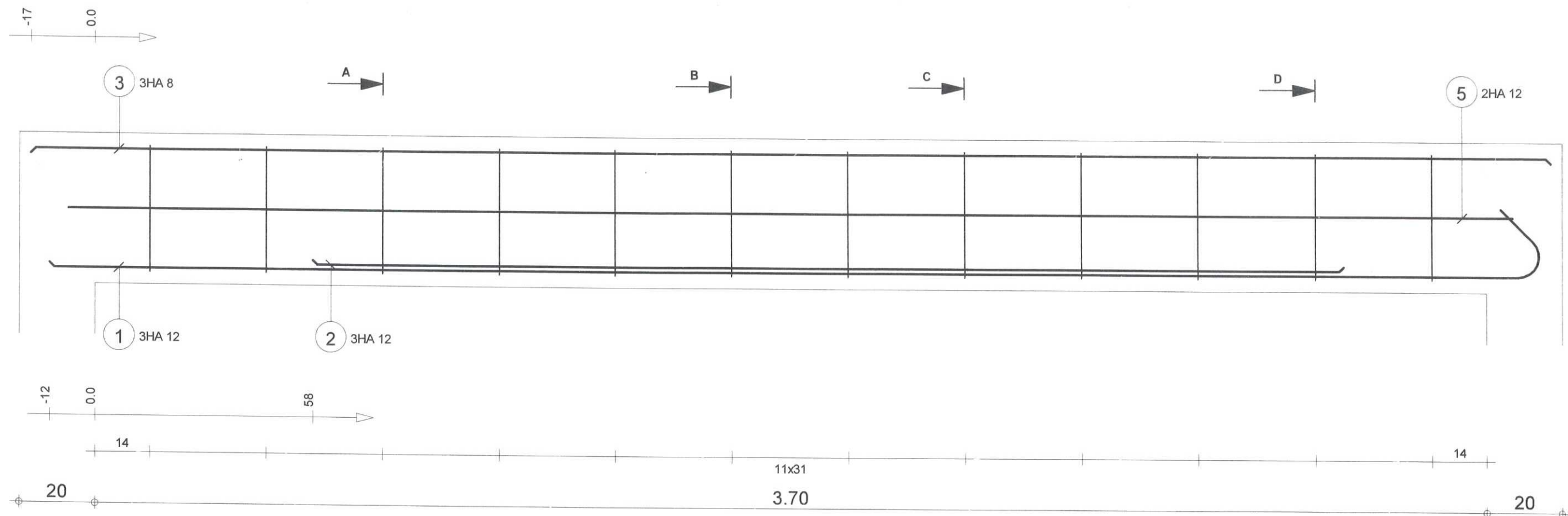
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	3HA 8	I=1.16	00	1.16	④	3HA 12	I=4.67	00	4.48	⑦	6HA 12	I=3.50	00	3.50	⑩	3HA 8	I=4.38	00	4.38
②	3HA 8	I=1.15	00	1.14	⑤	3HA 12	I=4.30	00	4.30	⑧	3HA 12	I=4.38	00	4.39	⑪	50RL 6	I=1.56	31	
③	3HA 12	I=4.48	00	4.48	⑥	3HA 12	I=4.49	00	4.30	⑨	3HA 8	I=4.43	00	4.43	⑫	6*2HA 12	I=4.29	00	4.29

R+1
PROJET CERME PLANS

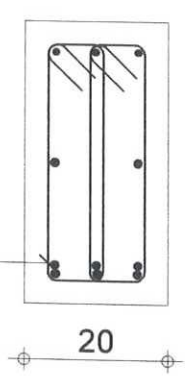
POUTRE 2
Section 20x70

Nombre 1

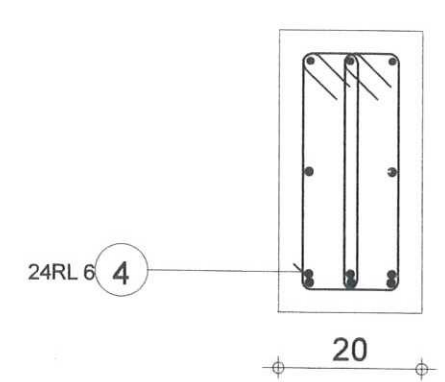
Béton : BETON25 = 1.2 m3	Acier HA 400 = 137 kg
Enrobage inférieur 3 cm	Acier RL 235 = 17.3 kg
Densité = 128.3 kg/ m3	Enrobage supérieur 3 cm
	Echelle pour la vue 4.22cm/m
	Enrobage latéral 3 cm



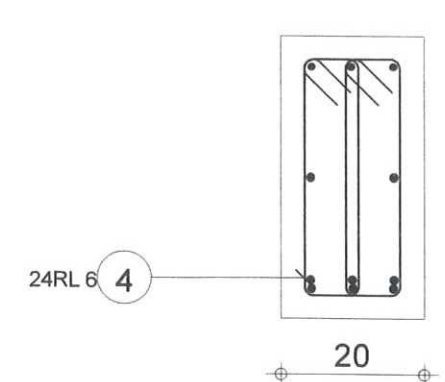
A-A



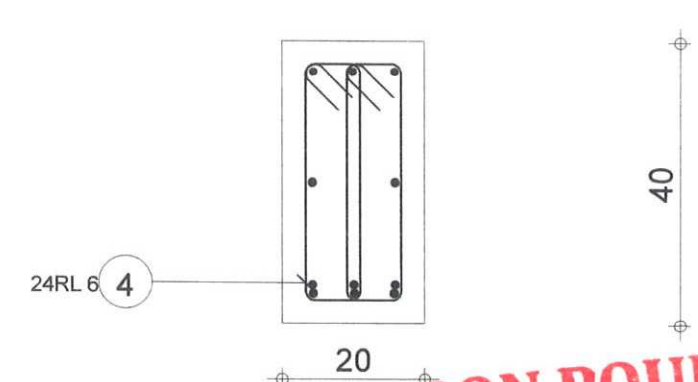
B-B



C-C



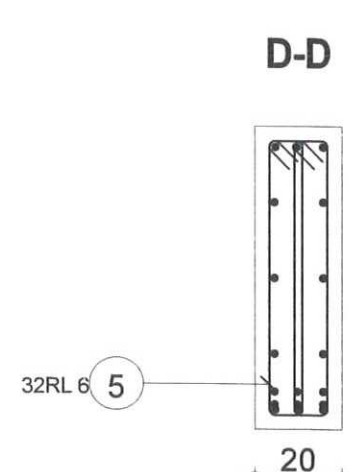
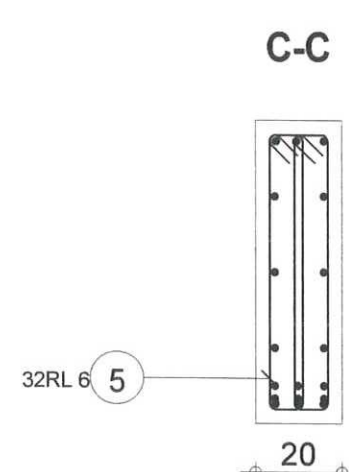
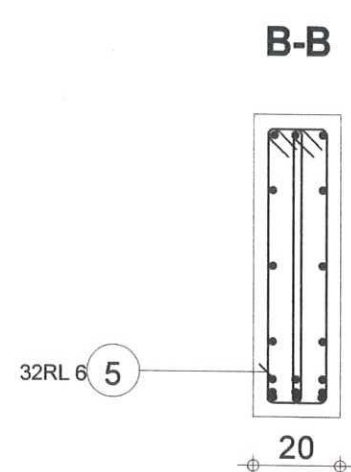
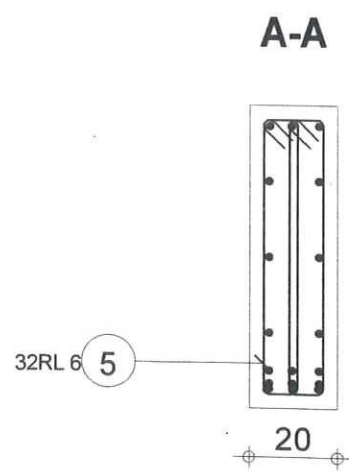
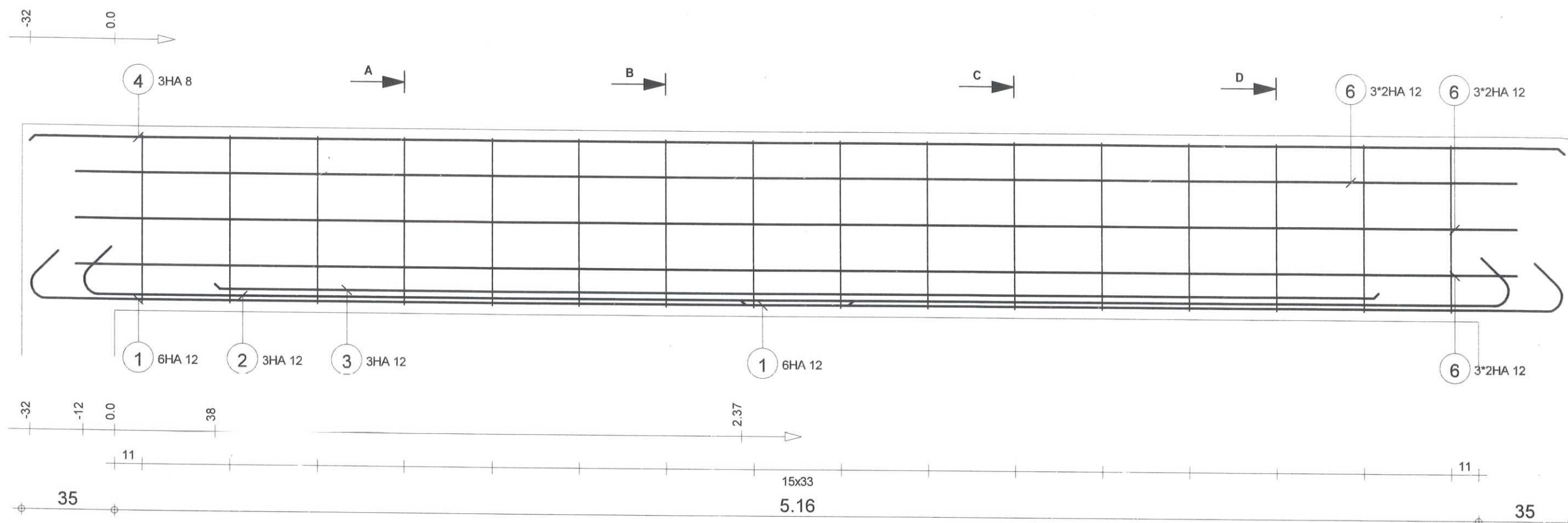
D-D



BON POUR EXÉCUTION

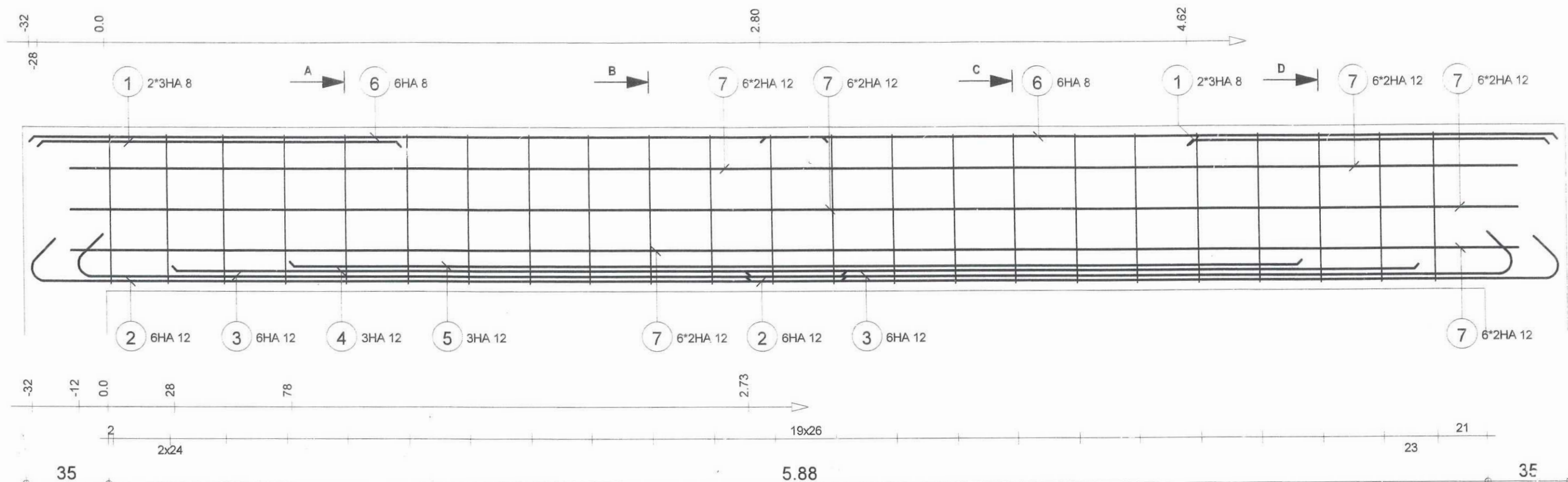


Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
1	3HA 12	I=4.16	00	3.97	4	24RL 6	I=96	31	
2	3HA 12	I=2.74	00	2.74	5	2HA 12	I=3.84	00	3.84
3	3HA 8	I=4.04	00	4.04					

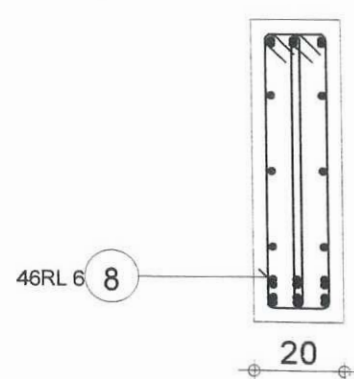


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 12	I=3.30	00  3.11	④	3HA 8	I=5.80	00  5.80
②	3HA 12	I=5.78	00  5.40	⑤	32RL 6	I=1.56	31  8
③	3HA 12	I=4.40	00  4.40	⑥	3*2HA 12	I=5.45	00  5.45

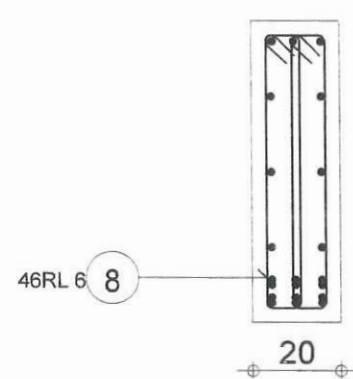




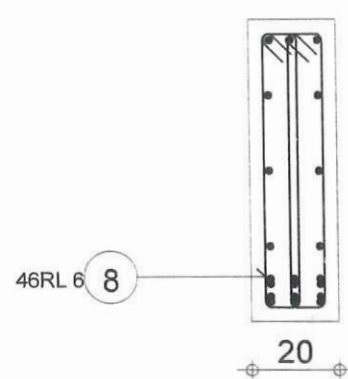
A-A



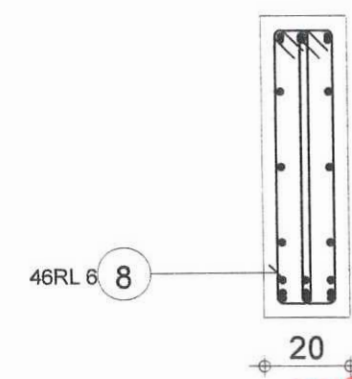
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	2*3HA 8	I=1.54	00	4	3HA 12	I=5.32	00	7	6*2HA 12	I=3.27	00
2	6HA 12	I=3.66	00	5	3HA 12	I=4.32	00	8	46RL 6	I=1.56	31
3	6HA 12	I=3.46	00	6	6HA 8	I=3.40	00				

Tél.

Fax

Nombre 1

Béton : BETON25 = 0.921 m3
Enrobage inférieur 3 cm
Densité = 136.8 ka/ m3

Acier HA 400 = 110 kg
Acier RL 235 = 15.9 kg

Enrobage supérieur 3 cm

Echelle pour la vue 5.46cm/m

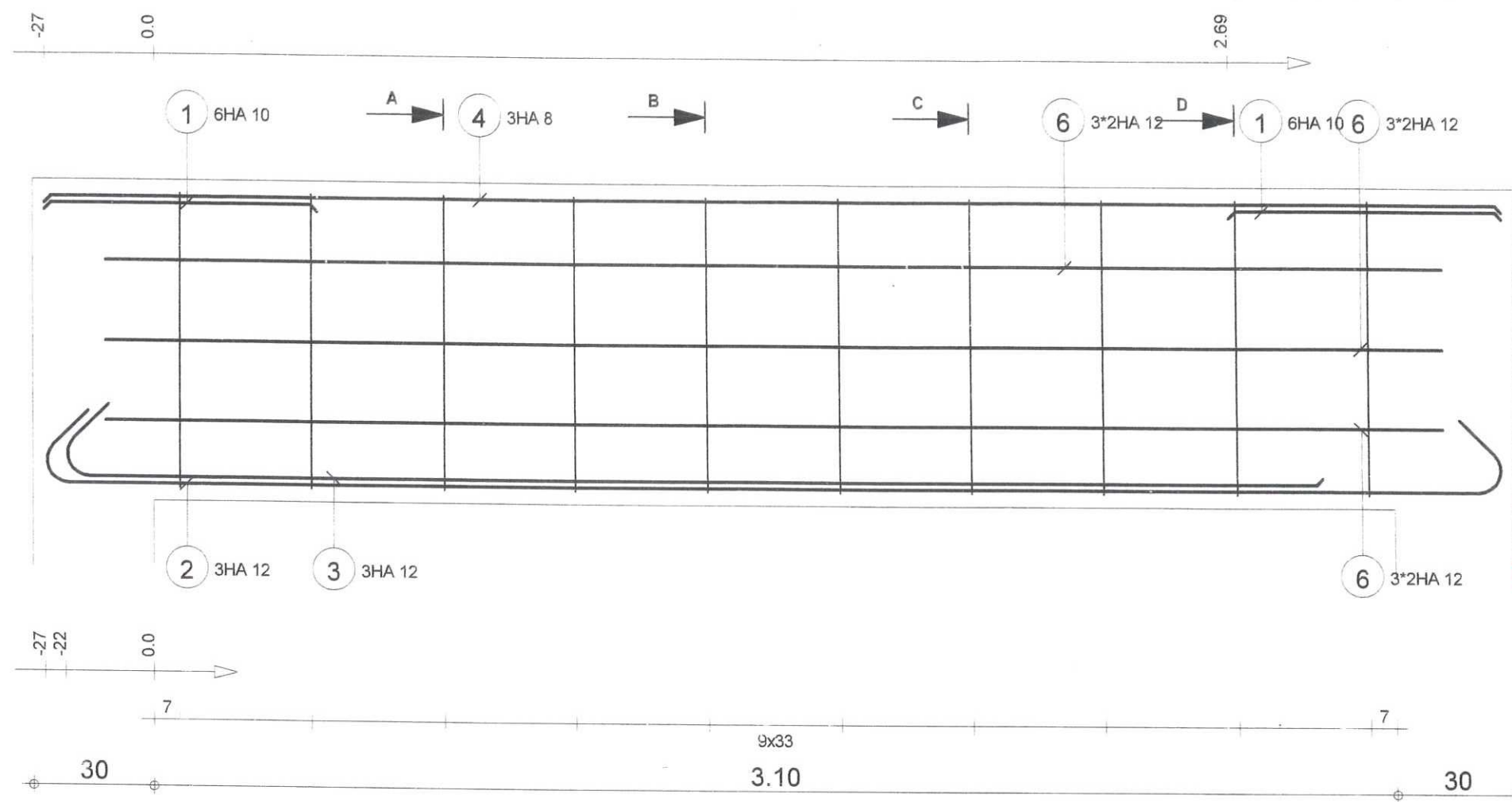
Enrobage latéral 3 cm

R+1

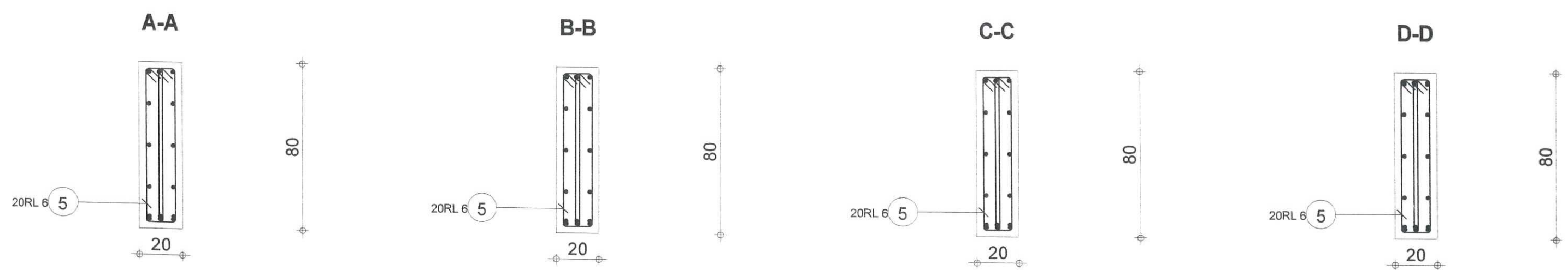
PROJET CEDME DI ANS

POUTRE 5

Section 20x70



**BON POUR
EXÉCUTION**

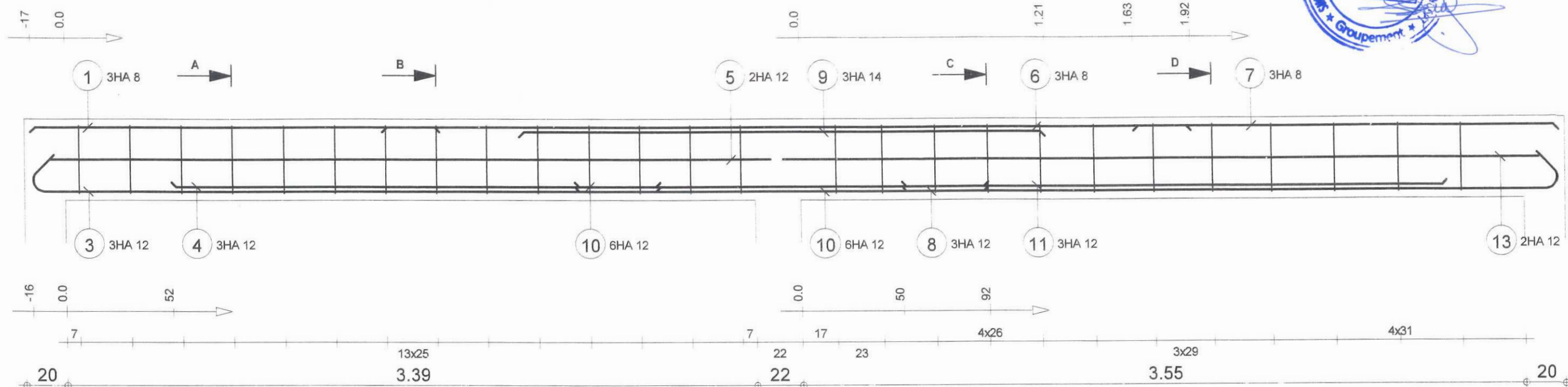


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 10	I=68	00	4	3HA 8	I=3.64	00
2	3HA 12	I=4.02	00	5	20RL 6	I=1.76	31
3	3HA 12	I=3.33	00	6	3*2HA 12	I=3.34	00

R+1
PROJET CEFME DI ANS

POUTRE 6
Section 20x80

Tél.	Fax	Nombre 1	Béton : BETON25 = 0.592 m3	Acier HA 400 = 44.2 kg
			Enrobage inférieur 3 cm	Acier RL 235 = 7.81 kg
			Densité = 87.84 kg/ m3	Enrobage supérieur 3 cm
				Enrobage latéral 3 cm
				Echelle pour la vue 6.6cm/m

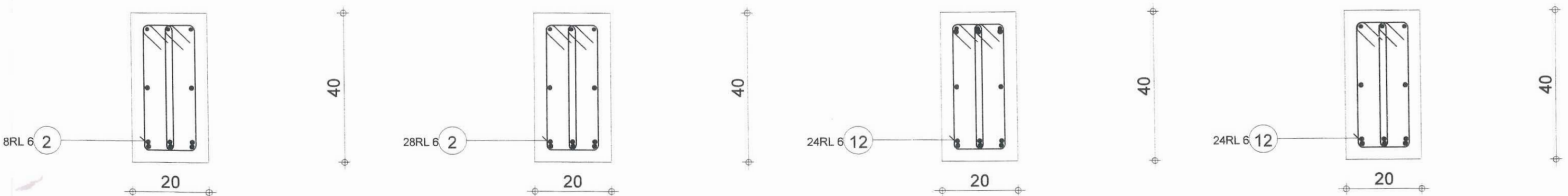


A-A

B-B

C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme					
1	3HA 8	I=2.00	00	2.00	4	3HA 12	I=2.40	00	2.40	7	3HA 8	I=2.09	00	2.09	10	6HA 12	I=2.03	00	2.03	13	2HA 12	I=3.70	00	3.70
2	28RL 6	I=96	31		5	2HA 12	I=3.54	00	3.54	8	3HA 12	I=3.41	00	3.22	11	3HA 12	I=2.67	00	2.67					
3	3HA 12	I=3.27	00		6	3HA 8	I=3.97	00	3.97	9	3HA 14	I=2.58	00	2.58	12	24RL 6	I=96	31						

Tél.

Fax

Nombre 1

Béton : BETON25 = 0.605 m3

Acier HA 400 = 73.9 kg

Acier RL 235 = 11.1 kg

Enrobage inférieur 3 cm

Enrobage supérieur 3 cm

Densité = 140.5 kg/ m3

Echelle pour la vue 4.78cm/m

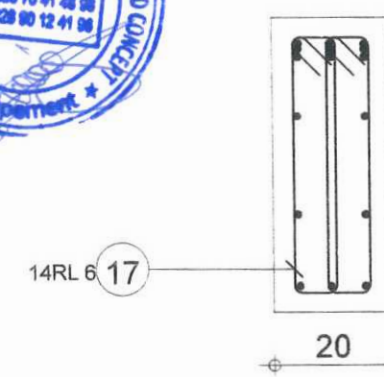
Enrobage latéral 3 cm

R+1

PROJET CFME DI ANC

POUTRE 8

Section 20x40



Echelle pour la vue 3.97cm/m

Section 20v50

Pos.	Armature		Code	Forme
16	2*2HA 12	l=1.67	00	1.67
17	14RL 6	l=1.15*	31	

**BON POUR
EXÉCUTION**



R+1

PROJET CERMF PI ANS

POUTRE 9

Section 20x50

Tél.

Fax

Nombre 1

Béton : BETON25 = 0.916 m3

Enrobage inférieur 3 cm

Densité = 131 kg/ m3

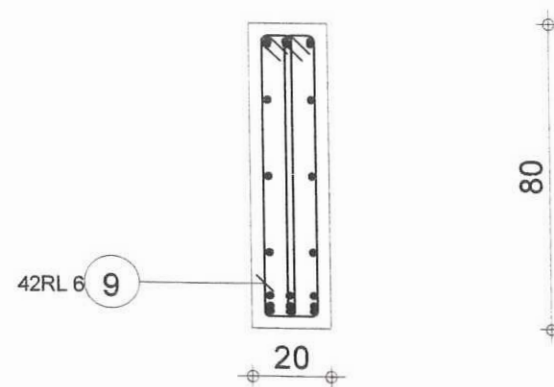
Acier HA 400 = 105 kg

Acier RL 235 = 15.9 kg

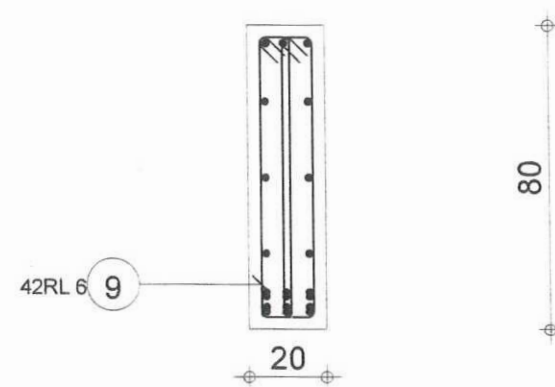
Enrobage supérieur 3 cm

Enrobage latéral 3 cm

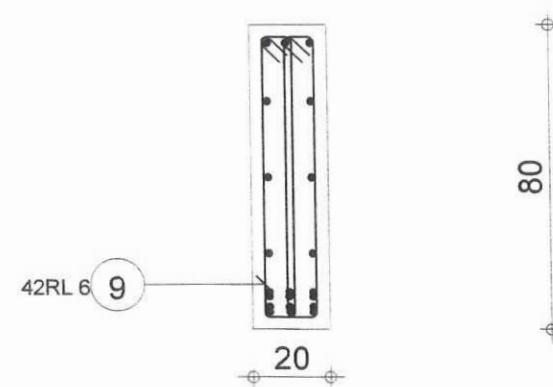
A-A



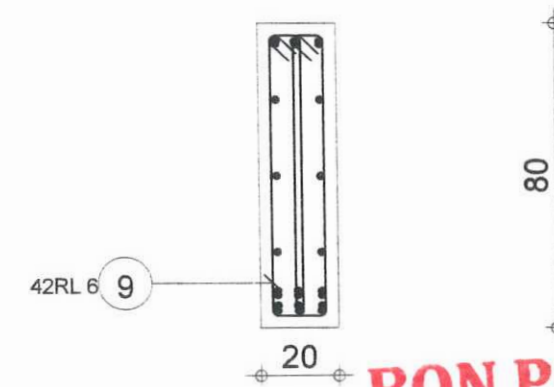
B-B



C-C



D-D



s.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 12	I=1.62	00	4	3HA 12	I=6.10	00	7	6HA 8	I=3.34	00
2	3HA 12	I=3.49	00	5	3HA 12	I=4.89	00	8	3*2HA 12	I=5.99	00
3	3HA 12	I=3.49	00	6	3HA 12	I=3.29	00	9	42RL 6	I=1.76	31

Tél.

Fax

Nombre 1

Béton : BETON25 = 1.03 m3

Enrobage inférieur 3 cm

Densité = 117.5 kg/ m3

Acier HA 400 = 105 kg

Acier RL 235 = 16.4 kg

Enrobage supérieur 3 cm

Echelle pour la vue 5.57cm/m

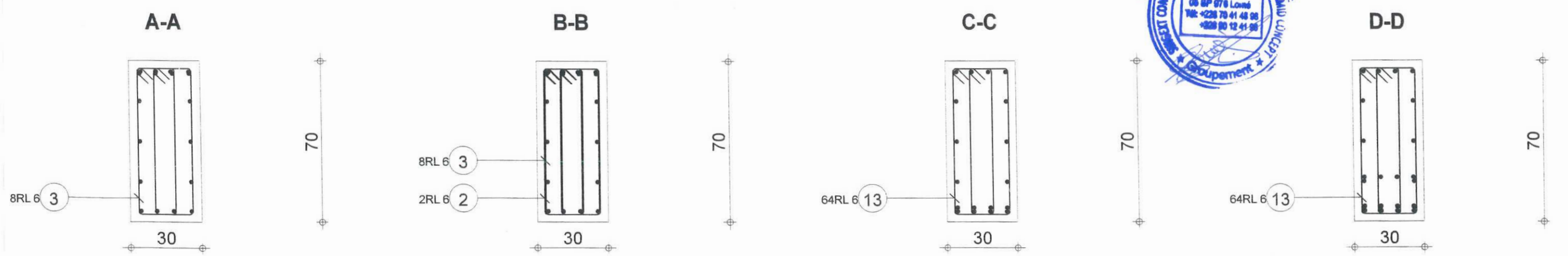
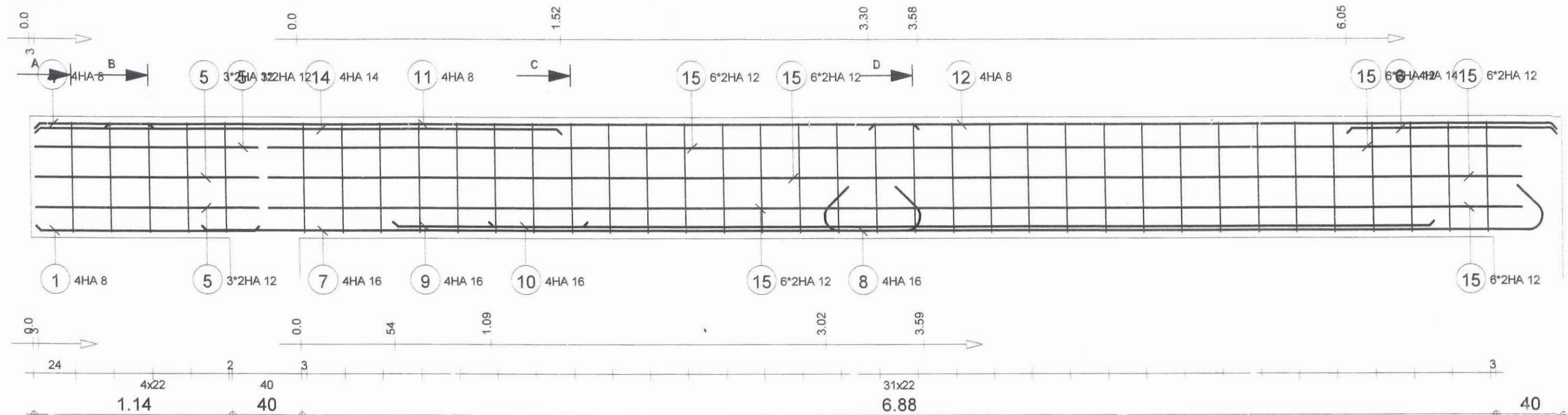
Enrobage lateral 3 cm

 $R+1$

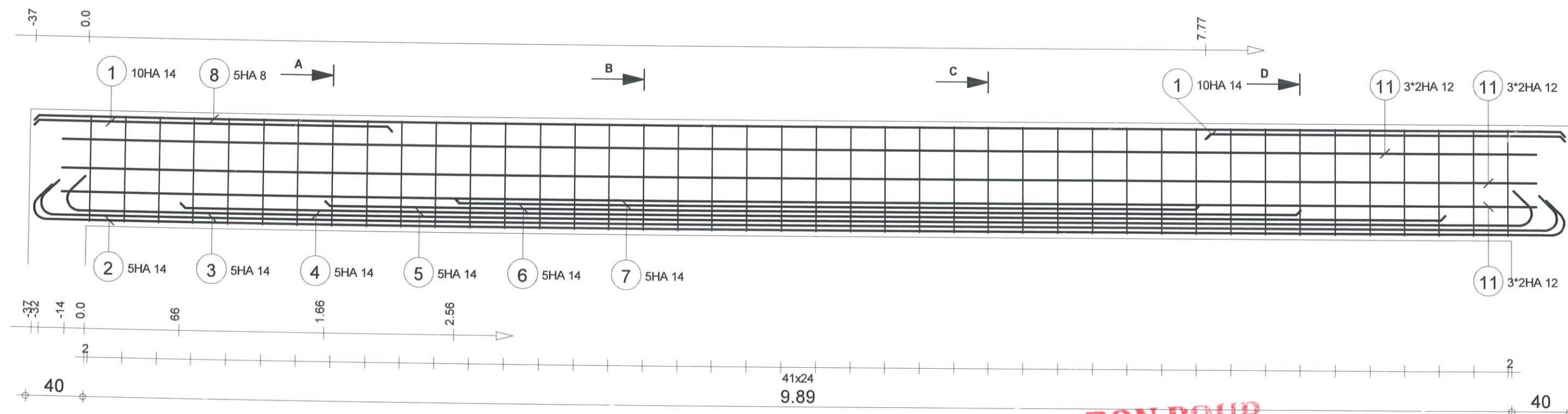
PROJET CERMF PI ANS

POUTRE 10

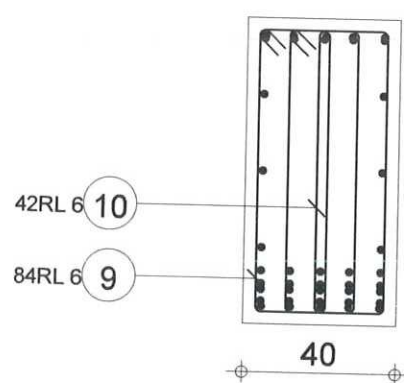
Section 20v80



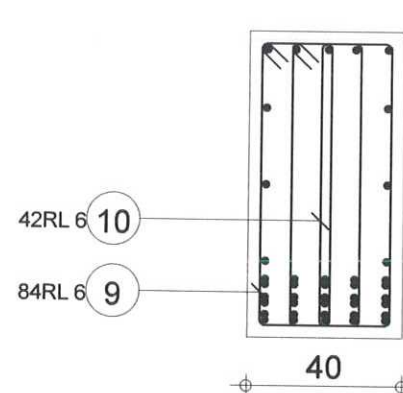
s.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	
1	4HA 8	I=1.28	00	1.28	4	4HA 8	I=68	00	68	7	4HA 16	I=4.41	00	4.15	10	4HA 16	I=5.45	00	5.45	
2	2RL 6	I=1.73	31	17	5	3*2HA 12	I=1.28	00	1.28	8	4HA 16	I=4.68	00	4.15	11	4HA 8	I=4.69	00	4.69	
3	8RL 6	I=1.72	31	16	6	4HA 14	I=1.20	00	1.20	9	4HA 16	I=1.12	00	1.12	12	4HA 8	I=3.95	00	3.95	
																13	64RL 6	I=1.73	31	17
																14	4HA 14	I=3.03	00	3.03
																15	6*2HA 12	I=3.79	00	3.79



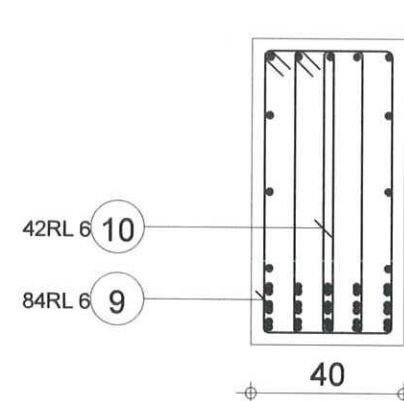
A-A



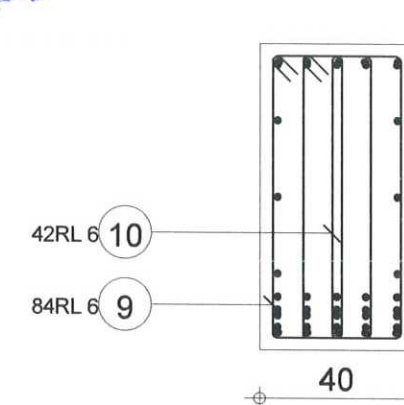
B-B



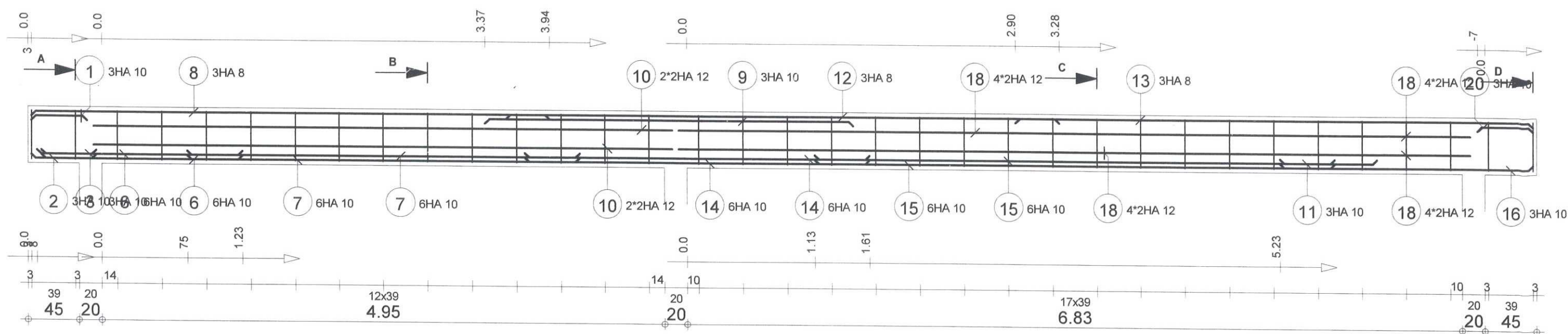
C-C



D-D



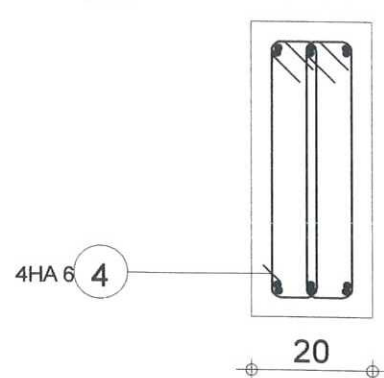
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	10HA 14	I=2.49	00	2.49	④	5HA 14	I=10.66	00	10.17	⑦	5HA 14	I=5.17	00	5.17	⑩	42RL 6	I=1.60	0.0	7.4
②	5HA 14	I=11.12	00	10.63	⑤	5HA 14	I=8.77	00	8.77	⑧	5HA 8	I=10.63	00	10.63	⑪	3*2HA 12	I=10.23	00	10.23
③	5HA 14	I=11.02	00	10.53	⑥	5HA 14	I=6.77	00	6.77	⑨	84RL 6	I=2.12	31	2.12					



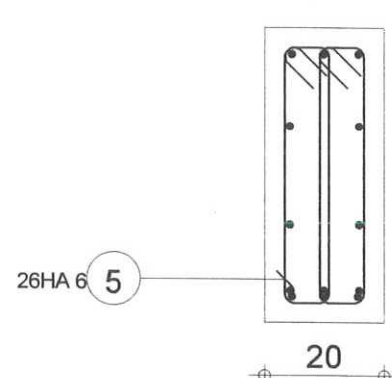
**BON POUR
EXÉCUTION**



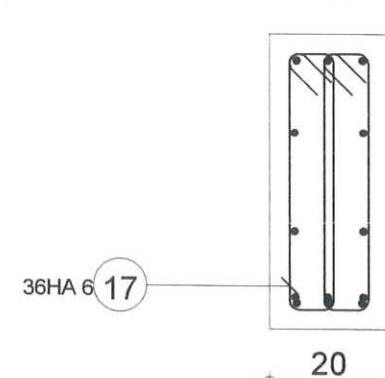
A-A



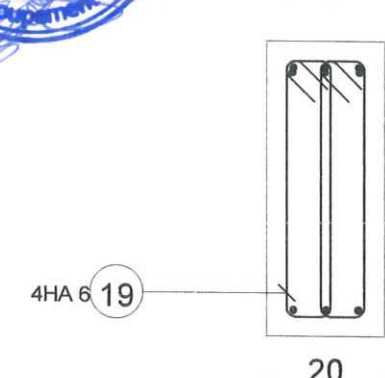
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme							
1	3HA 10	I=49	00	49	4	4HA 6	I=1.16	31	8	4	4	7	6HA 10	I=3.45	00	3.45	10	2*2HA 12	I=5.09	00	5.09	13	3HA 8	I=4.56	00	4.56
2	3HA 10	I=57	00	57	5	26HA 6	I=1.16	31	8	4	4	8	3HA 8	I=4.56	00	4.56	11	3HA 10	I=86	00	86	14	6HA 10	I=3.04	00	3.04
3	3HA 10	I=52	00	52	6	6HA 10	I=1.76	00	1.76	9	3HA 10	I=3.25	00	3.25	12	3HA 8	I=4.88	00	4.88	15	6HA 10	I=4.58	00	4.58		

Tél.

Fax

Nombre 1

Acier HA 500 = 124 kg

Acier HA 500 = 18 kg

Enrobage inférieur 3 cm

Enrobage supérieur 3 cm

Enrobage latéral 3 cm

Densité = 106.8 kg/ m3

Echelle pour la vue 2.77cm/m

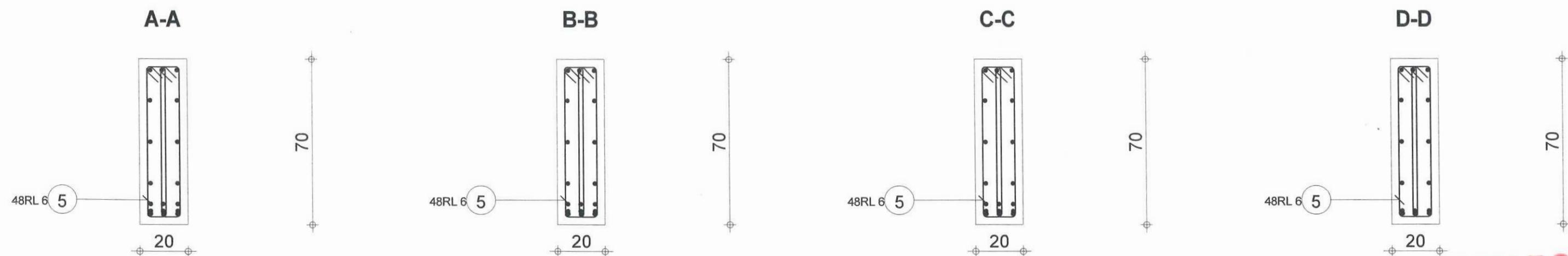
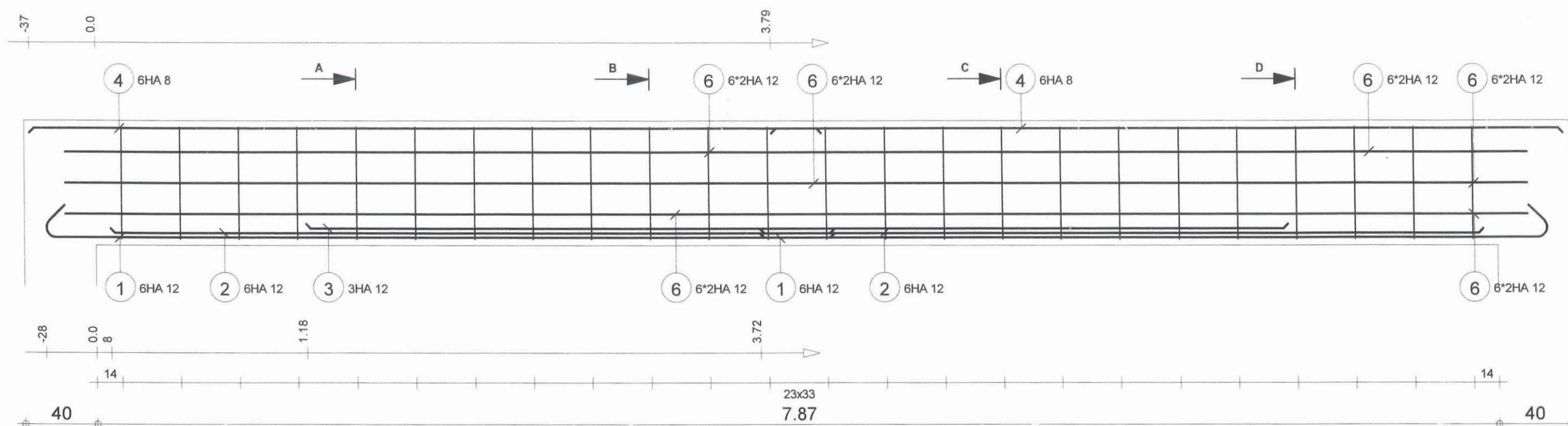
Page 1/2

R+1

PROJET CERME PLANS

POUTRE 14

Section 20x50



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 12	I=4.62	00	4	6HA 8	I=4.45	00
2	6HA 12	I=4.07	00	5	48RL 6	I=1.56	31
3	3HA 12	I=5.51	00	6	6*2HA 12	I=4.29	00

R+1

PROJET CERME PLANS

POUTRE 15
Section 20x70

Tél.

Fax

Nombre 1

Béton : BETON25 = 1.21 m3
Enrobage inférieur 3 cm
Densité = 110.7 kg/ m3

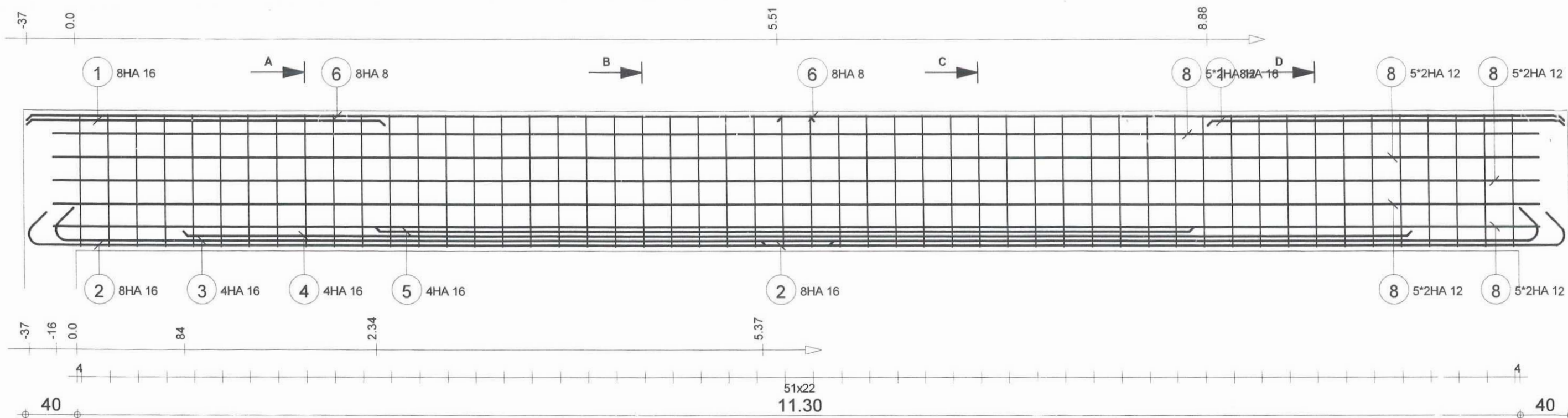
Acier HA 400 = 117 kg
Acier RL 235 = 16.6 kg

Enrobage supérieur 3 cm

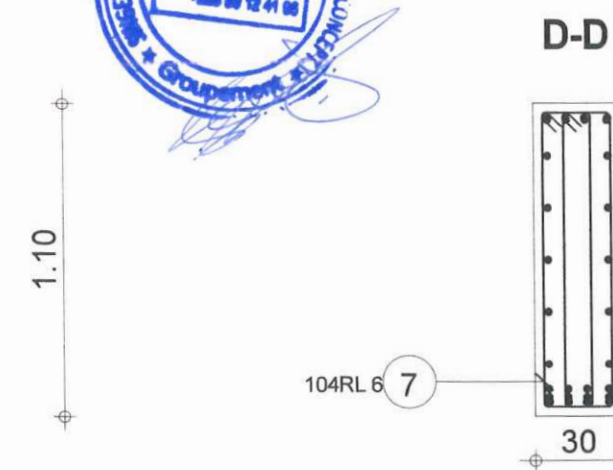
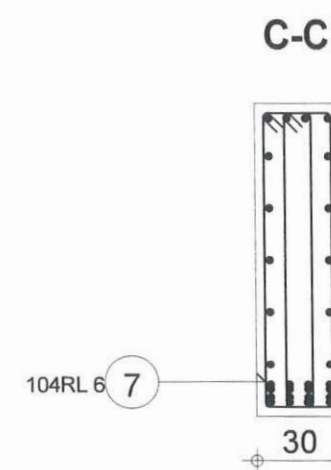
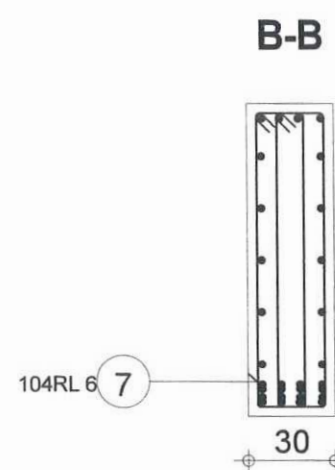
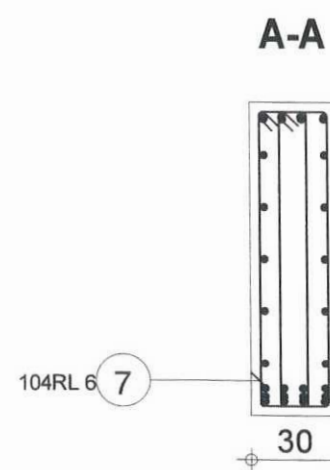
Echelle pour la vue 4.18cm/m

Enrobage latéral 3 cm

Page 4/4



**BON POUR
EXECUTION**



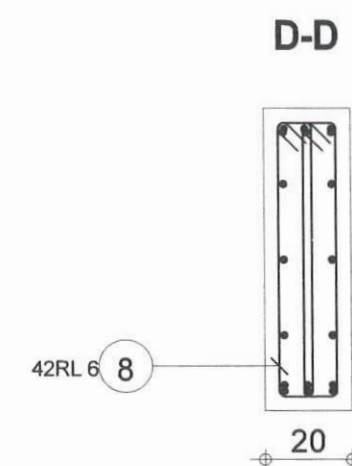
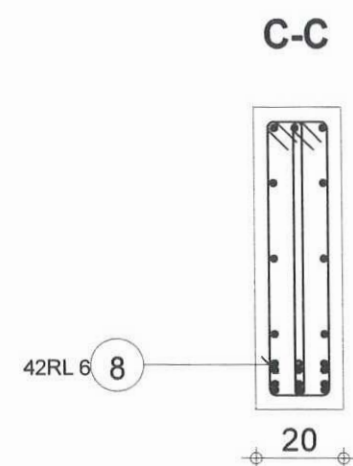
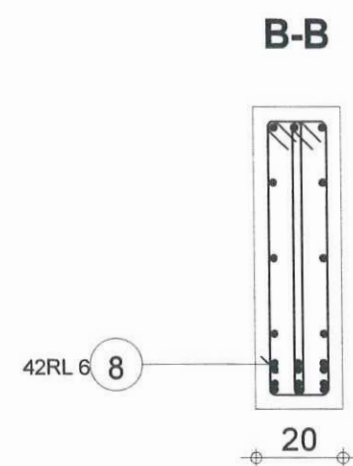
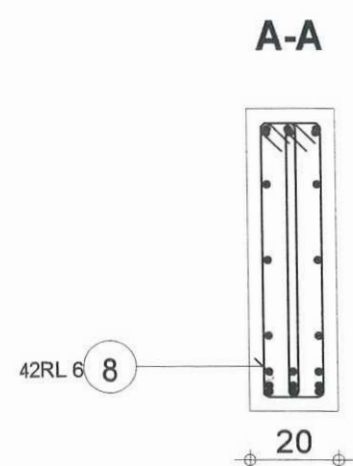
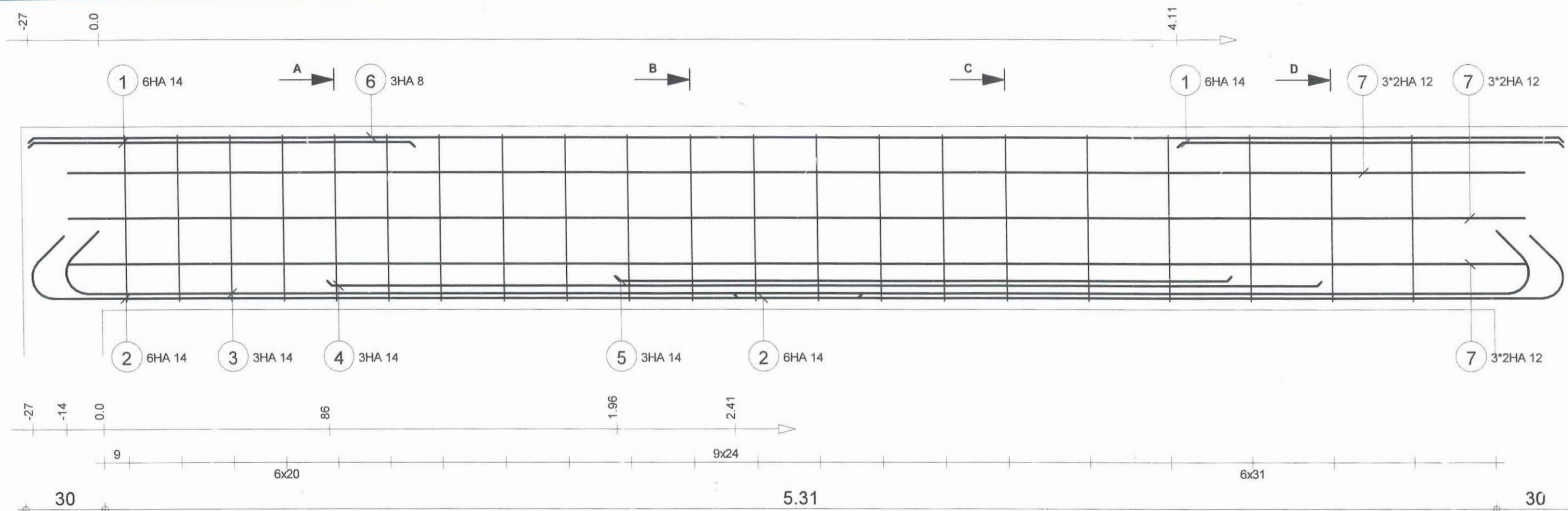
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	8HA 16	I=2.79	00	2.79	④	4HA 16	I=9.62	00	9.62	⑦	104RL 6	I=2.53	31	17 8 104
②	8HA 16	I=6.57	00	6.30	⑤	4HA 16	I=6.42	00	6.42	⑧	5*2HA 12	I=11.64	00	11.64
③	4HA 16	I=12.15	00	11.62	⑥	8HA 8	I=6.16	00	6.16					

R+1
PROJET CERME PLANS

POUTRE 16 AVEC REMONTEE DE 35CM
Section 30x110

Nombre 1

Béton : BETON25 = 3.99 m3	Acier HA 400 = 419 kg
Enrobage inférieur 3 cm	Acier RL 235 = 58.5 kg
Densité = 119.5 kg/ m3	Enrobage supérieur 3 cm
	Enrobage latéral 3 cm
	Echelle pour la vue 3 03cm/m



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
1	6HA 14	I=1.47	00	1.47	4	3HA 14	I=3.79	00	3.79	7	3*2HA 12	I=5.55	00	5.55
2	6HA 14	I=3.42	00	3.17	5	3HA 14	I=2.35	00	2.35	8	42RL 6	I=1.56	31	1.56
3	3HA 14	I=6.08	00	5.59	6	3HA 8	I=5.85	00	5.85					



R+1
PROJET CERME PLANS

POUTRE 17
Section 20x70

Nombre 1

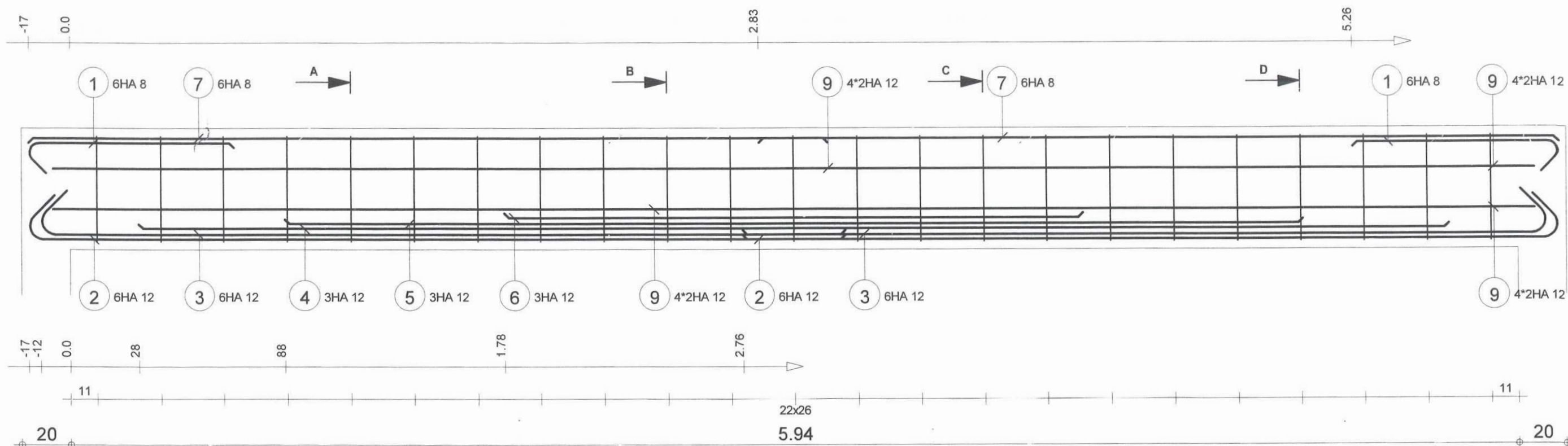
Béton : BETON25 = 0.828 m3
Enrobage inférieur 3 cm
Densité = 158.2 kg/ m3

Acier HA 400 = 116 kg
Acier RL 235 = 14.5 kg

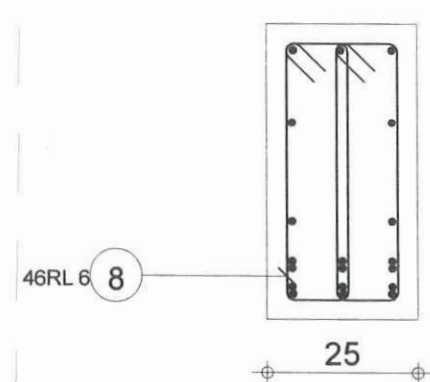
Enrobage supérieur 3 cm

Echelle pour la vue 6.05cm/m

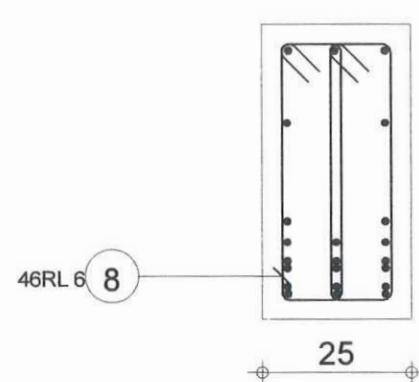
Enrobage latéral 3 cm



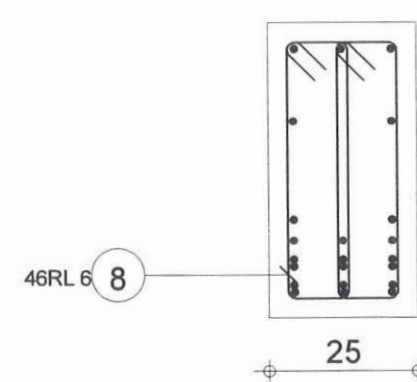
A-A



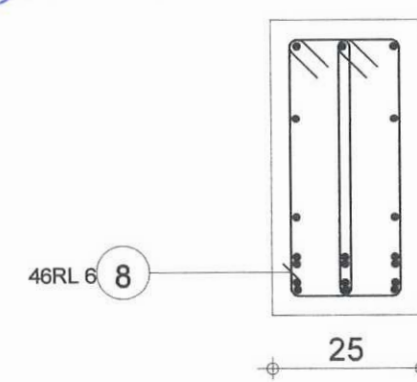
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 8	I=97	00	4	3HA 12	I=5.38	00	7	6HA 8	I=3.28	00
2	6HA 12	I=3.54	00	5	3HA 12	I=4.18	00	8	46RL 6	I=1.21	31
3	6HA 12	I=3.49	00	6	3HA 12	I=2.38	00	9	4*2HA 12	I=3.22	00

Tél.

Fax

Nombre 1

R+1
PROJET CERME PLANS

POUTRE 18
Section 25x50

Béton : BETON25 = 0.792 m3

Enrobage inférieur 3 cm

Densité = 145.2 kg/ m3

Surface du coffrage = 8.07 m2

Acier HA 400 = 102 kg

Acier RL 235 = 12.3 kg

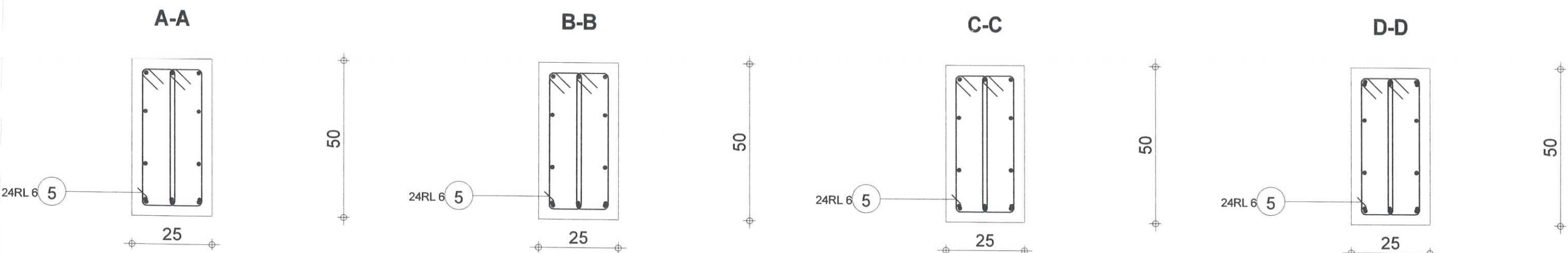
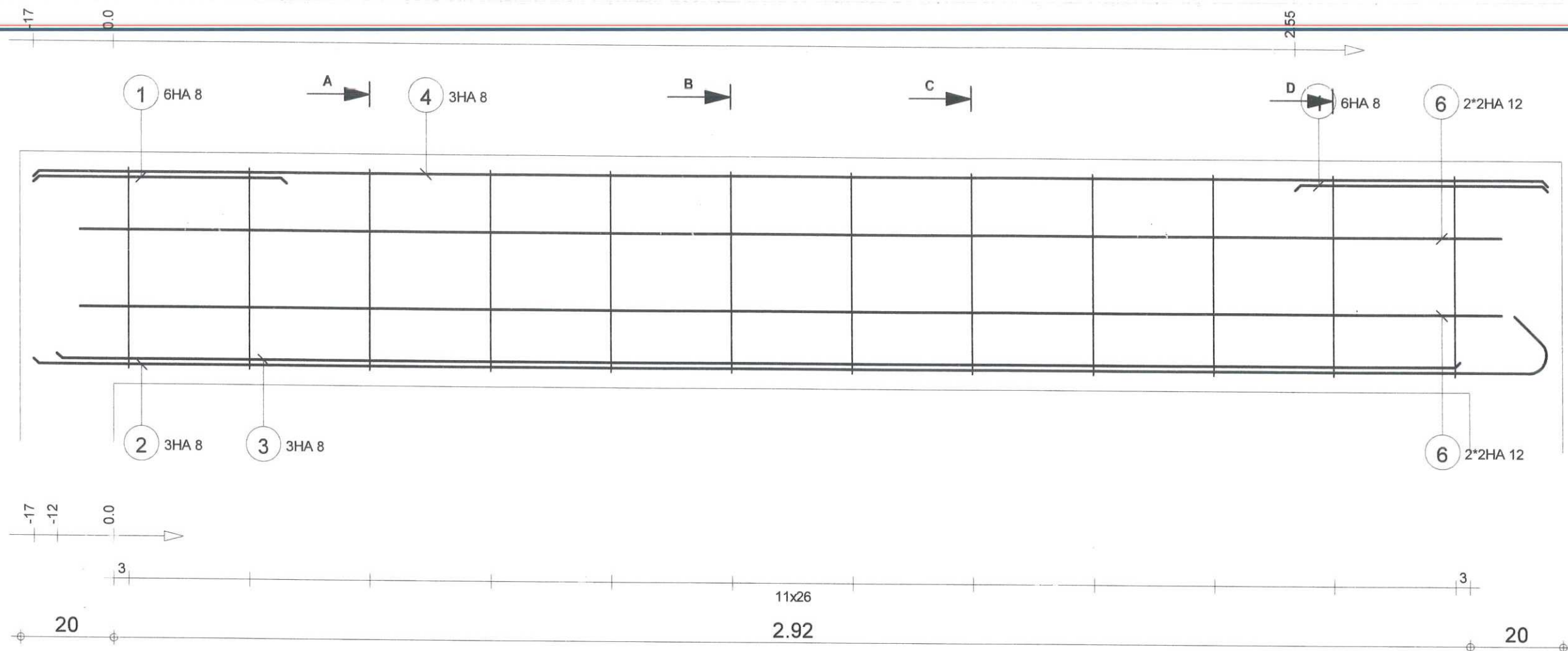
Enrobage supérieur 3 cm

Echelle pour la vue 5.67cm/m

Echelle pour la vue 5.67cm/m

Enrobage latéral 3 cm

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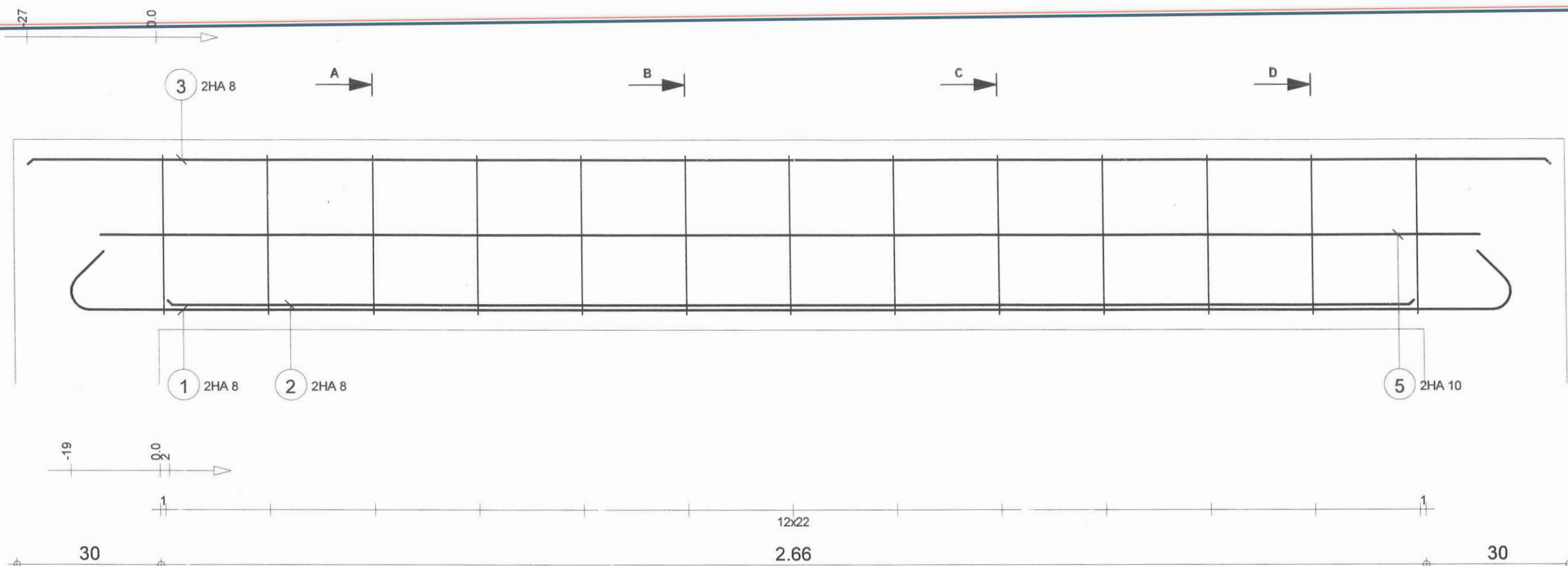


**BON POUR
EXECUTION**

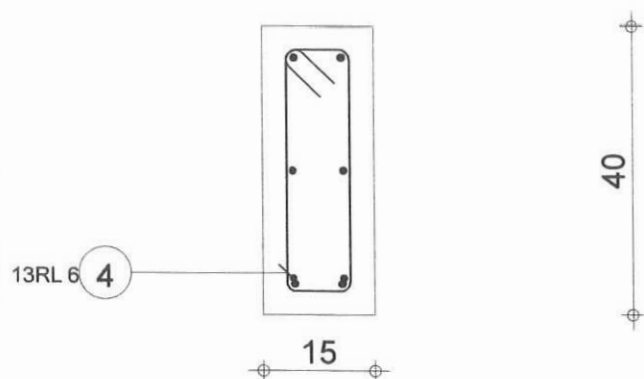


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 8	I=54	00	4	3HA 8	I=3.26	00
2	3HA 8	I=3.39	00	5	24RL 6	I=1.21	31
3	3HA 8	I=3.02	00	6	2*2HA 12	I=3.06	00

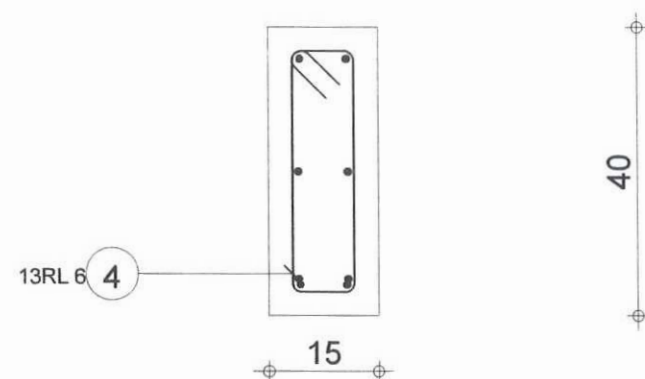
R+1 PROJET CERME_PLANS	POUTRE 19 Section 25x50	Tél.	Fax	Nombre 1	Acier HA 400 = 23.6 kg		
		Béton : BETON25 = 0.415 m3			Acier RL 235 = 6.42 kg		
		Enrobage inférieur 3 cm			Enrobage supérieur 3 cm		Enrobage latéral 3 cm
		Densité = 72.29 kg/ m3			Echelle pour la vue 9.33cm/m		Page 1/1
		Surface du coffrage = 4.3 m2			Echelle pour la section 7.8cm/m		



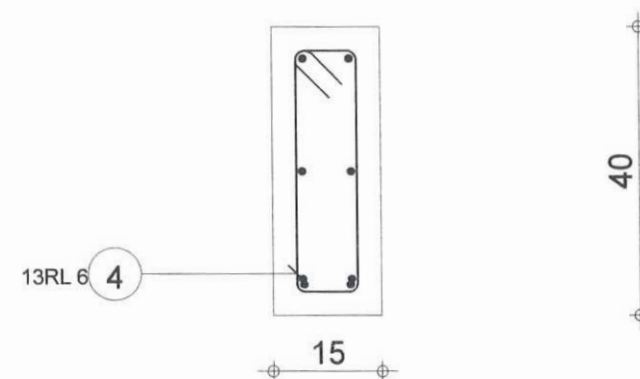
A-A



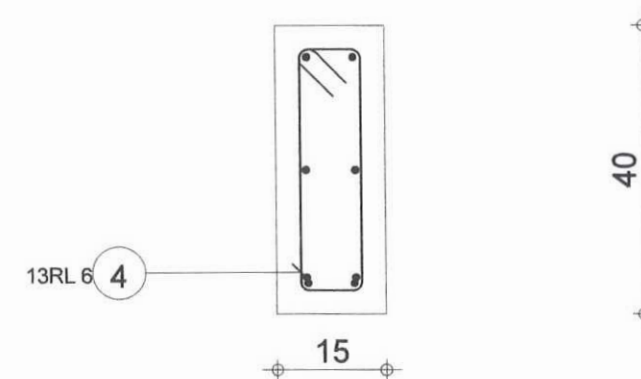
B-B



C-C



D-D



**BON POUR
EXÉCUTION**



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	2HA 8	I=3.29	00	4	13RL 6	I=98	31
2	2HA 8	I=2.62	00	5	2HA 10	I=2.90	00
3	2HA 8	I=3.20	00				

Tél.

Fax

Nombre 1

R+1
PROJET CERME_PLANS

POUTRE 20
Section 15x40

Enrobage inférieur 3 cm

Densité = 69.39 kg/ m3

Surface du coffrage = 3 13 m2

Acier HA 400 = 10.8 kg

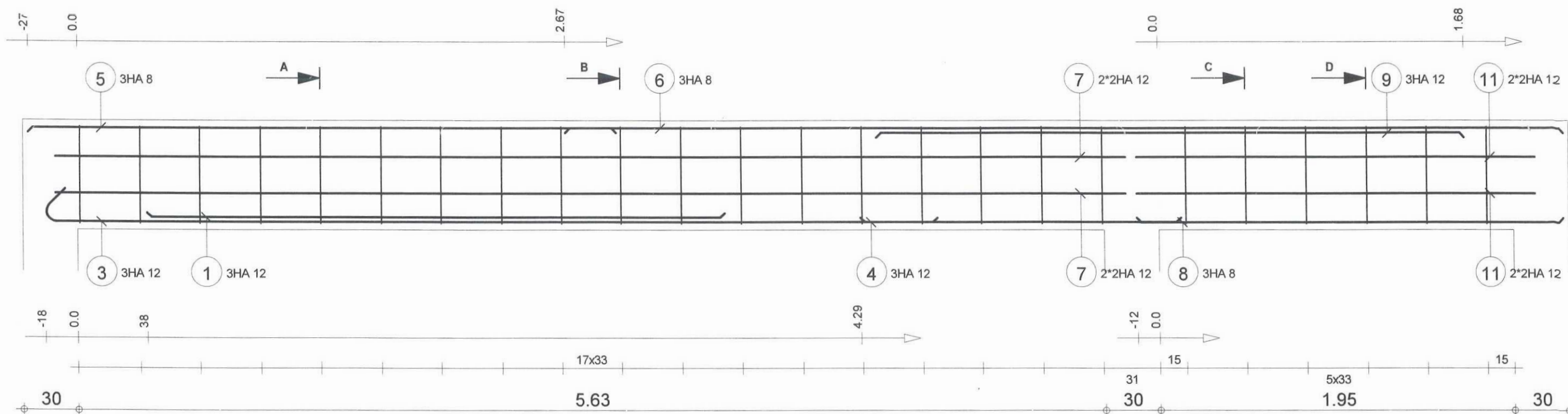
Acier RL 235 = 2.81 kg

Enrobage supérieur 3 cm

Echelle pour la vue 10.7cm/m

Echelle pour la section 9.55cm/m

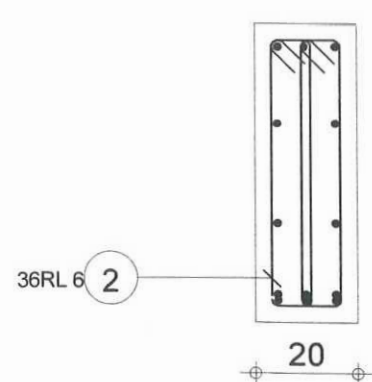
Enrobage latéral 3 cm



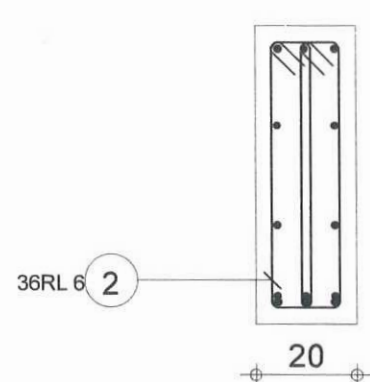
**BON POUR
EXÉCUTION**



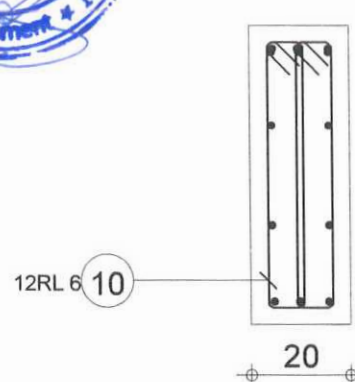
A-A



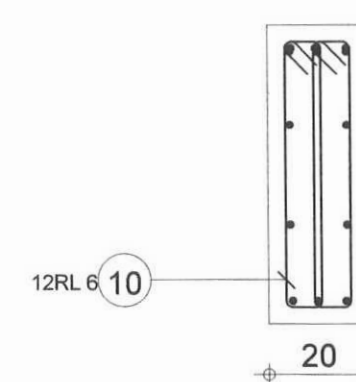
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12	I=3.17	00	④	3HA 12	I=1.76	00	⑦	2*2HA 12	I=5.87	00	⑩	12RL 6	I=1.35	31
②	36RL 6	I=1.36	31	⑤	3HA 8	I=3.23	00	⑧	3HA 8	I=2.34	00	⑪	2*2HA 12	I=2.19	00
③	3HA 12	I=5.08	00	⑥	3HA 8	I=5.47	00	⑨	3HA 12	I=3.22	00				

Tél.

Fax

Nombre 1

Béton : BETON25 = 1.02 m3

Enrobage inférieur 3 cm

Densité = 89.61 kg/ m3

Surface du coffrage = 14.0 m2

Acier HA 400 = 76.9 kg

Acier RL 235 = 14.5 kg

Enrobage supérieur 3 cm

Echelle pour la vue 4.28cm/m

Echelle pour la vue 4.28cm/m

Enrobage latéral 3 cm

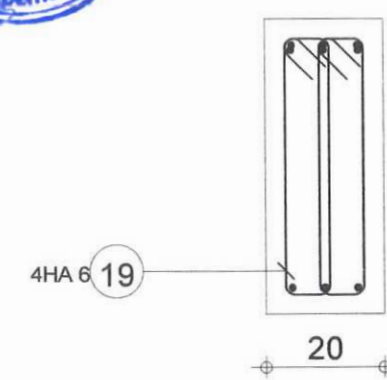
Page 1/1

R+1

PROJET CERME_PLANS

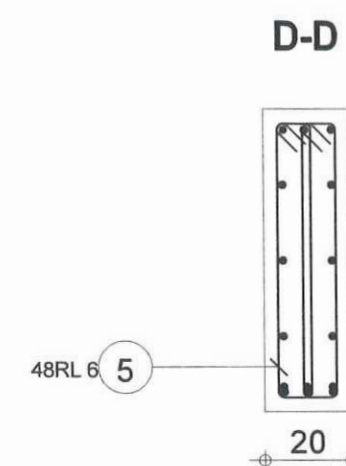
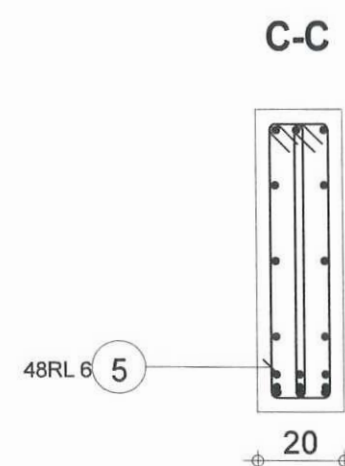
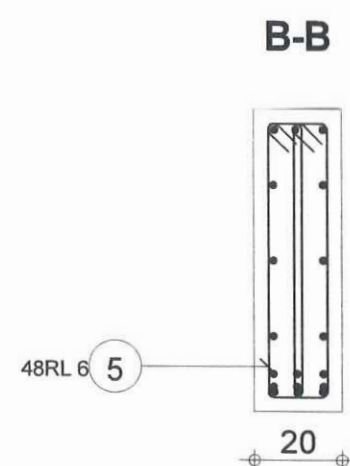
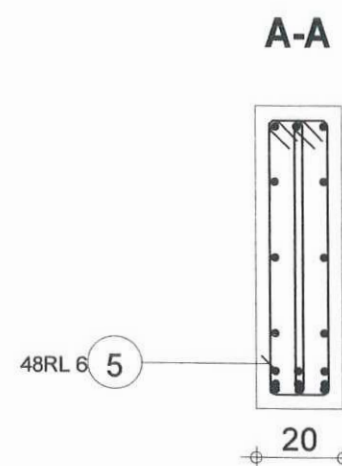
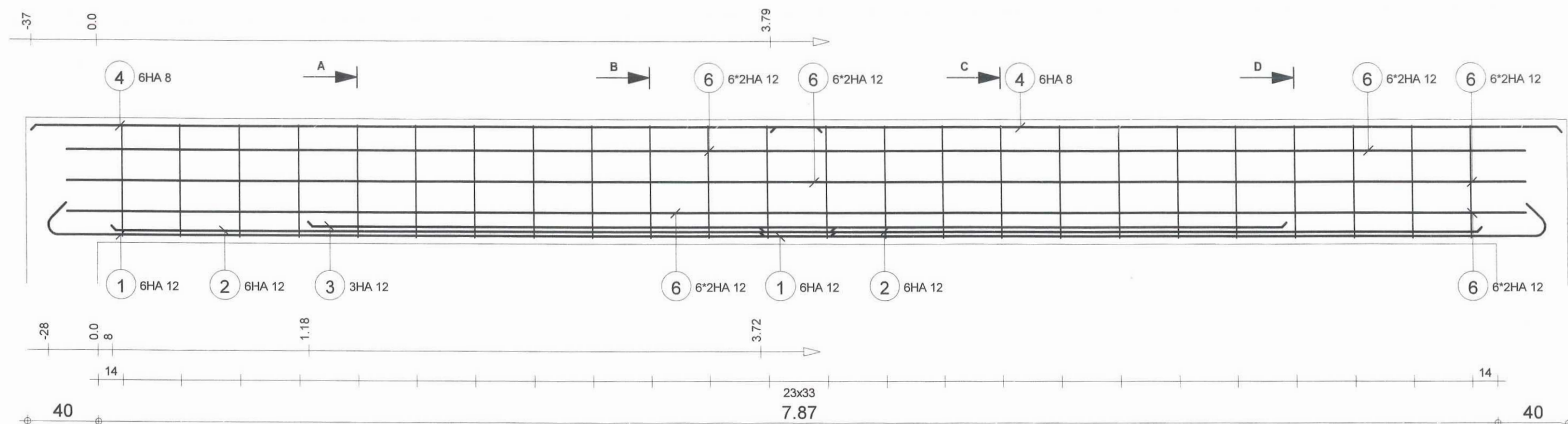
POUTRE 21

Section 20x60

Fax

Page 1/2

Nombre 1



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 12	I=4.62	00	4	6HA 8	I=4.45	00
2	6HA 12	I=4.07	00	5	48RL 6	I=1.56	31
3	3HA 12	I=5.51	00	6	6*2HA 12	I=4.29	00

R+1
PROJET CERME PLANS

POUTRE 15
Section 20x70

Tél.

Fax

Nombre 1

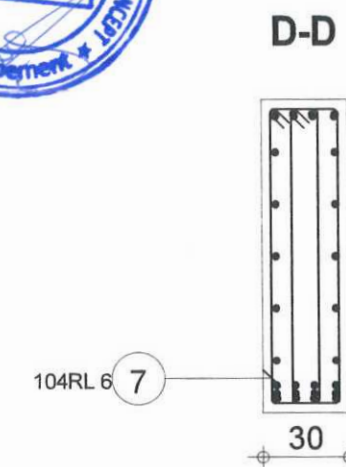
Béton : BETON25 = 1.21 m3
Enrobage inférieur 3 cm
Densité = 110.7 kg/ m3
Surface du coffrage = 14 m2

Acier HA 400 = 117 kg
Acier RL 235 = 16.6 kg

Enrobage supérieur 3 cm

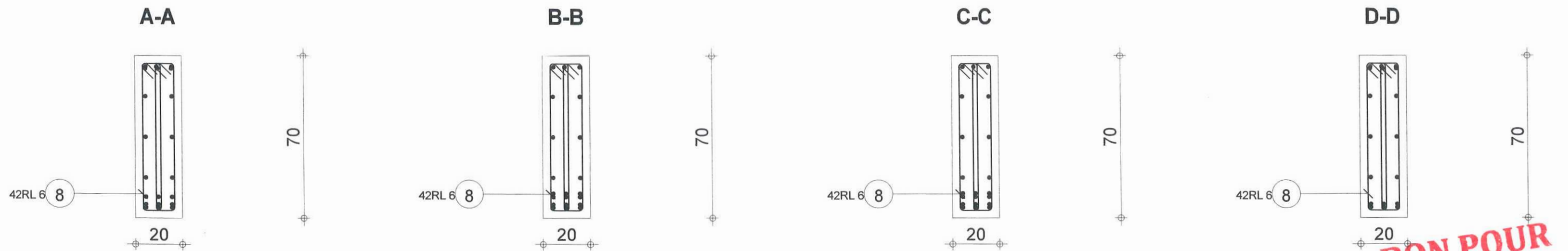
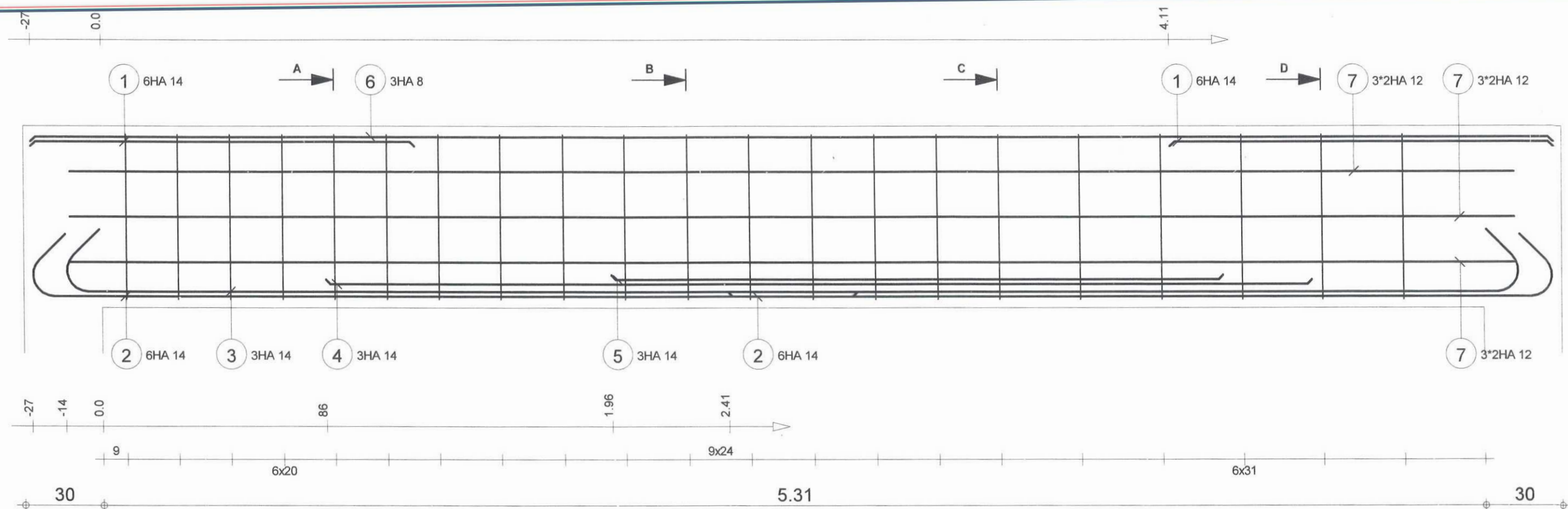
Echelle pour la vue 4.18cm/m
Echelle pour la section 5.71cm/m

Page 1/1

Tél. Fax

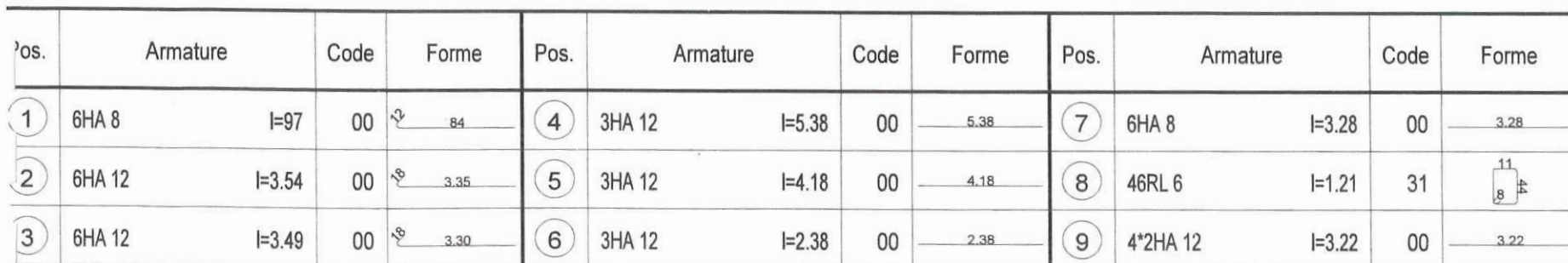
Nombre 1

Page 1/1

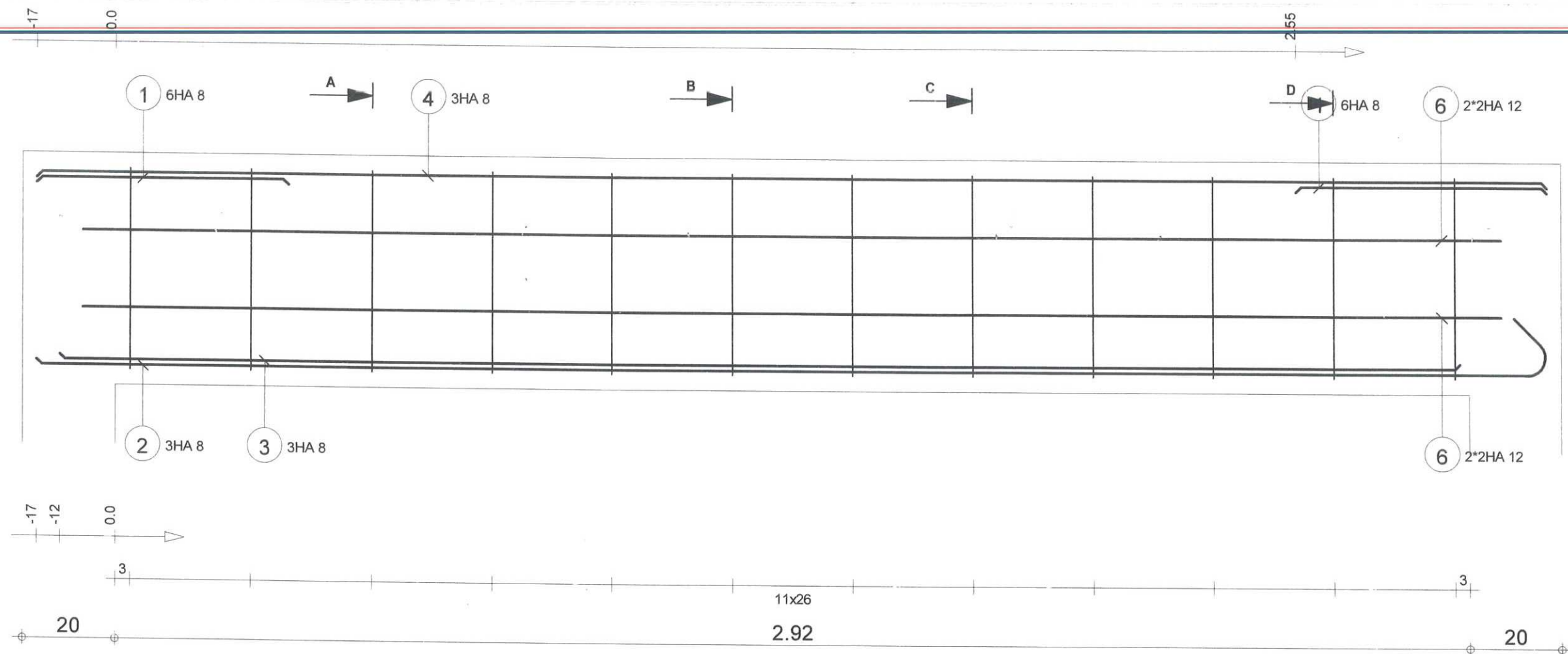


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
1	6HA 14	I=1.47	00	1.47	4	3HA 14	I=3.79	00	3.79	7	3*2HA 12	I=5.55	00	5.55
2	6HA 14	I=3.42	00	3.17	5	3HA 14	I=2.35	00	2.35	8	42RL 6	I=1.56	31	8
3	3HA 14	I=6.08	00	5.59	6	3HA 8	I=5.85	00	5.85					





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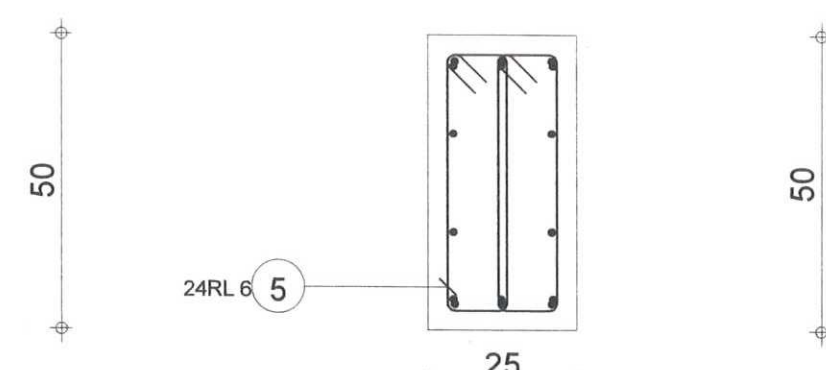
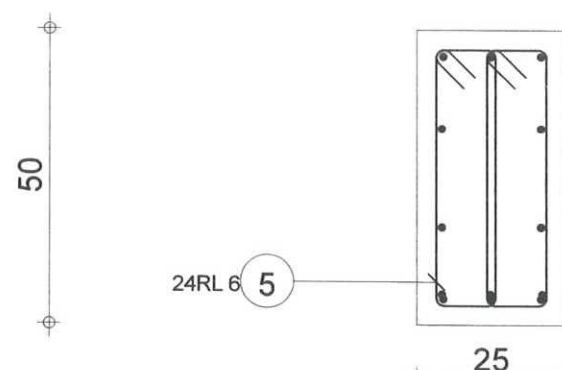
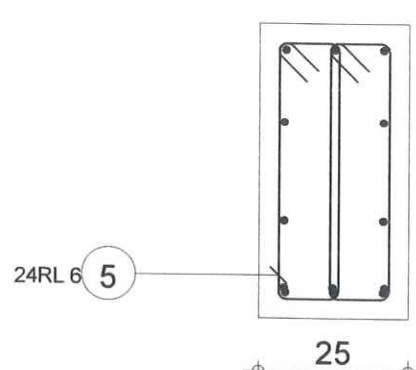
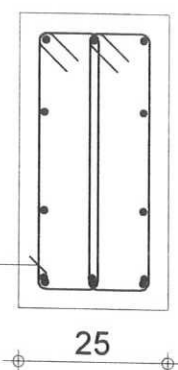


A-A

B-B

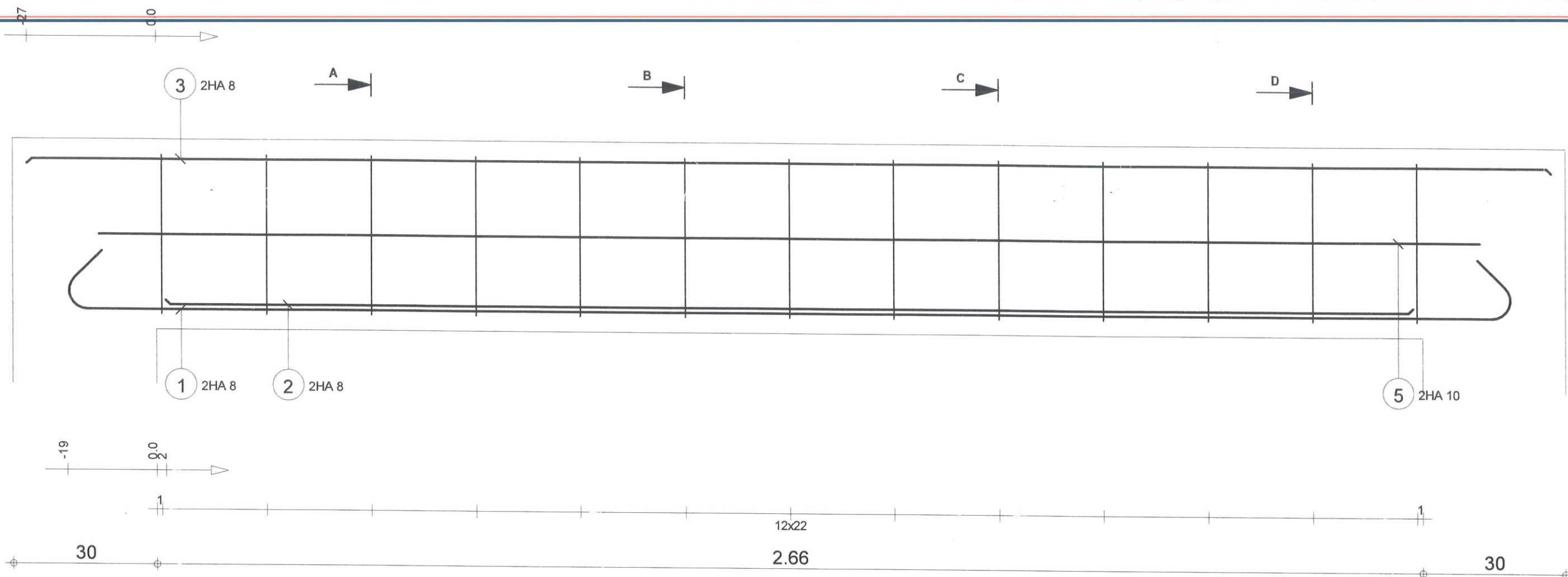
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 8	I=54	00	4	3HA 8	I=3.26	00
2	3HA 8	I=3.39	00	5	24RL 6	I=1.21	31
3	3HA 8	I=3.02	00	6	2*2HA 12	I=3.06	00



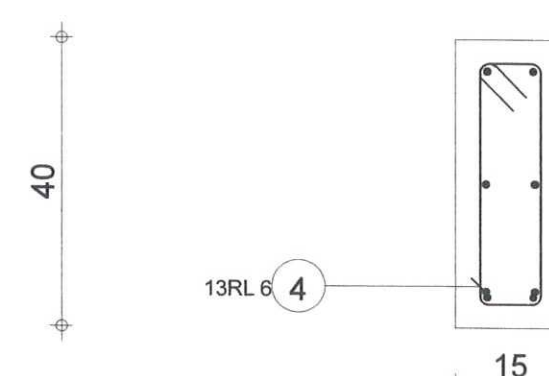
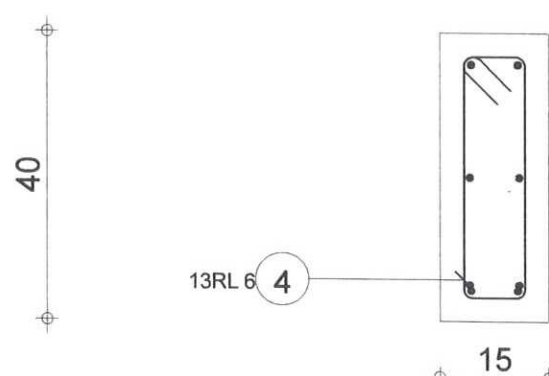
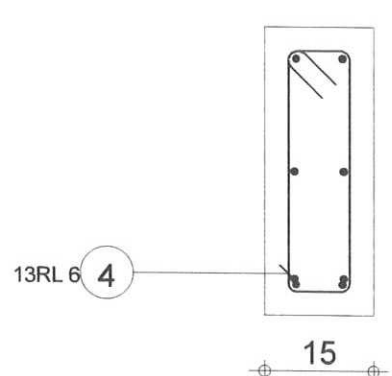
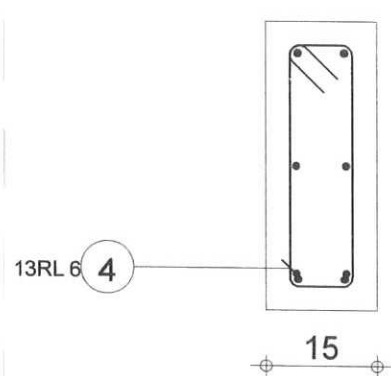


A-A

B-B

C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	2HA 8	I=3.29	00	4	13RL 6	I=98	31
2	2HA 8	I=2.62	00	5	2HA 10	I=2.90	00
3	2HA 8	I=3.20	00				



R+1
PROJET CERME_PLANS

POUTRE 20
Section 15x40

Tél.

Fax

Nombre 1

Enrobage inférieur 3 cm

Densité = 69.39 kg/ m3

Surface du coffrage = 3.13 m2

Acier HA 400 = 10.8 kg

Acier RL 235 = 2.81 kg

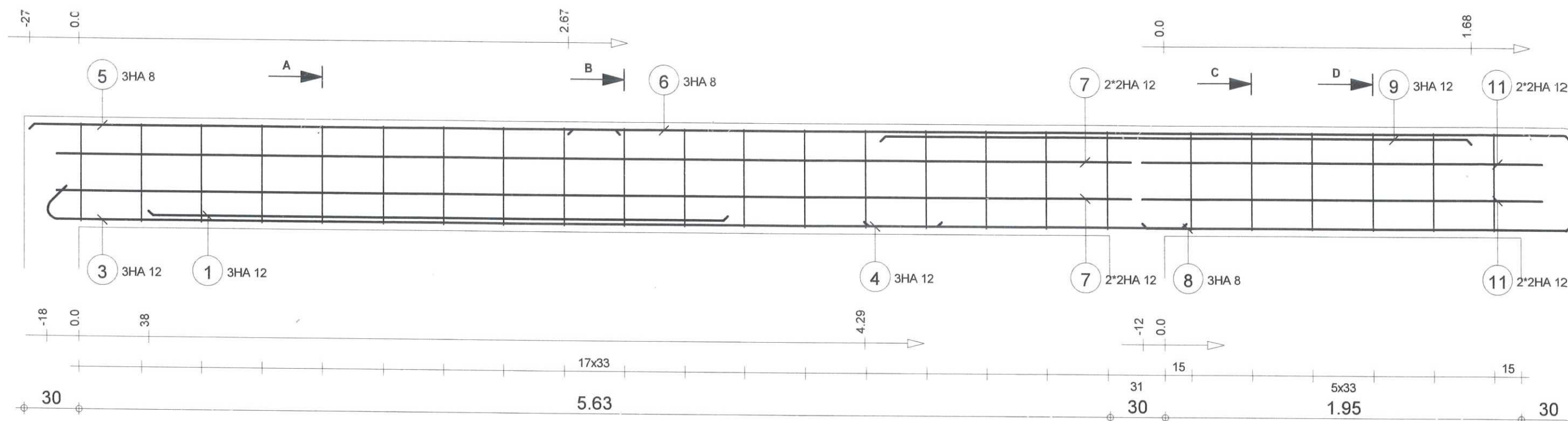
Enrobage supérieur 3 cm

Echelle pour la vue 10.7cm/m

Echelle pour la section 0.55cm/m

Enrobage latéral 3 cm

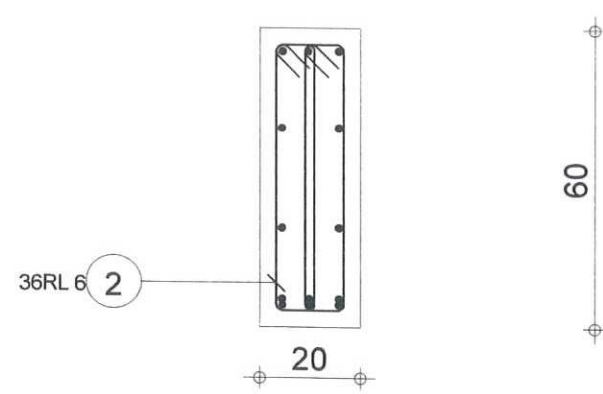
Page 1/1



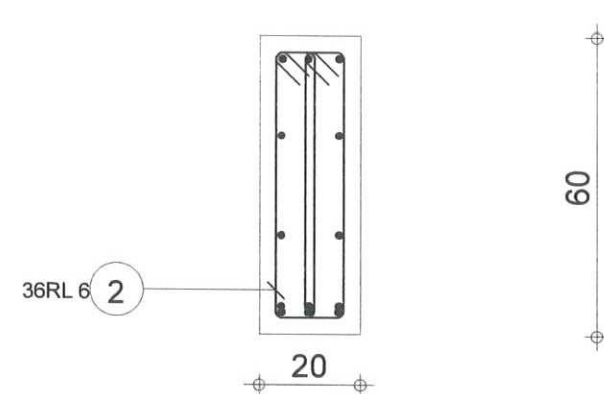
**BON POUR
EXÉCUTION**



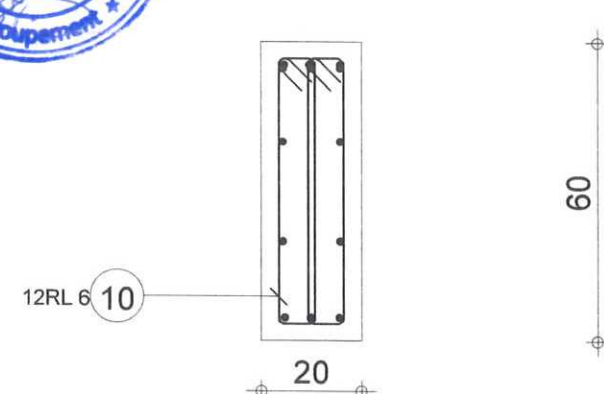
A-A



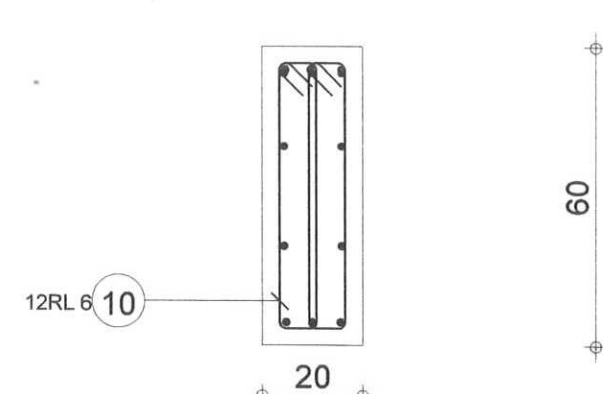
B-B



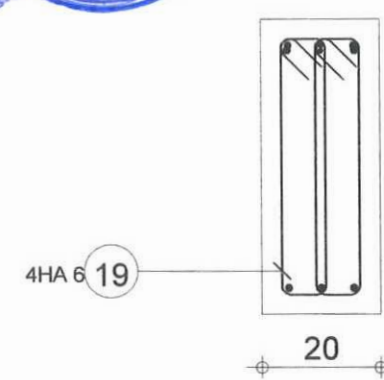
C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
1	3HA 12	I=3.17	00	3.17	4	3HA 12	I=1.76	00	1.76	7	2*2HA 12	I=5.87	00	5.87	10	12RL 6	I=1.35	31	
2	36RL 6	I=1.36	31		5	3HA 8	I=3.23	00	3.23	8	3HA 8	I=2.34	00	2.33	11	2*2HA 12	I=2.19	00	2.18
3	3HA 12	I=5.08	00		6	3HA 8	I=5.47	00	5.47	9	3HA 12	I=3.22	00	3.22					

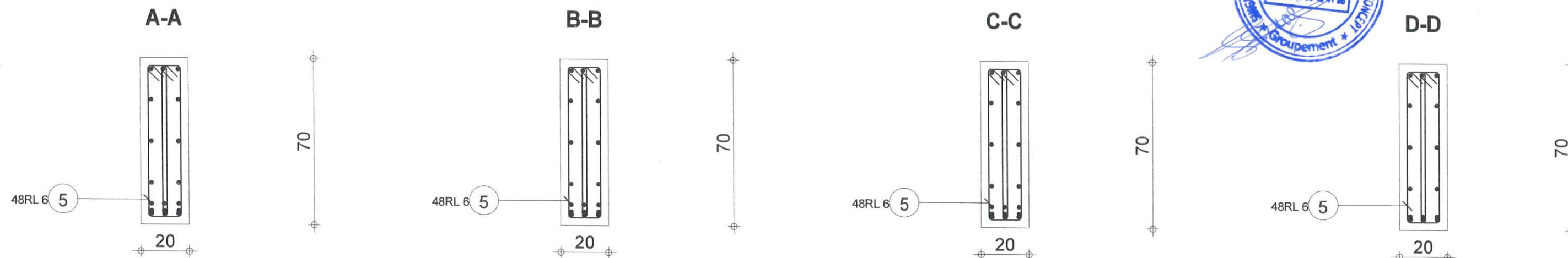
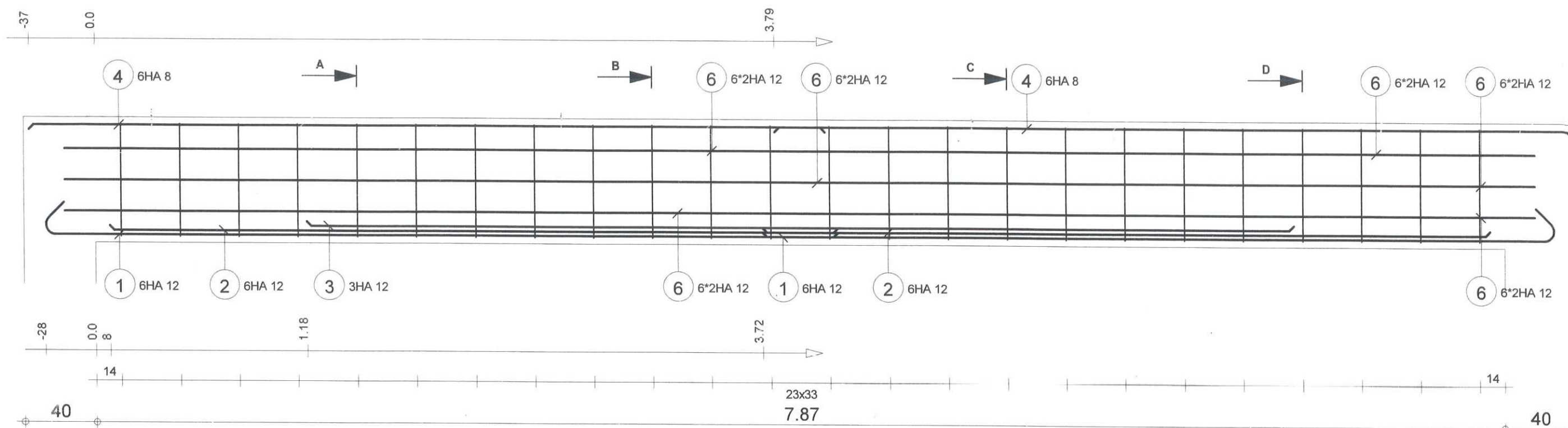
Page 1/2

Pos	Armature		Code	Forme
16	3HA 10	l=2.23	00	2.23
17	36HA 6	l=1.16	31	
18	4*2HA 12	l=3.75	00	3.75
19	4HA 6	l=1.16	31	
20	3HA 10	l=49	00	49

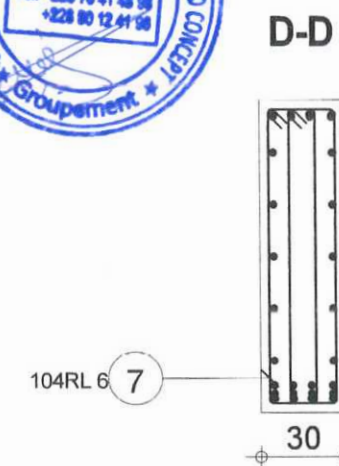
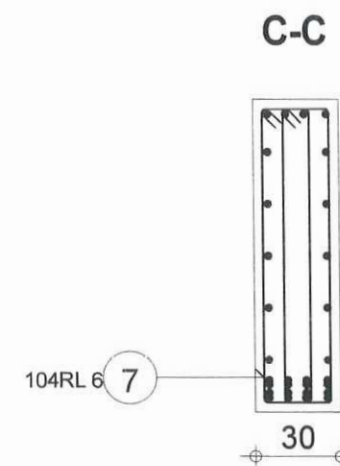
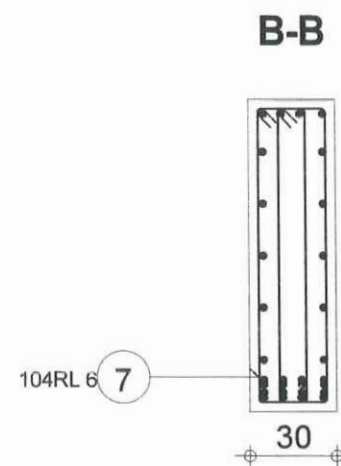
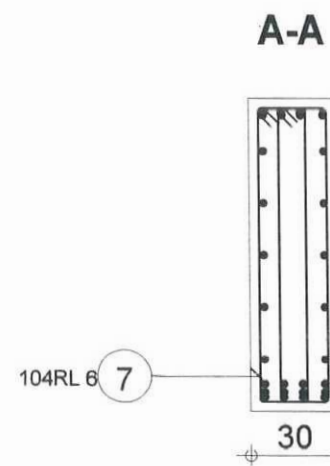
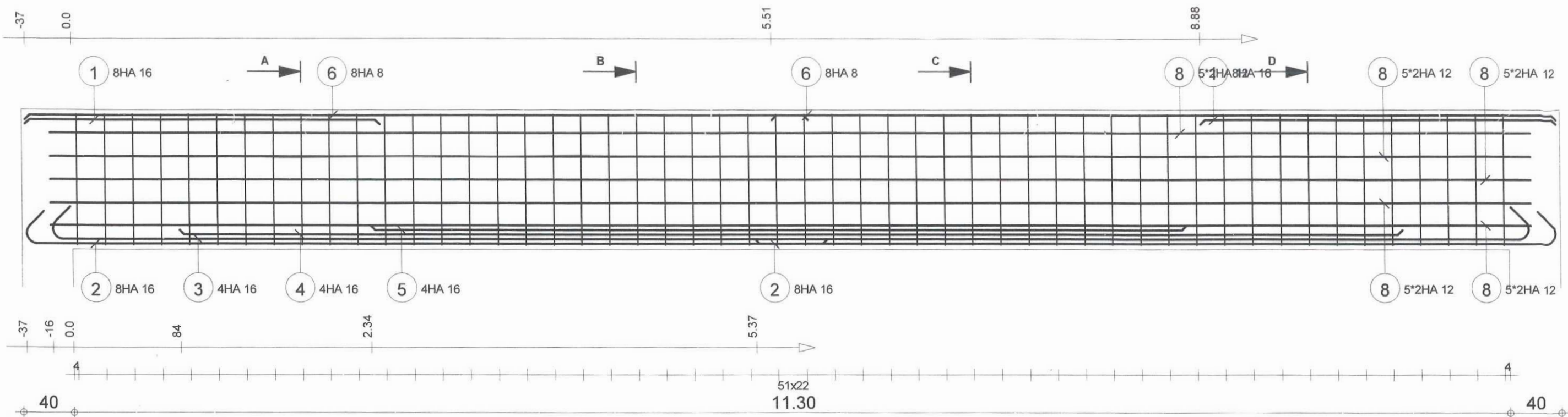
**BON POUR
EXECUTION**



R+1 PROJET CERME PLANS	POUTRE 14 Section 20x50	Nombre 1	Tél.	Fax	Acier HA 500 = 124 kg		
					Acier HA 500 = 18 kg		
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm
			Densité = 106.8 kg/ m3				Page 2/2
				Surface du coffrage = 16 m2			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 12	I=4.62	00	4	6HA 8	I=4.45	00
2	6HA 12	I=4.07	00	5	48RL 6	I=1.56	31
3	3HA 12	I=5.51	00	6	6*2HA 12	I=4.29	00



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
1	8HA 16	l=2.79	00	2.79	4	4HA 16	l=9.62	00	9.62	7	104RL 6	l=2.53	31	17 8 12
2	8HA 16	l=6.57	00	6.30	5	4HA 16	l=6.42	00	6.42	8	5*2HA 12	l=11.64	00	11.64
3	4HA 16	l=12.15	00	11.62	6	8HA 8	l=6.16	00	6.16					

R+1
PROJET CERME_PLANS

POUTRE 16 AVEC REMONTEE DE 35CM
Section 30x110

Nombre 1

Béton : BETON25 = 3.99 m3
Enrobage inférieur 3 cm
Densité = 119.5 kg/ m3
Surface du coffrage = 30.7 m2

Acier HA 400 = 419 kg
Acier RL 235 = 58.5 kg

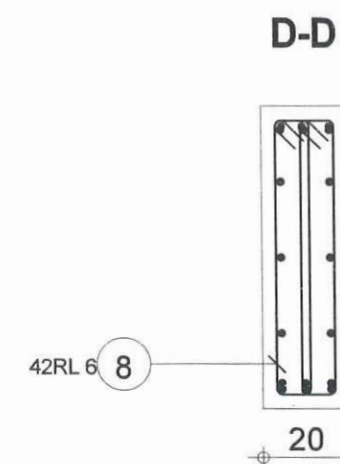
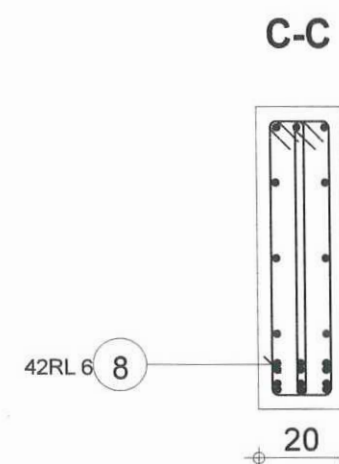
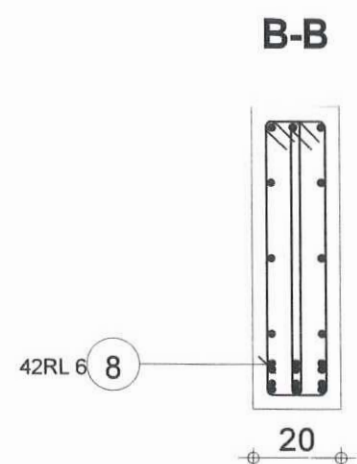
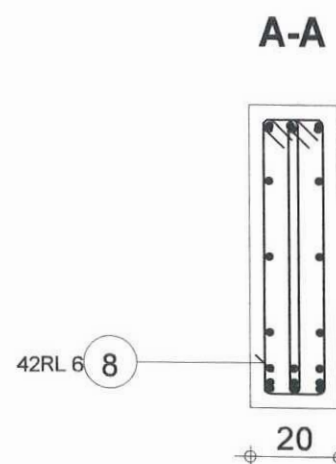
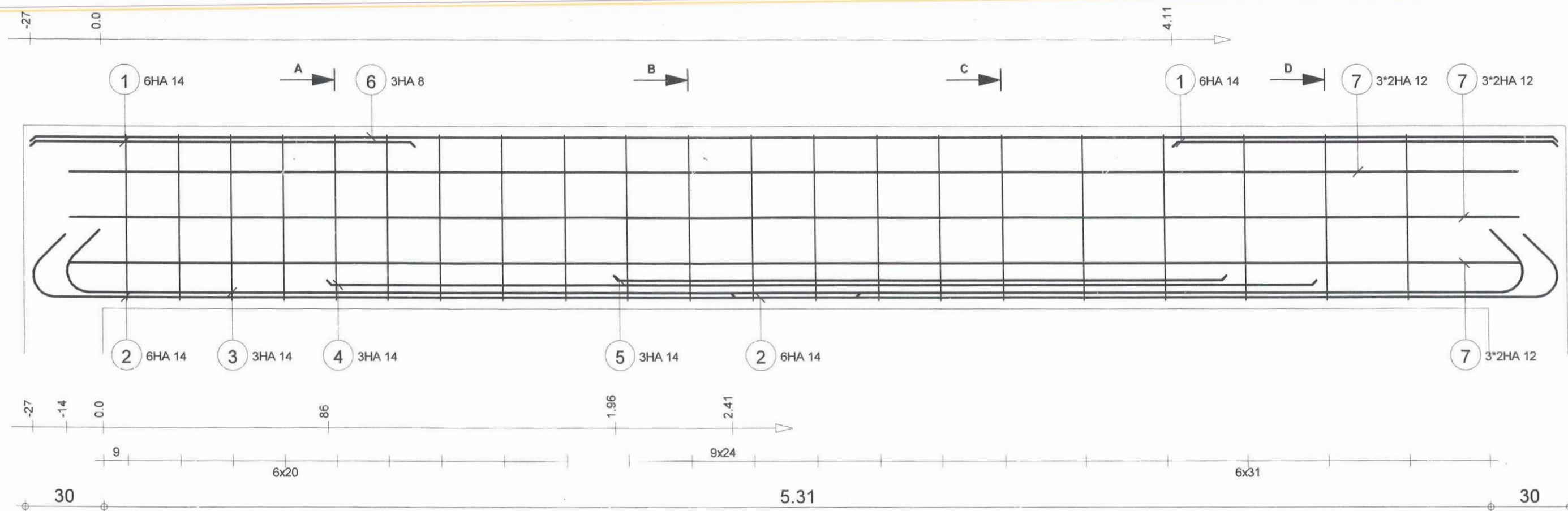
Enrobage supérieur 3 cm

Echelle pour la vue 3.03cm/m

Echelle pour la section 3.03cm/m

Enrobage latéral 3 cm

Page 1/1



[Signature]

Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	6HA 14	I=1.47	00	1.47	④	3HA 14	I=3.79	00	3.79	⑦	3*2HA 12	I=5.55	00	5.55
②	6HA 14	I=3.42	00	3.17	⑤	3HA 14	I=2.35	00	2.35	⑧	42RL 6	I=1.56	31	
③	3HA 14	I=6.08	00	5.59	⑥	3HA 8	I=5.85	00	5.85					

R+1
PROJET CERME PLANS

POUTRE 17
Section 20x70

Nombre 1

Béton : BETON25 = 0.828 m3
Enrobage inférieur 3 cm
Densité = 158.2 kg/ m3
Surface du coffrage = 9.62 m2

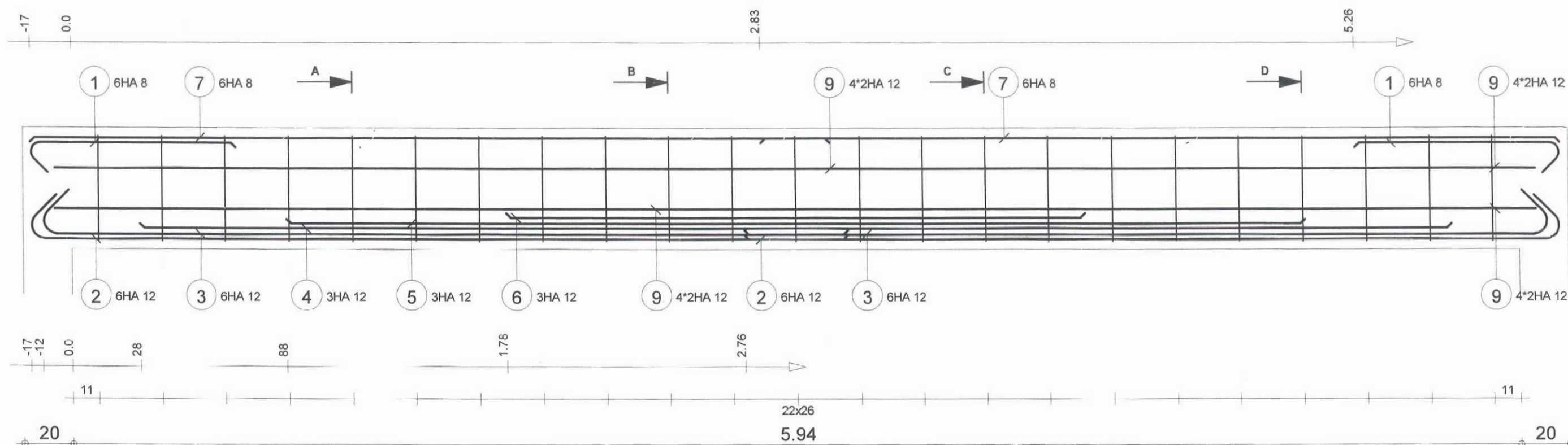
Acier HA 400 = 116 kg
Acier RL 235 = 14.5 kg

Enrobage supérieur 3 cm

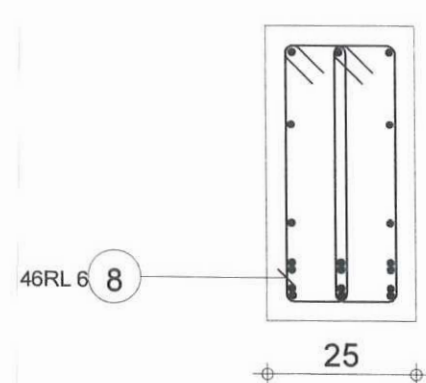
Echelle pour la vue 6.05cm/m
Echelle pour la section 5.71cm/m

Enrobage latéral 3 cm

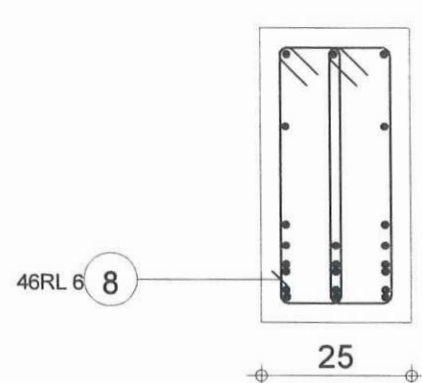
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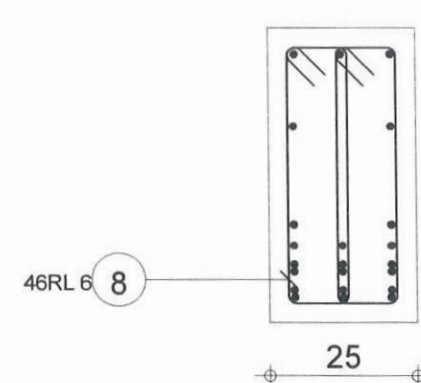
A-A



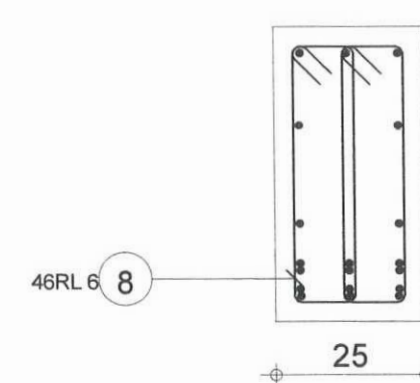
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 8	I=97	00	4	3HA 12	I=5.38	00	7	6HA 8	I=3.28	00
2	6HA 12	I=3.54	00	5	3HA 12	I=4.18	00	8	46RL 6	I=1.21	31
3	6HA 12	I=3.49	00	6	3HA 12	I=2.38	00	9	4*2HA 12	I=3.22	00

Tél.

Fax

Nombre 1

R+1

PROJET CERME_PLANS

POUTRE 18

Section 25x50

Béton : BETON25 = 0.792 m3

Enrobage inférieur 3 cm

Densité = 145.2 kg/ m3

Surface du coffrage = 8.07 m2

Acier HA 400 = 102 kg

Acier RL 235 = 12.3 kg

Enrobage supérieur 3 cm

Echelle pour la vue 5.67cm/m

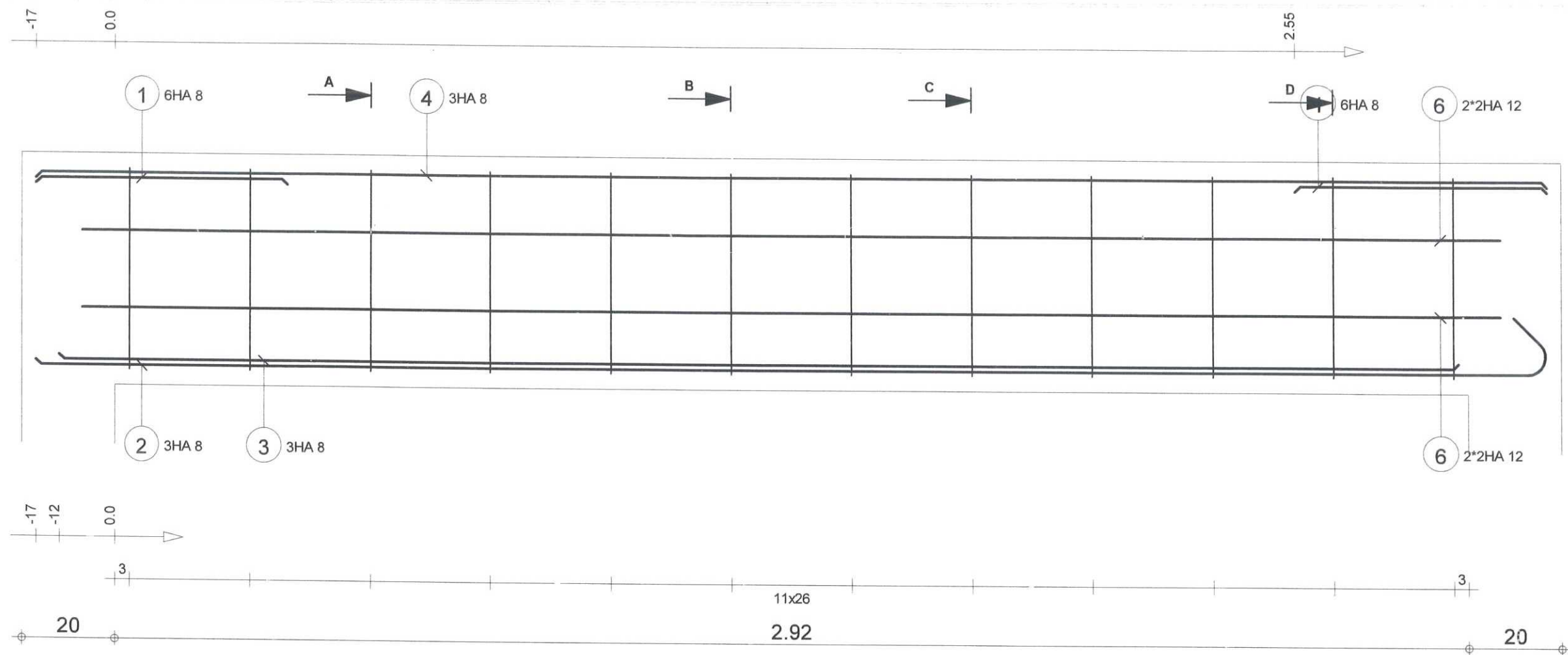
Echelle pour la section 7.8cm/m

Enrobage latéral 3 cm

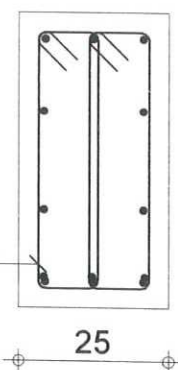
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BON POUR

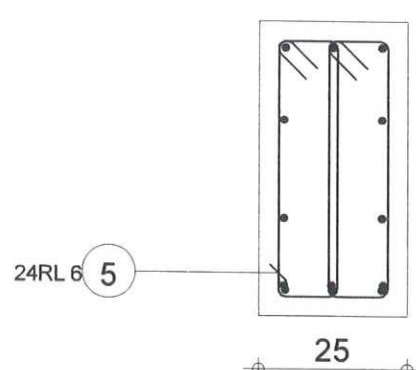




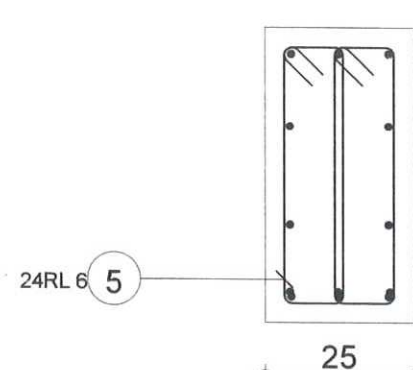
A-A



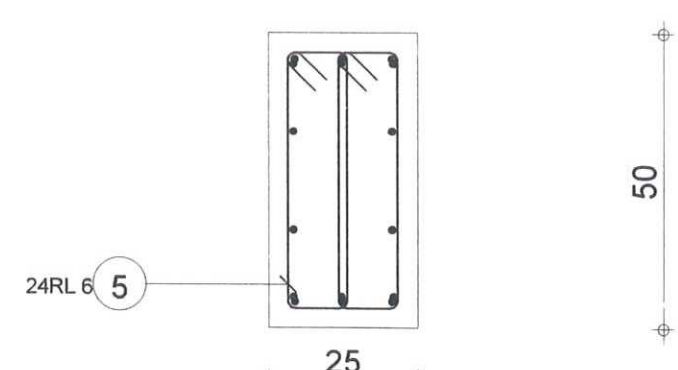
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 8	I=54	00	4	3HA 8	I=3.26	00
2	3HA 8	I=3.39	00	5	24RL 6	I=1.21	31
3	3HA 8	I=3.02	00	6	2*2HA 12	I=3.06	00

Tél.

Fax

Nombre 1

R+1
PROJET CERME_PLANS

POUTRE 19
Section 25x50

Béton : BETON25 = 0.415 m3
Enrobage inférieur 3 cm
Densité = 72.29 kg/ m3
Surface du coffrage = 4.3 m2

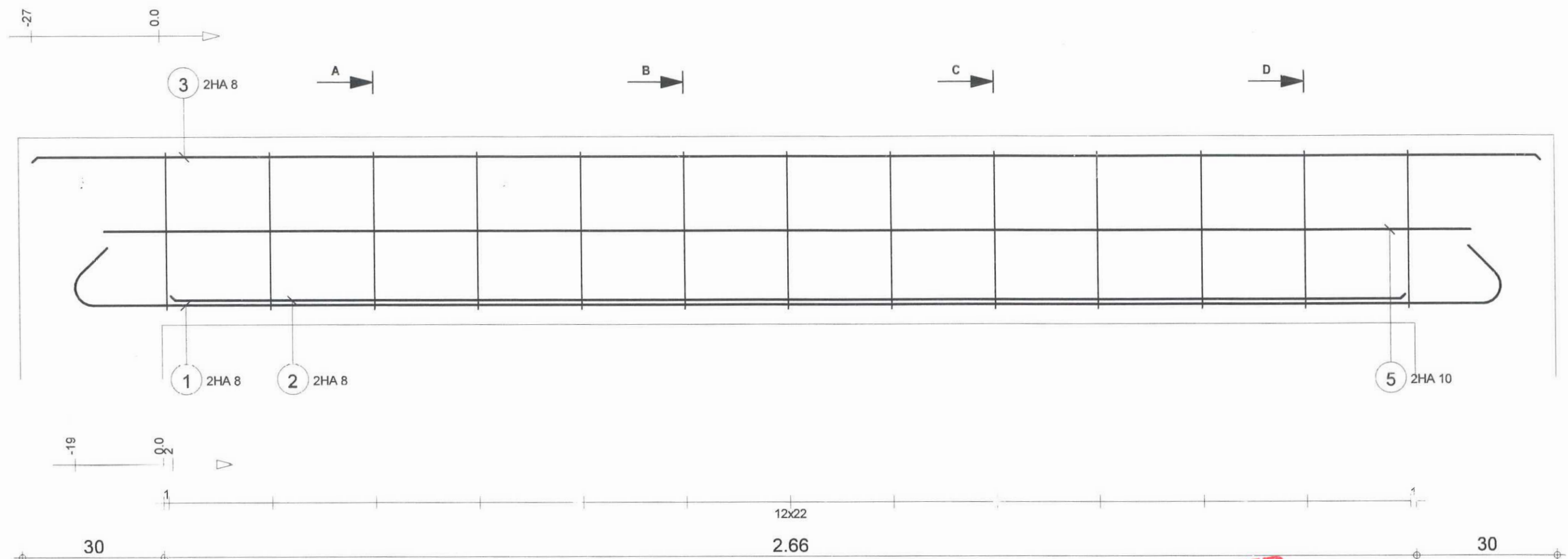
Acier HA 400 = 23.6 kg
Acier RL 235 = 6.42 kg

Enrobage supérieur 3 cm
Echelle pour la vue 9.33cm/m
Echelle pour la section 7.8cm/m

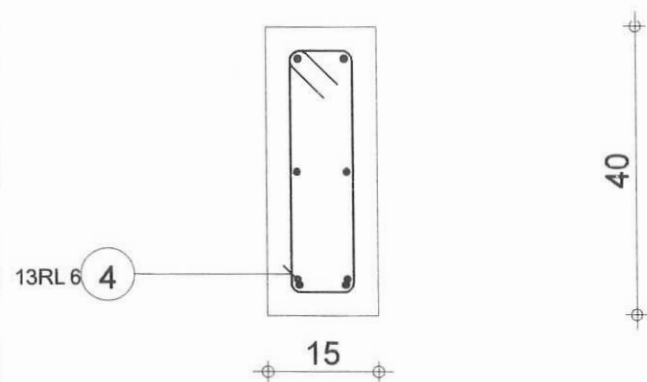
Enrobage latéral 3 cm

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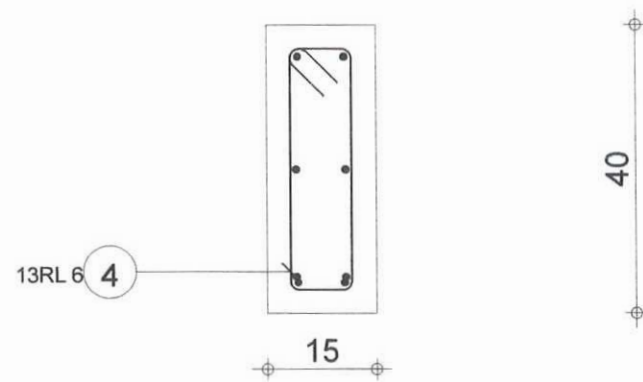




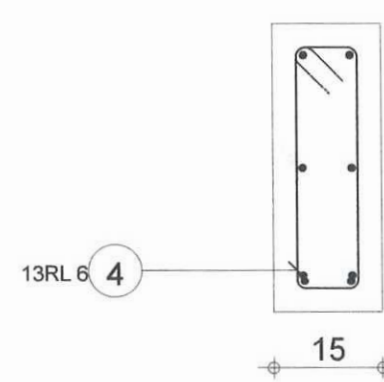
A-A



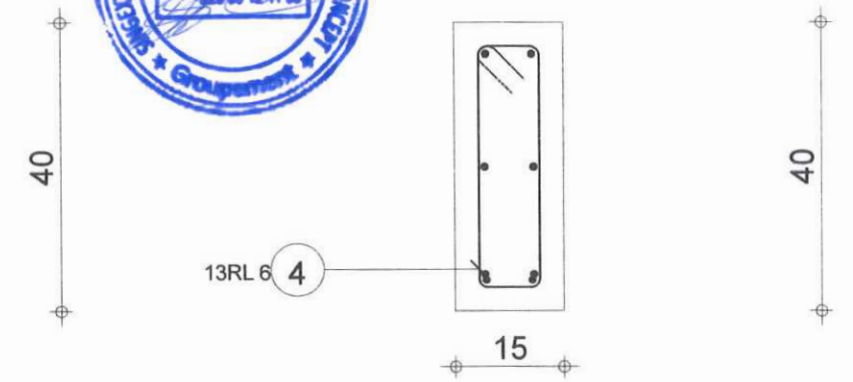
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	2HA 8	I=3.29	00	4	13RL 6	I=98	31
2	2HA 8	I=2.62	00	5	2HA 10	I=2.90	00
3	2HA 8	I=3.20	00				

Tél.

Fax

Nombre 1

R+1

PROJET CERME_PLANS

POUTRE 20

Section 15x40

Enrobage inférieur 3 cm

Densité = 69.39 kg/ m3

Surface du coffrage = 3.13 m2

Acier HA 400 = 10.8 kg

Acier RL 235 = 2.81 kg

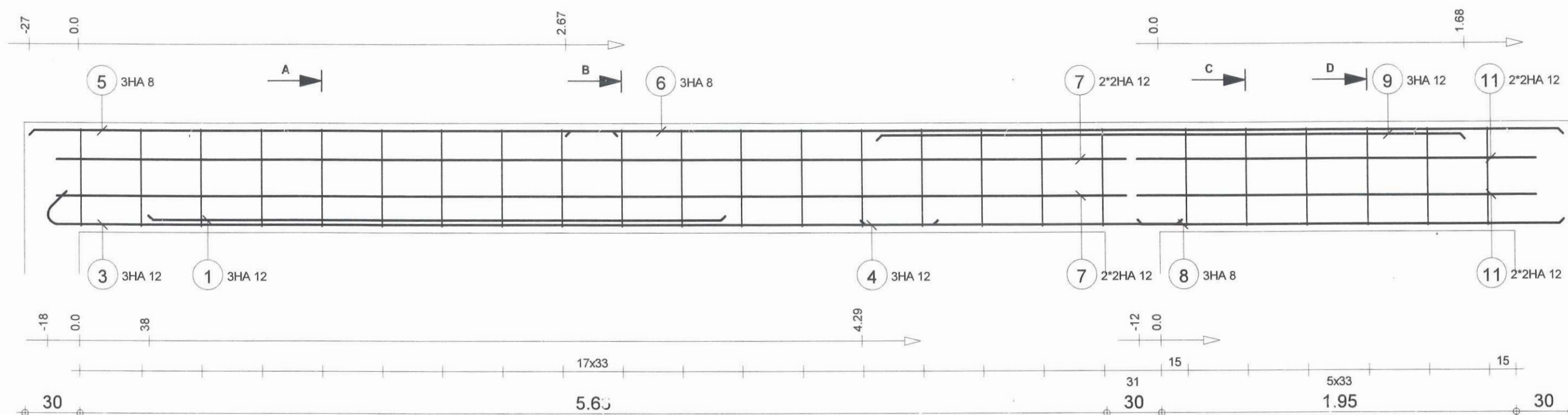
Enrobage supérieur 3 cm

Echelle pour la vue 10.7cm/m

Echelle pour la section 9.55cm/m

Enrobage latéral 3 cm

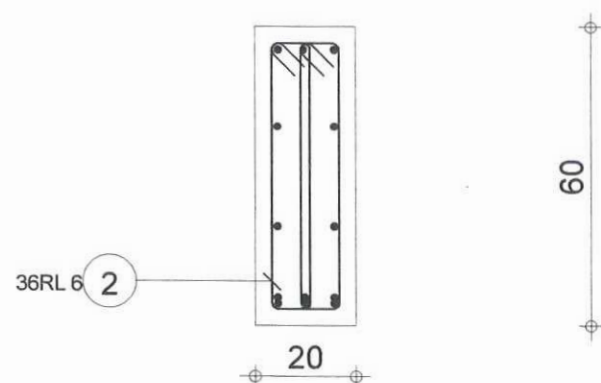
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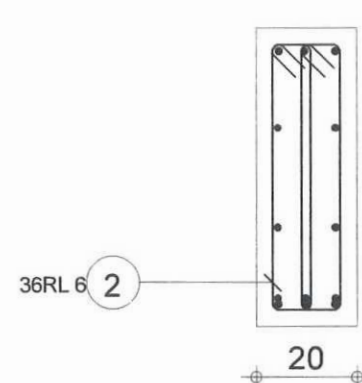
**BON POUR
EXÉCUTION**



A-A



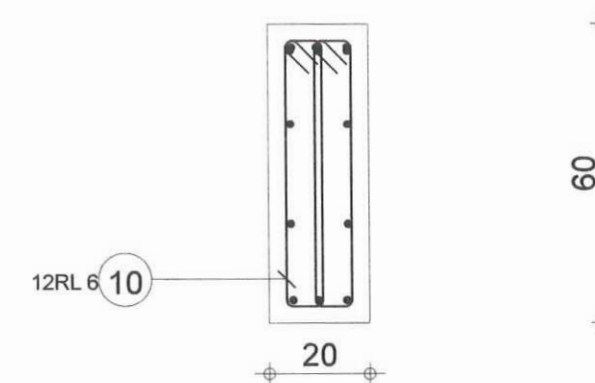
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
1	3HA 12	I=3.17	00	3.17	4	3HA 12	I=1.76	00	1.76	7	2*2HA 12	I=5.87	00	5.87	10	12RL 6	I=1.35	31	31
2	36RL 6	I=1.36	31	1.36	5	3HA 8	I=3.23	00	3.23	8	3HA 8	I=2.34	00	2.34	11	2*2HA 12	I=2.19	00	2.19
3	3HA 12	I=5.08	00	5.08	6	3HA 8	I=5.47	00	5.47	9	3HA 12	I=3.22	00	3.22					

Tél.

Fax

Nombre 1

Béton : BETON25 = 1.02 m3

Acier HA 400 = 76.9 kg

Acier RL 235 = 14.5 kg

Enrobage inférieur 3 cm

Enrobage supérieur 3 cm

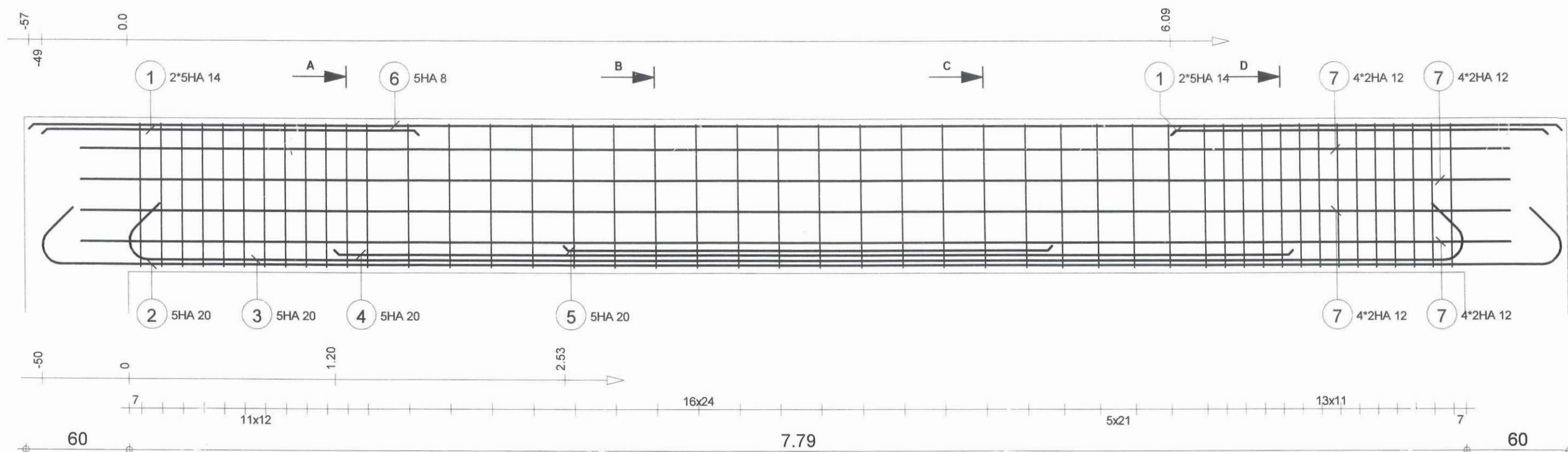
Enrobage latéral 3 cm

Densité = 89.61 kg/ m3

Echelle pour la vue 4.28cm/m

Surface du coffrage = 11.9 m2

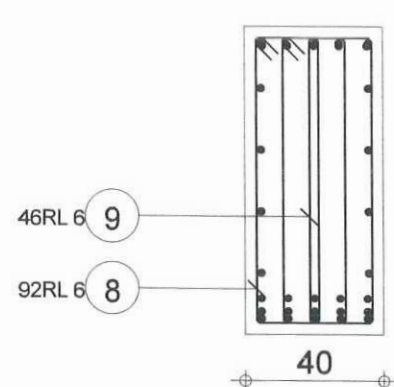
Echelle pour la section 6.58cm/m



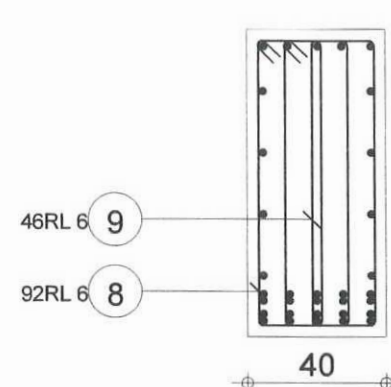
**BON POUR
EXÉCUTION**



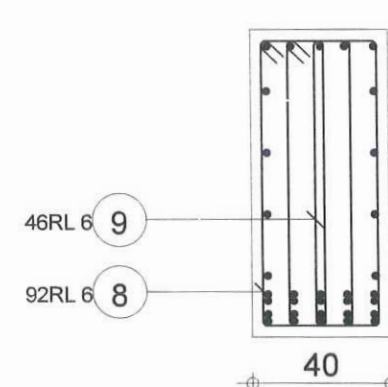
A-A



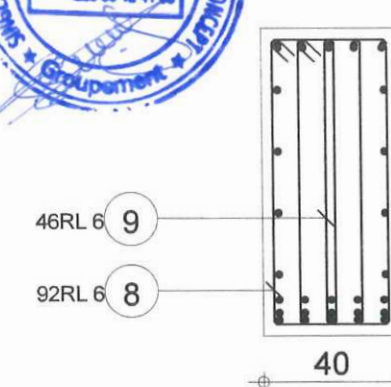
B-B



C-C



D-D



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
1	2*5HA 14	I=2.19	00	2.19	4	5HA 20	I=5.59	00	5.59	7	4*2HA 12	I=8.33	00	8.33
2	5HA 20	I=9.54	00	8.86	5	5HA 20	I=2.85	00	2.85	8	92RL 6	I=2.32	31	2.32
3	5HA 20	I=8.46	00	7.79	6	5HA 8	I=8.93	00	8.93	9	46RL 6	I=1.80		1.80

Tél.

Fax

Nombre 1

R+1
PROJET CERME PLANS

POUTRE 23
Section 40x90

Béton : BETON25 = 3.24 m3
Enrobage inférieur 3 cm
Densité = 152.8 kg/ m3
Surface du coffrage = 20 m2

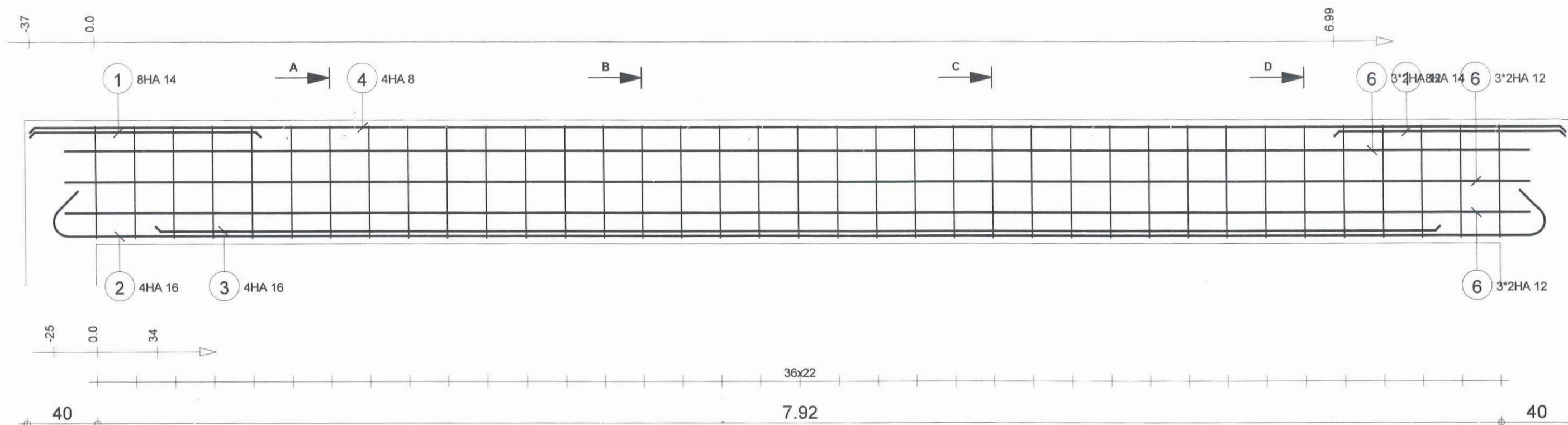
Acier HA 400 = 429 kg
Acier RL 235 = 65.7 kg

Enrobage supérieur 3 cm

Echelle pour la vue 4.04cm/m
Echelle pour la section 4.52cm/m

Enrobage latéral 3 cm

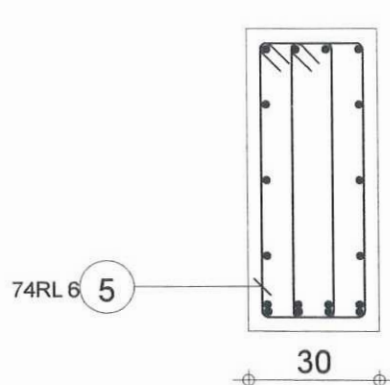
Page 1/1



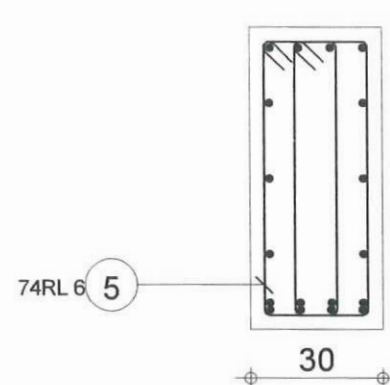
**BON POUR
EXÉCUTION**



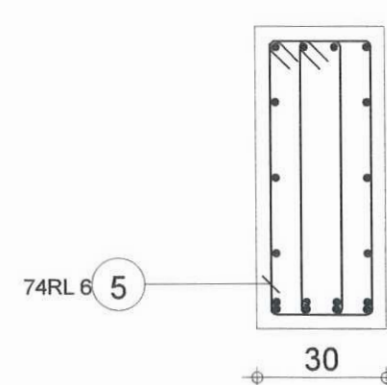
A-A



B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme		
1	8HA 14	I=1.30	00	1.30	4	4HA 8	I=8.66	00	8.66
2	4HA 16	I=8.96	00	8.43	5	74RL 6	I=1.73	31	17 8
3	4HA 16	I=7.24	00	7.24	6	3*2HA 12	I=8.26	00	8.26

R+1
PROJET CERME_PLANS

POUTRE 24
Section 30x70

Nombre 1

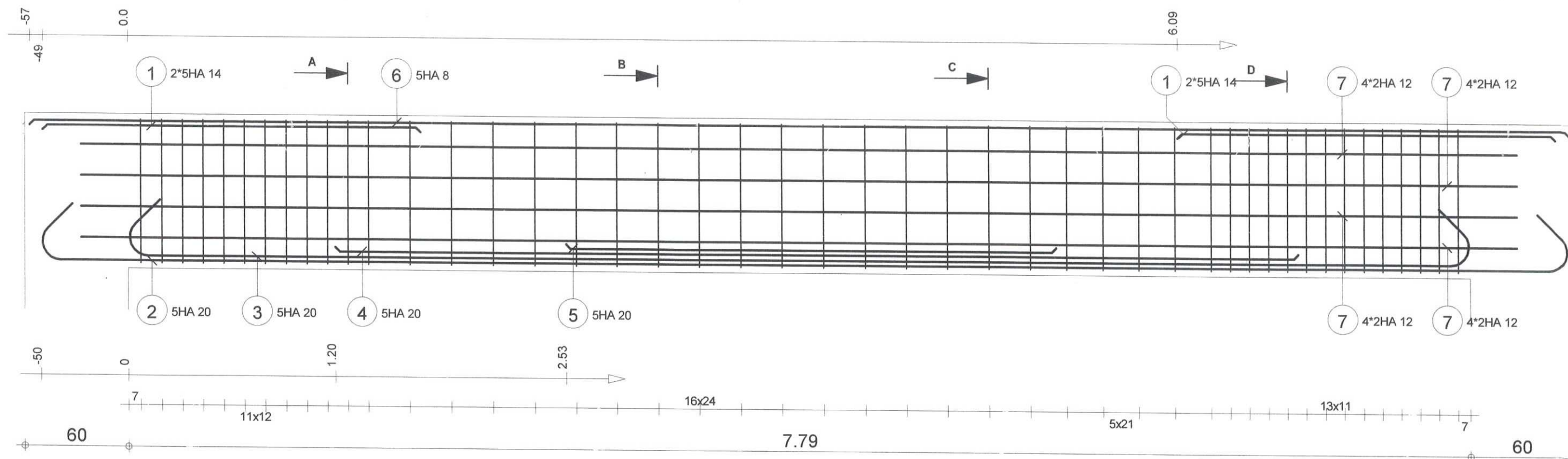
Béton : BETON25 = 1.83 m3
Enrobage inférieur 3 cm
Densité = 109.8 kg/ m3
Surface du coffrage = 15 m2

Acier HA 400 = 173 kg
Acier RL 235 = 28.5 kg

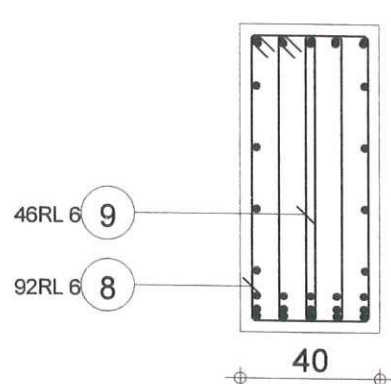
Enrobage supérieur 3 cm

Echelle pour la vue 4.16cm/m
Echelle pour la section 5.71cm/m

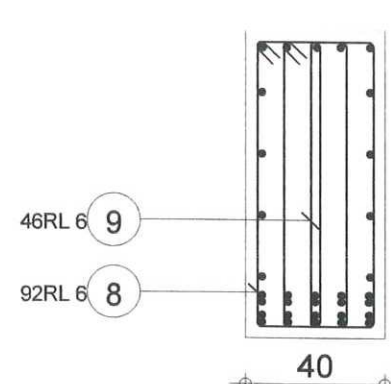
Enrobage latéral 3 cm



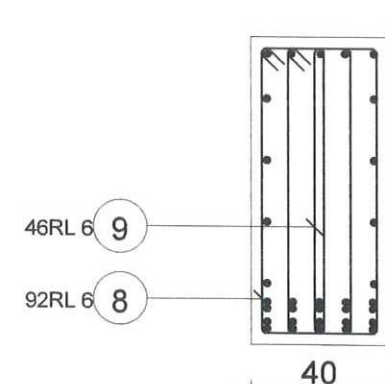
A-A



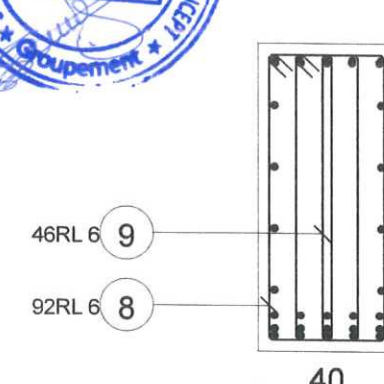
B-B



C-C



D-D



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2*5HA 14	I=2.19	00	2.19	④	5HA 20	I=5.59	00	5.59	⑦	4*2HA 12	I=8.33	00	8.33
②	5HA 20	I=9.54	00	8.86	⑤	5HA 20	I=2.85	00	2.85	⑧	92RL 6	I=2.32	31	2.32
③	5HA 20	I=8.46	00	7.79	⑥	5HA 8	I=8.93	00	8.93	⑨	46RL 6	I=1.80		1.80

Tél.

Fax

Nombre 1

R+1
PROJET CERME_PLANS

POUTRE 23
Section 40x90

Béton : BETON25 = 3.24 m3
Enrobage inférieur 3 cm
Densité = 152.8 kg/ m3
Surface du coffrage = 20 m2

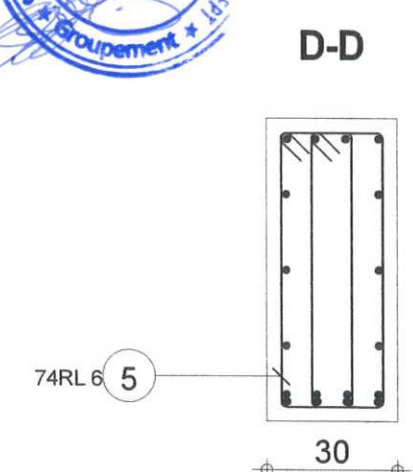
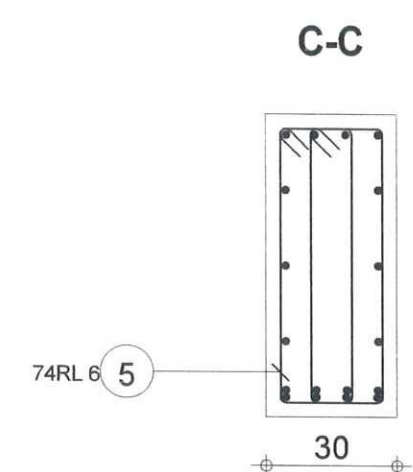
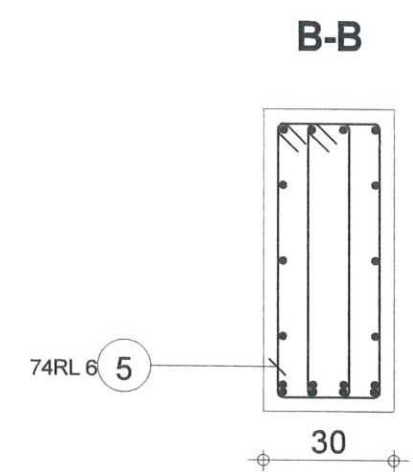
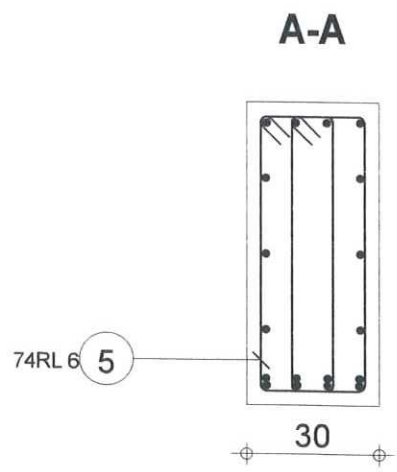
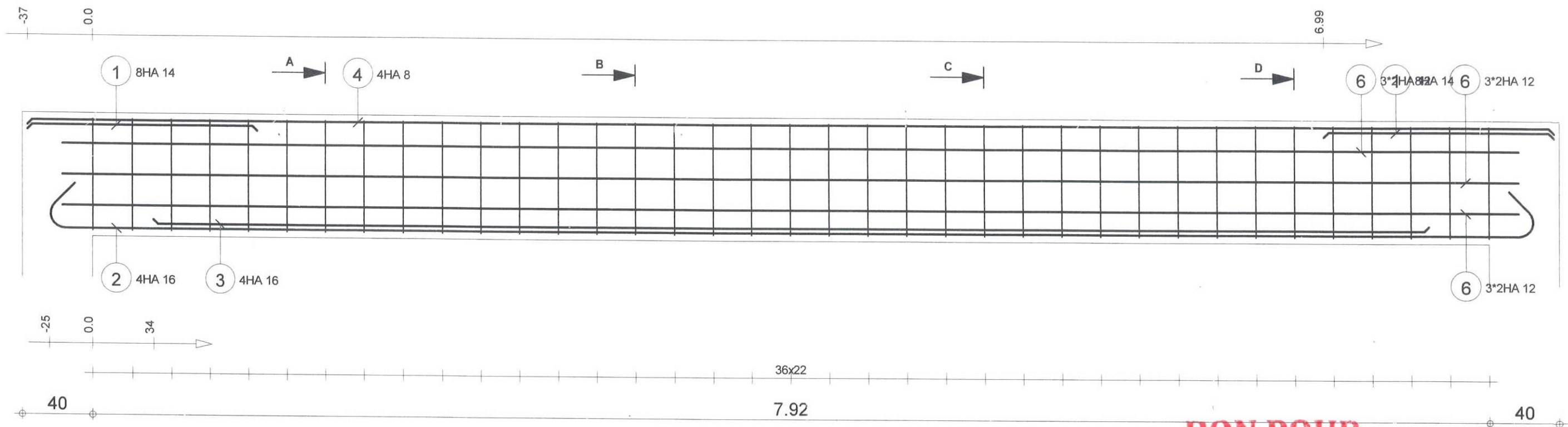
Acier HA 400 = 429 kg
Acier RL 235 = 65.7 kg

Enrobage supérieur 3 cm

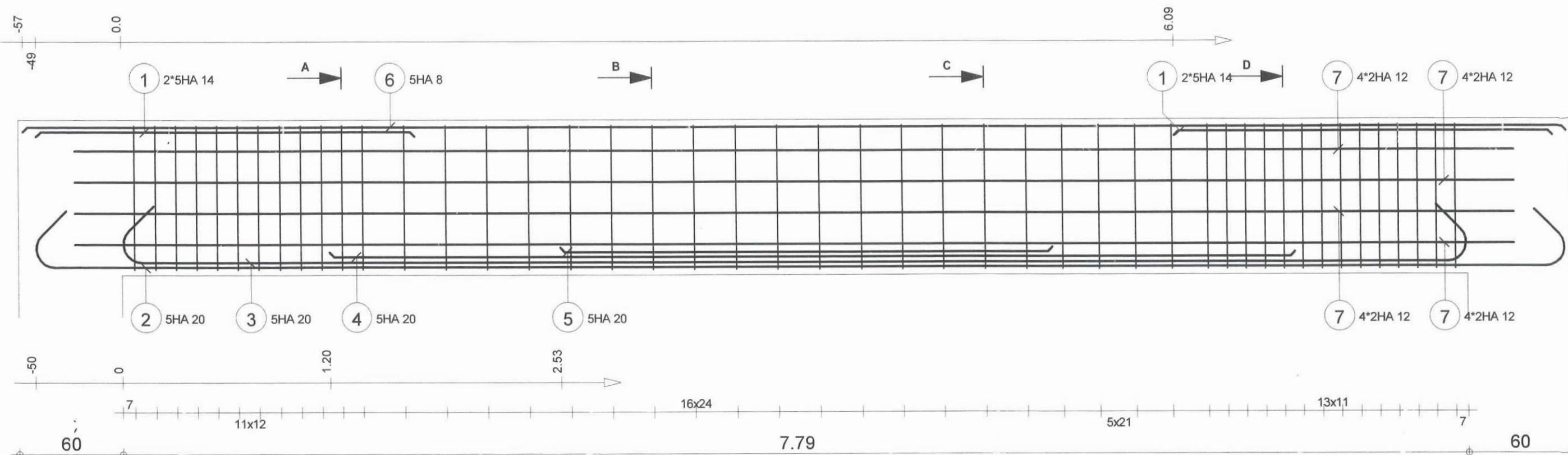
Echelle pour la vue 4.04cm/m
Echelle pour la section 4.52cm/m

Enrobage latéral 3 cm

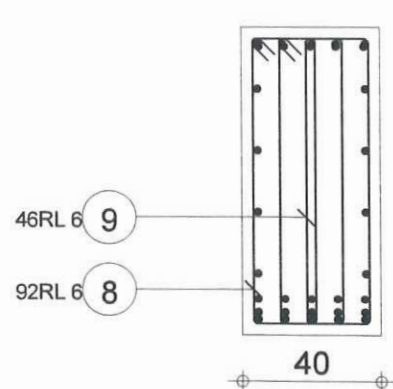
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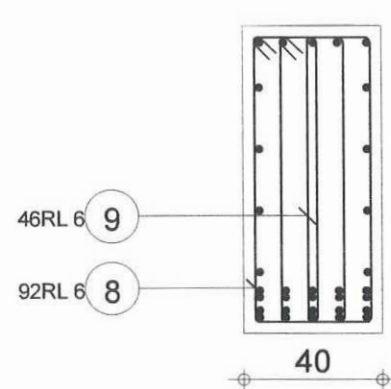
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 14	I=1.30	00	④	4HA 8	I=8.66	00
②	4HA 16	I=8.96	00	⑤	74RL 6	I=1.73	31
③	4HA 16	I=7.24	00	⑥	3*2HA 12	I=8.26	00



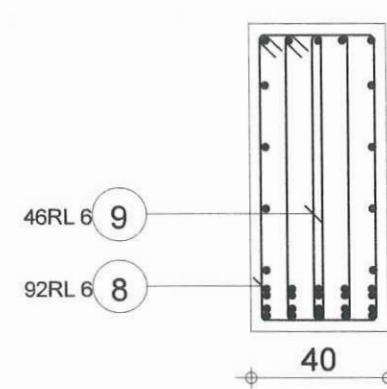
A-A



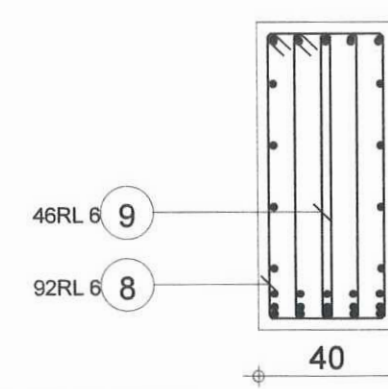
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	2*5HA 14	I=2.19	00	2.19	④	5HA 20	I=5.59	00	5.59	⑦	4*2HA 12	I=8.33	00	8.33
②	5HA 20	I=9.54	00	8.86	⑤	5HA 20	I=2.85	00	2.85	⑧	92RL 6	I=2.32	31	2.32
③	5HA 20	I=8.46	00	7.79	⑥	5HA 8	I=8.93	00	8.93	⑨	46RL 6	I=1.80		1.80

Tél.

Fax

Nombre 1

R+1

PROJET CERME_PLANS

POUTRE 23

Section 40x90

Béton : BETON25 = 3.24 m3

Enrobage inférieur 3 cm

Densité = 152.8 kg/ m3

Surface du coffrage = 20 m2

Acier HA 400 = 429 kg

Acier RL 235 = 65.7 kg

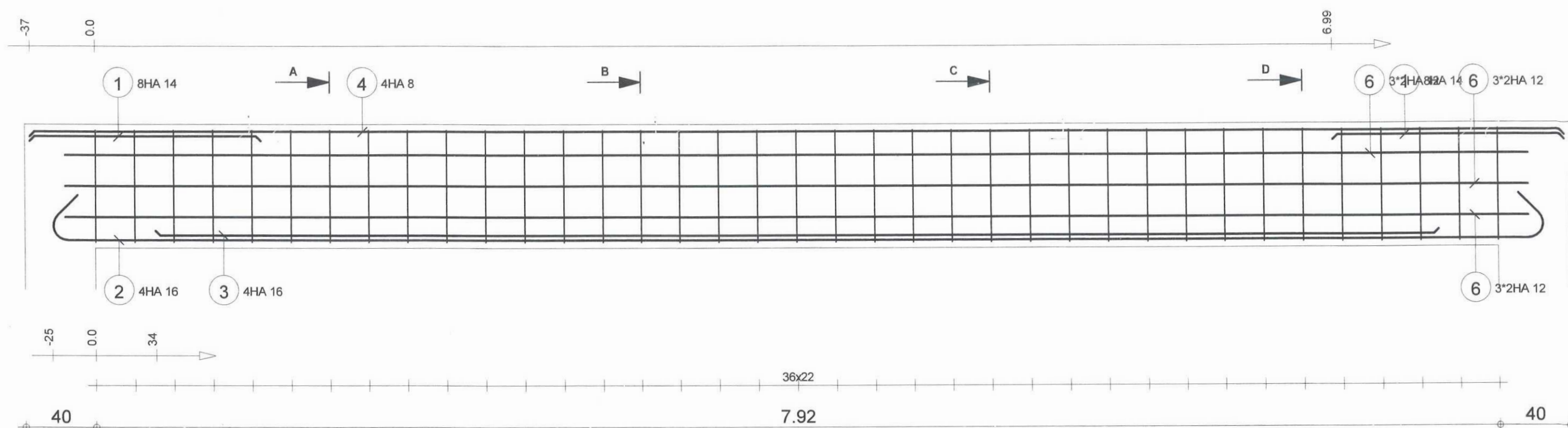
Enrobage supérieur 3 cm

Echelle pour la vue 4.04cm/m

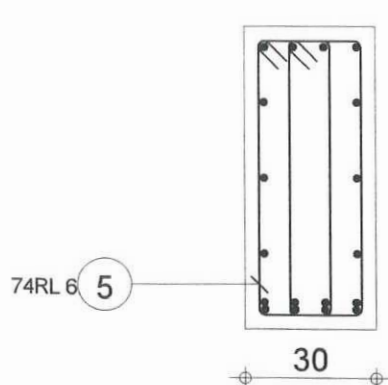
Echelle pour la section 4.52cm/m

Enrobage latéral 3 cm

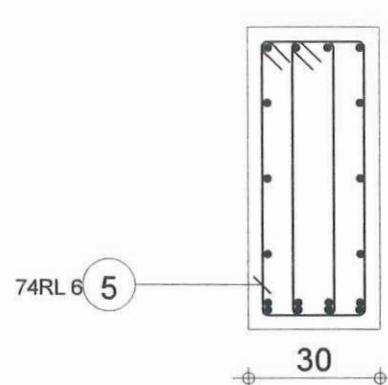
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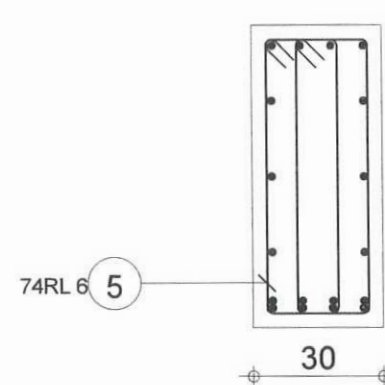
A-A



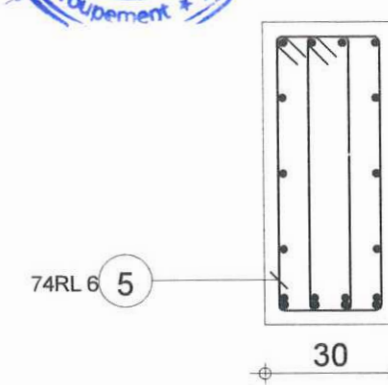
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme		
①	8HA 14	I=1.30	00	1.30	④	4HA 8	I=8.66	00	8.66
②	4HA 16	I=8.96	00	8.43	⑤	74RL 6	I=1.73	31	17 8
③	4HA 16	I=7.24	00	7.24	⑥	3*2HA 12	I=8.26	00	8.26

R+1
PROJET CERME_PLANS

POUTRE 24
Section 30x70

Nombre 1

Béton : BETON25 = 1.83 m3
Enrobage inférieur 3 cm
Densité = 109.8 kg/ m3
Surface du coffrage = 15 m2

Acier HA 400 = 173 kg
Acier RL 235 = 28.5 kg

Enrobage supérieur 3 cm

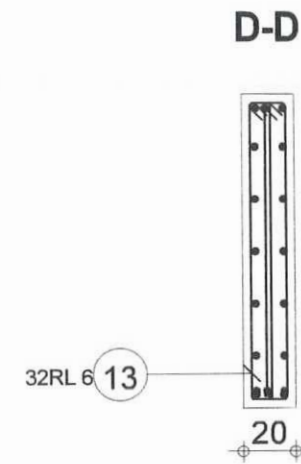
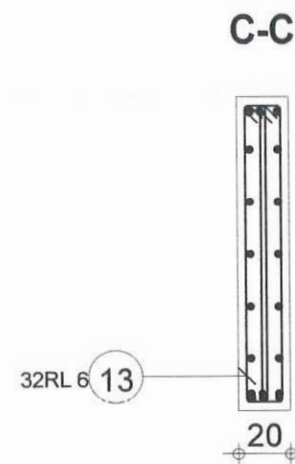
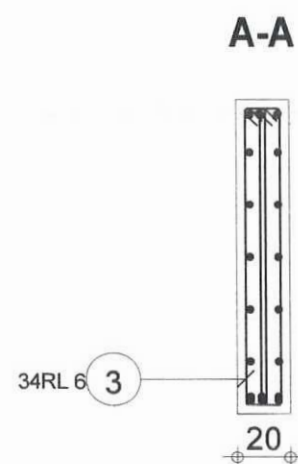
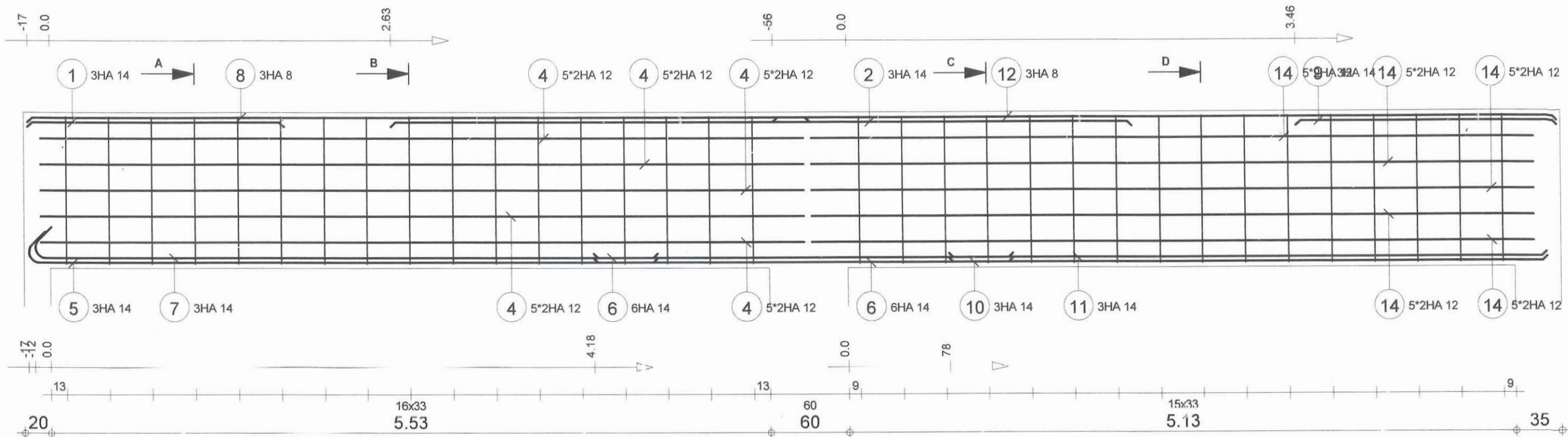
Echelle pour la vue 4.16cm/m
Echelle pour la section 5.71cm/m

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Pos.	Armature	Code	Forme
16	18RL 6 l=1.60		0.0 7/4
17	3*2HA 12 l=4.13	00	4.13



R+1 PROJET CERME PLANS	POUTRE 26 Section 45x80	Nombre 1	Tél.	Fax	Acier HA 400 = 581 kg		
					Acier RL 235 = 72.9 kg		
			Béton : BETON25 = 4.58 m3		Enrobage supérieur 3 cm		Enrobage latéral 3 cm
			Enrobage inférieur 3 cm				
			Densité = 142.8 kg/ m3				
		Surface du coffrage = 26.4 m2				Page 2/2	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	3HA 14	I=1.97	00	1.97	4	5*2HA 12	I=5.87	00	5.87	7	3HA 14	I=5.04	00	4.79	10	3HA 14	I=4.60	00	4.60
2	3HA 14	I=5.70	00	5.70	5	3HA 14	I=5.09	00	4.84	8	3HA 8	I=6.02	00	6.02	11	3HA 14	I=4.59	00	4.59
3	34RL 6	I=2.56	31	1.14	6	6HA 14	I=3.23	00	3.23	9	3HA 14	I=2.00	00	2.00	12	3HA 8	I=6.02	00	6.02

R+1
PROJET CERME_PLANS

POUTRE 27
Section 20x120

Nombre 1

Béton : BETON25 = 2.84 m3
Enrobage inférieur 3 cm
Densité = 99.3 kg/ m3
Surface du coffrage = 31 m2

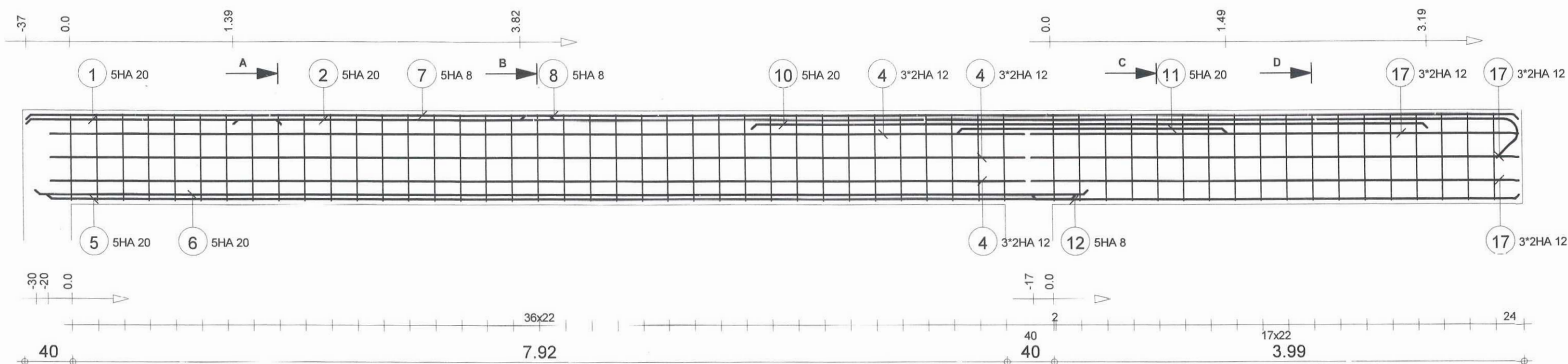
Acier HA 400 = 244 kg
Acier RL 235 = 37.5 kg

Enrobage supérieur 3 cm

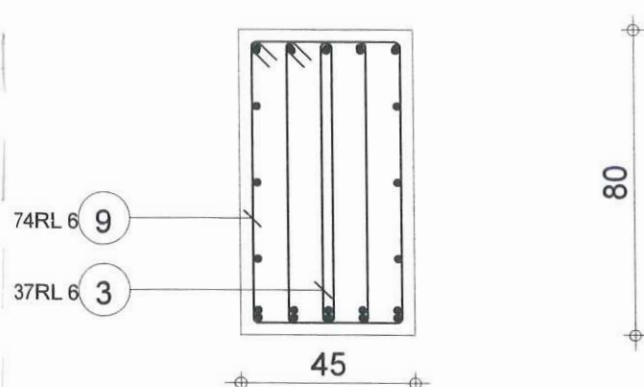
Echelle pour la vue 3.1cm/m
Echelle pour la section 3.46cm/m

Enrobage latéral 3 cm

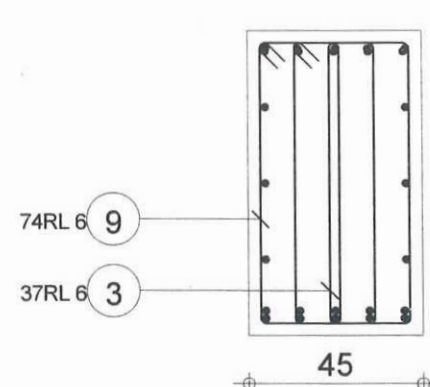
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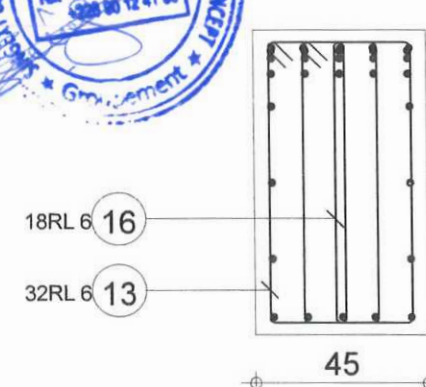
A-A



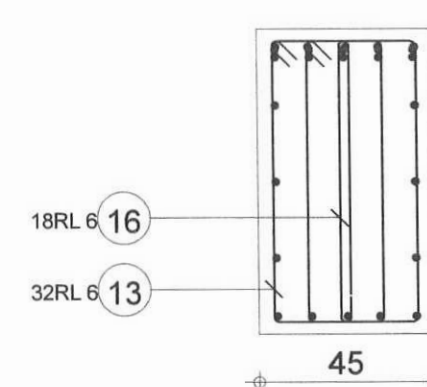
B-B



C-C



D-D



BON POUR
EXÉCUTION



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	5HA 20	I=2.16	00	2.15	④	3*2HA 12	I=8.26	00	8.26	⑦	5HA 8	I=4.47	00	4.47	⑩	5HA 20	I=5.73	00	5.73
②	5HA 20	I=11.24	00	10.90	⑤	5HA 20	I=8.72	00	8.72	⑧	5HA 8	I=8.47	00	8.47	⑪	5HA 20	I=2.28	00	2.28
③	37RL 6	I=1.60	0.0	74	⑥	5HA 20	I=8.92	00	8.92	⑨	74RL 6	I=2.20	31	30	⑫	5HA 8	I=4.13	00	4.13
																⑬	32RL 6	I=2.17	31
																⑭	3RL 6	I=2.20	31
																⑮	1RL 6	I=2.18	31

Tél.

Fax

Nombre 1

R+1

PROJET CERME_PLANS

POUTRE 26

Section 45x80

Béton : BETON25 = 4.58 m3

Enrobage inférieur 3 cm

Densité = 142.8 kg/ m3

Surface du coffrage = 26.4 m2

Acier HA 400 = 581 kg

Acier RL 235 = 72.9 kg

Enrobage supérieur 3 cm

Echelle pour la vue 2.89cm/m

Echelle pour la section 5.05cm/m

Enrobage latéral 3 cm

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Pos.	Armature	Code	Forme
16	18RL 6	l=1.60	
17	3*2HA 12	l=4.13	00 4.13

**BON POUR
EXÉCUTION**



R+1
PROJET CERME_PLANS

POUTRE 26
Section 45x80

Tél.

Fax

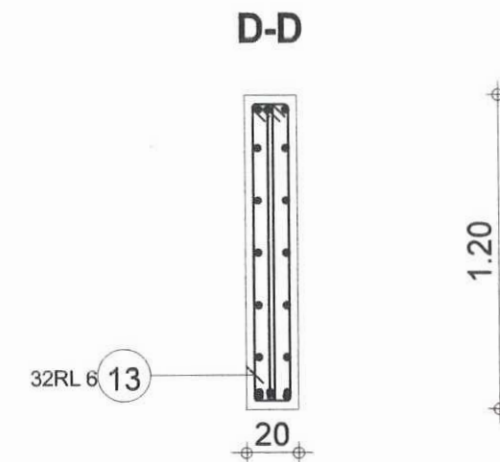
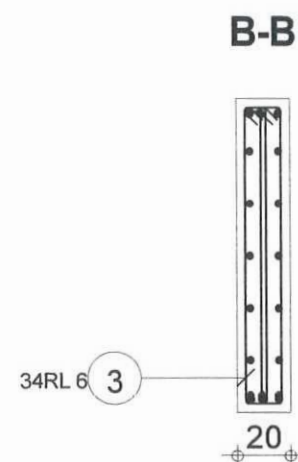
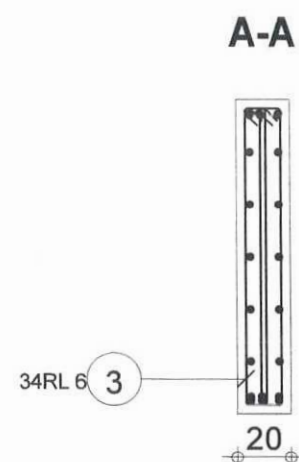
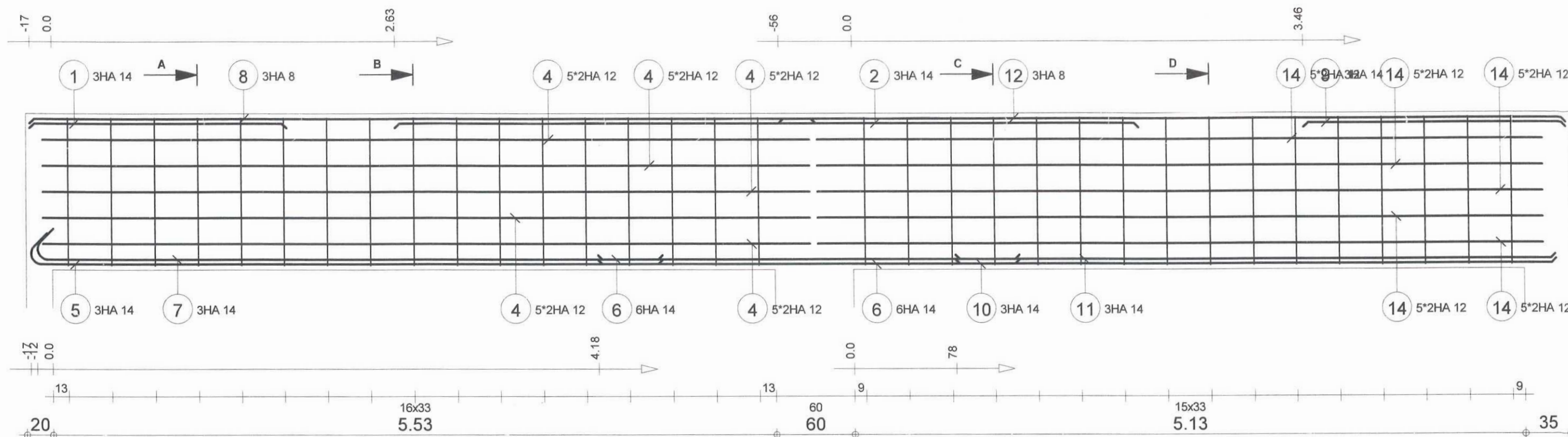
Nombre 1

Béton : BETON25 = 4.58 m3
Enrobage inférieur 3 cm
Densité = 142.8 kg/ m3
Surface du coffrage = 26.4 m2

Acier HA 400 = 581 kg
Acier RL 235 = 72.9 kg

Enrobage supérieur 3 cm

Enrobage latéral 3 cm



**BON POUR
EXÉCUTION**



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	3HA 14	I=1.97	00	1.97	4	5*2HA 12	I=5.87	00	5.87	7	3HA 14	I=5.04	00	4.79	10	3HA 14	I=4.60	00	4.60
2	3HA 14	I=5.70	00	5.70	5	3HA 14	I=5.09	00	4.84	8	3HA 8	I=6.02	00	6.02	11	3HA 14	I=4.59	00	4.59
3	34RL 6	I=2.56	31	2.56	6	6HA 14	I=3.23	00	3.23	9	3HA 14	I=2.00	00	2.00	12	3HA 8	I=6.02	00	6.02

R+1
PROJET CERME_PLANS

POUTRE 27
Section 20x120

Nombre 1

Béton : BETON25 = 2.84 m3
Enrobage inférieur 3 cm
Densité = 99.3 kg/ m3
Surface du coffrage = 31 m2

Acier HA 400 = 244 kg
Acier RL 235 = 37.5 kg

Enrobage supérieur 3 cm

Echelle pour la vue 3.1cm/m
Echelle pour la section 2.40cm

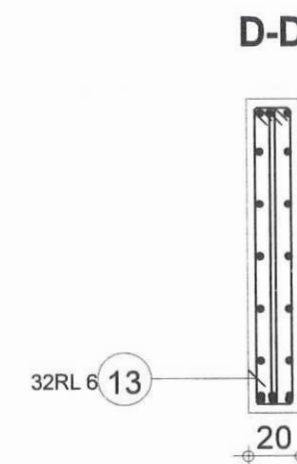
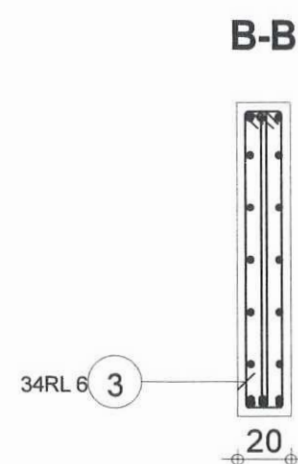
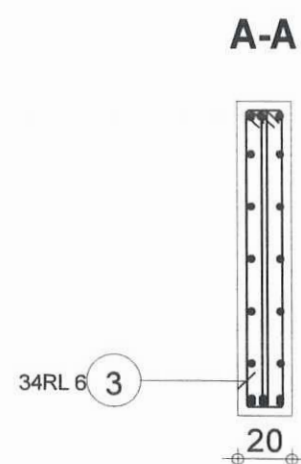
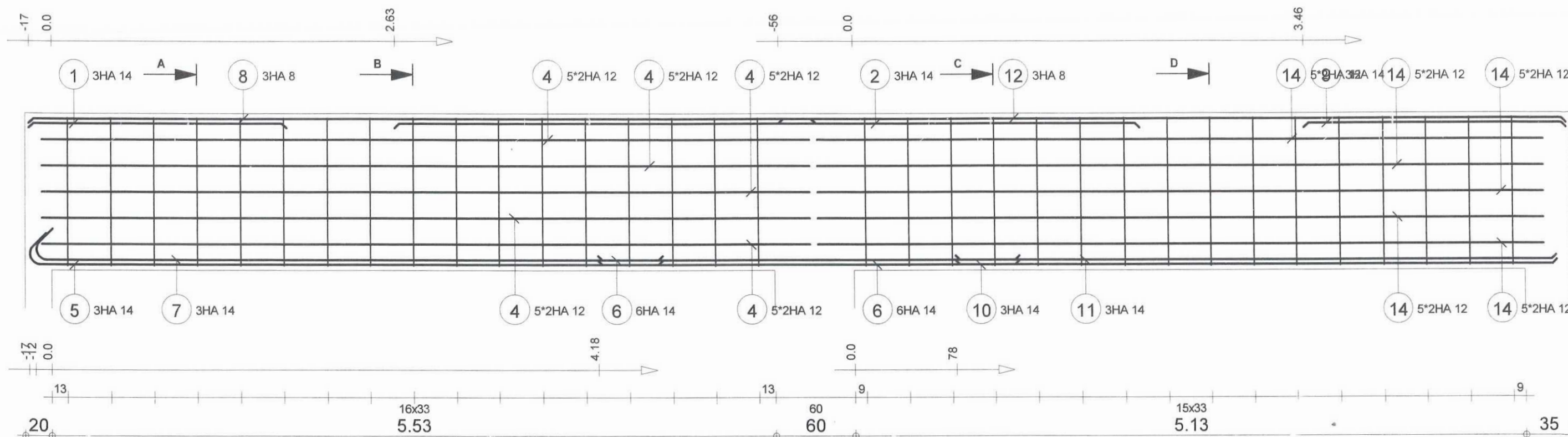
Enrobage latéral 3 cm

Page 1/1

Pos.	Armature	Code	Forme
16	18RL 6	I=1.60	
17	3*2HA 12	I=4.13	00 4.13



R+1 PROJET CERME PLANS	POUTRE 26 Section 45x80	Tél.	Fax	Nombre 1	Béton : BETON25 = 4.58 m3		Acier HA 400 = 581 kg
					Enrobage inférieur 3 cm		Acier RL 235 = 72.9 kg
					Enrobage supérieur 3 cm		Enrobage latéral 3 cm
		Densité = 142.8 kg/ m3					
		Surface du coffrage = 26.4 m2					
				Page 2/2			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	3HA 14	I=1.97	00	1.97	4	5*2HA 12	I=5.87	00	5.87	7	3HA 14	I=5.04	00	4.79	10	3HA 14	I=4.60	00	4.60
2	3HA 14	I=5.70	00	5.70	5	3HA 14	I=5.09	00	4.84	8	3HA 8	I=6.02	00	6.02	11	3HA 14	I=4.59	00	4.59
3	34RL 6	I=2.56	31	2.56	6	6HA 14	I=3.23	00	3.23	9	3HA 14	I=2.00	00	2.00	12	3HA 8	I=6.02	00	6.02