

BURKINA FASO
La patrie ou la mort, nous vaincrons

PROJET DE CONSTRUCTION D'UN BATIMENT
RDC A CENTRE MERE-ENFANTS
A POUYTENGA

MAITRE D'OEUVRE



Afrik Studio & partners

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Tel: 75 45 34 93

ETUDES

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Tel: 70 71 07 63

MAITRE D'OUVRAGE

CSPS URBAIN DU SECTEUR 3 DE POUYTENGA

CONTROLE TECHNIQUE

DOSSIER D'EXÉCUTION

CARNET DE FERRAILLAGE
semelles-Poteaux-Longrines-Poutres

Octobre 2025

ECH: 1/VAR

CARNET N°2

Indice: A

Voir plans de coffrage

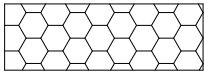
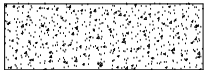
pour coupes et details

Vérifier par:

Yiziah Arnaud BADO (Architecte)

Sayouba GUIRE (Ingénieur)

INDICATIONS GENERALES

CHARGES D'EXPLOITATION	LEGENDE	DOSAGE Sauf qualité précisée sur plan
Dallage 250 daN/m ²	 Gros beton	200 kg/m ³
Dalle 100daN/m ²	 Beton de propreté	150 kg/m ³
Toiture 100daN/m ²	 Beton arme	350 kg/m ³
Taux de travail du sol = 1.70 bars à -100 cm/TN selon l'études de sol du LNBTP	 Agglos pleins	Type B80
	 Agglos creux	Type B40

BETON ARME dosé à 350 kg/m³ de ciment CPA 45
 Fc28=20MPa ; sauf indication particulière
 précisée sur le plan. Enrobage=3 cm

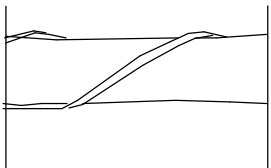
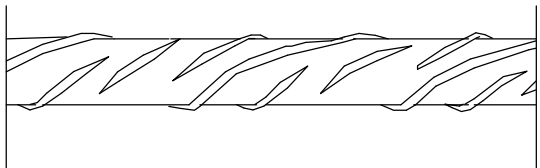
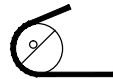
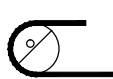
Fissurations sur éléments	Peu préjudiciable ☒	Préjudiciable ☒	Très préjudiciable ☐
	en général	En fondation	

INDICATIONS GENERALES

ACIERS

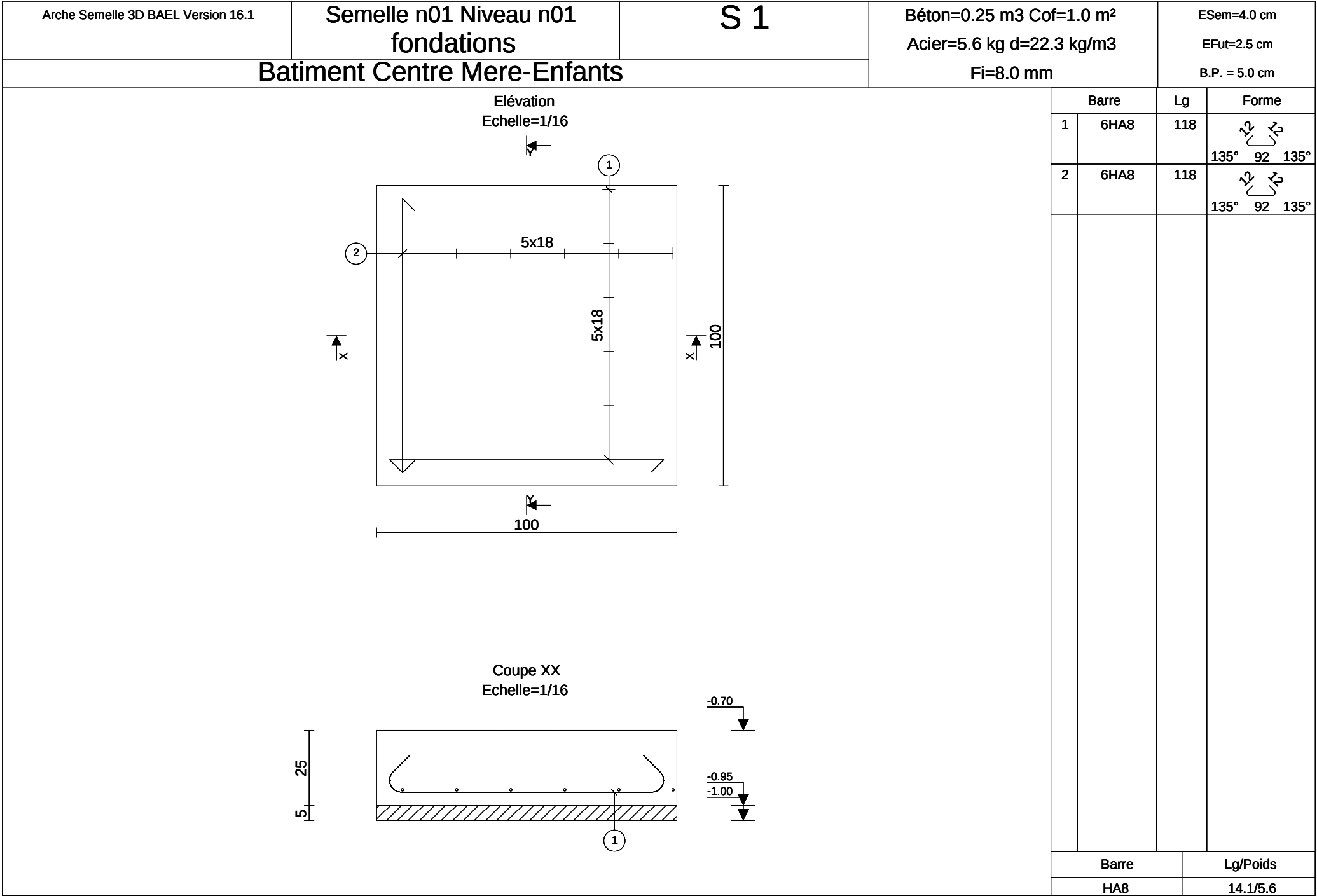
Aciers doux lisses nuance FeE215 type 1 indiqués par $\emptyset$
 Aciers à haute adhérence nuance FeE500 indiqués par HA
 conformes aux fiches d'identification CPC fascicule 4 titre 1.
 Aciers treillis soudés indiqués par TS – Type 4 $f_e=500$ MPa

FACONNAGE DES ACIERS A HAUTE ADHERENCE

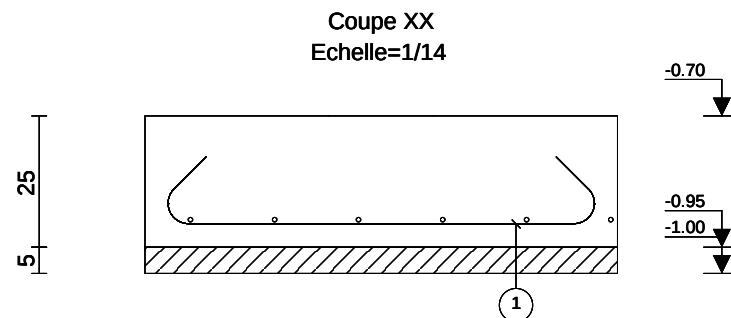
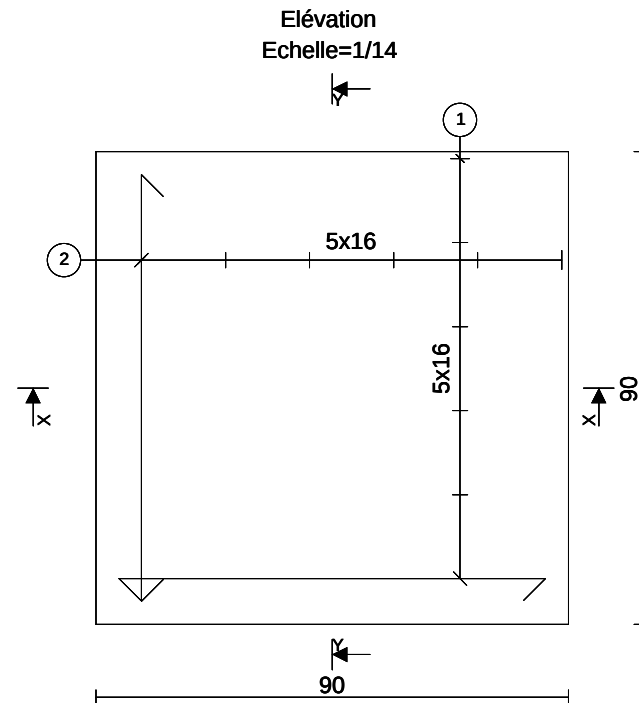
Barres: $\emptyset$ nominaux en mm	6	8	10	12	14	16	20	25	32	40	
Diamètre des mandrins de cintrage en mm											
	A la main ou a la machine				A la machine						
Etriers et cadres	30	40	60	80							 
Ancrages	60	80	100	120	140	170	200	250	400	400	 
Coudes			140	170	200	250	320	400	600		

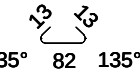
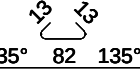
FERRAILLAGE DES SEMELLES

FERRAILLAGE DES POTEAUX PLOTS ET RAIDISSEURS

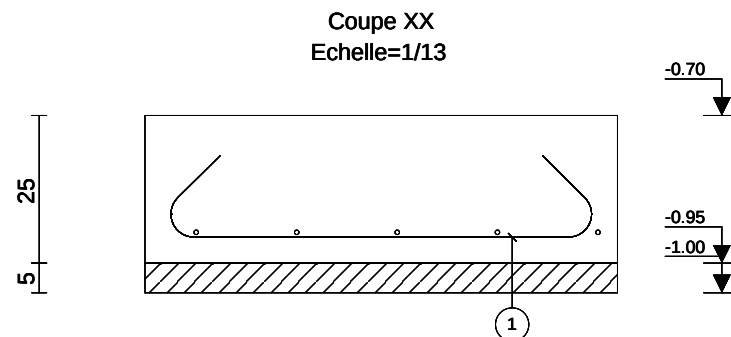
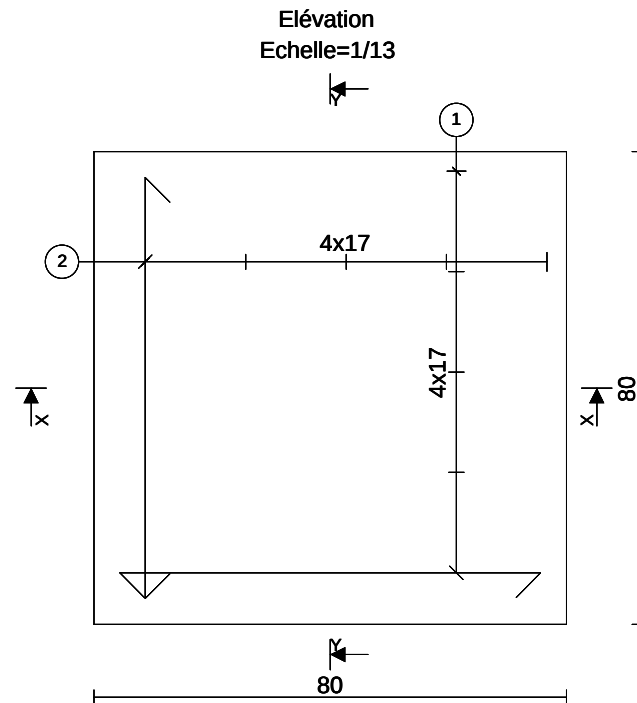


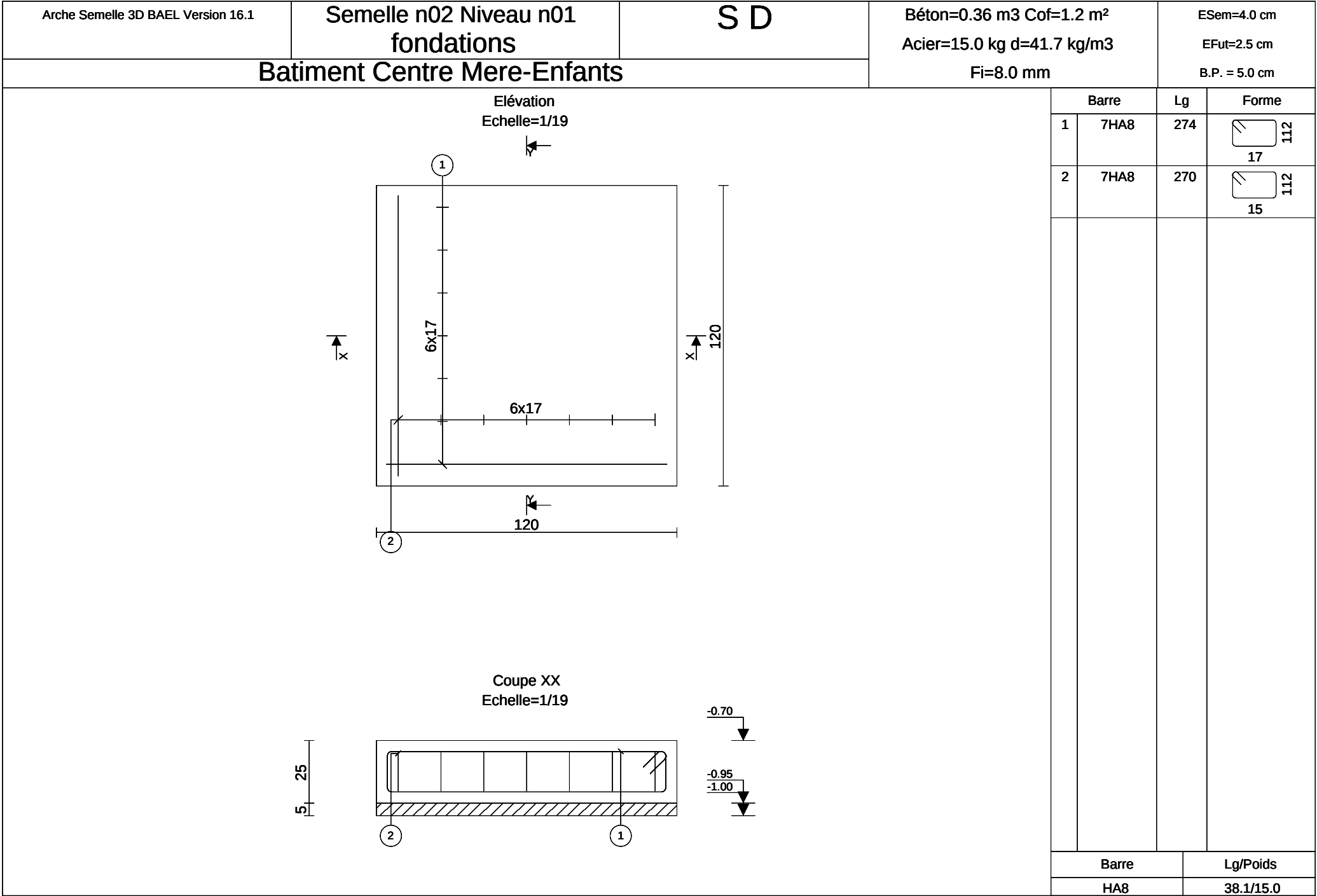
Batiment Centre Mere-Enfants

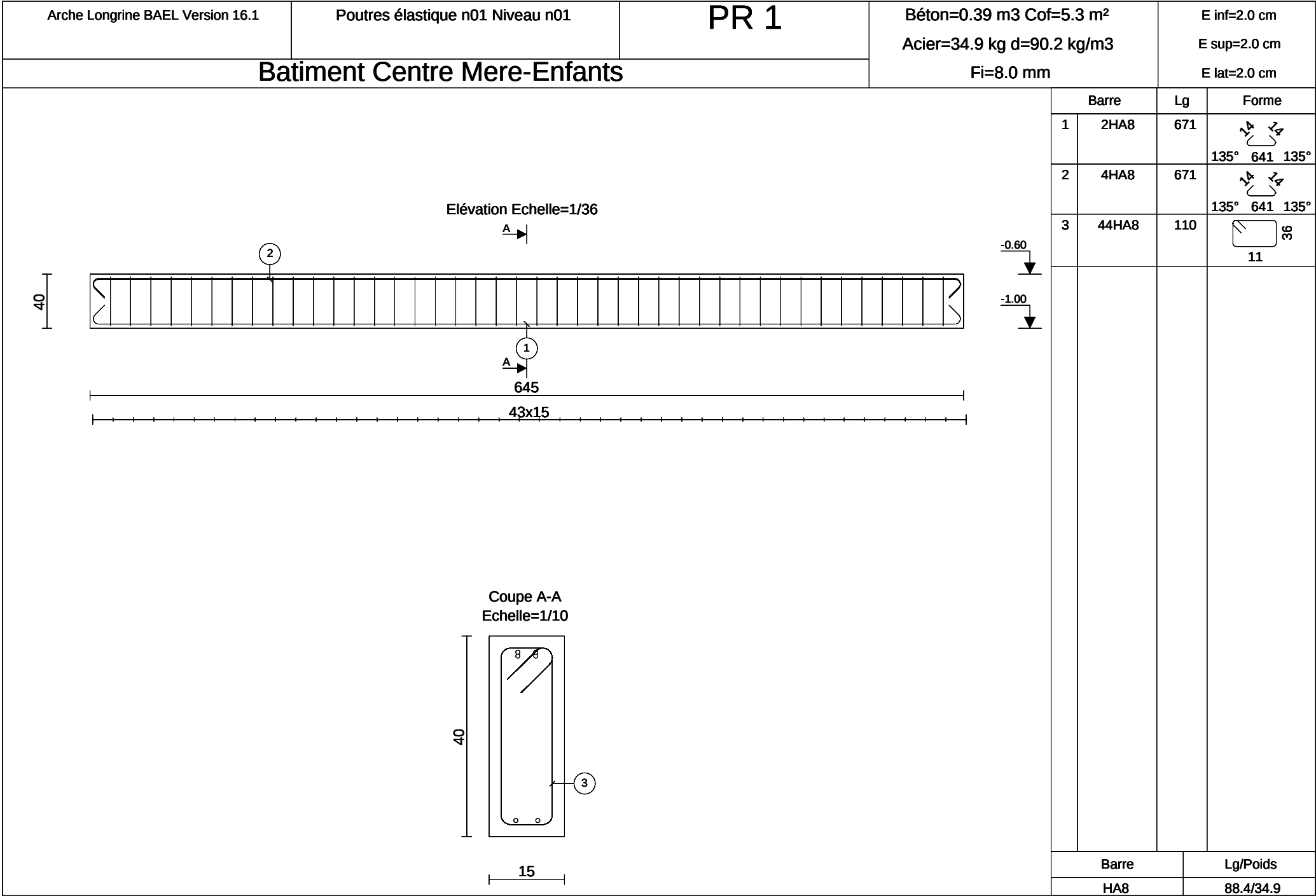


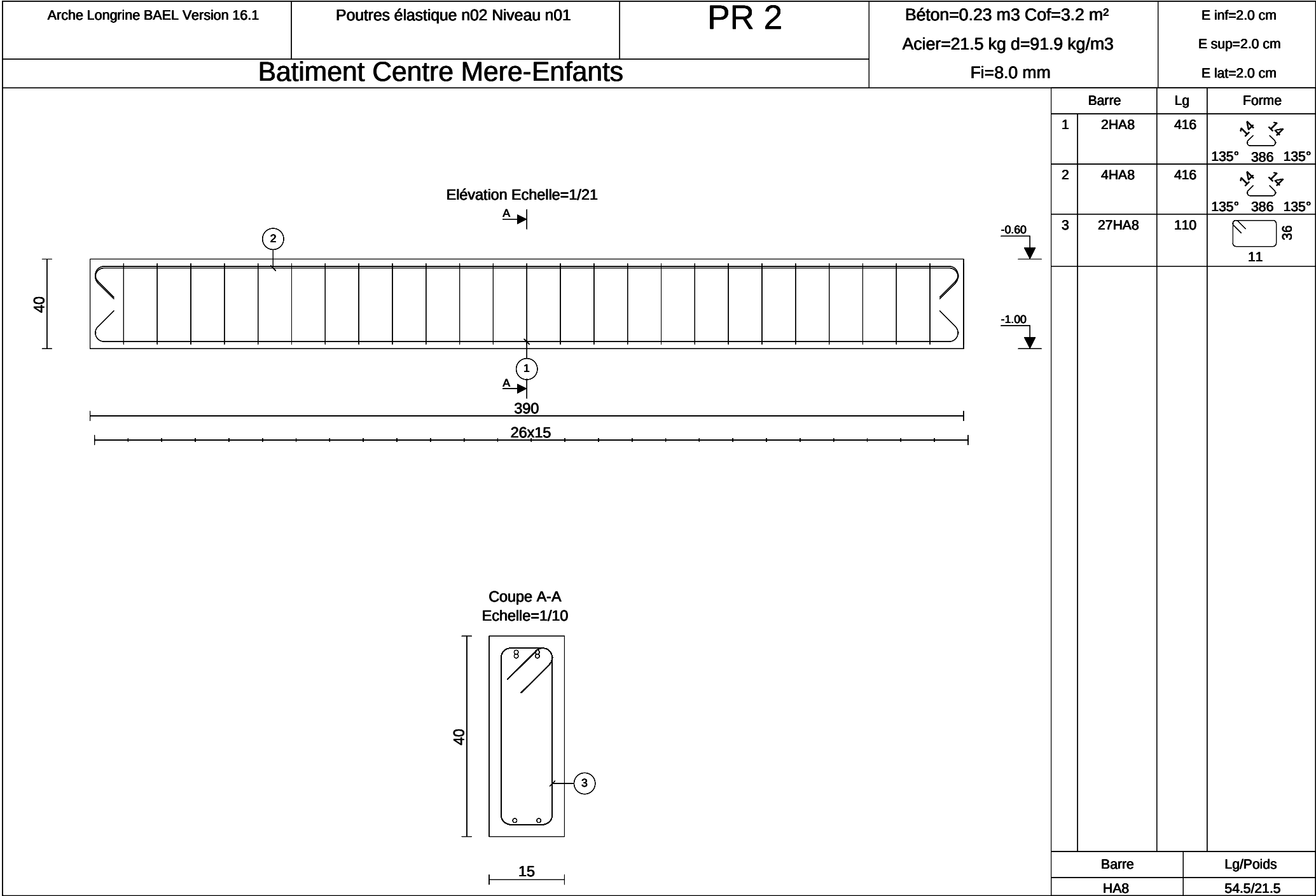
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2	6HA8	109	
Barre		Lg/Poids	
HA8		13.1/5.2	

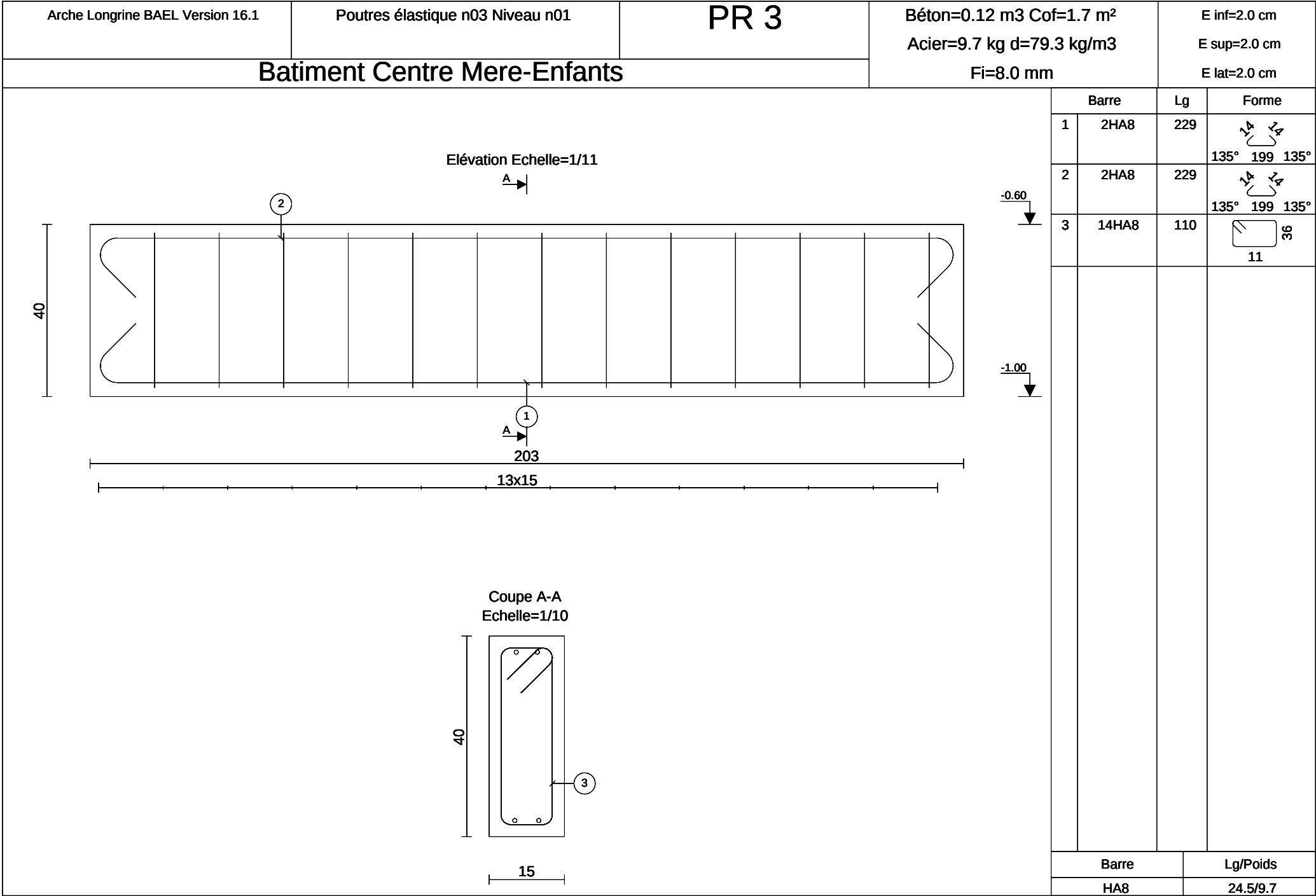
Batiment Centre Mere-Enfants

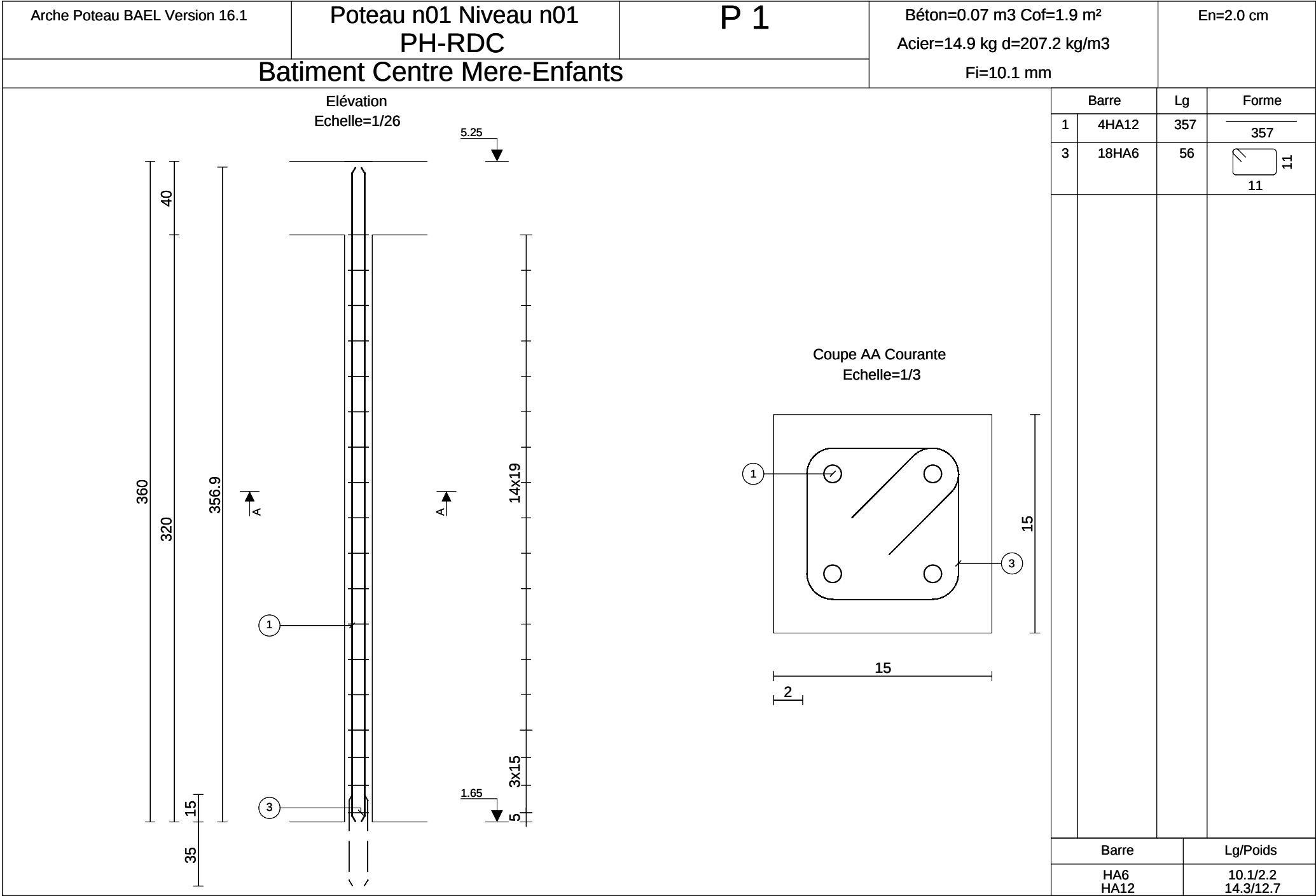
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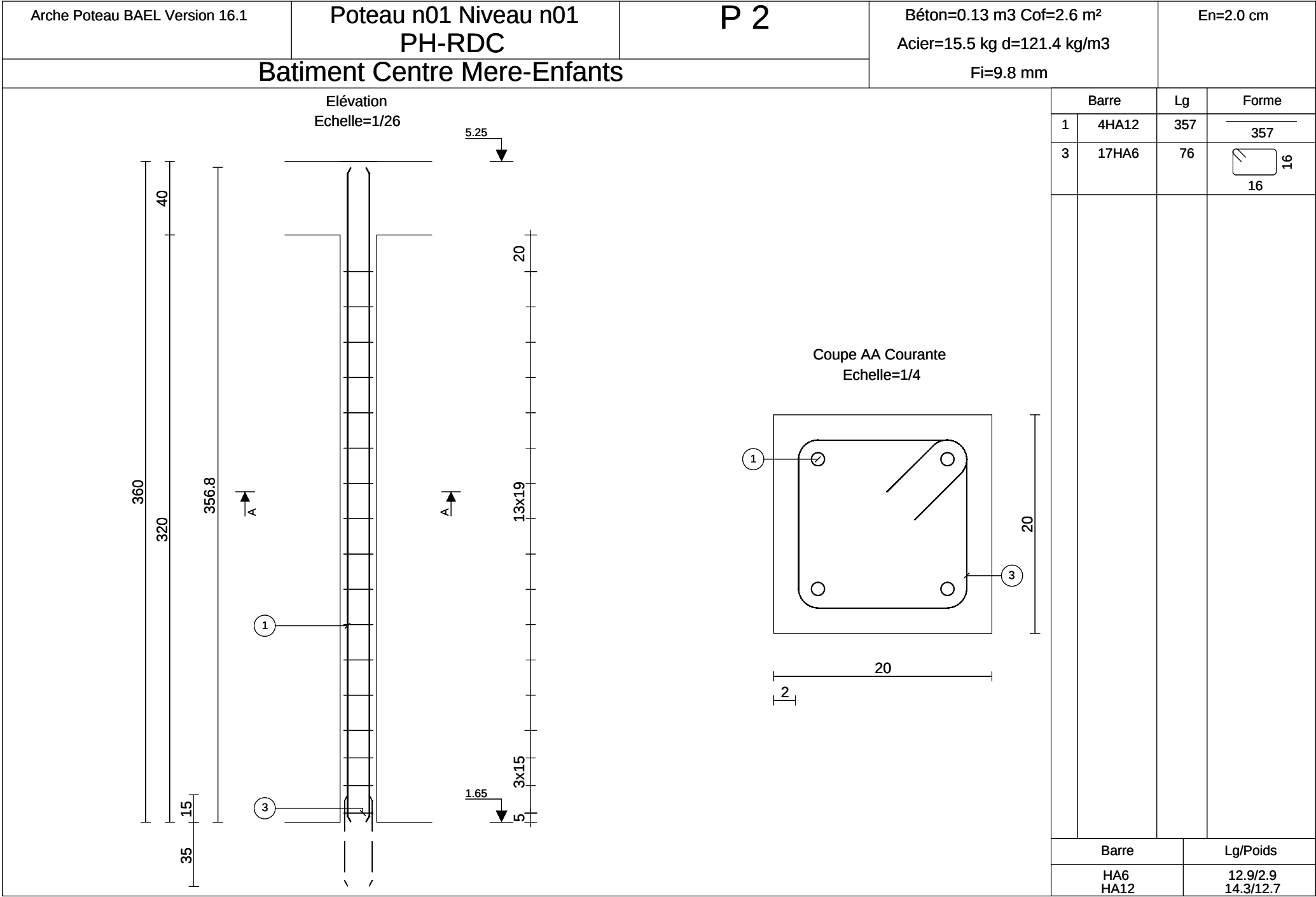




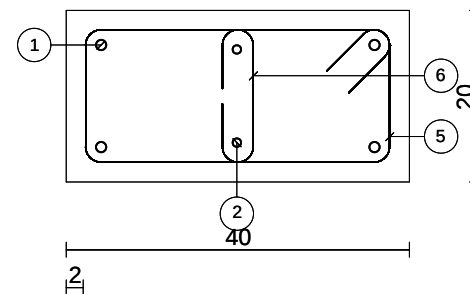


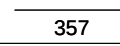
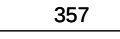
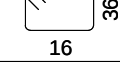
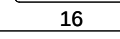


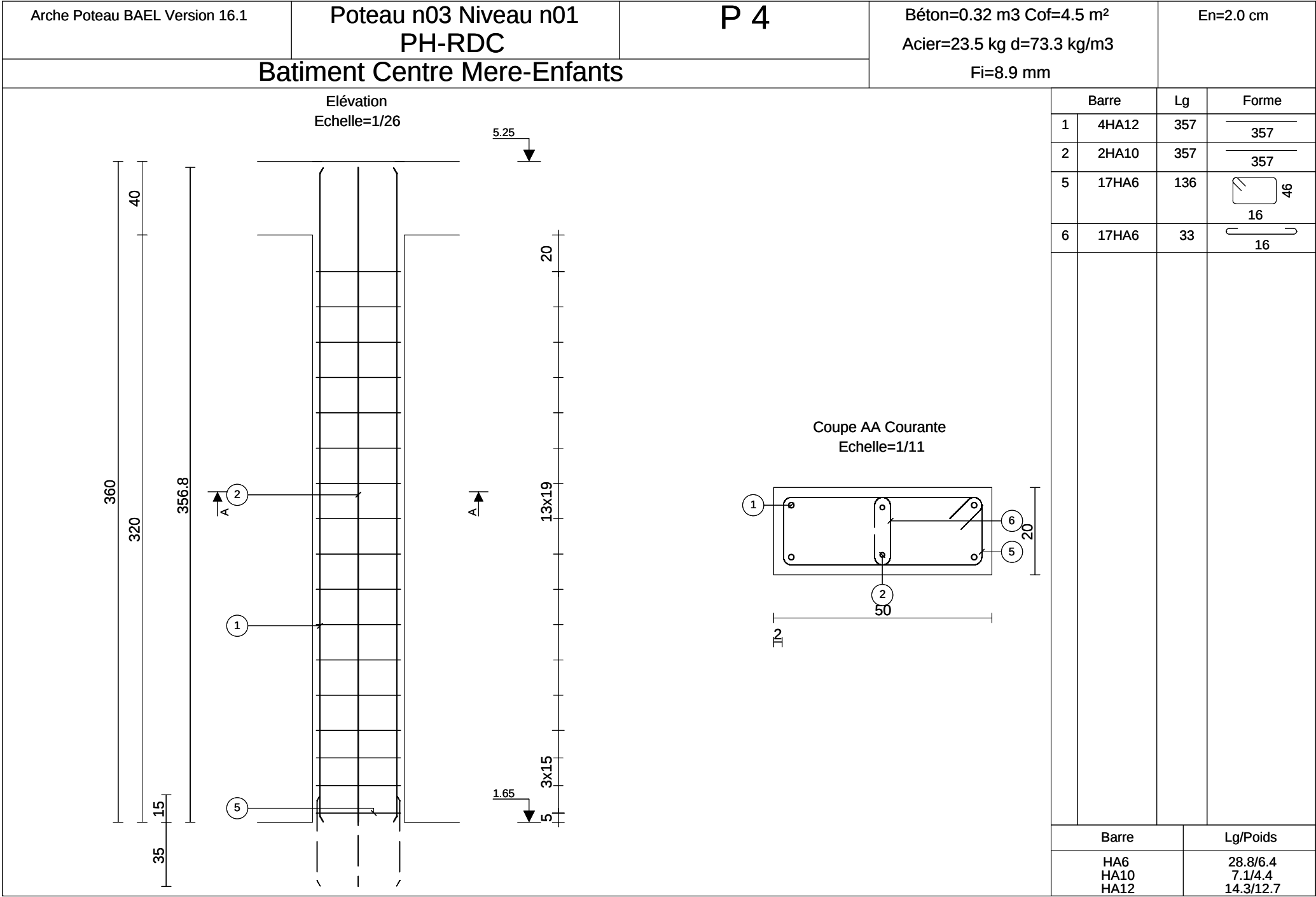


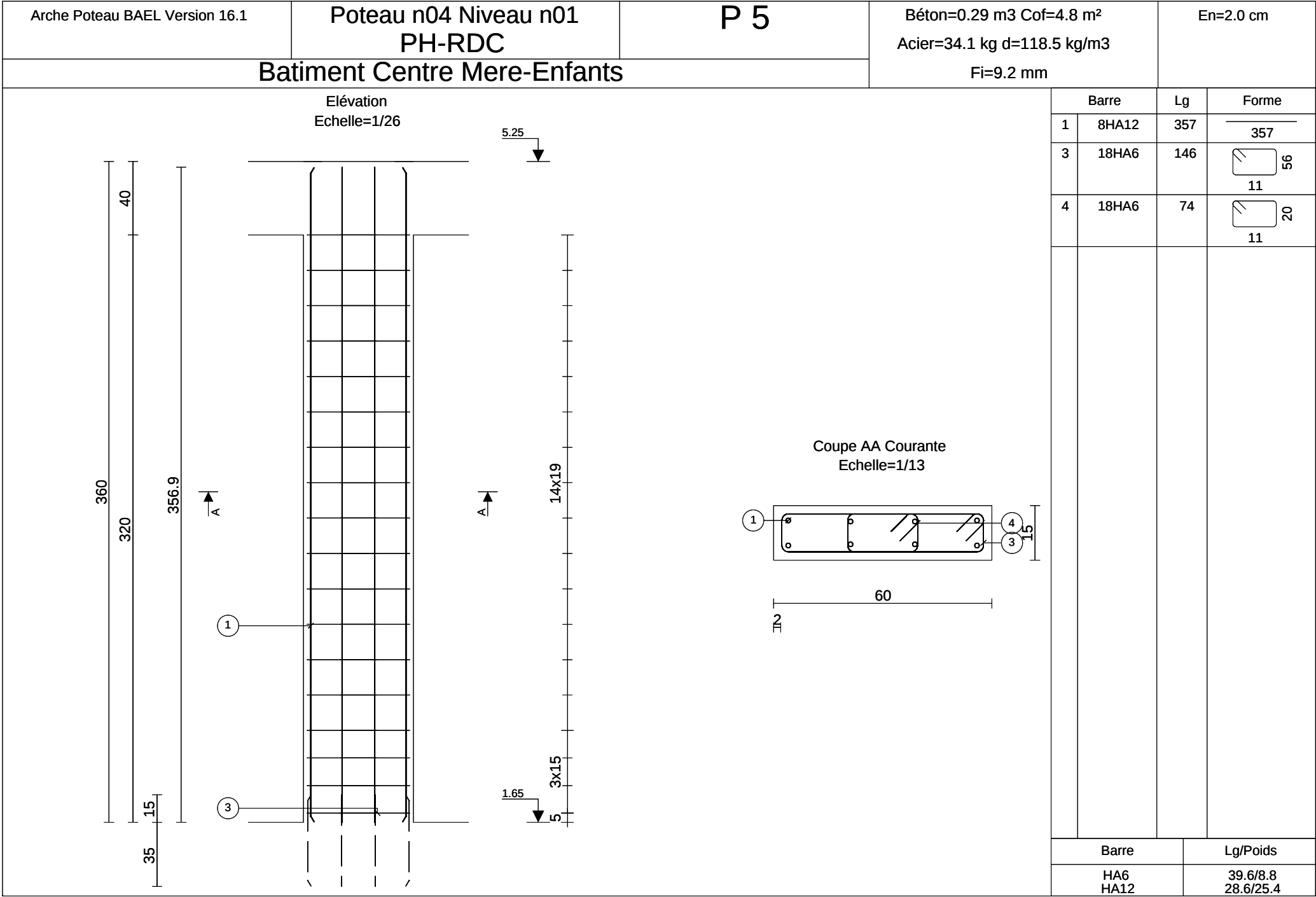


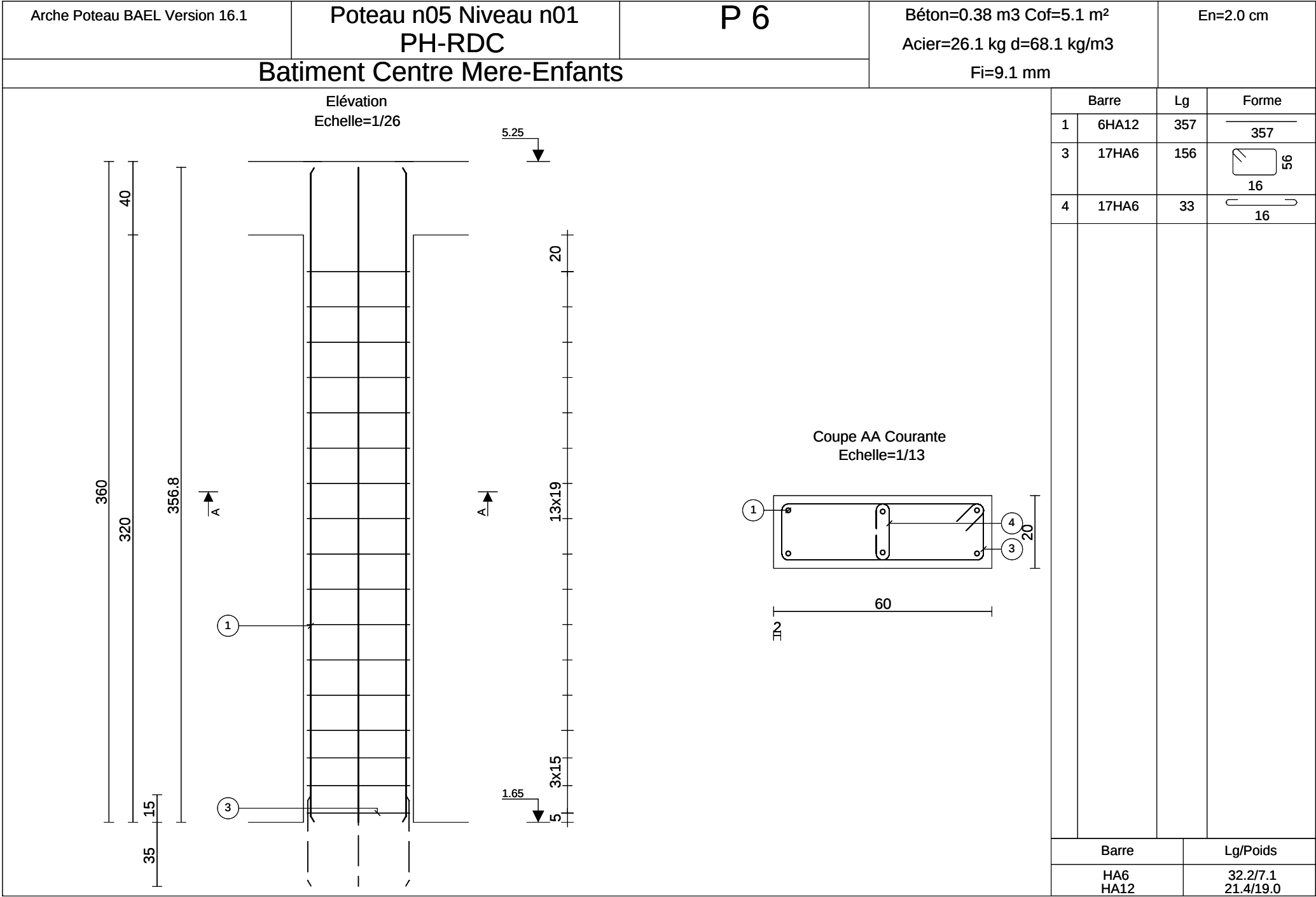
$F_i = 9.0 \text{ mm}$

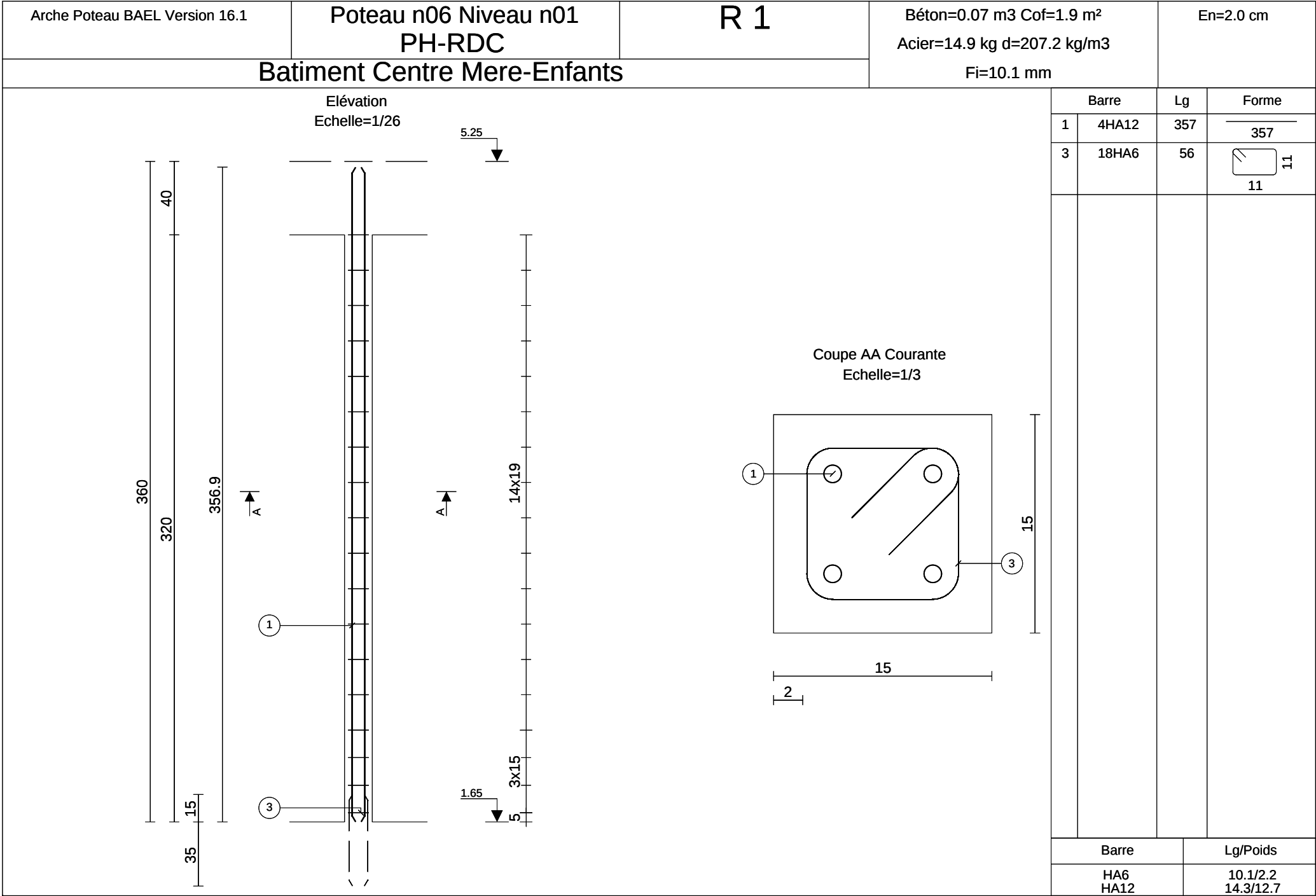


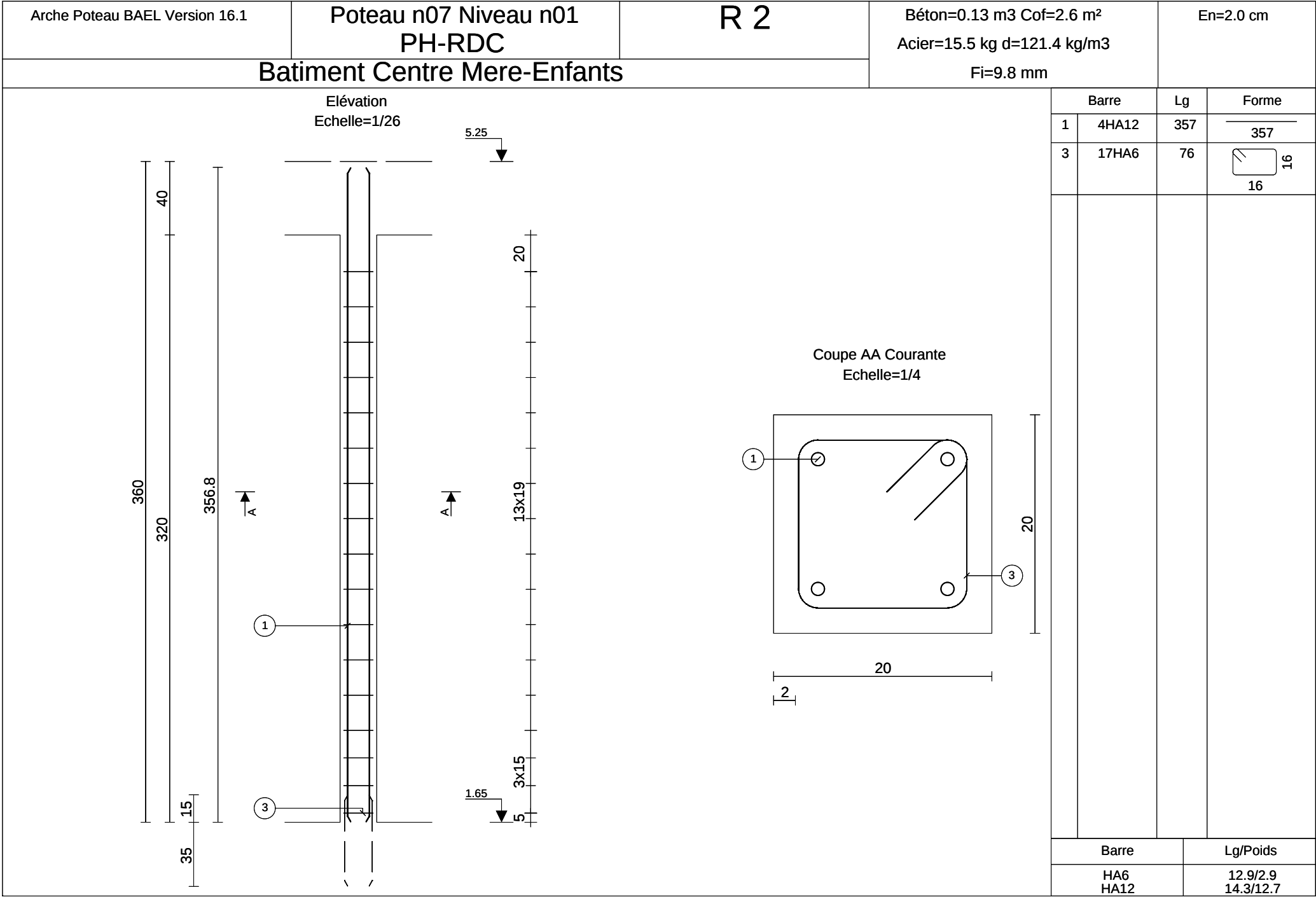
Barre		Lg	Forme
1	4HA12	357	
2	2HA10	357	
5	17HA6	116	
6	17HA6	33	
Barre		Lg/Poids	
HA6 HA10 HA12		25.4/5.6 7.1/4.4 14.3/12.7	



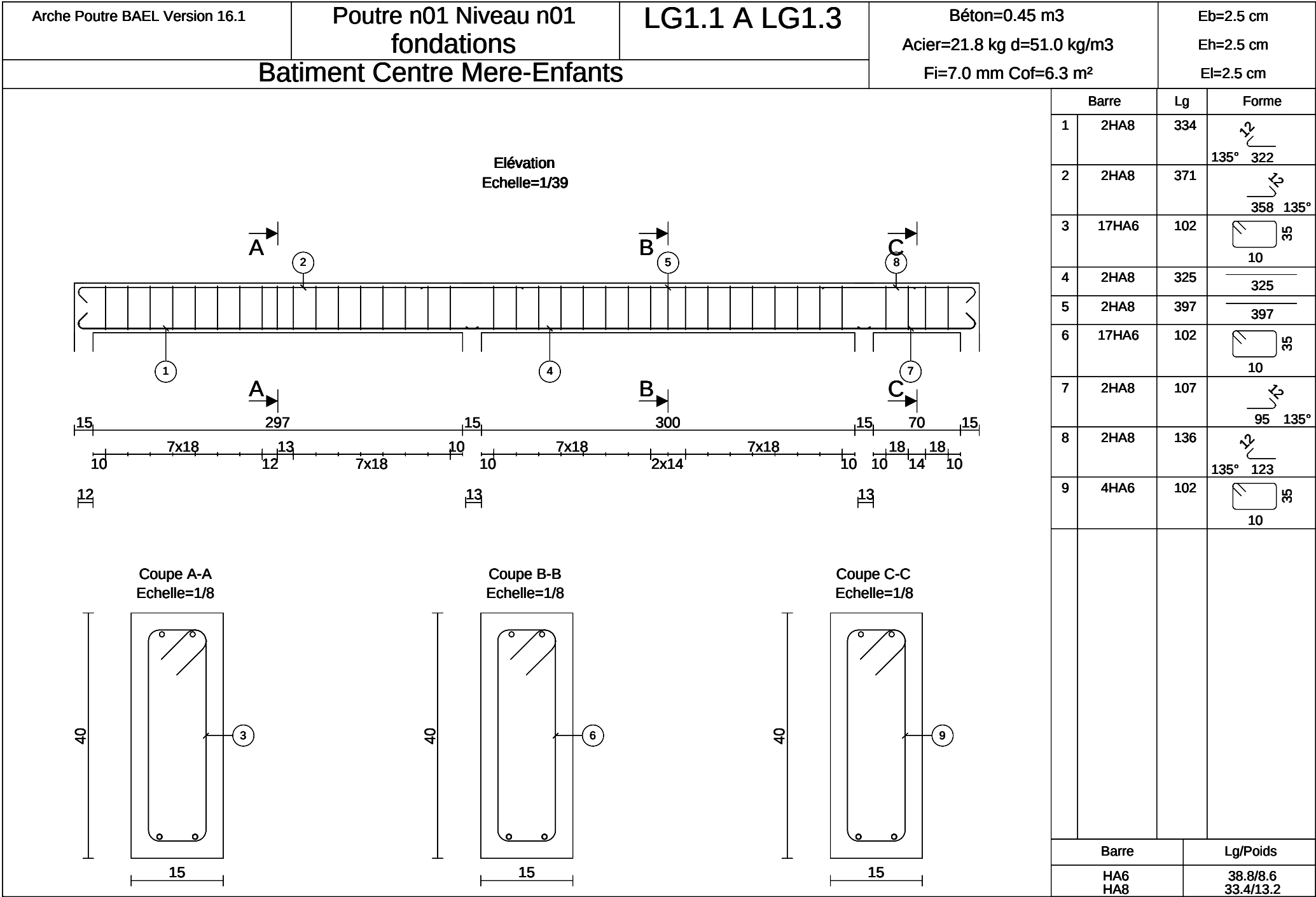






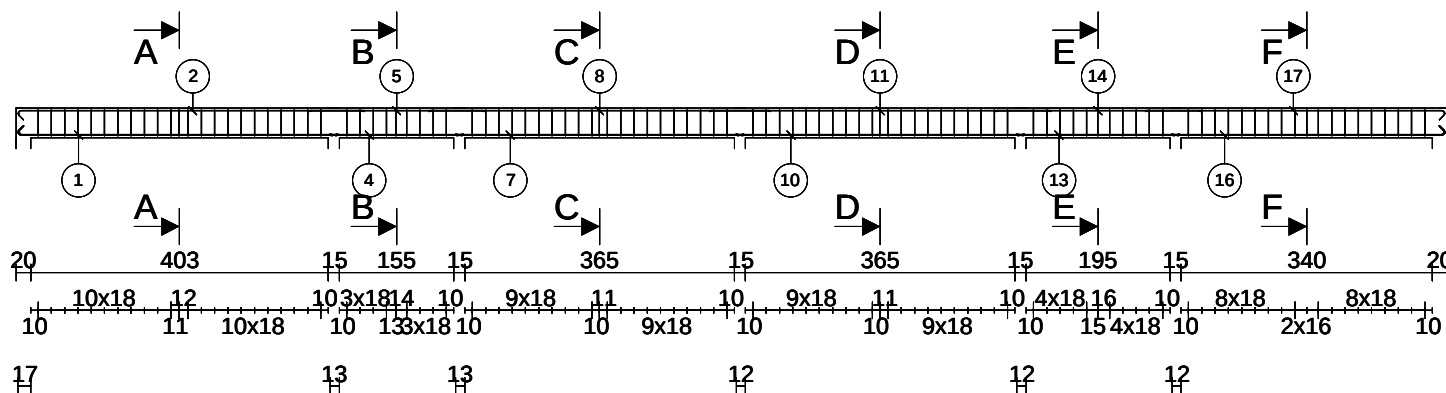


FERRAILLAGE DES LONGRINES

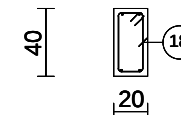


Arche Poutre BAEL Version 16.1	Poutre n01 Niveau n01 fondations	LG2.1 A LG2.6	Béton=1.58 m3 Acier=60.2 kg d=39.2 kg/m3 Fi=6.9 mm Cof=18.2 m²	Eb=2.5 cm Eh=2.5 cm El=2.5 cm
Batiment Centre Mere-Enfants				

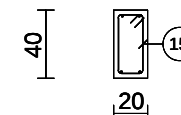
Elévation
Echelle=1/102



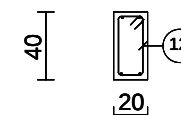
Coupe F-F
Echelle=1/44



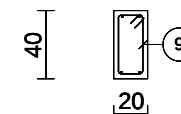
Coupe E-E
Echelle=1/44



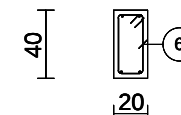
Coupe D-D
Echelle=1/44



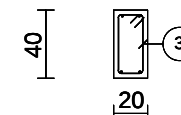
Coupe C-C
Echelle=1/44



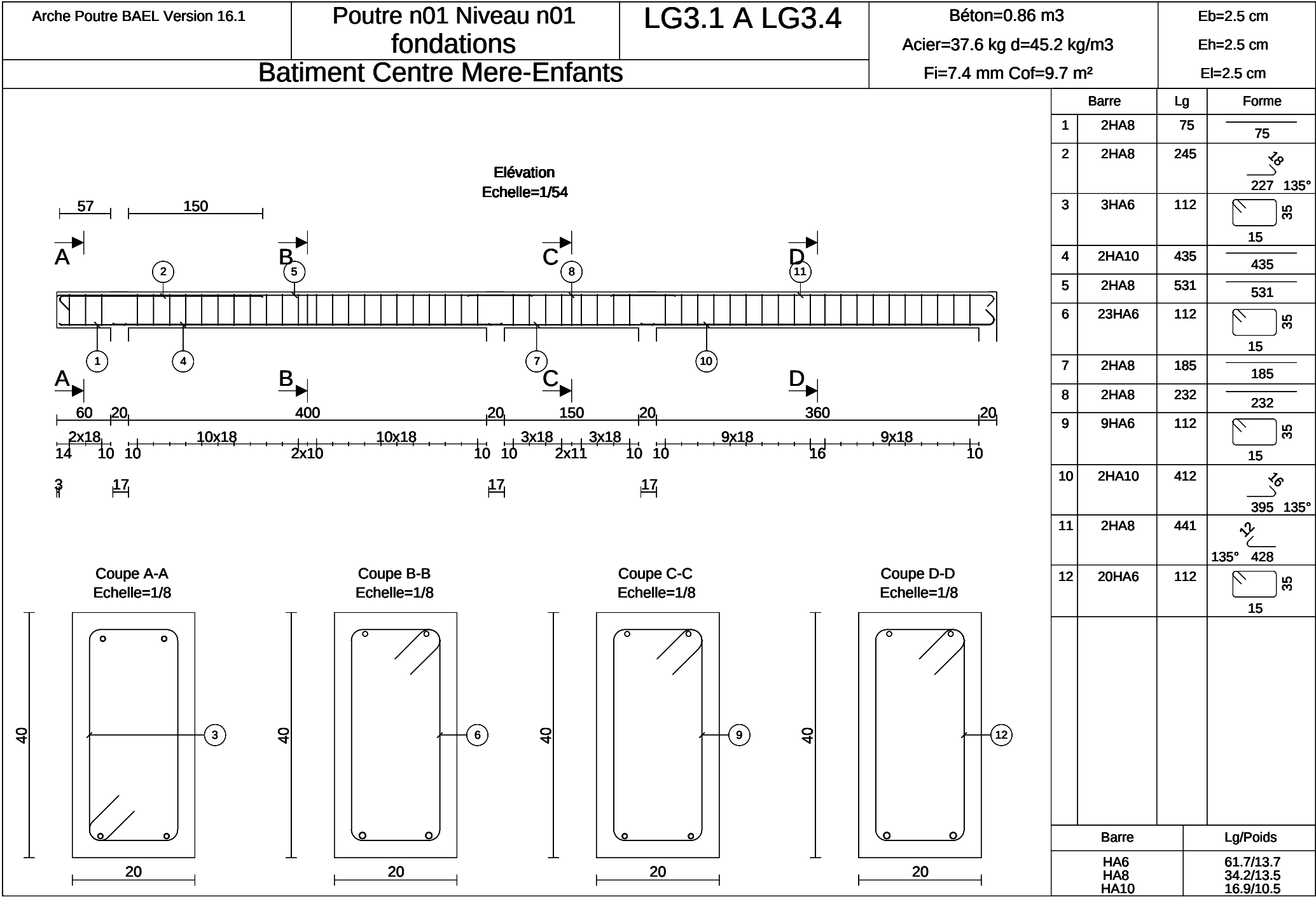
Coupe B-B
Echelle=1/44

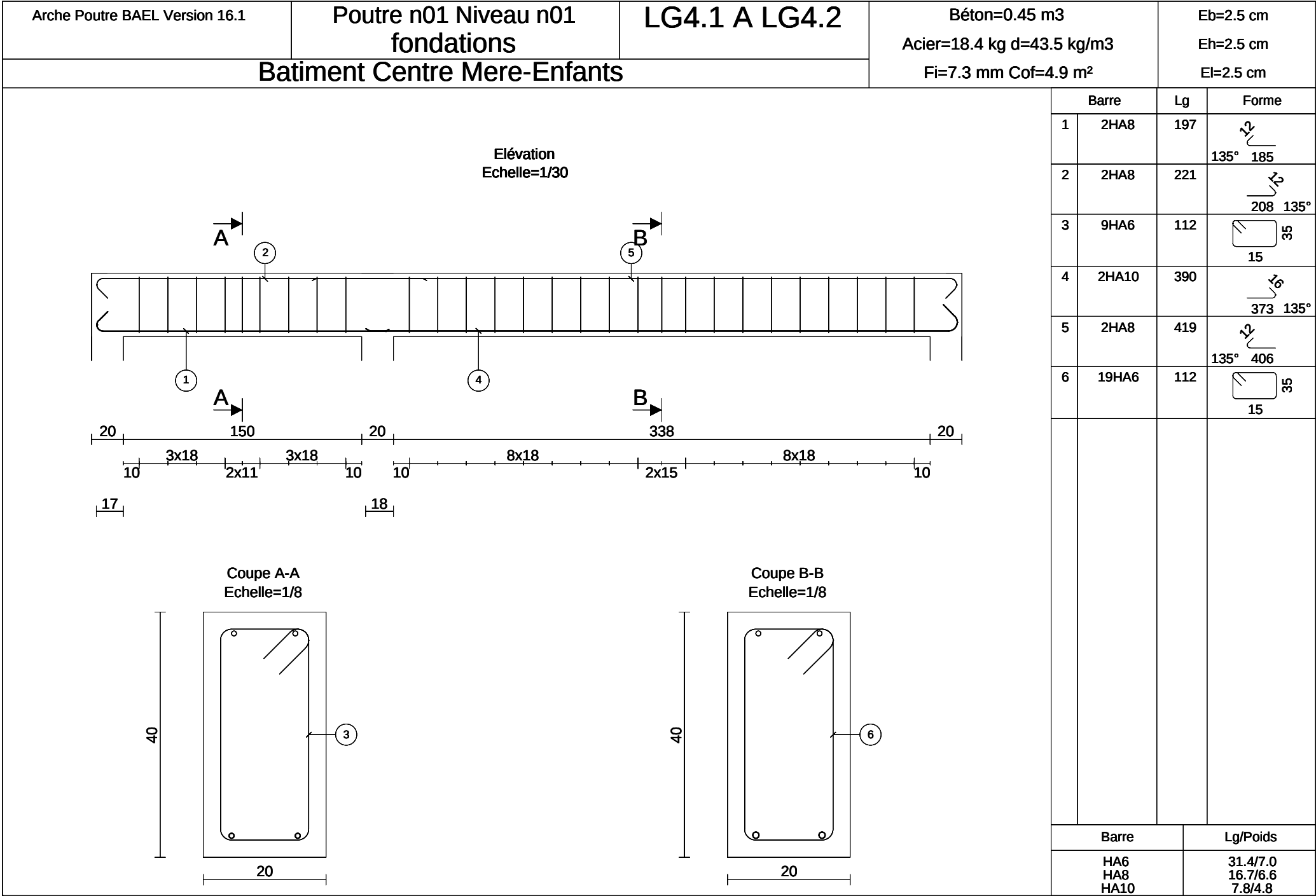


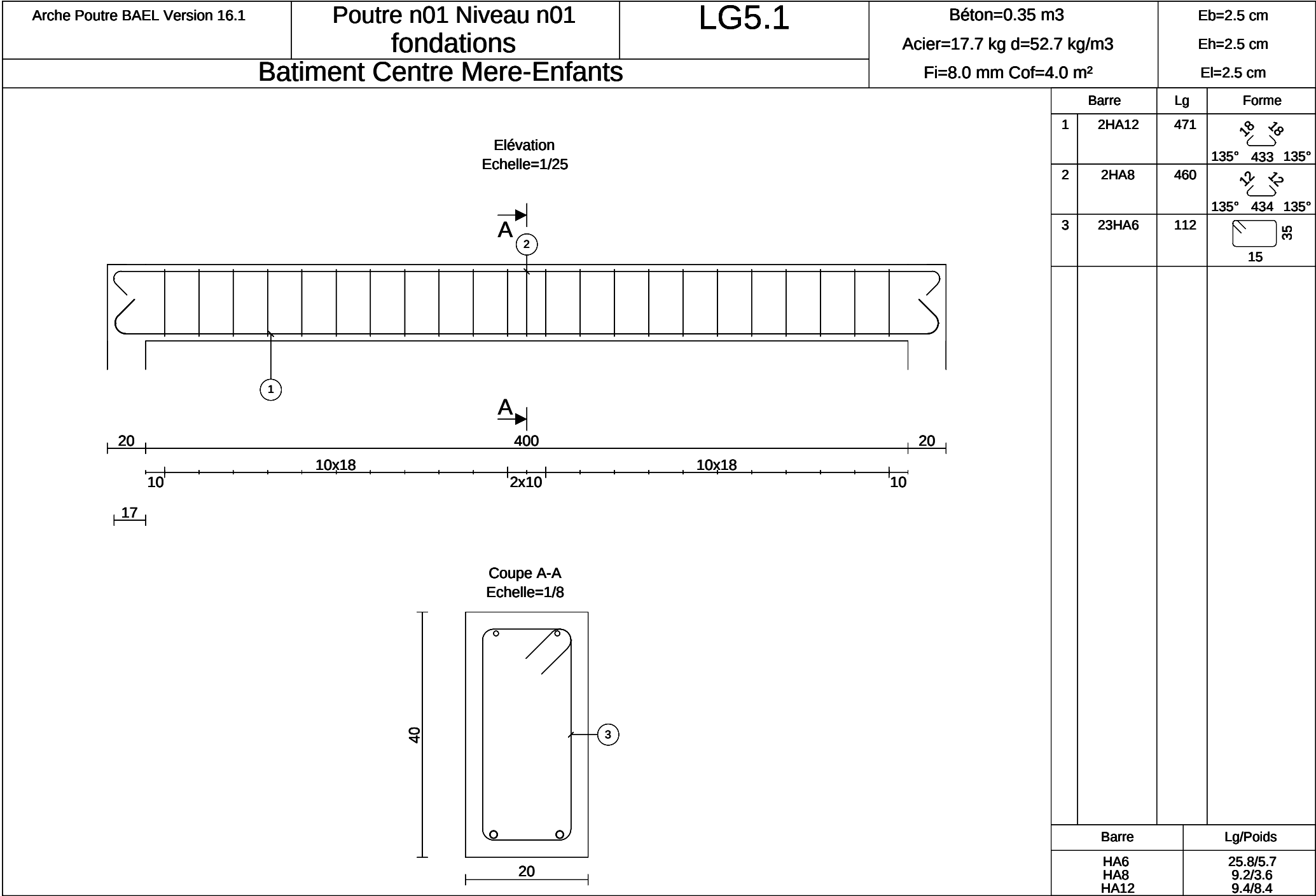
Coupe A-A
Echelle=1/44

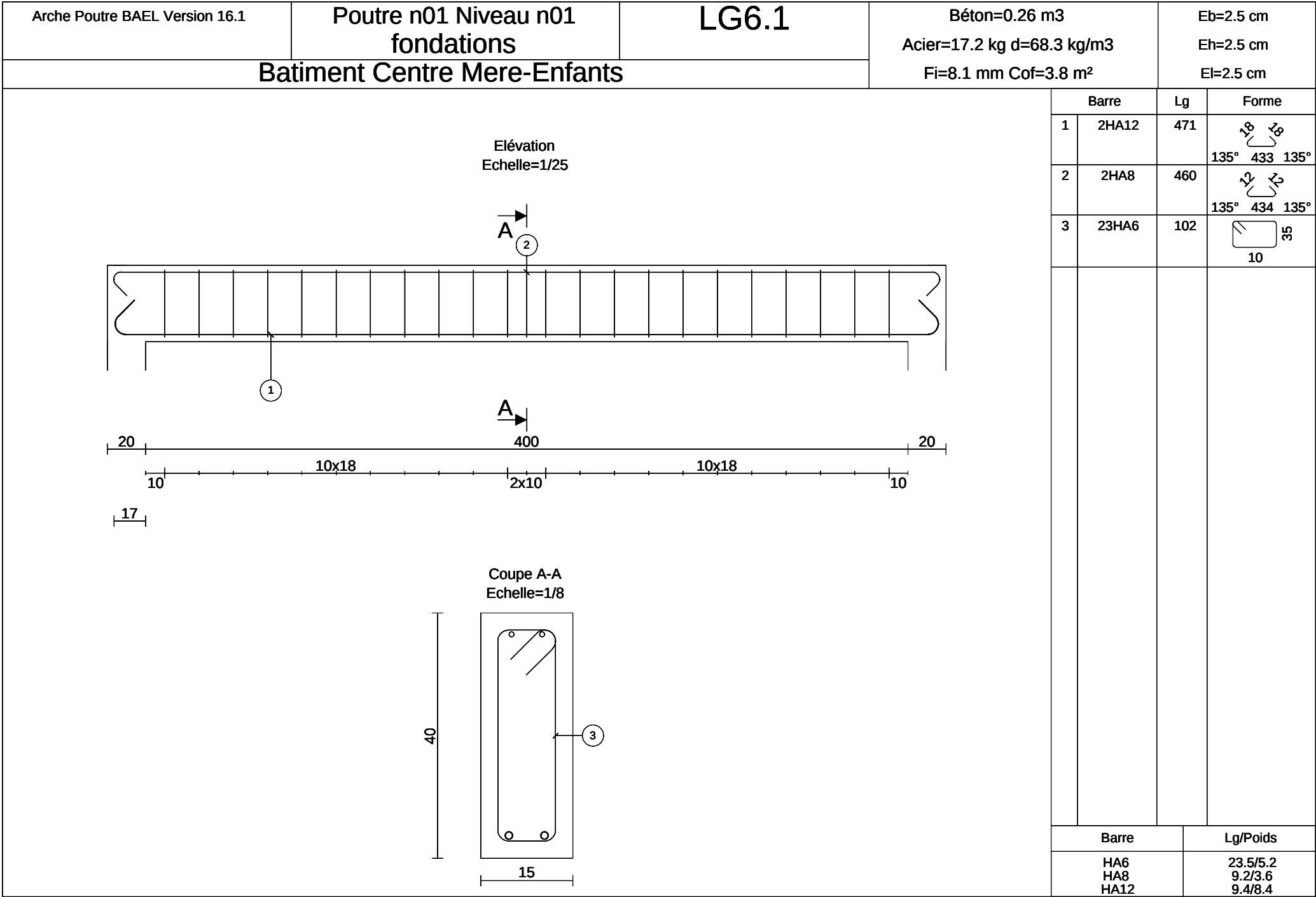


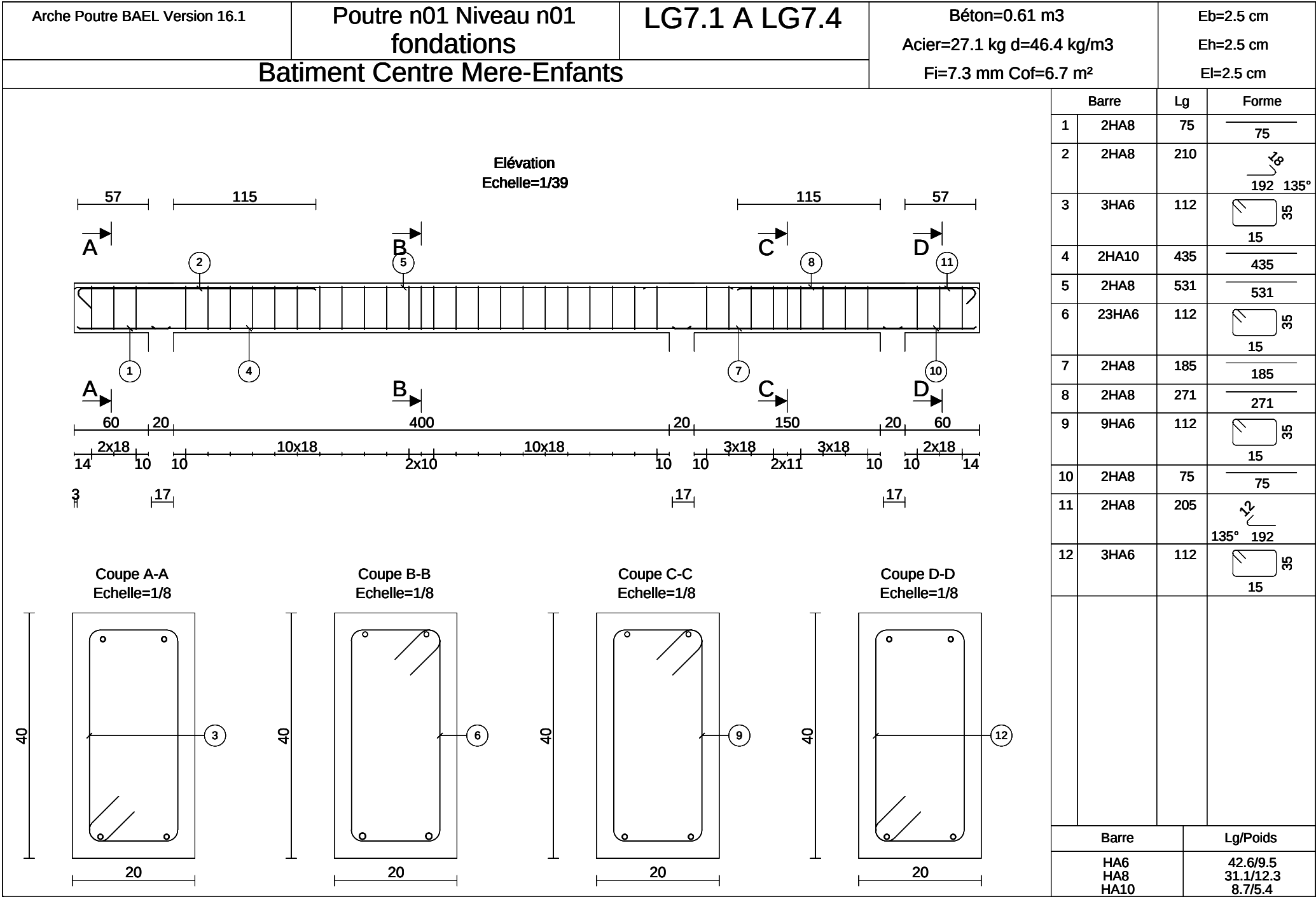
Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme
1	2HA8	445	5	2HA8	237	9	21HA6	112	13	2HA8	220	17	2HA8	419
2	2HA8	482	6	9HA6	112	10	2HA8	390	14	2HA8	277	18	19HA6	112
3	23HA6	112	7	2HA8	390	11	2HA8	462	15	11HA6	112			
4	2HA8	180	8	2HA8	462	12	21HA6	112	16	2HA8	382			
Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids
HA6		116.7/25.9	HA8		86.9/34.3									

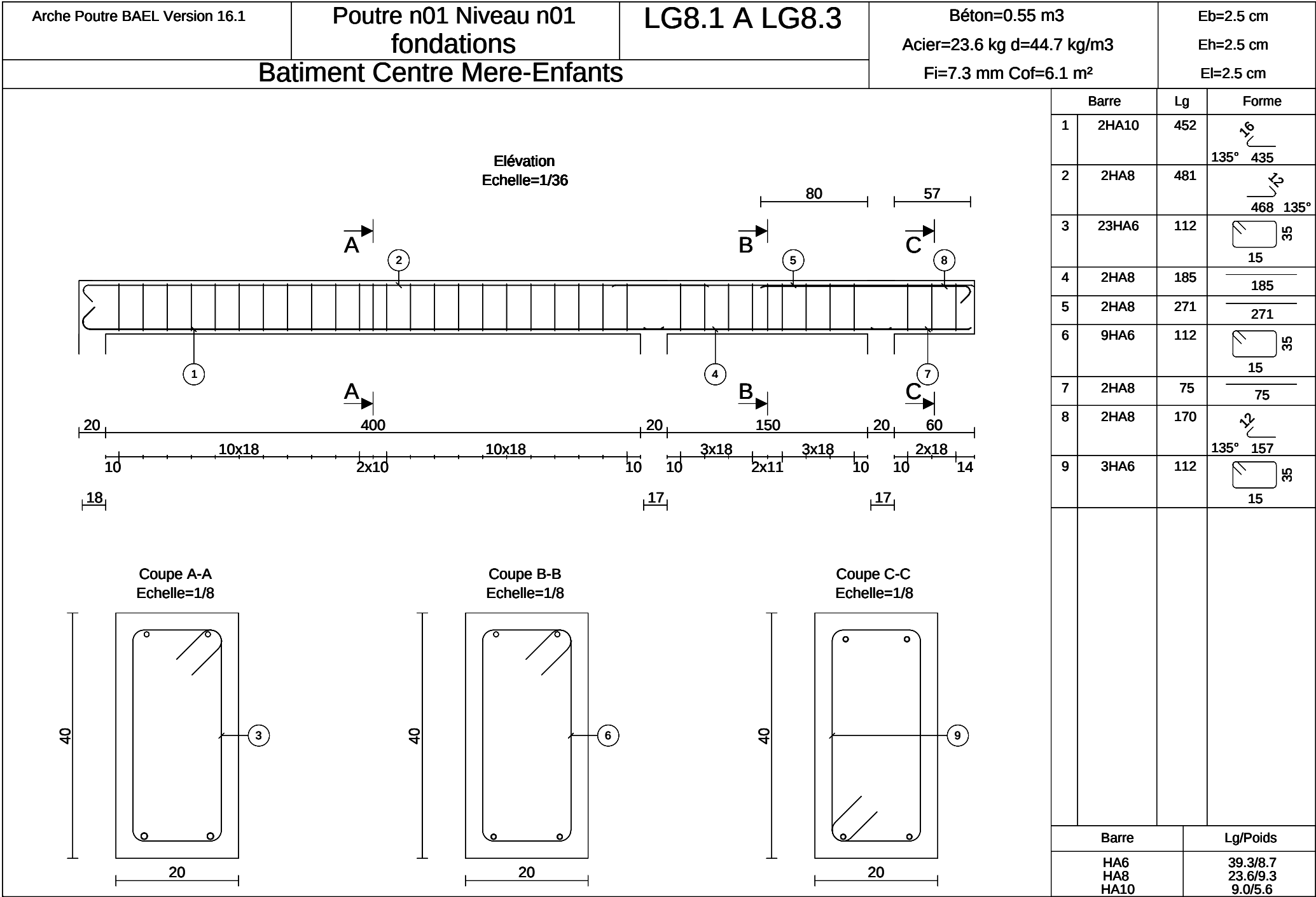


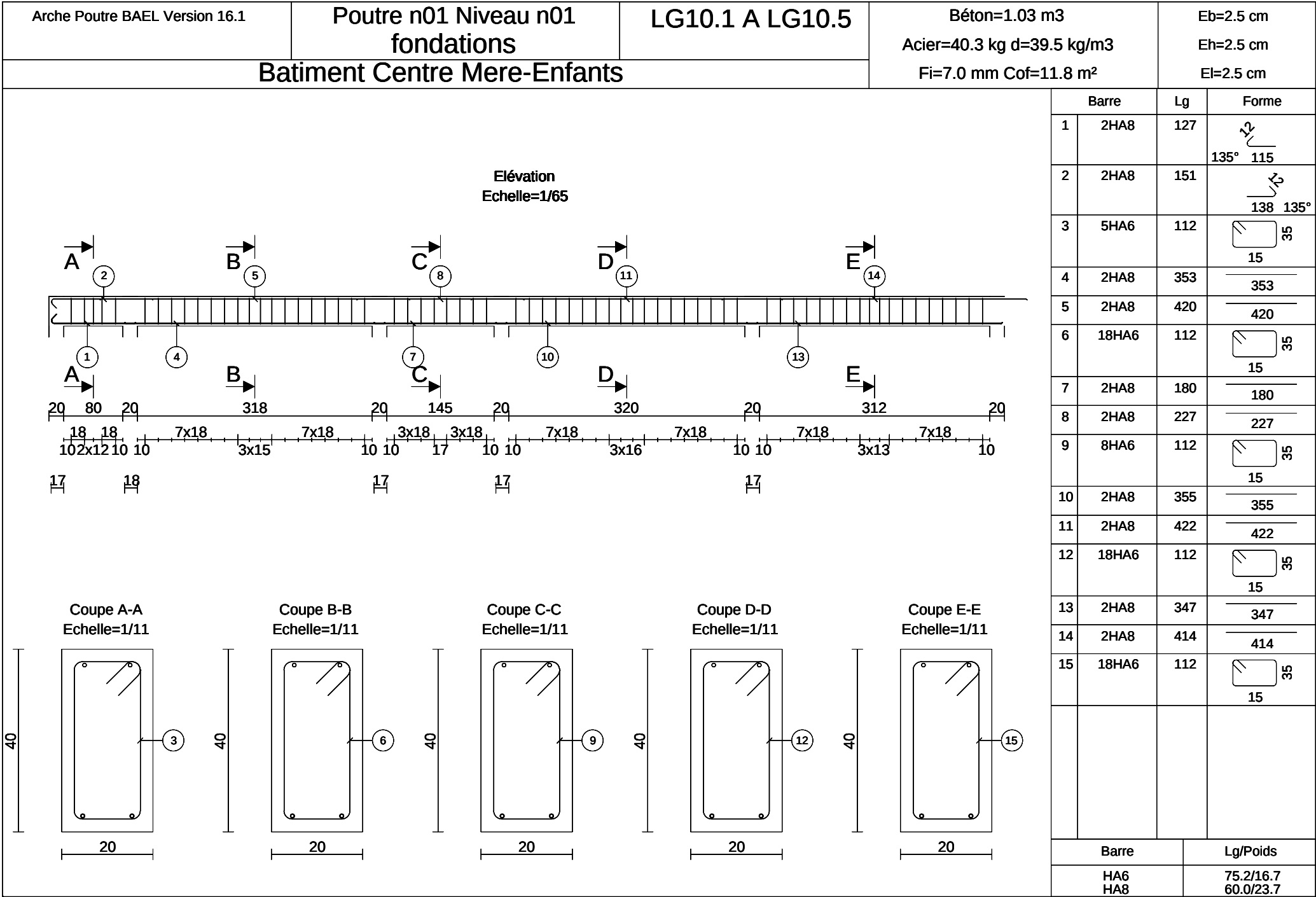


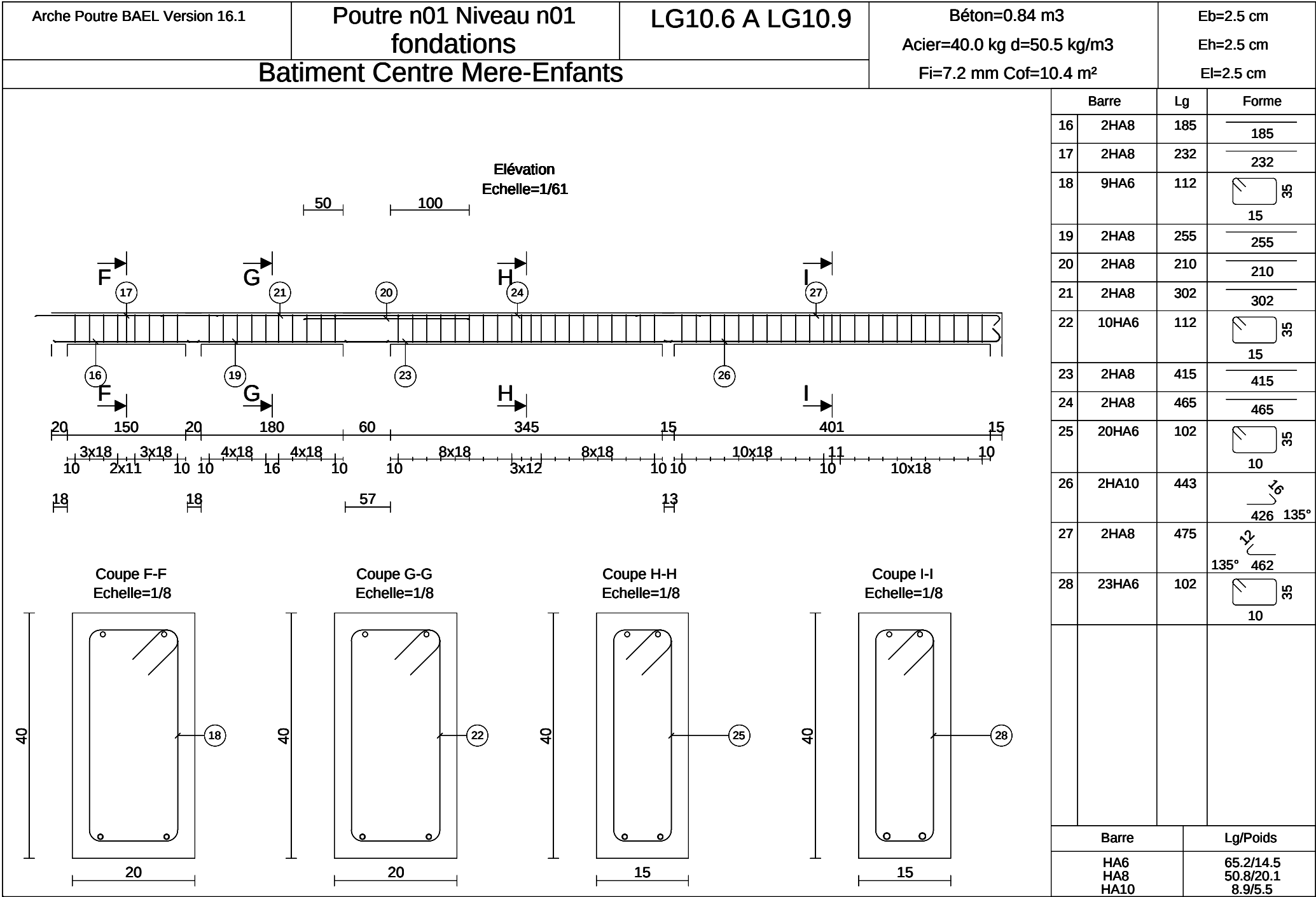


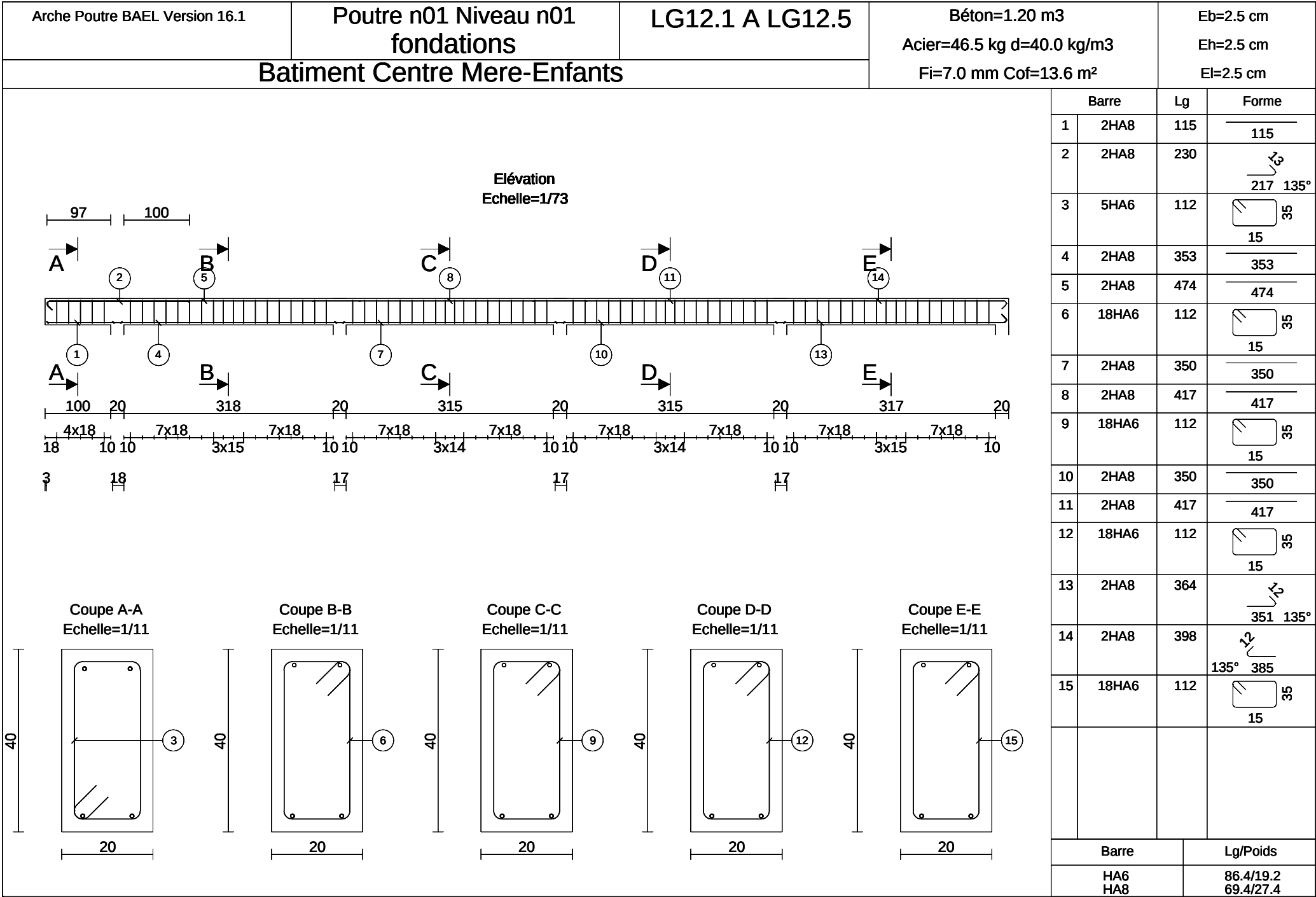


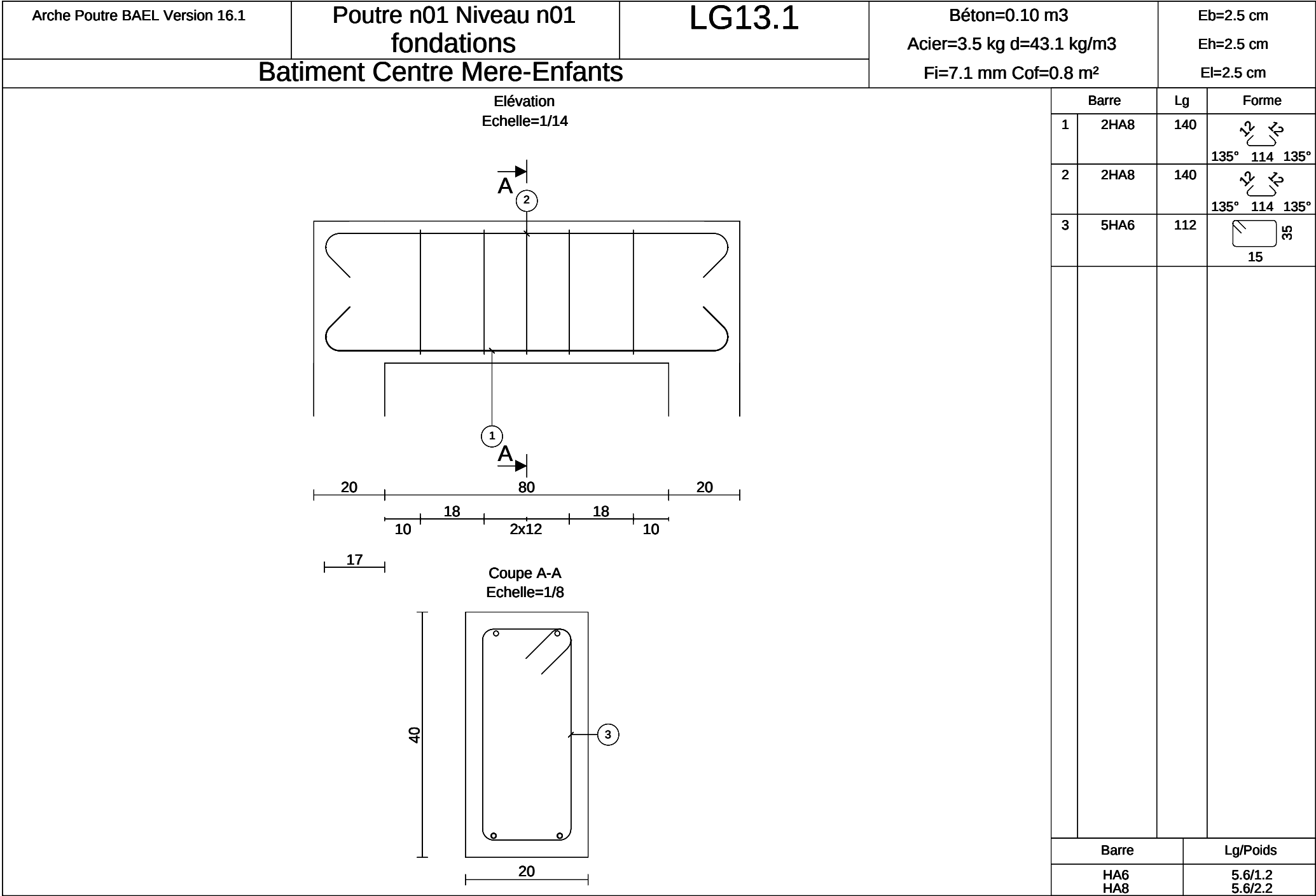


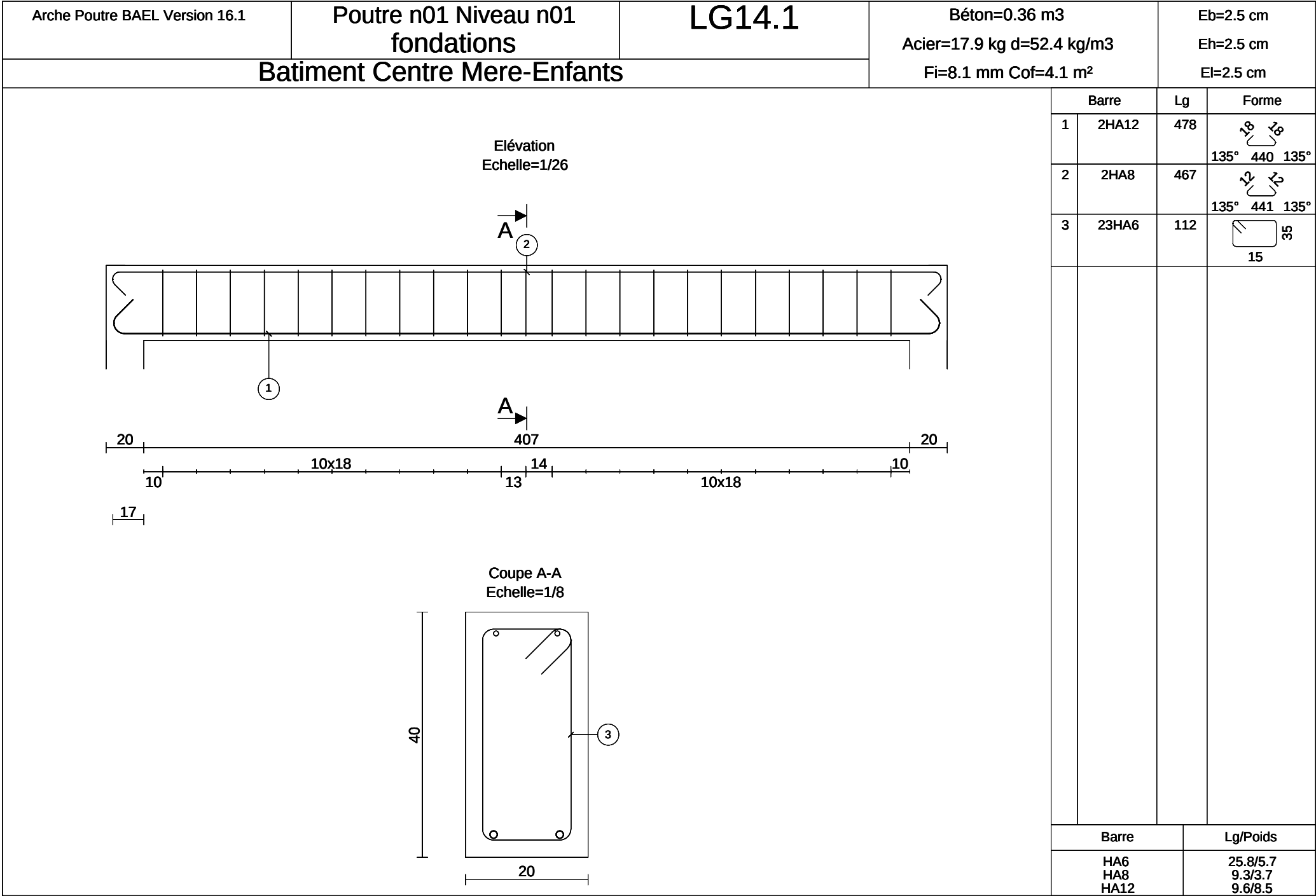


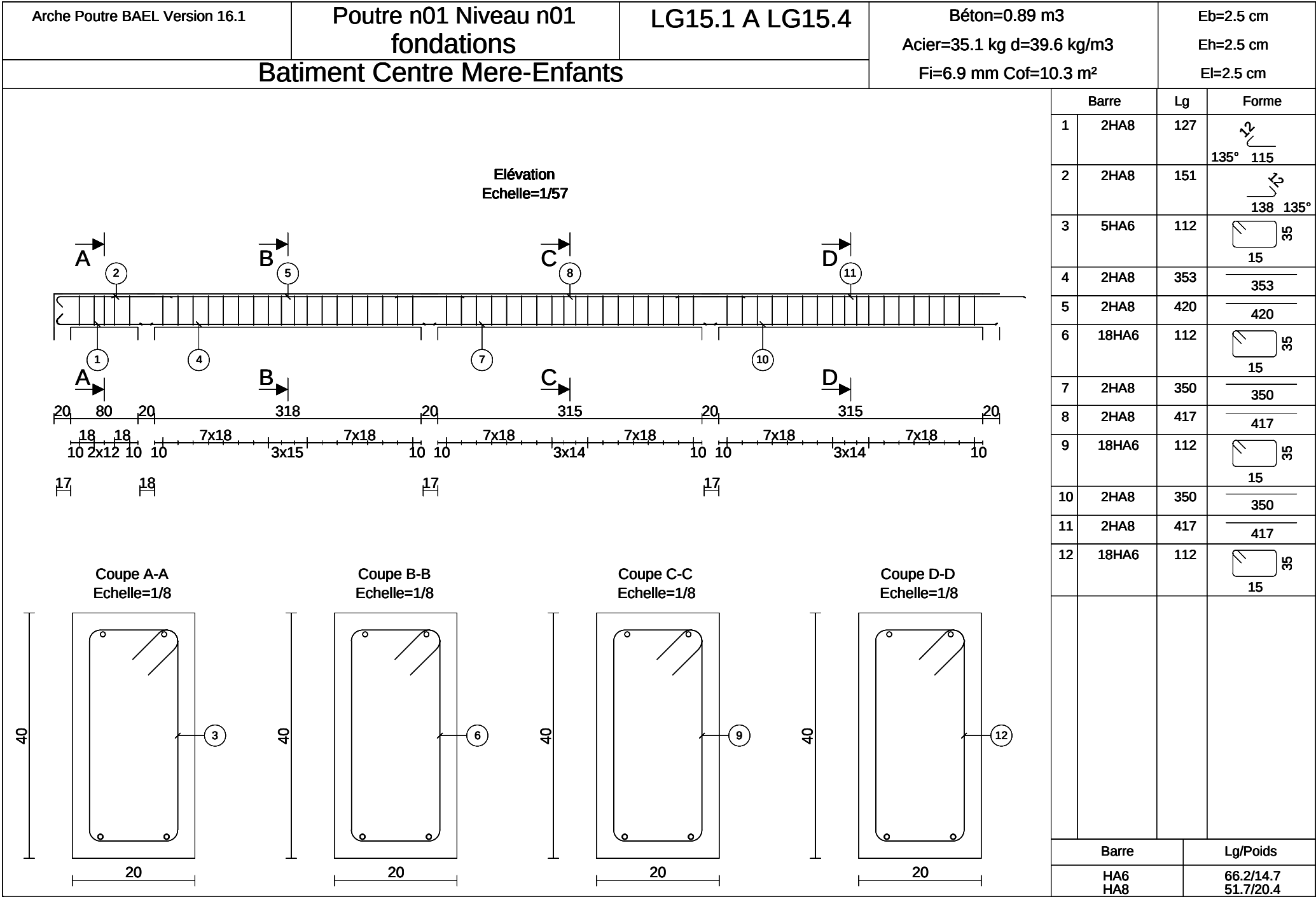


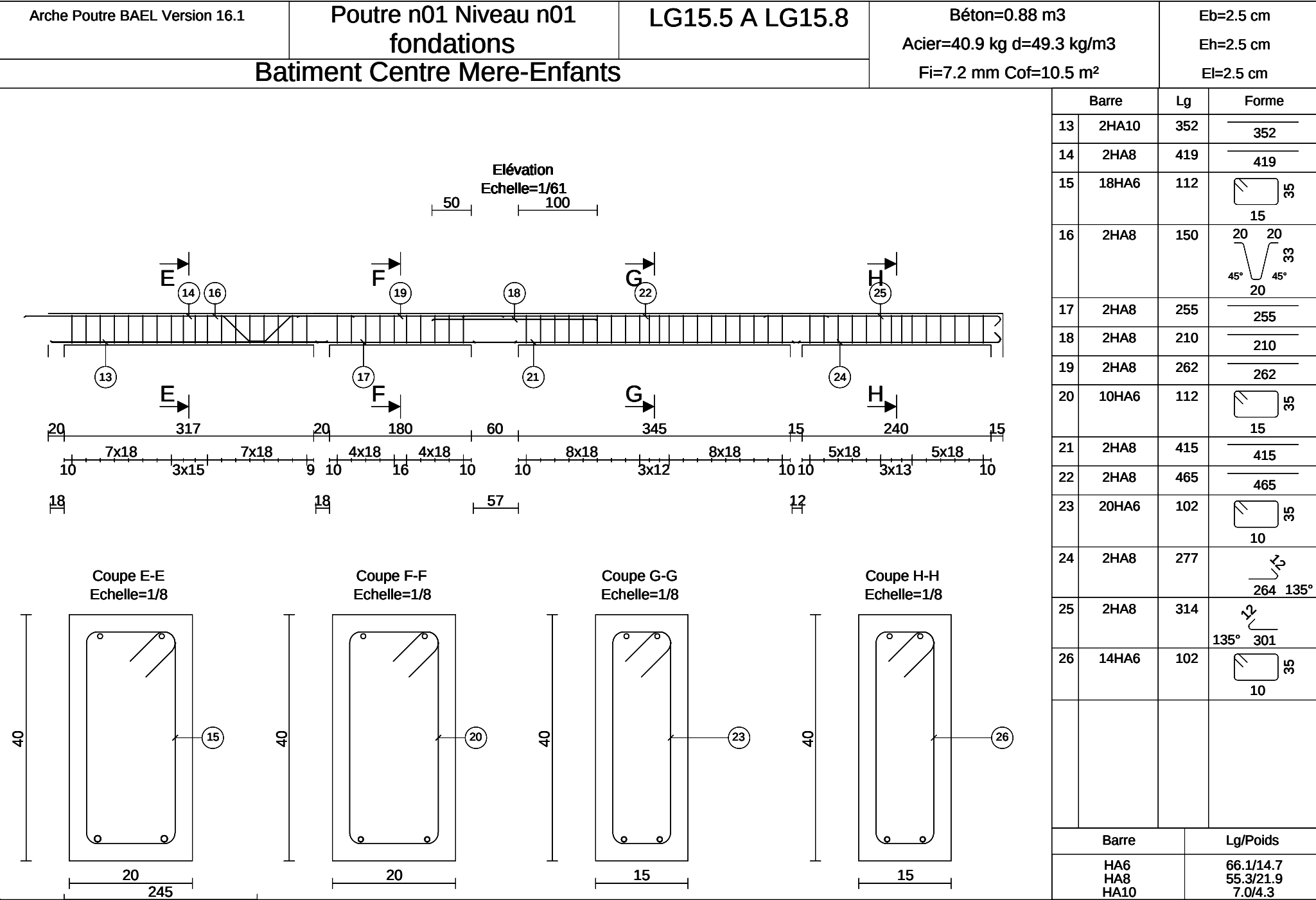


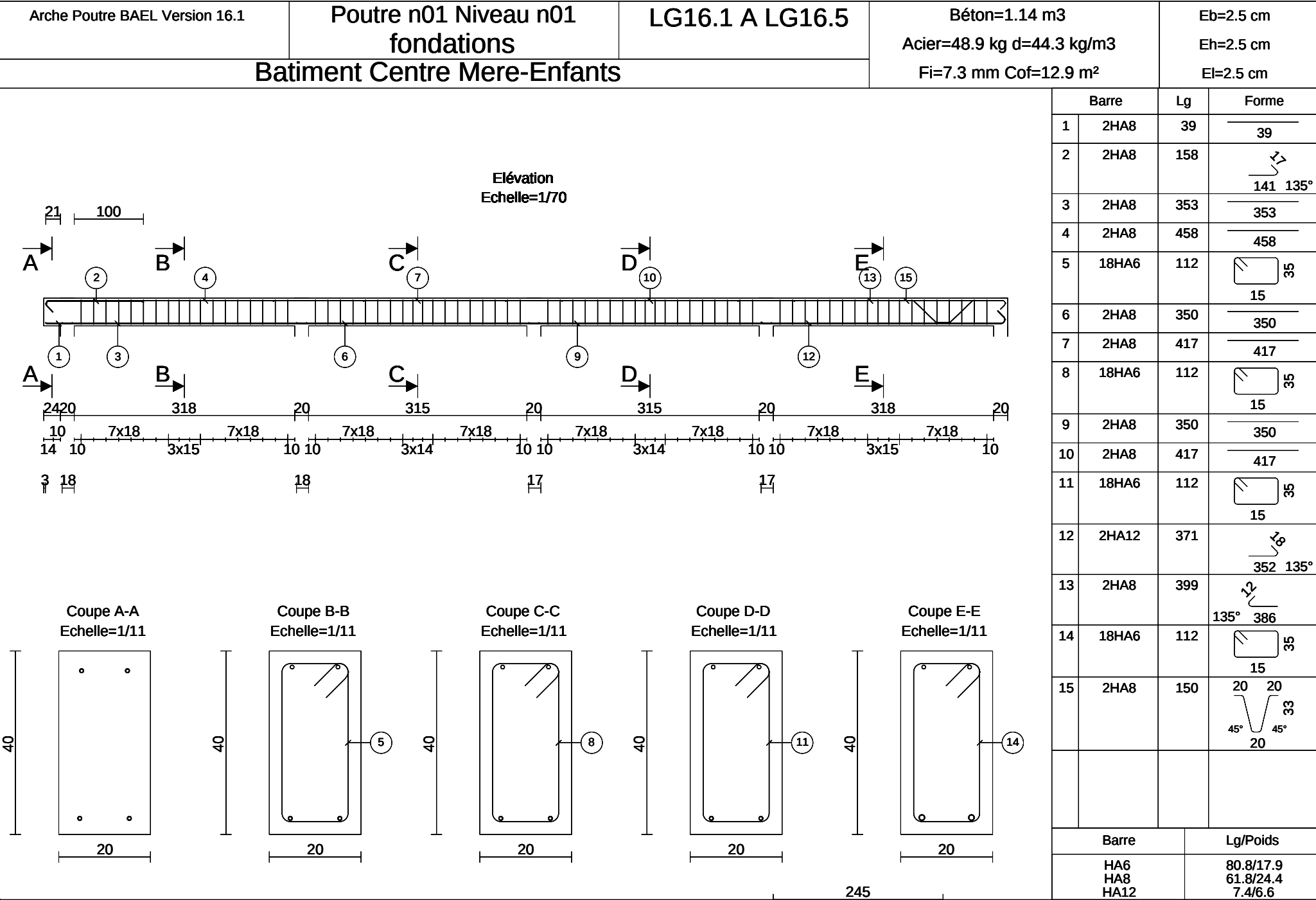


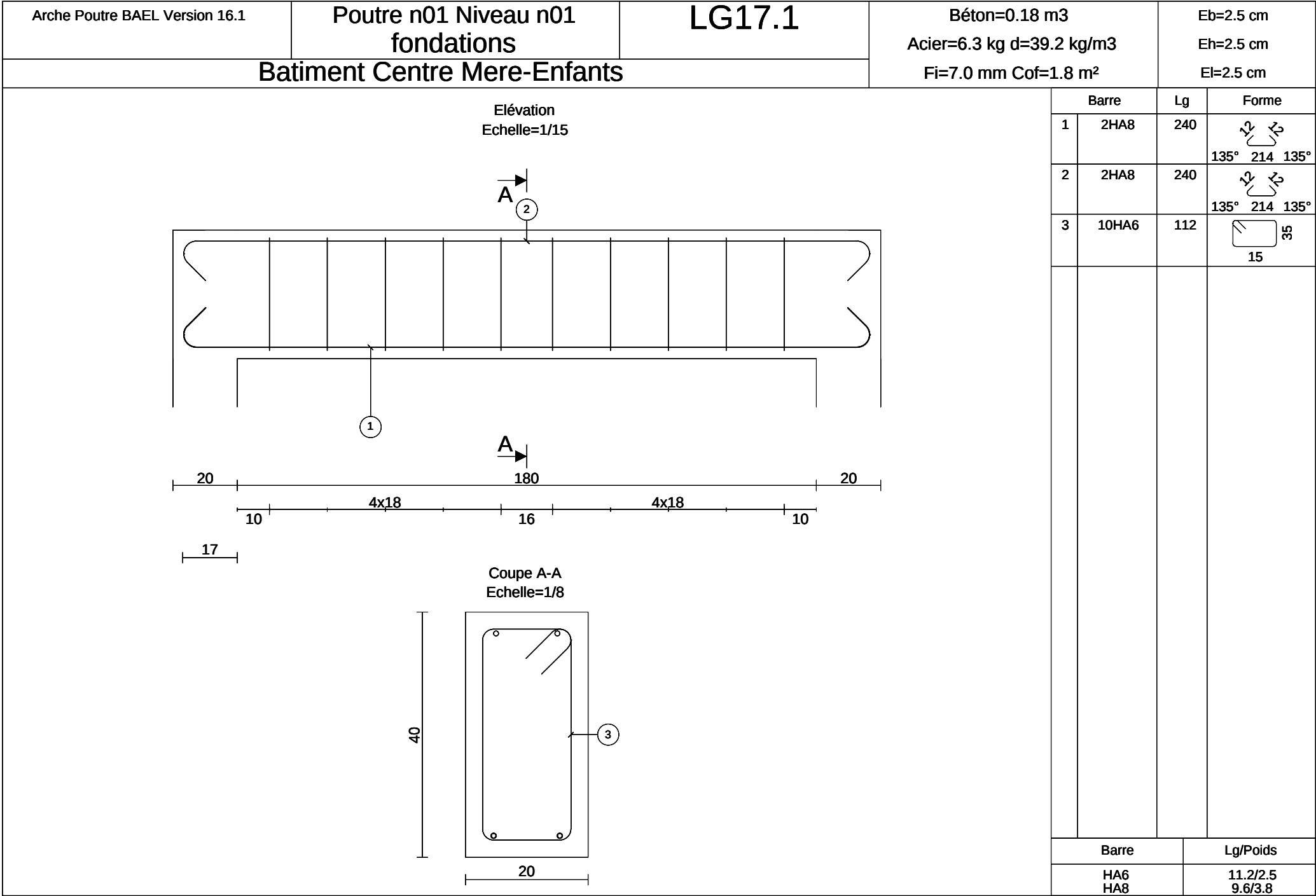


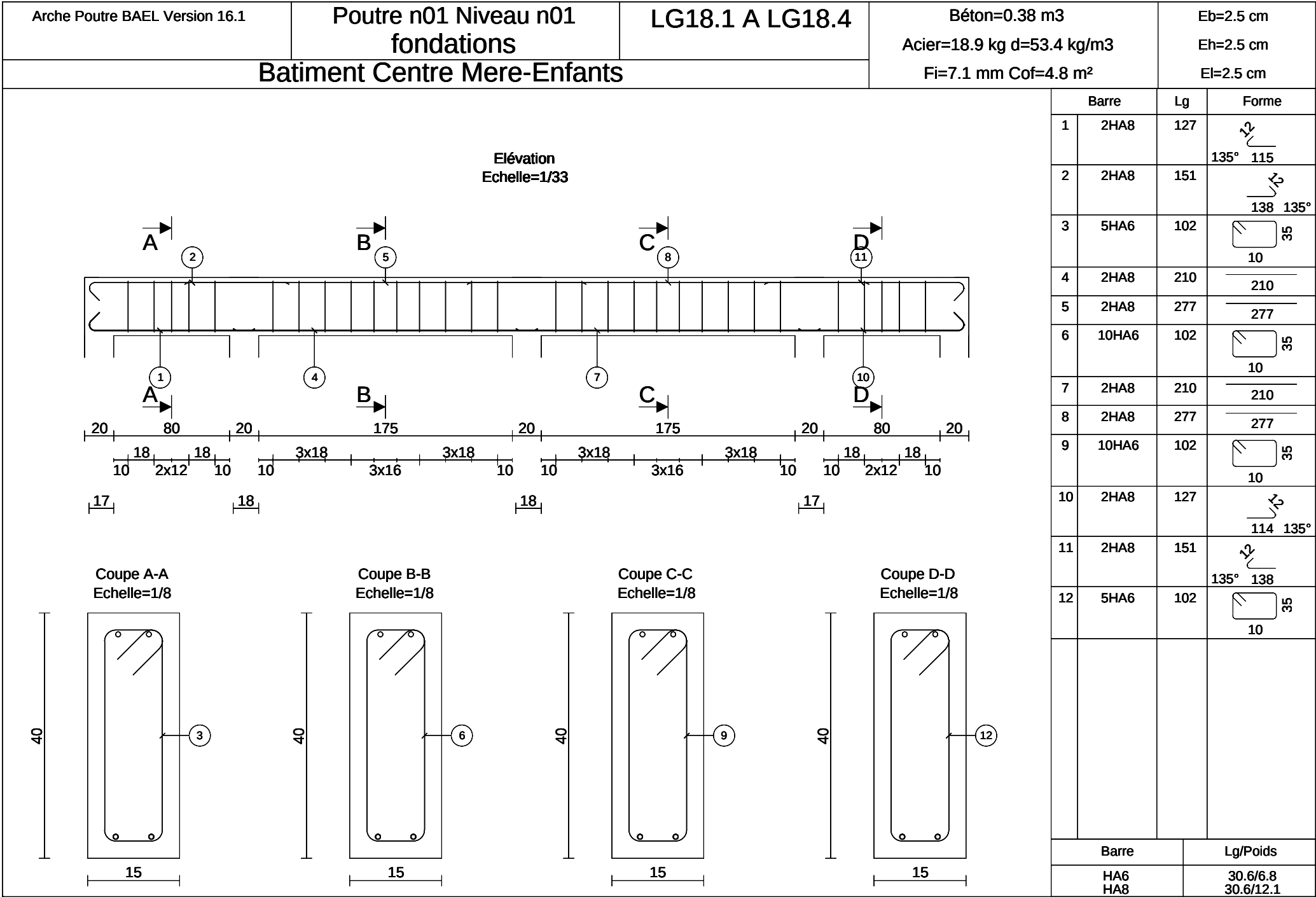


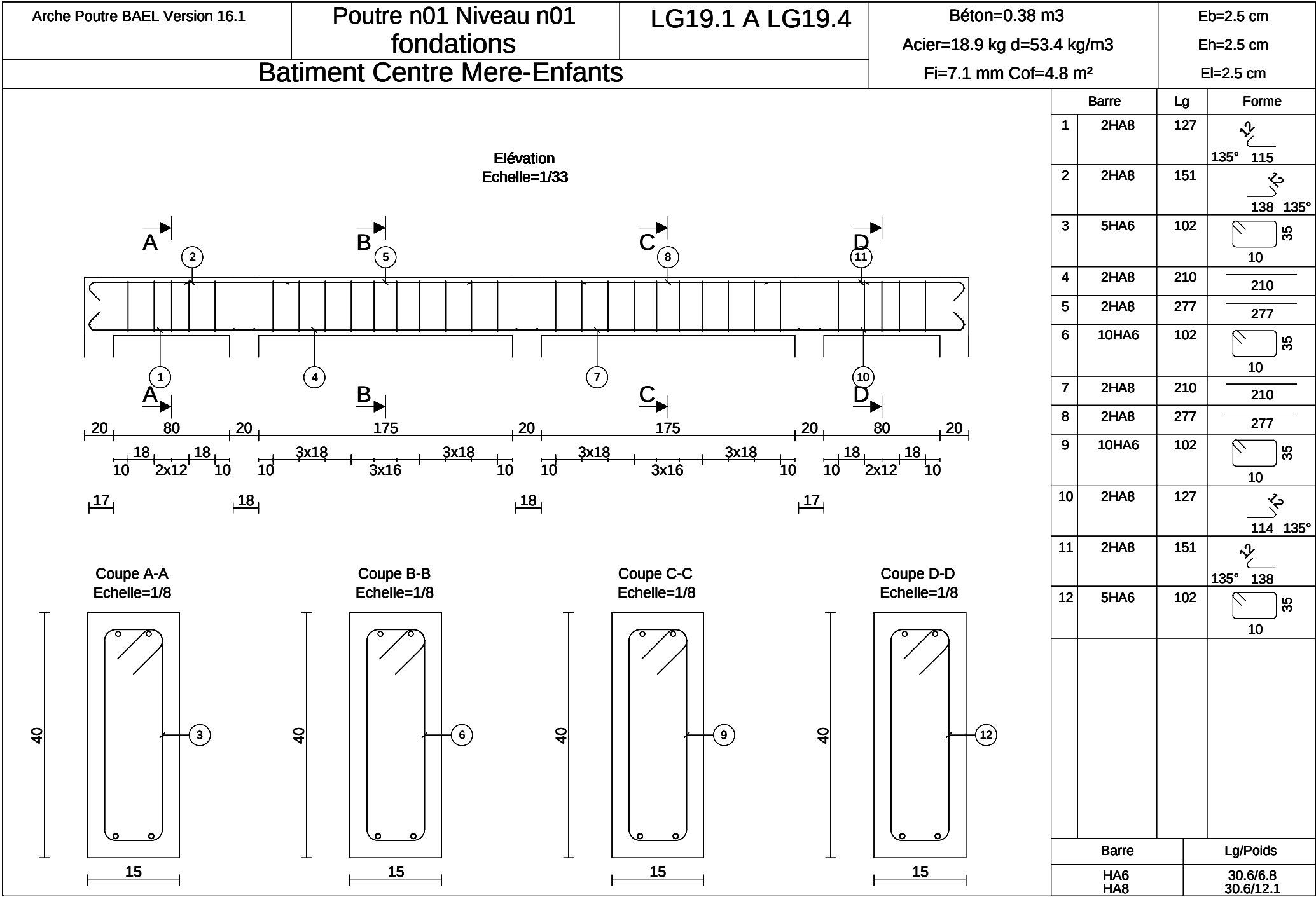












Arche Poutre BAEL Version 16.1	Poutre n01 Niveau n01 fondations	LG20.1 A LG20.2	Béton=0.50 m3 Acier=18.7 kg d=39.6 kg/m3 Fi=6.9 mm Cof=5.5 m²	Eb=2.5 cm Eh=2.5 cm El=2.5 cm
Batiment Centre Mere-Enfants				

Elévation
Echelle=1/33

1 2 4 5

A A B B

20 275 20 275 20

10 6x18 3x13 6x18 10 10 6x18 3x13 6x18 10

17 18

Coupe A-A
Echelle=1/8

40

20

3

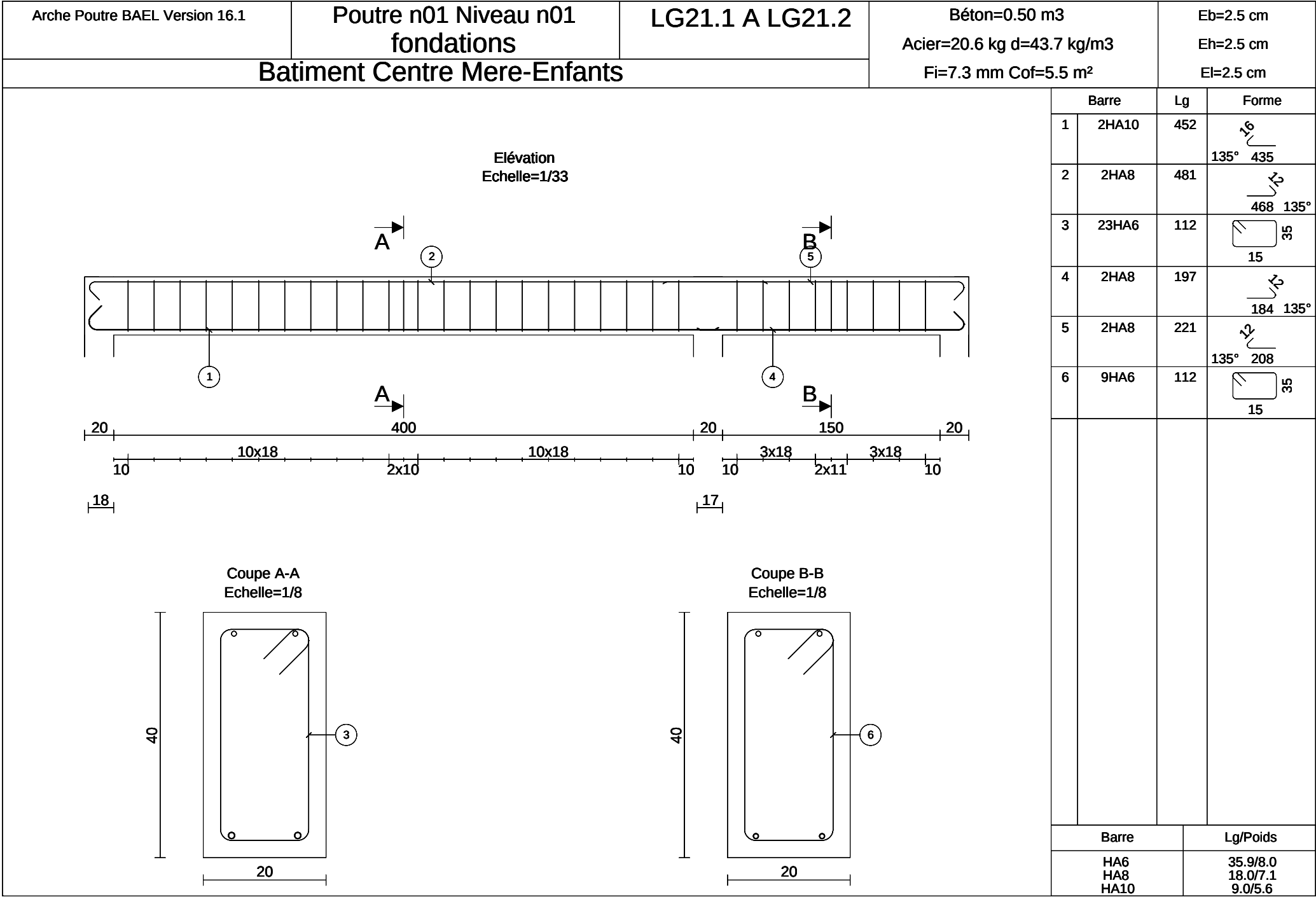
Coupe B-B
Echelle=1/8

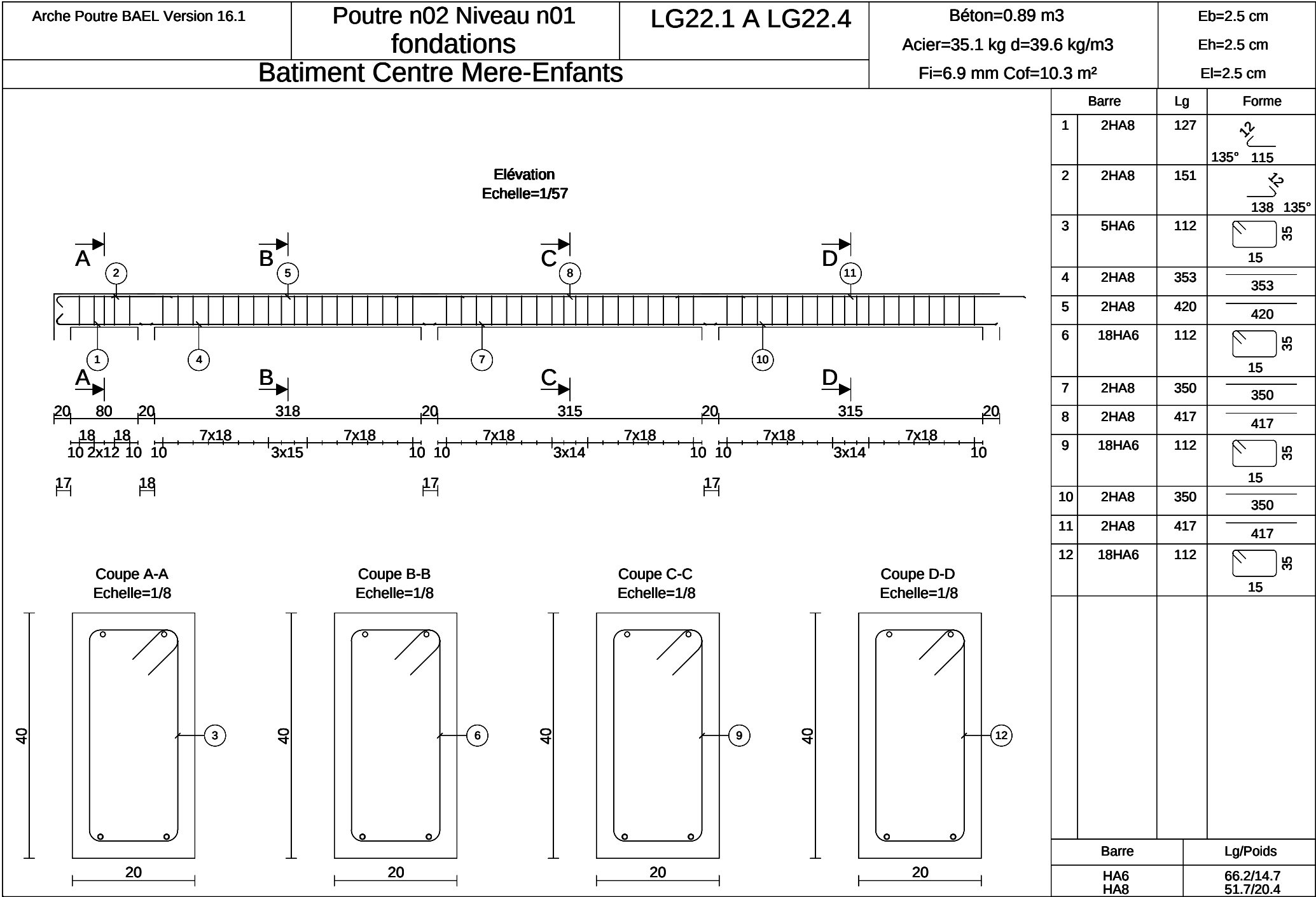
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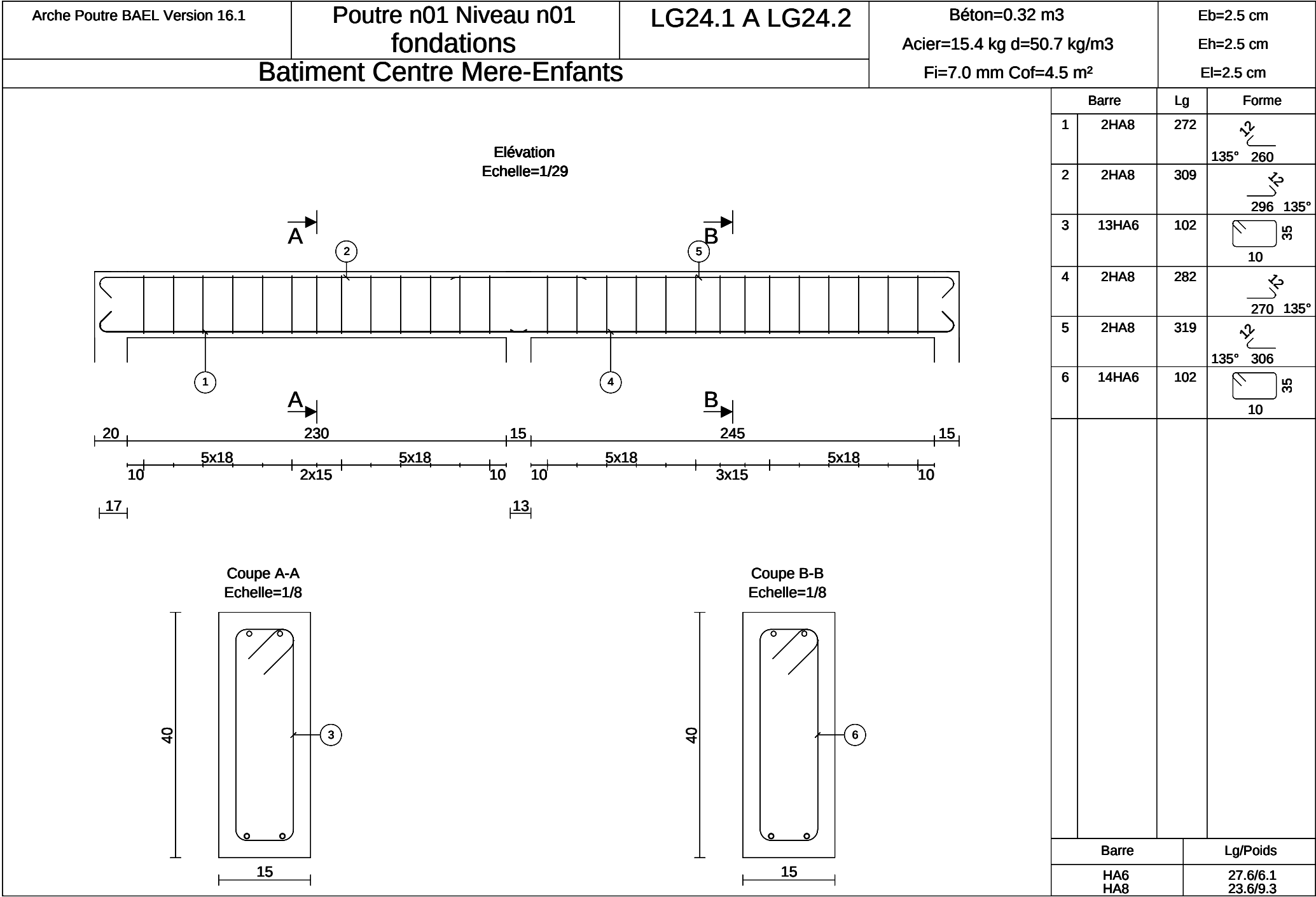
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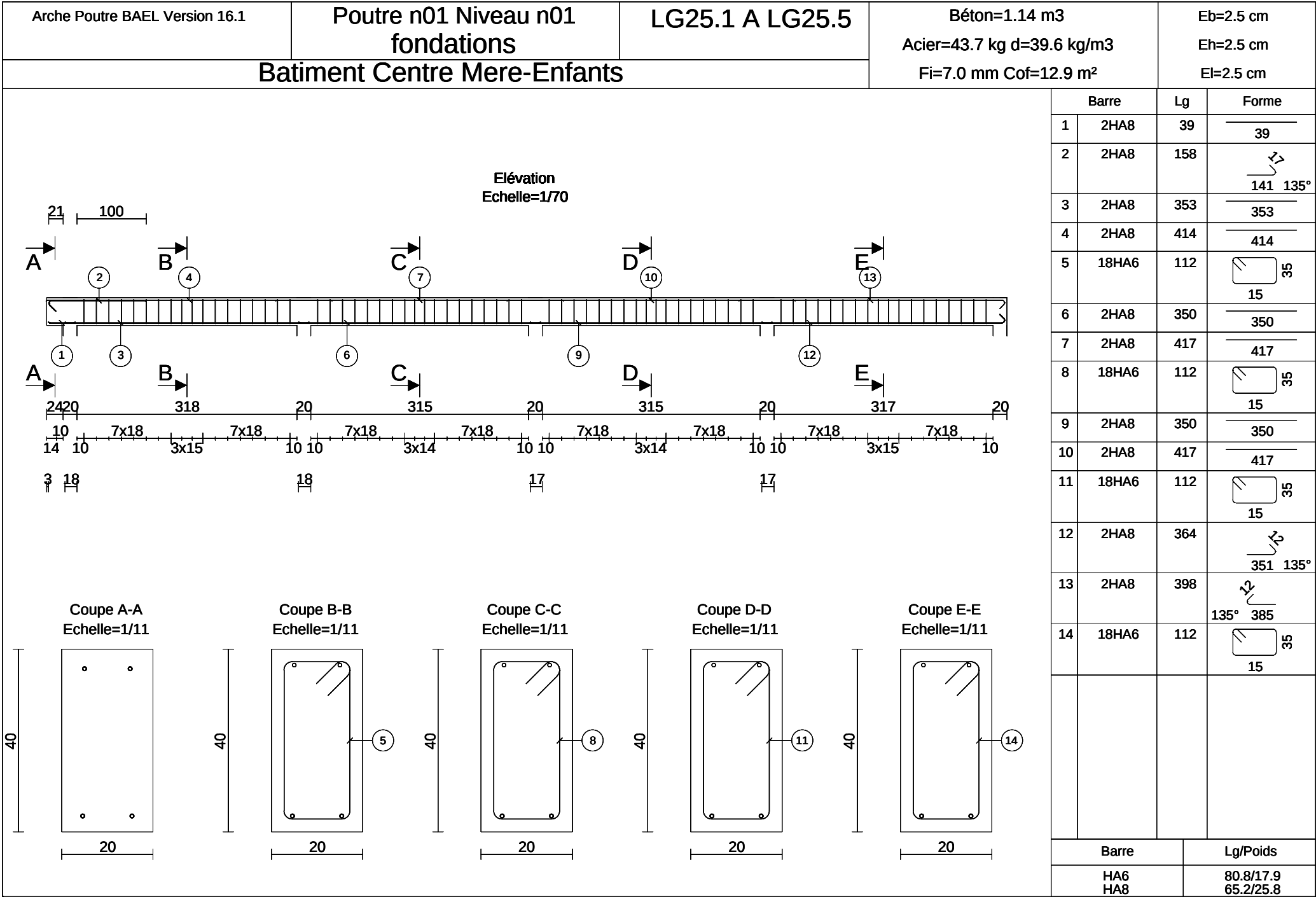
6

Barre		Lg	Forme
1	2HA8	322	135° 310
2	2HA8	356	343 135°
3	16HA6	112	35 15
4	2HA8	322	310 135°
5	2HA8	356	135° 343
6	16HA6	112	35 15
Barre		Lg/Poids	
HA6		35.9/8.0	
HA8		27.1/10.7	



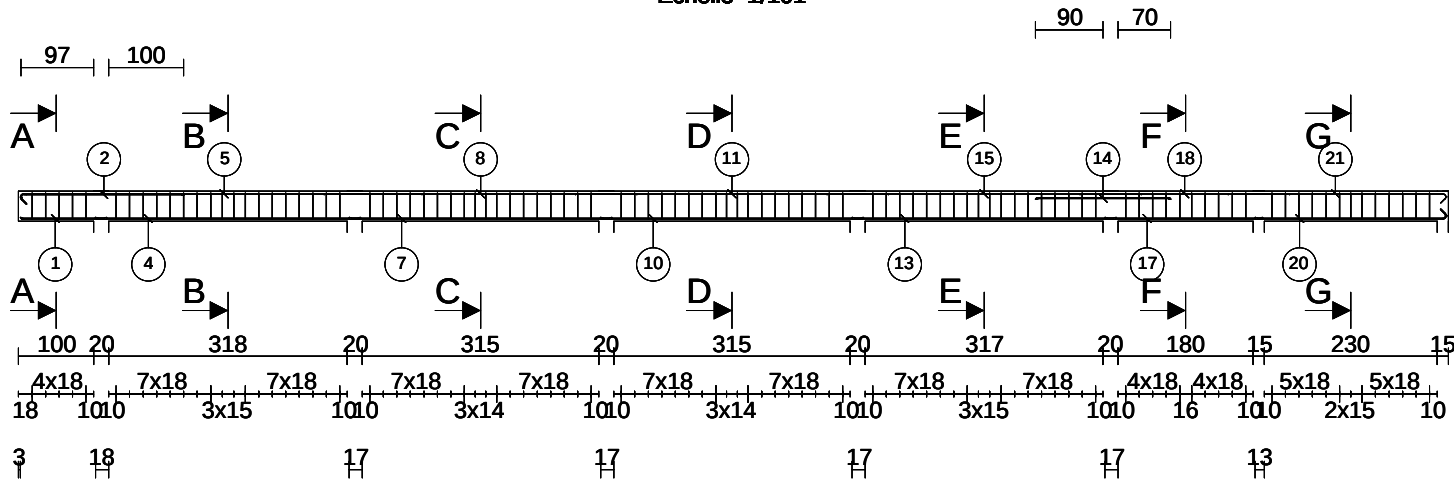




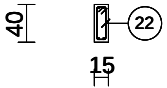


Arche Poutre BAEL Version 16.1	Poutre n01 Niveau n01 fondations	LG26.1 A LG26.7	Béton=1.48 m3 Acier=62.1 kg d=43.4 kg/m3 Fi=7.0 mm Cof=17.5 m²	Eb=2.5 cm Eh=2.5 cm El=2.5 cm
Batiment Centre Mere-Enfants				

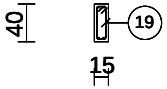
Elévation
Echelle=1/101



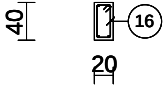
Coupe G-G
Echelle=1/80



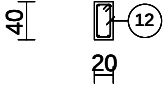
Coupe F-F
Echelle=1/80



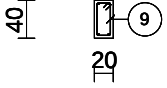
Coupe E-E
Echelle=1/80



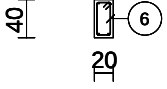
Coupe D-D
Echelle=1/80



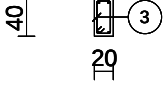
Coupe C-C
Echelle=1/80



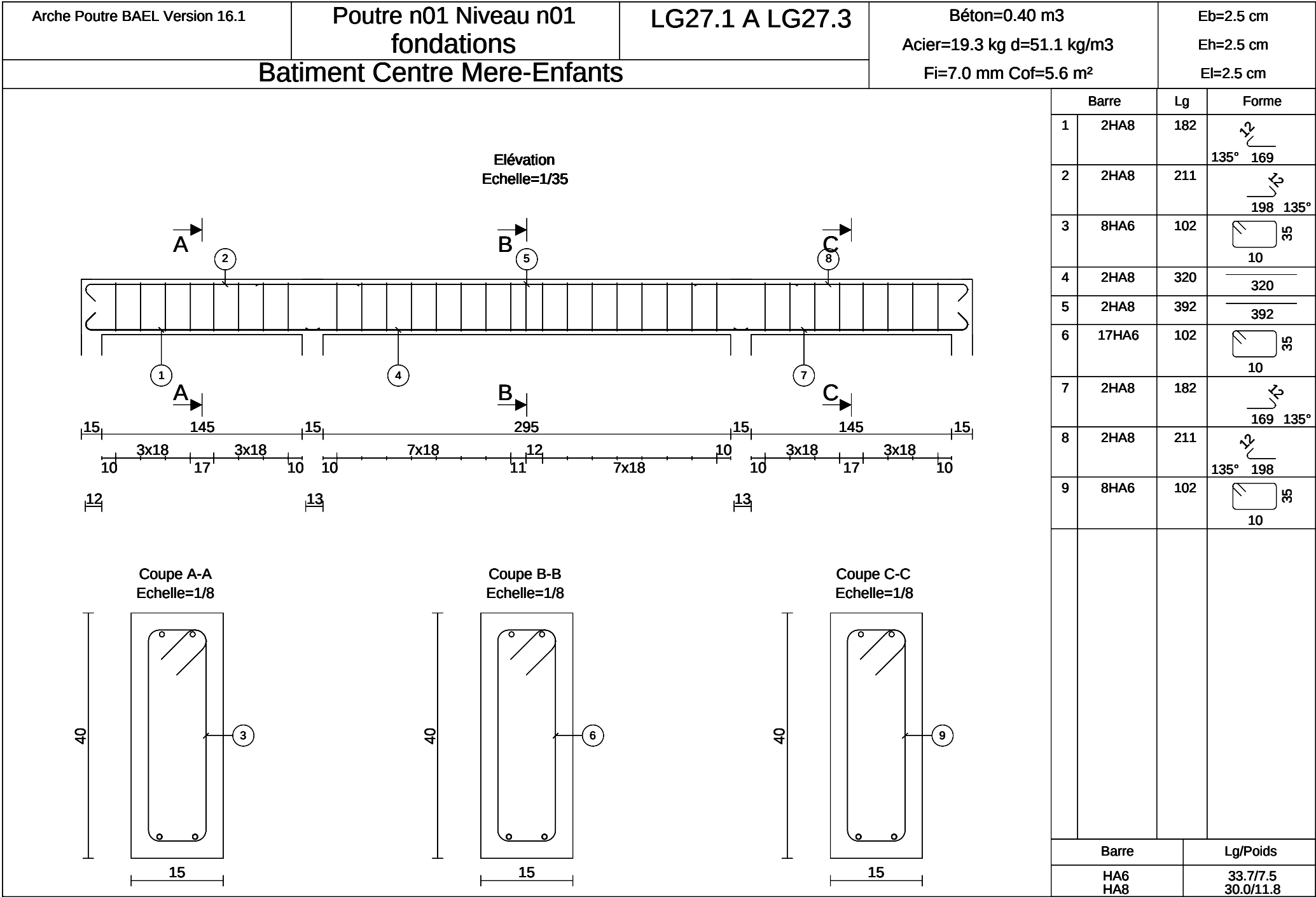
Coupe B-B
Echelle=1/80

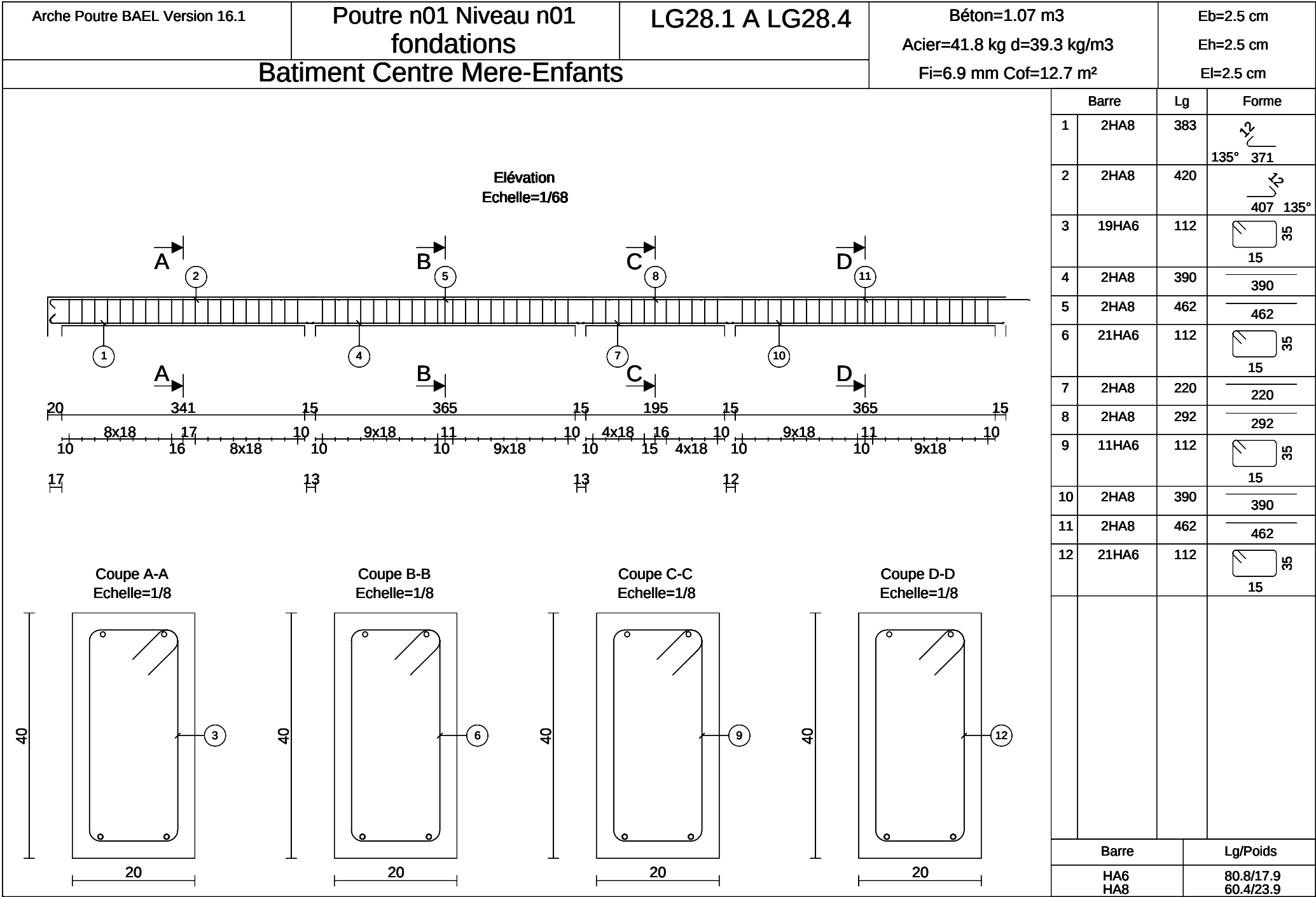


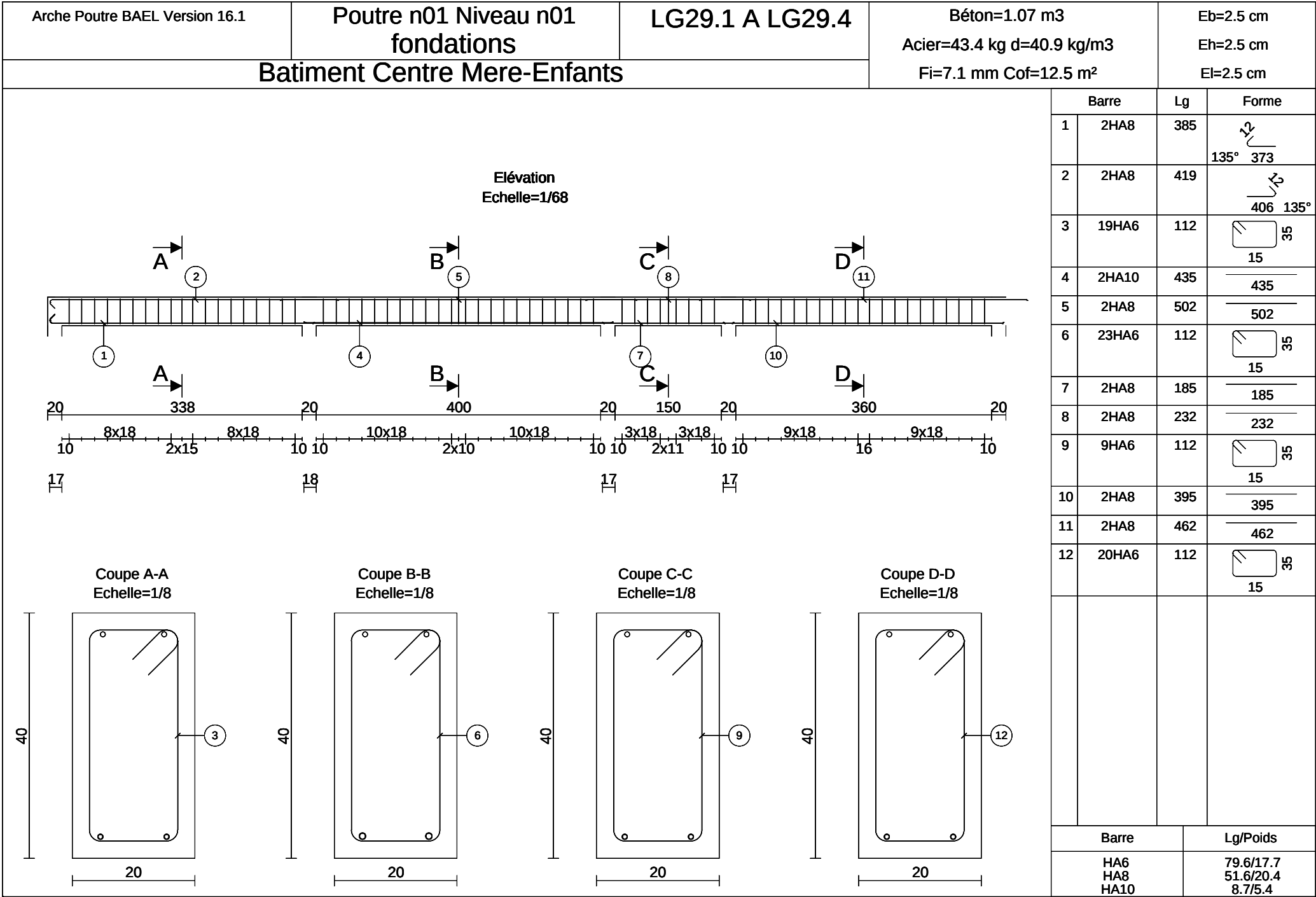
Coupe A-A
Echelle=1/80

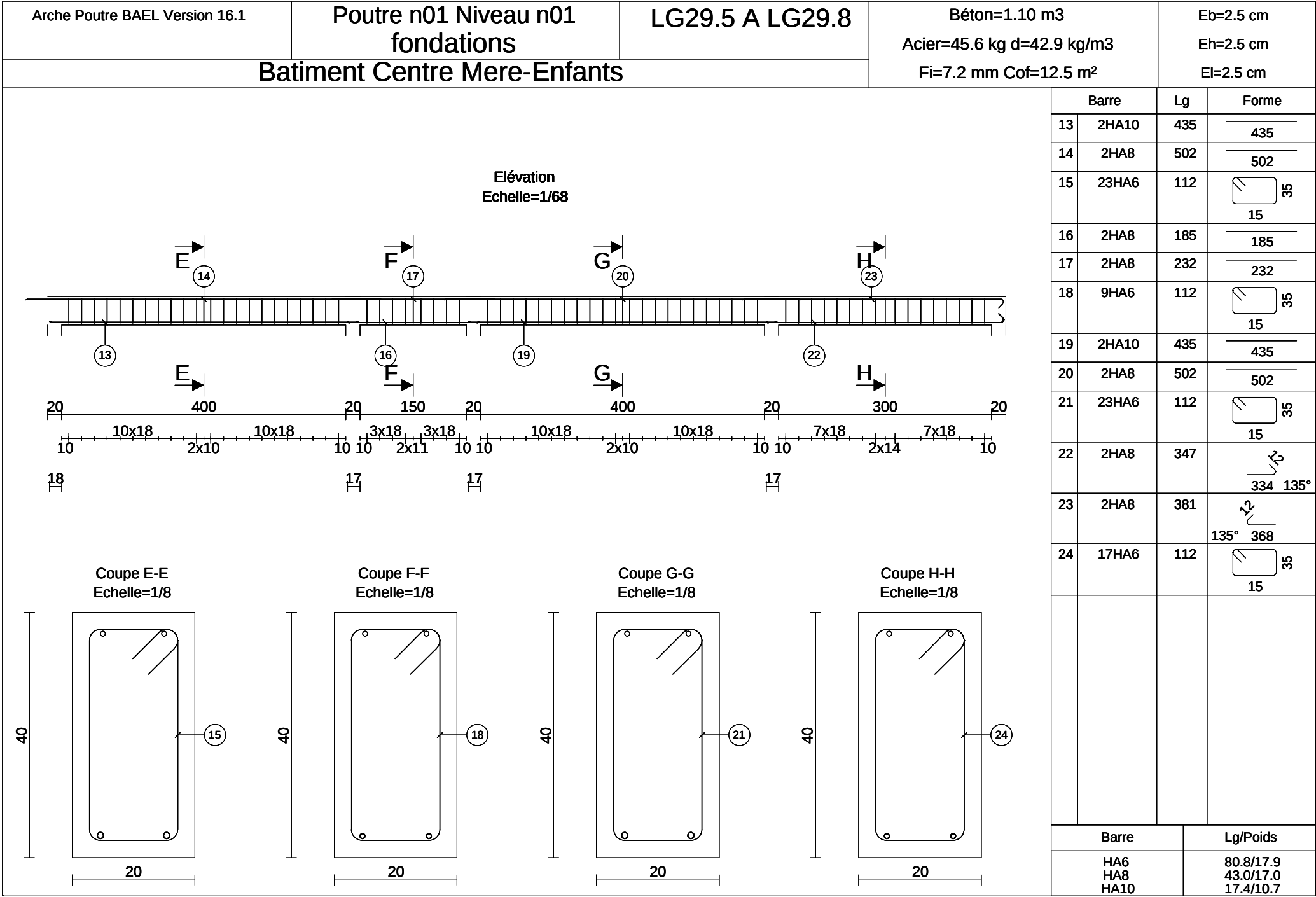


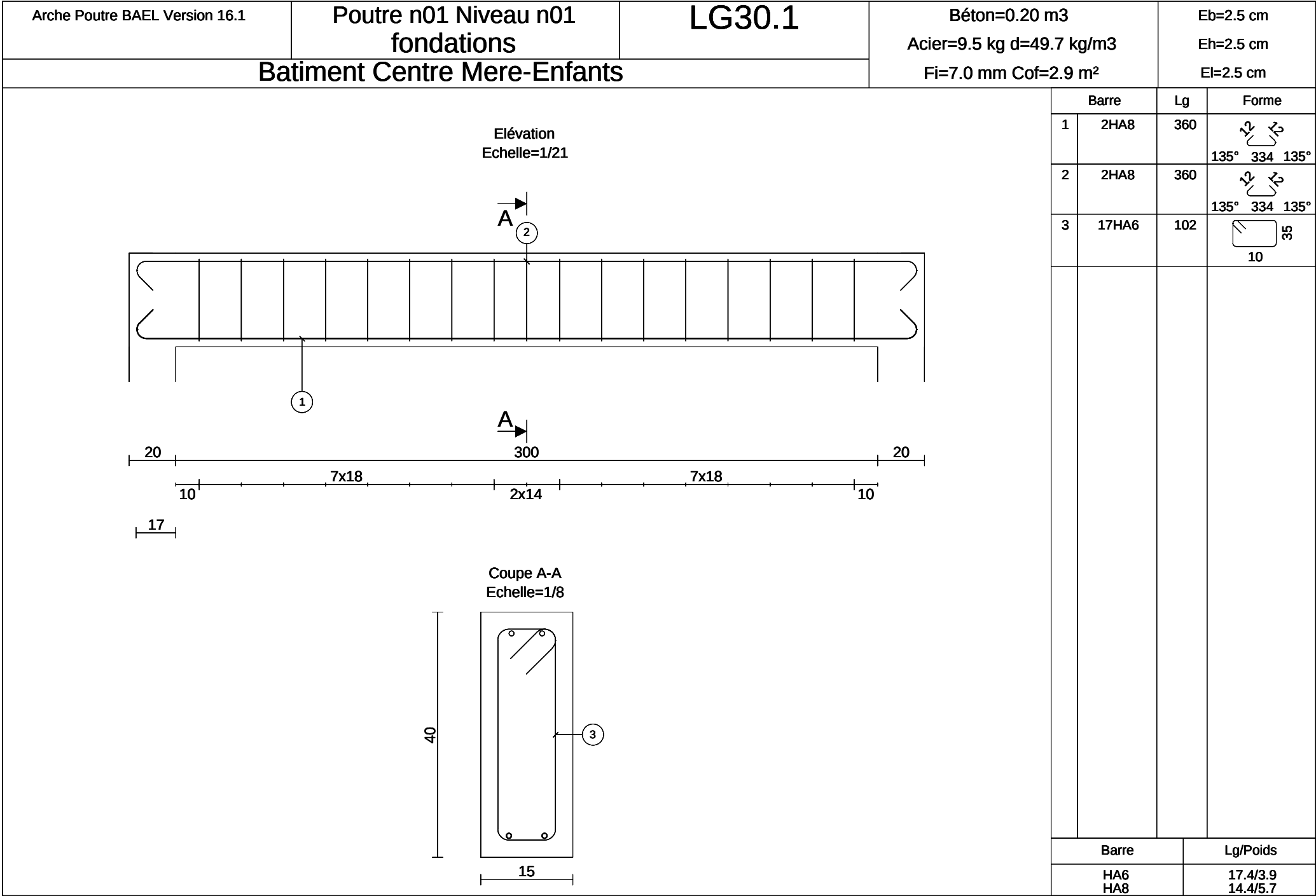
Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme
1	2HA8	115	6	18HA6	112	11	2HA8	417	16	18HA6	112	21	2HA8	304
2	2HA8	230	7	2HA8	350	12	18HA6	112	17	2HA8	210	22	13HA6	102
3	5HA6	112	8	2HA8	417	13	2HA8	352	18	2HA8	280			
4	2HA8	353	9	18HA6	112	14	2HA8	180	19	10HA6	102			
5	2HA8	528	10	2HA8	350	15	2HA8	419	20	2HA8	267			
Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids
HA6		109.9/24.4	HA8		95.5/37.7									

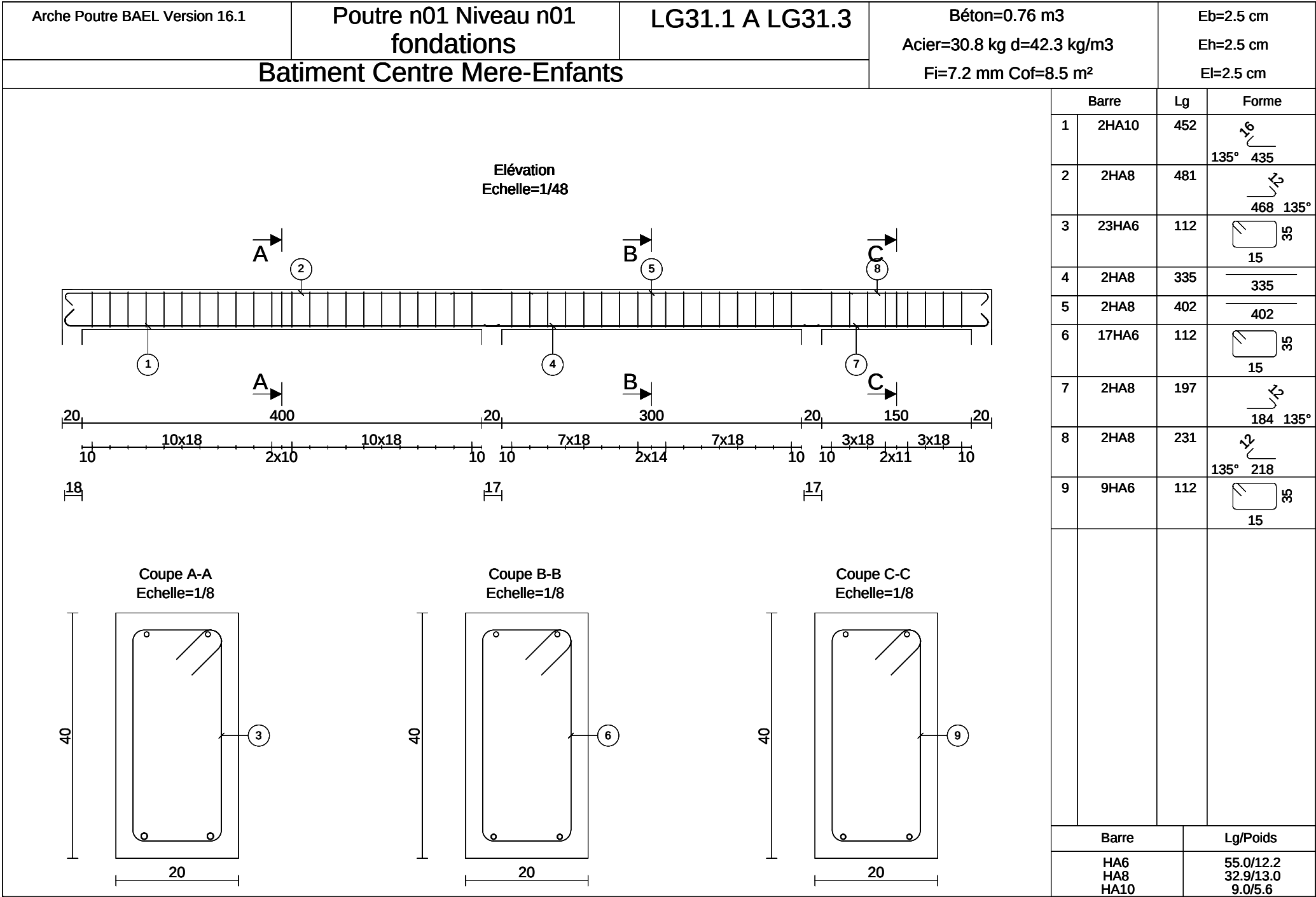


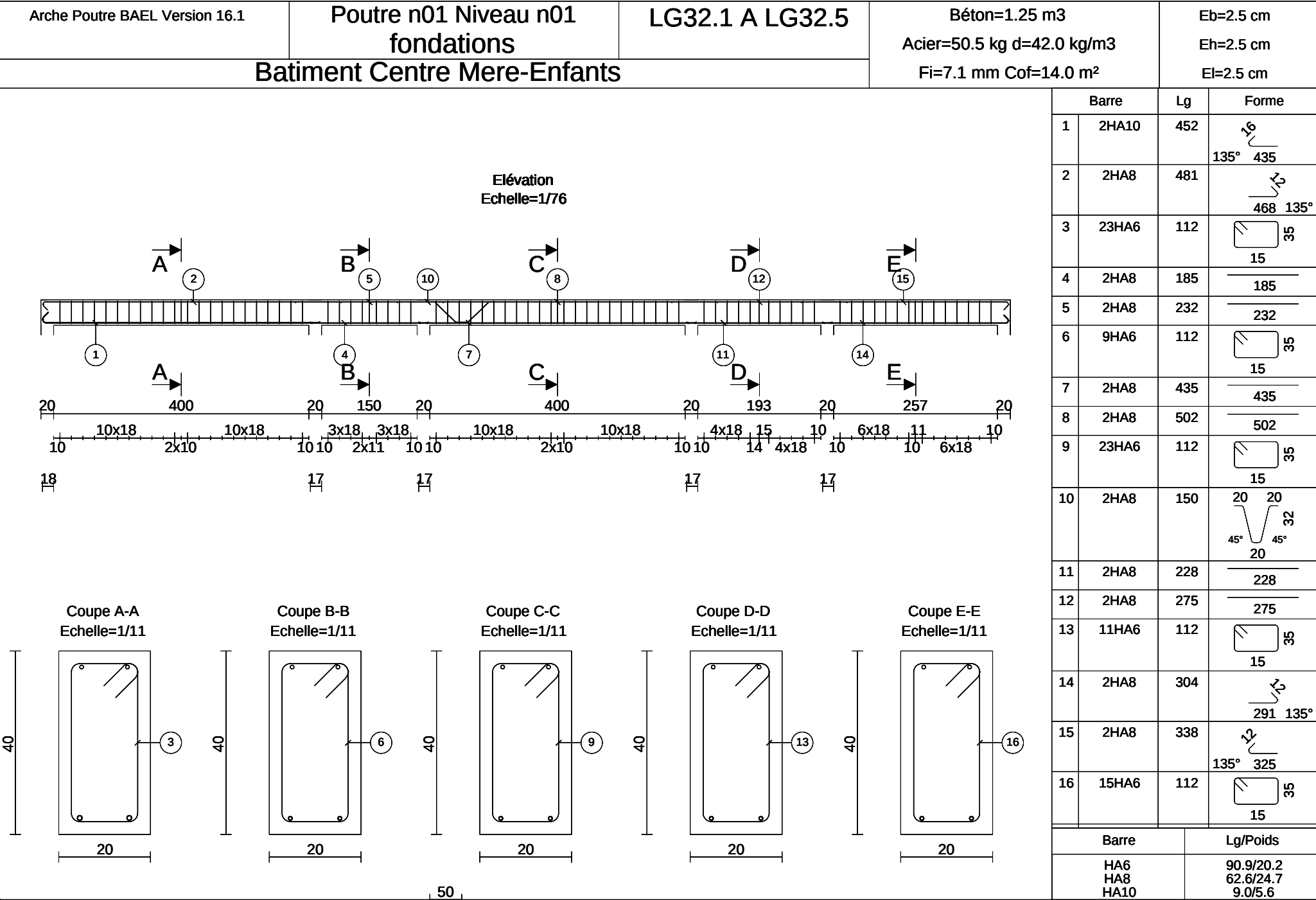


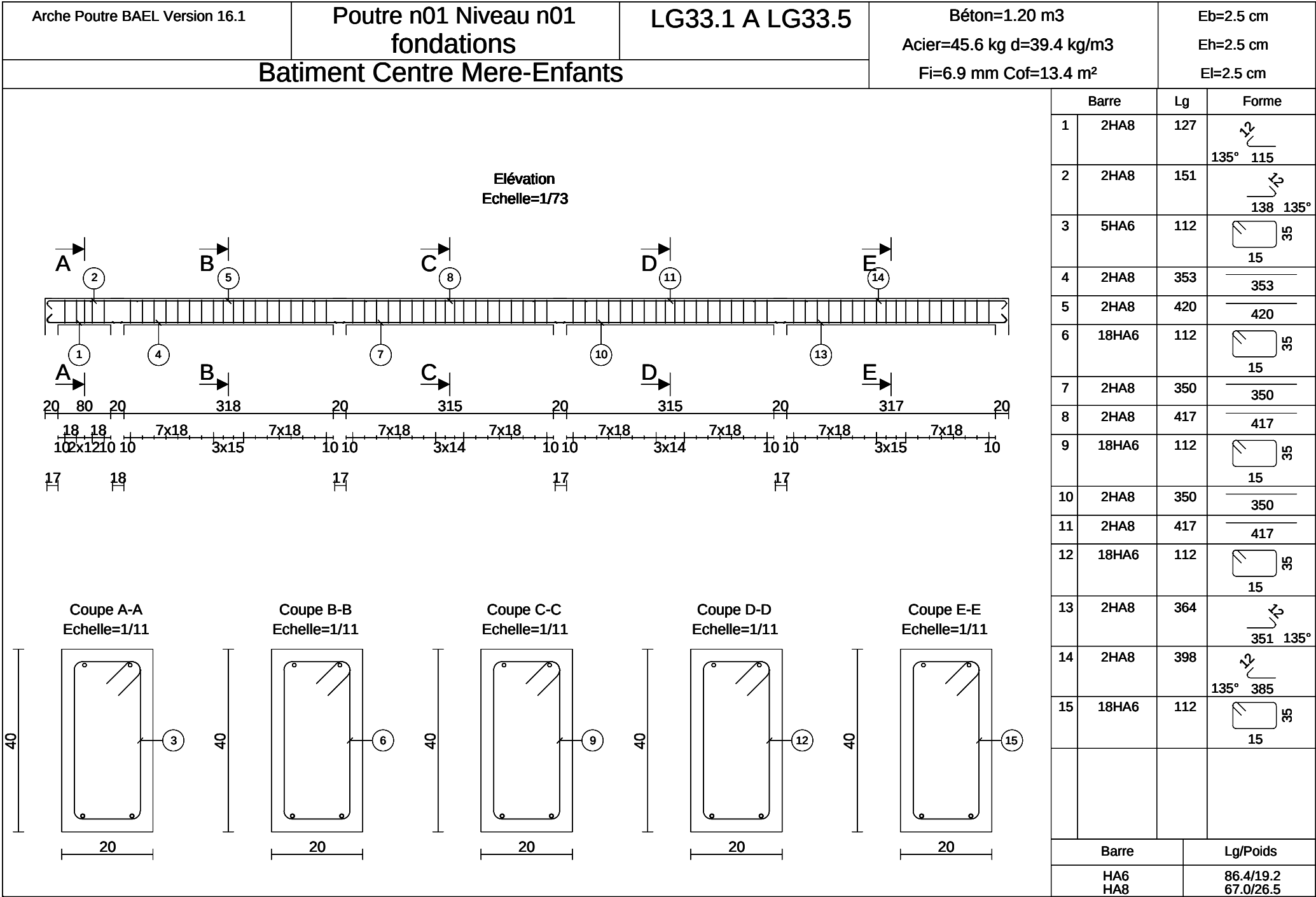


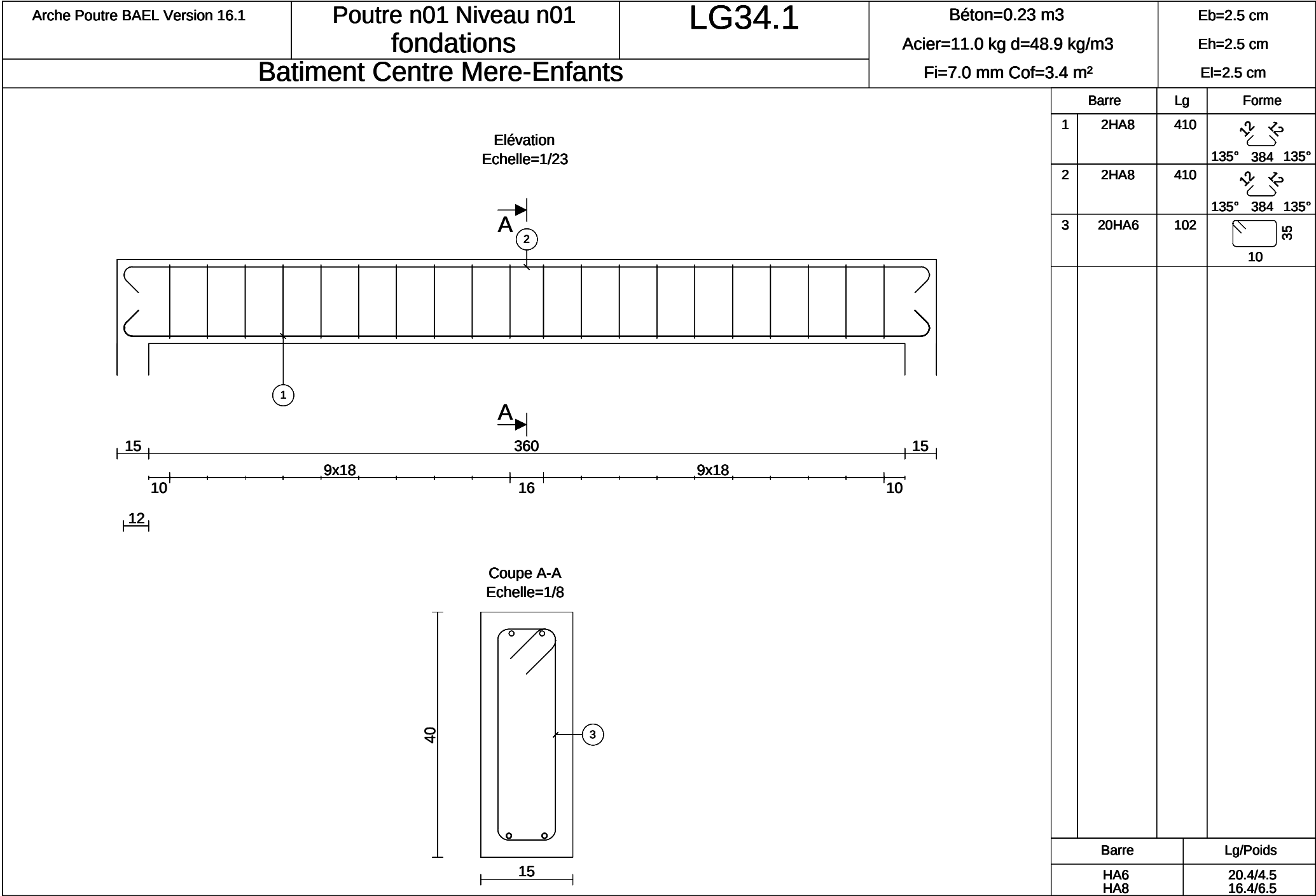


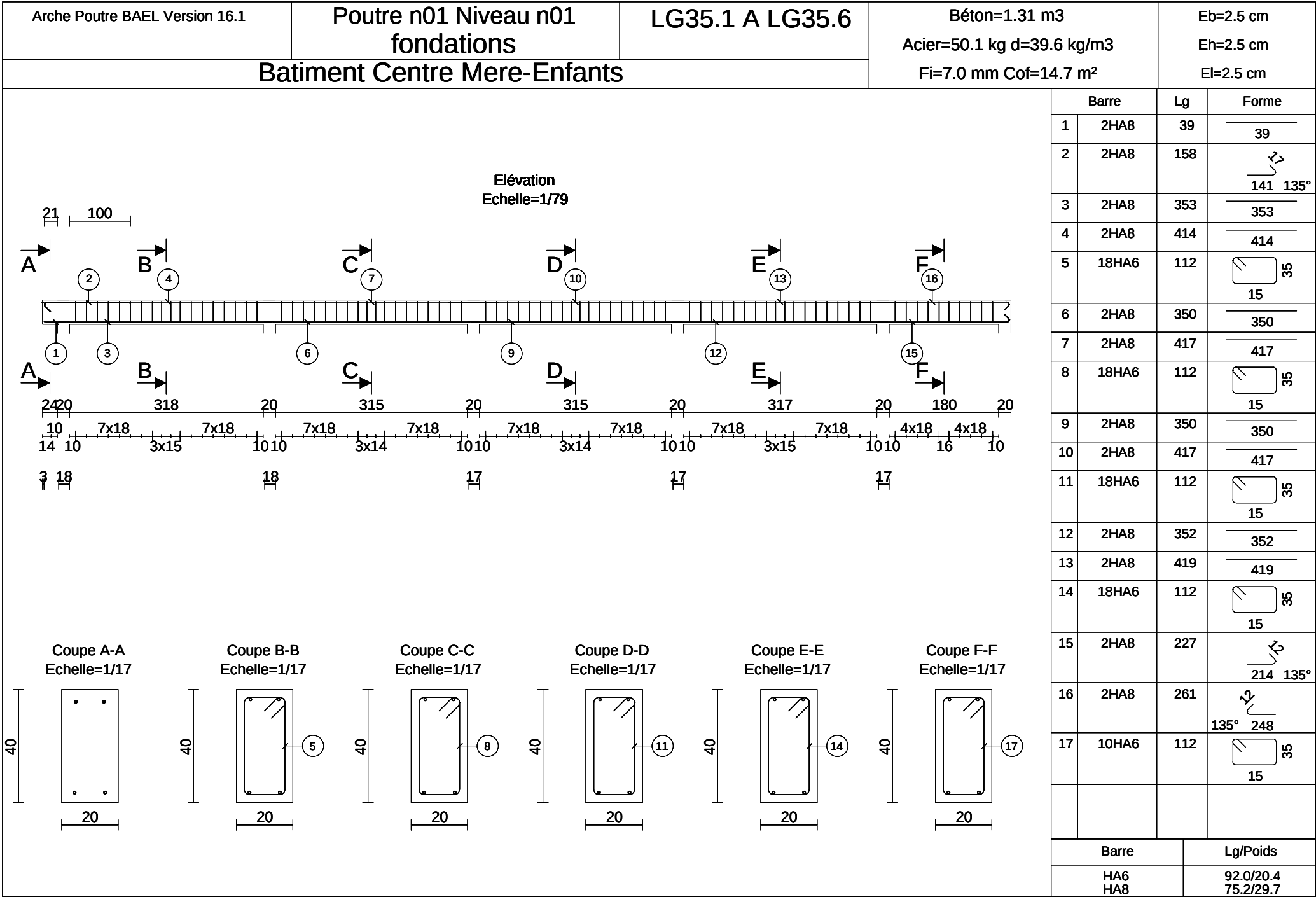


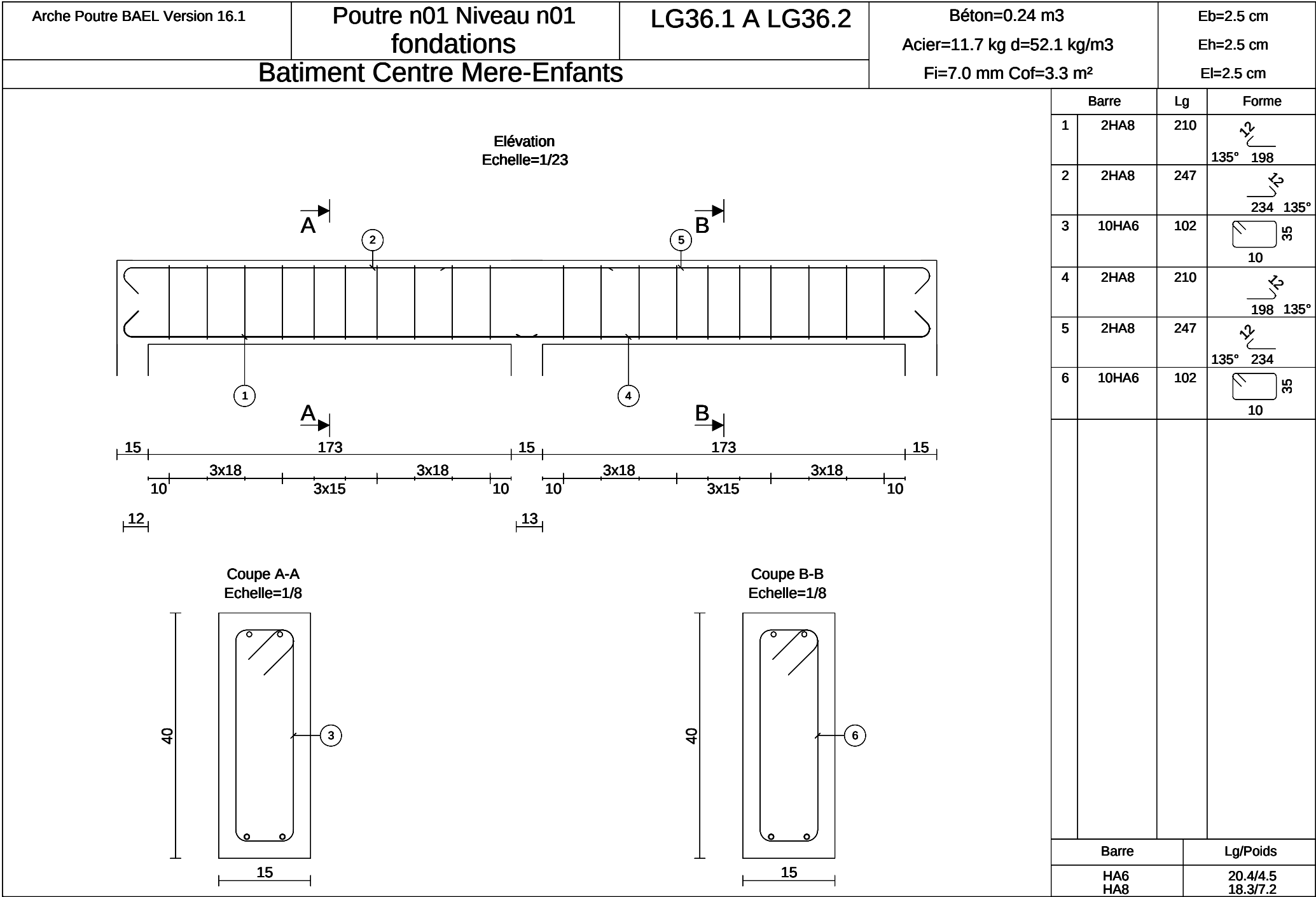


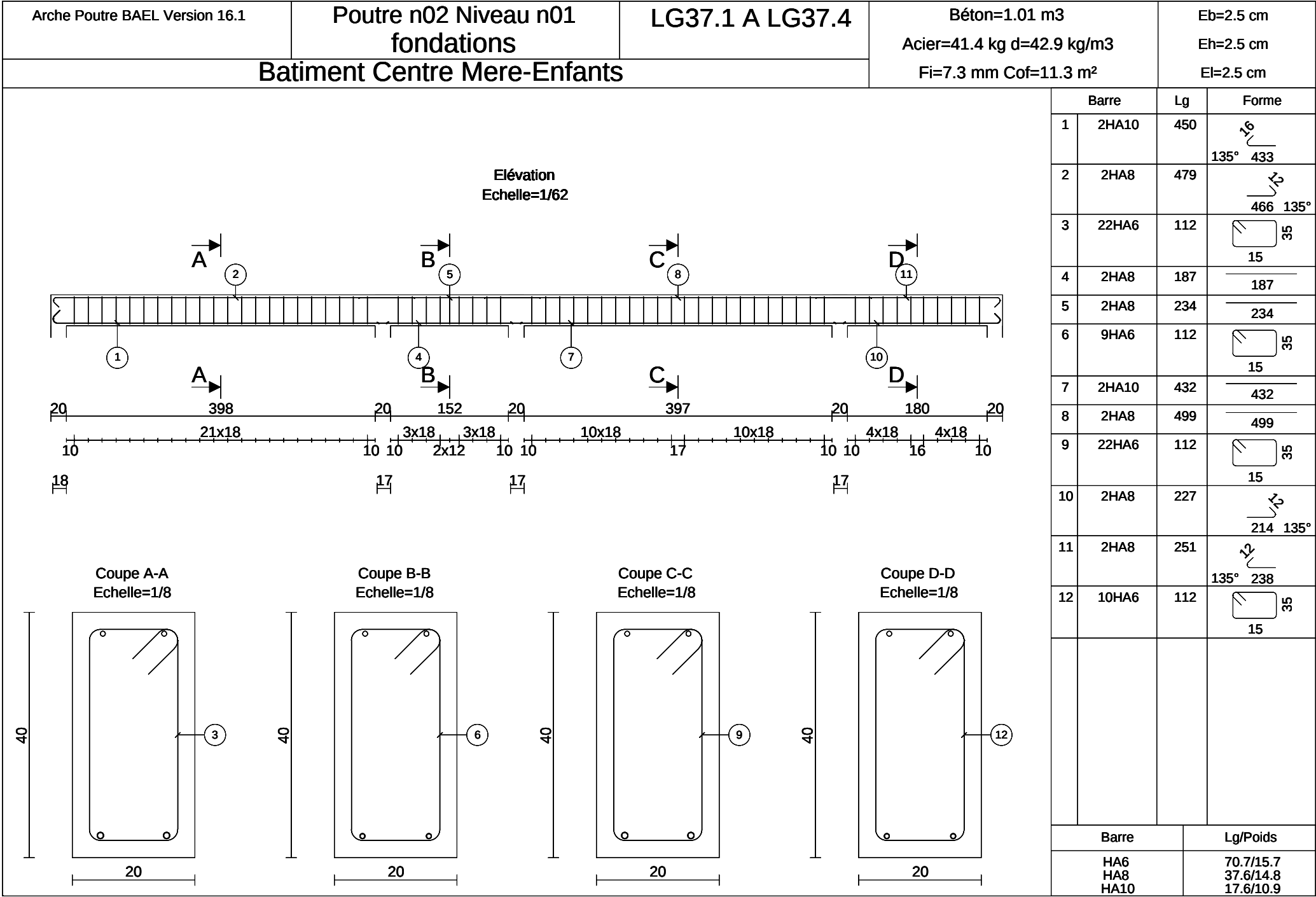


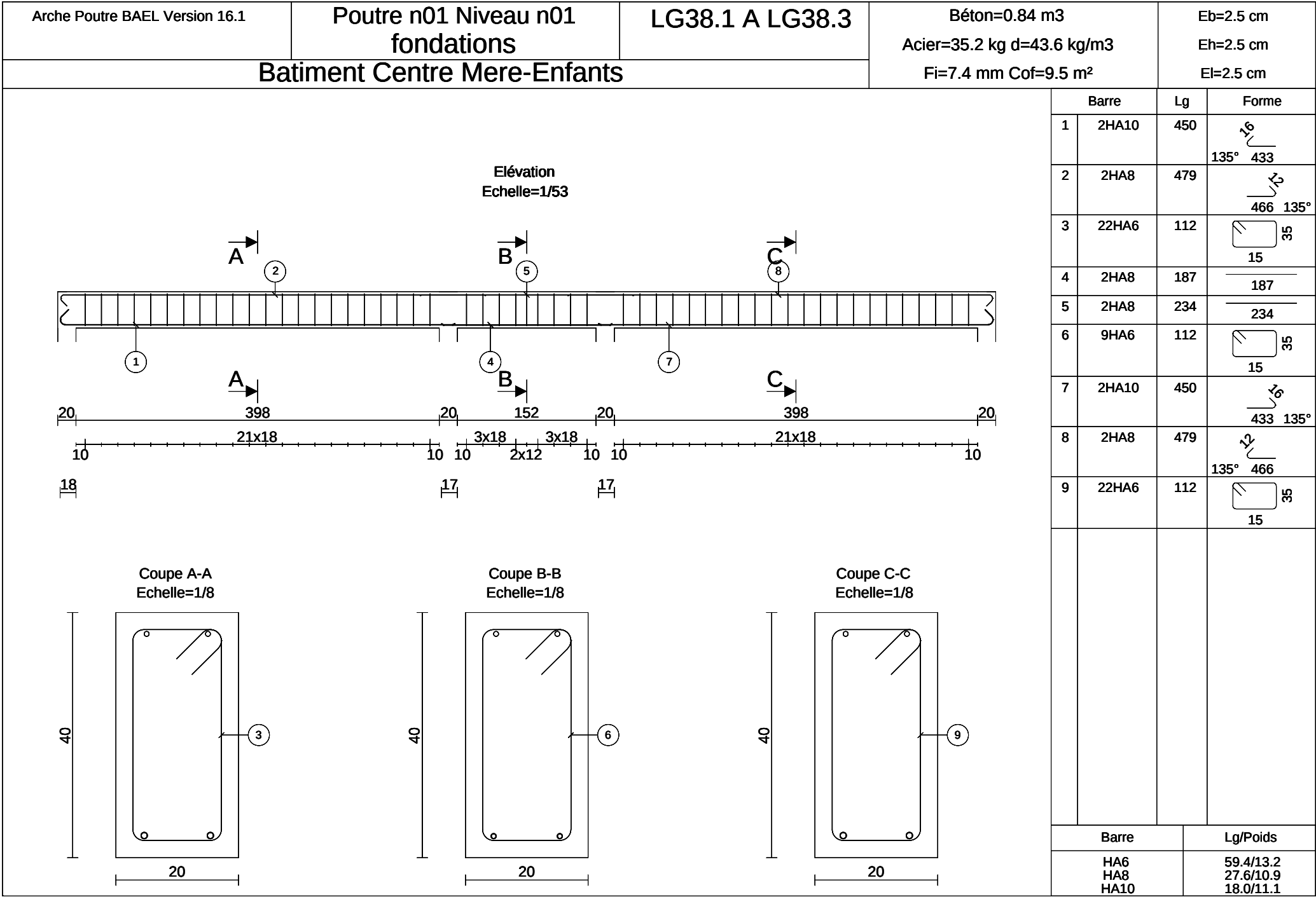


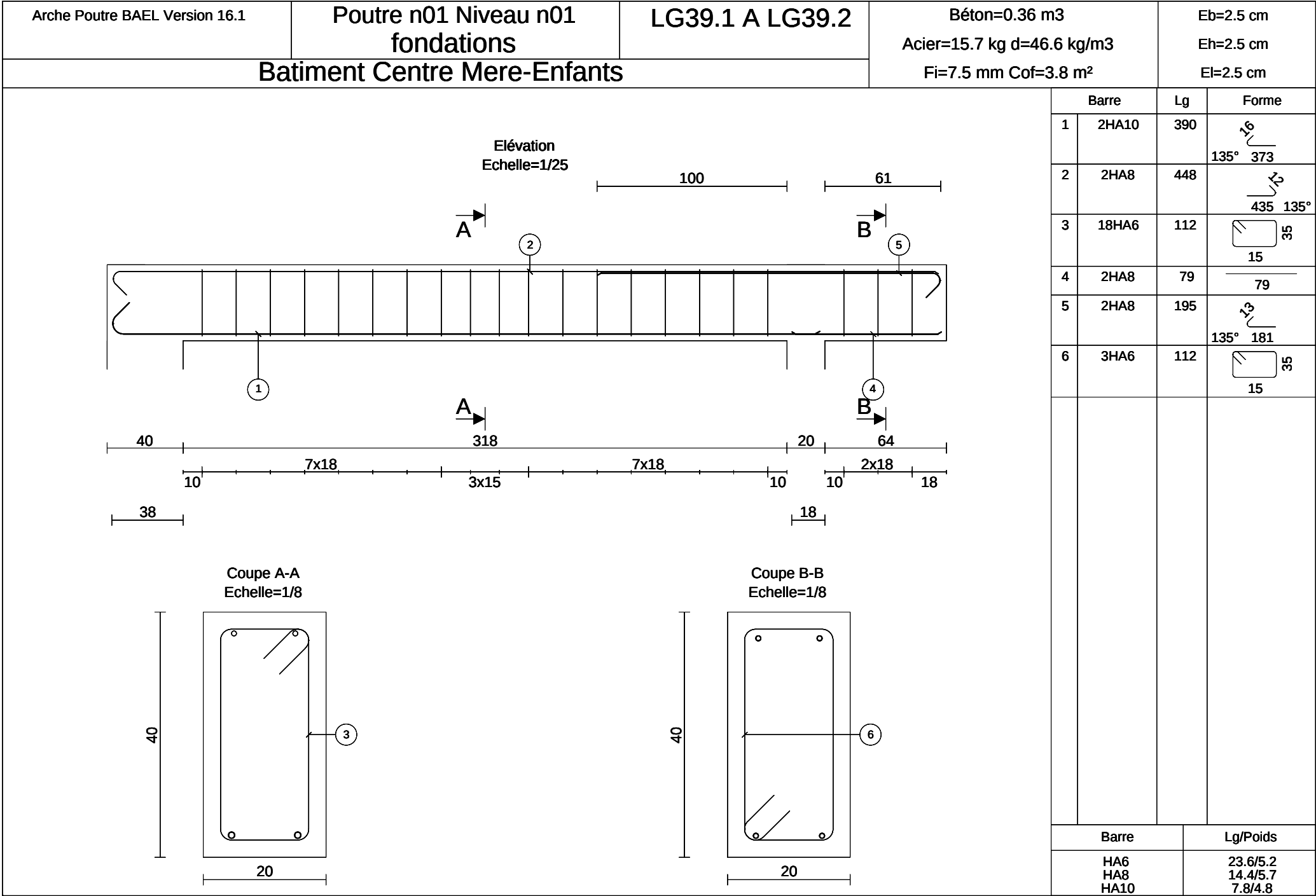










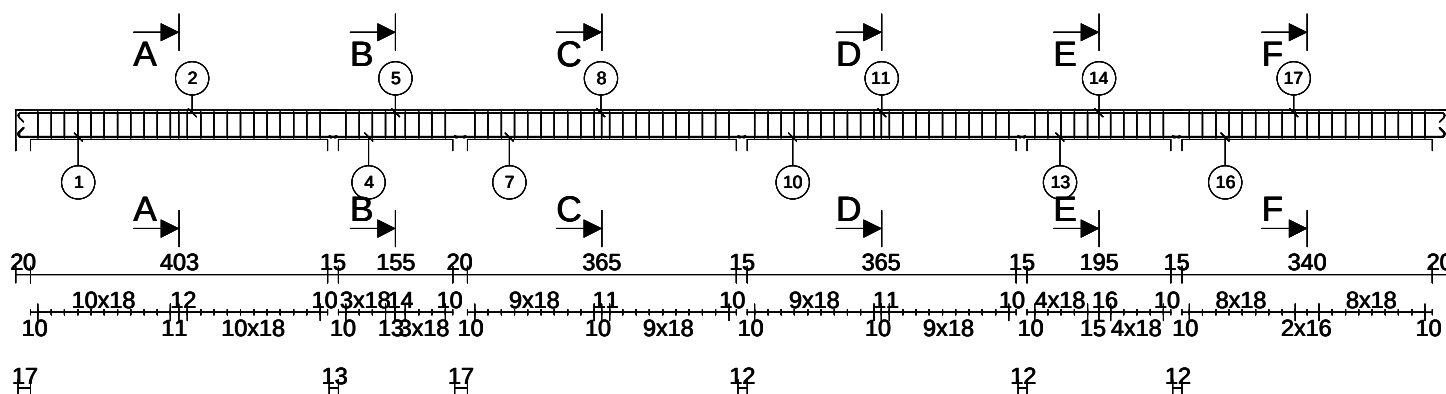


FERRAILLAGE DES POUTRES

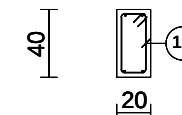
PH-RDC

Arche Poutre BAEL Version 16.1	Poutre n01 Niveau n01 PH-RDC	A1.1 A A1.6	Béton=1.59 m3 Acier=60.3 kg d=39.2 kg/m3 Fi=6.9 mm Cof=18.2 m²	Eb=2.5 cm Eh=2.5 cm El=2.5 cm
Batiment Centre Mere-Enfants				

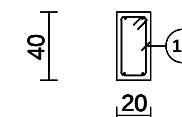
Elévation
Echelle=1/103



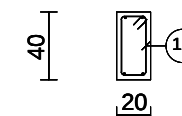
Coupe F-F
Echelle=1/44



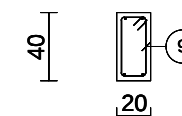
Coupe E-E
Echelle=1/44



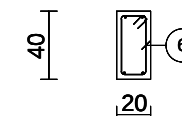
Coupe D-D
Echelle=1/44



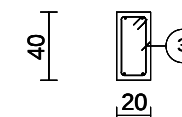
Coupe C-C
Echelle=1/44



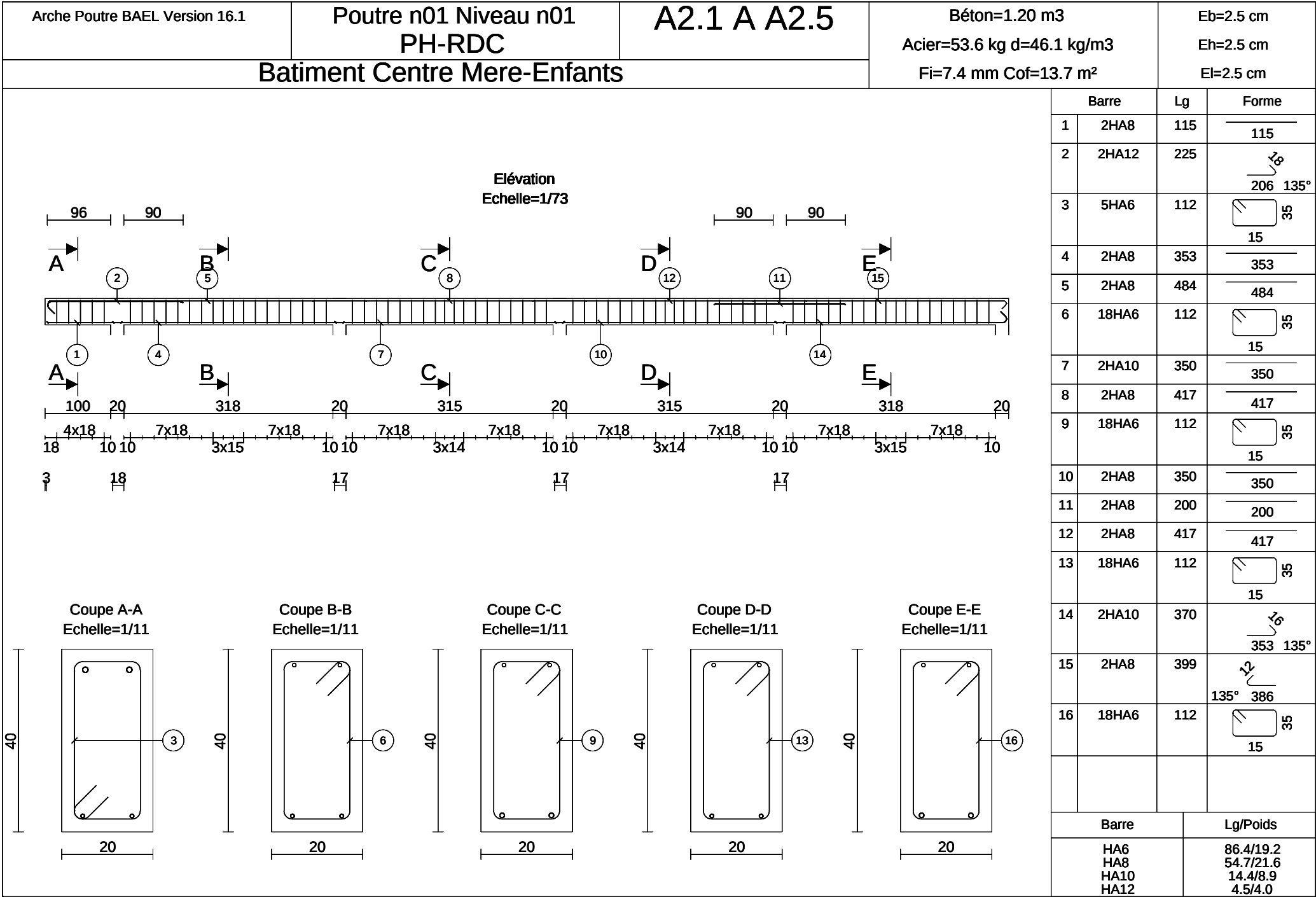
Coupe B-B
Echelle=1/44



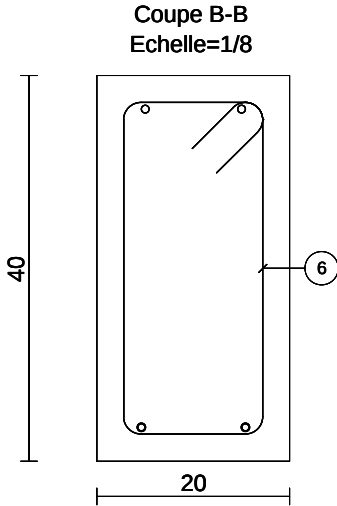
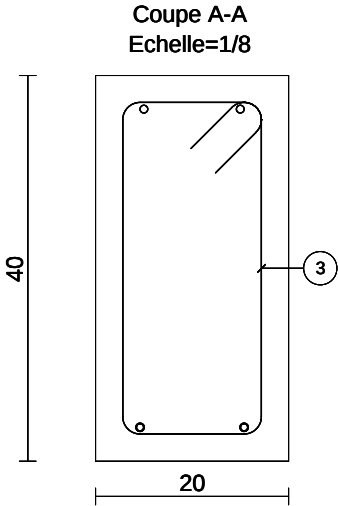
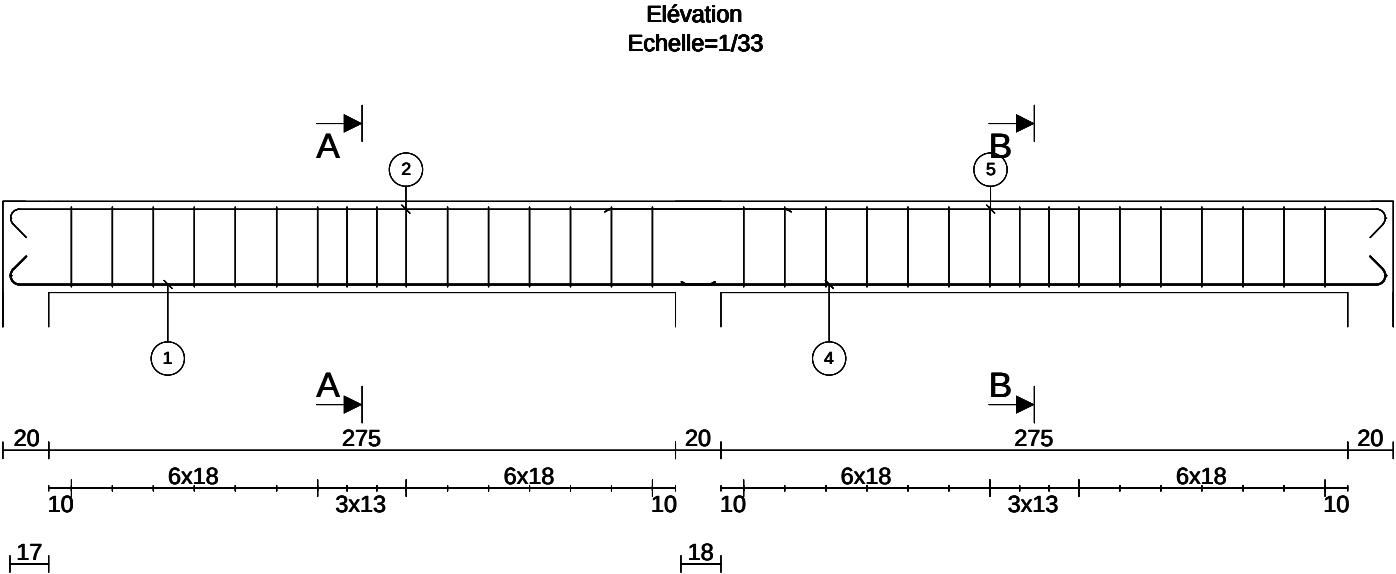
Coupe A-A
Echelle=1/44



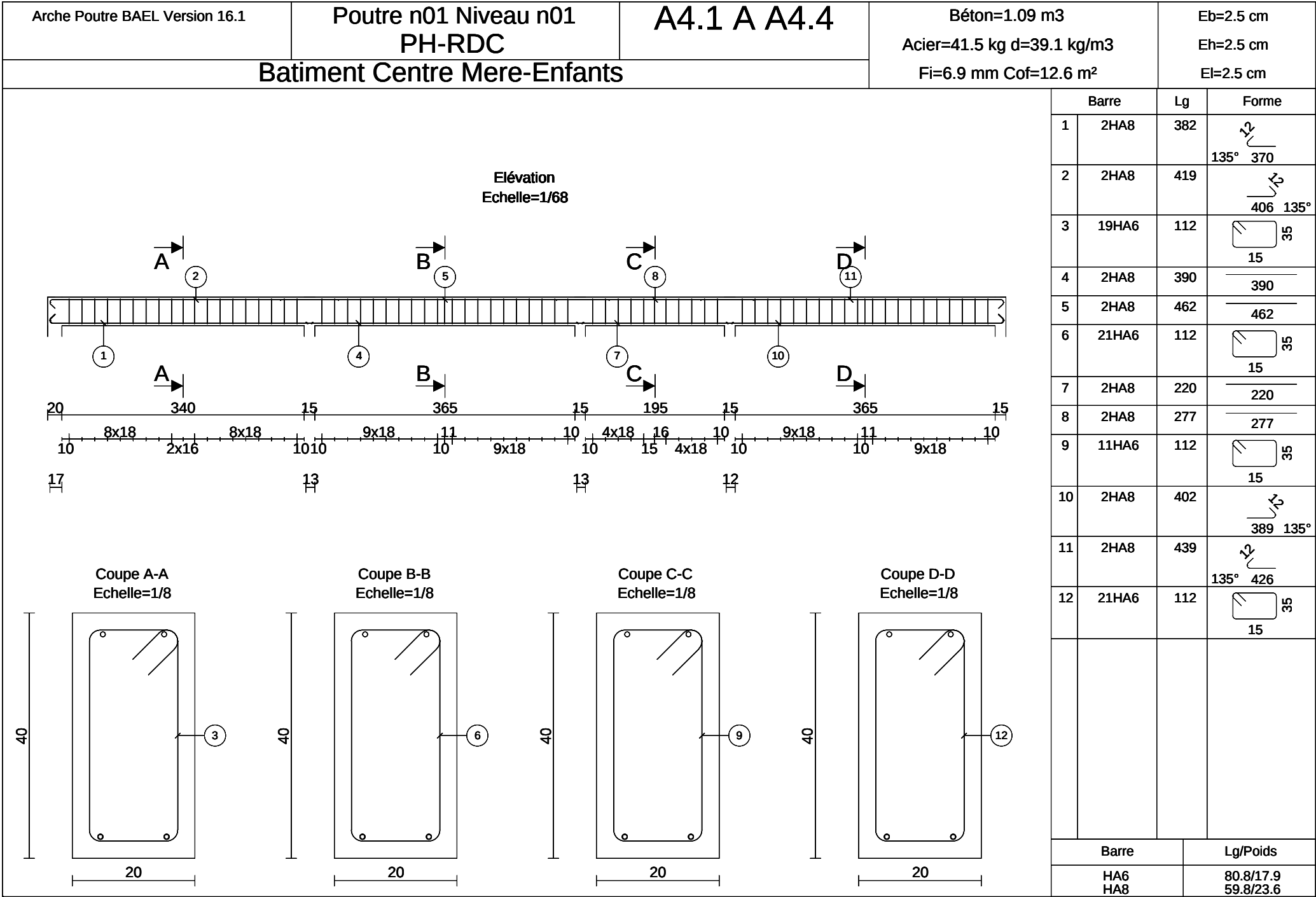
Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme	Barre	Lg	Forme
1	2HA8	445	5	2HA8	237	9	21HA6	112	13	2HA8	220	17	2HA8	419
		135° 432			237			15			220			135° 406
2	2HA8	482	6	9HA6	112	10	2HA8	390	14	2HA8	277	18	19HA6	112
		469 135°			15			390			277			15
3	23HA6	112	7	2HA8	395	11	2HA8	462	15	11HA6	112			
		15			395			462			15			
4	2HA8	185	8	2HA8	465	12	21HA6	112	16	2HA8	382			
		185			465			15			369 135°			
Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids	Barre		Lg/Poids
HA6		116.7/25.9	HA8		87.2/34.4									

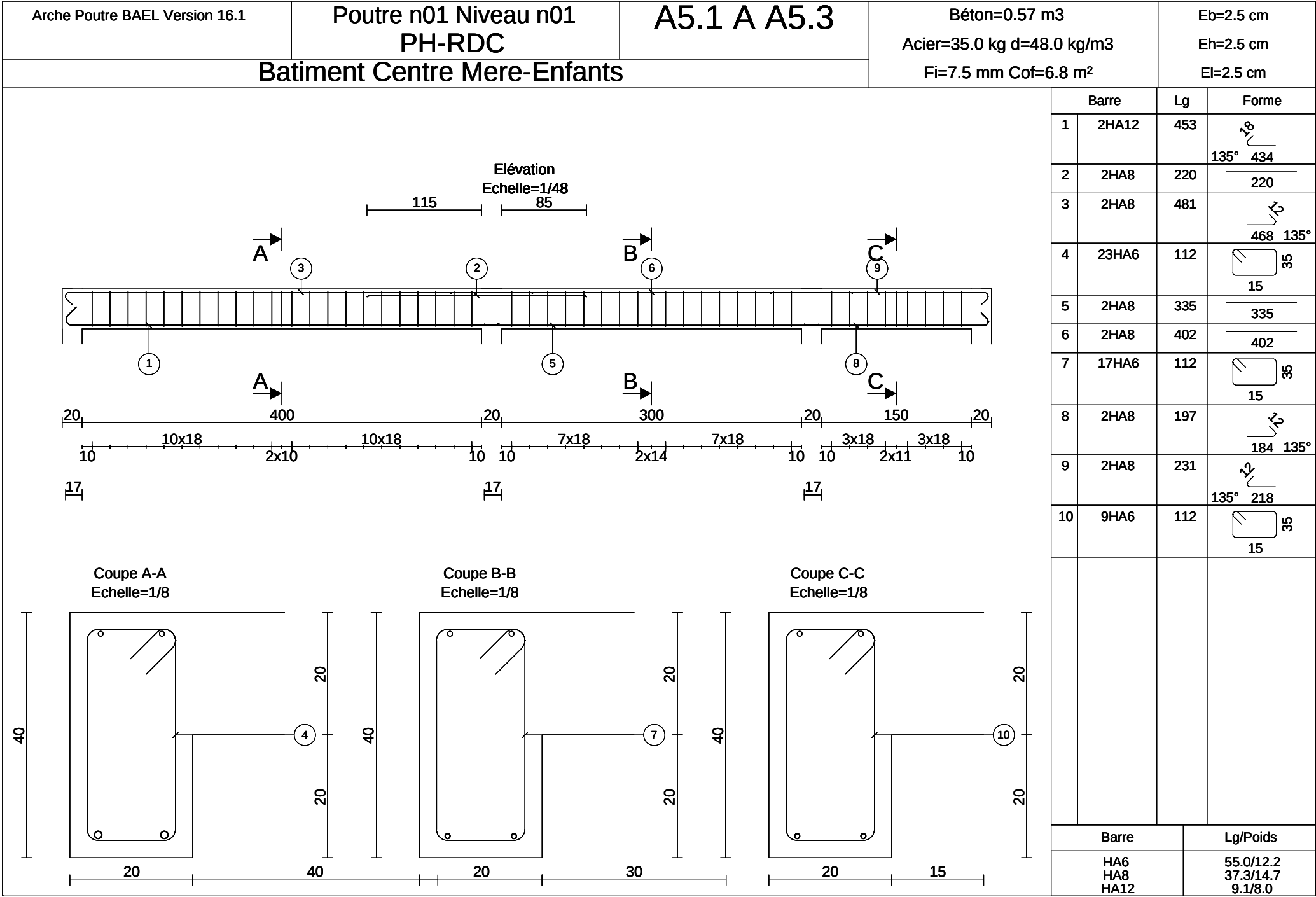


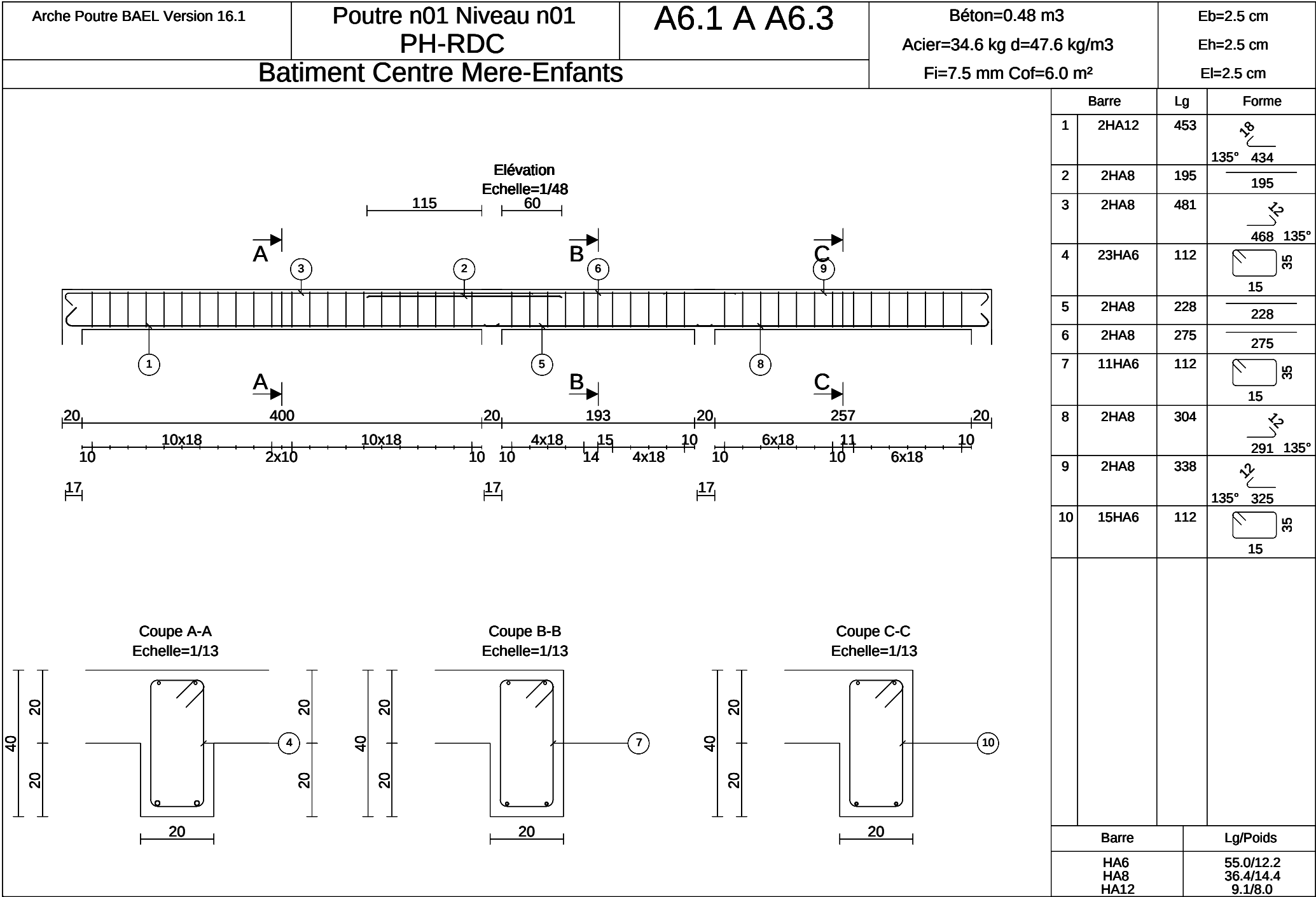
Arche Poutre BAEL Version 16.1	Poutre n02 Niveau n01 PH-RDC	A3.1 A A3.2	Béton=0.50 m3 Acier=18.7 kg d=39.6 kg/m3 Fi=6.9 mm Cof=5.5 m²	Eb=2.5 cm Eh=2.5 cm El=2.5 cm
Batiment Centre Mere-Enfants				



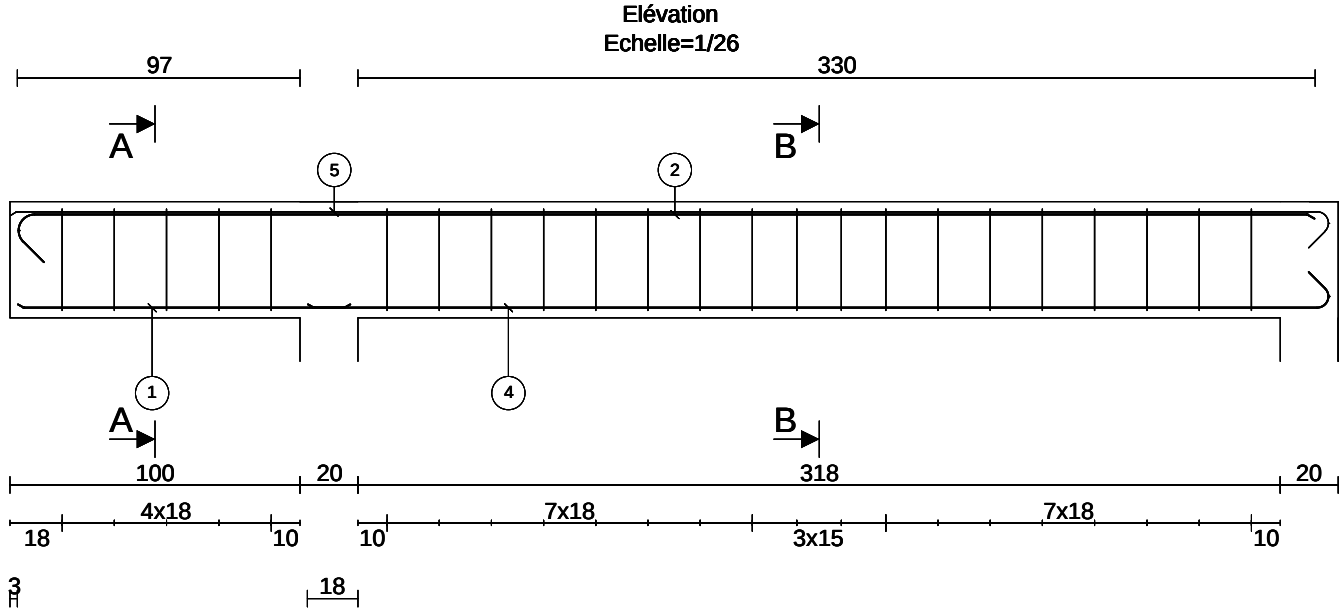
	Barre	Lg	Forme
1	2HA8	322	135° 310
2	2HA8	356	343 135°
3	16HA6	112	35 15
4	2HA8	322	310 135°
5	2HA8	356	135° 343
6	16HA6	112	35 15
Barre		Lg/Poids	
HA6		35.9/8.0	
HA8		27.1/10.7	







Arche Poutre BAEL Version 16.1	Poutre n03 Niveau n01 PH-RDC	A7.1 A A7.2	Béton=0.24 m3 Acier=18.9 kg d=52.8 kg/m3 Fi=7.5 mm Cof=2.9 m²	Eb=2.5 cm Eh=2.5 cm El=2.5 cm
Batiment Centre Mere-Enfants				



Barre		Lg	Forme
1	2HA8	115	115
2	2HA10	464	448 135°
3	5HA6	112	15 35
4	2HA8	365	353 135°
5	2HA8	468	455 135°
6	18HA6	112	15 35
Barre		Lg/Poids	
HA6		25.8/5.7	
HA8		19.0/7.5	
HA10		9.3/5.7	

