

REPUBLIQUE TUNISIENNE

MINISTERE DES AFFAIRES LOCALES
ET DE L'ENVIRONNEMENT

AGENCE DE PROTECTION ET D'AMENAGEMENT DU LITTORAL
A.P.A.L



TRAVAUX D'INTERVENTION EN TECHNIQUES SOUPLES POUR
LA PROTECTION D'UN TRONÇON DE LITTORAL A GHAR EL MELH

DOSSIER D'APPEL DOFFRES

A	Avril-2019	Edition originale	NF/MKH	SGH/SH	H.N.
Indice	Dates	Modifications	Etabli par	Vérifié par	Approuvé par

DOSSIER DES PLANS



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A.P.S

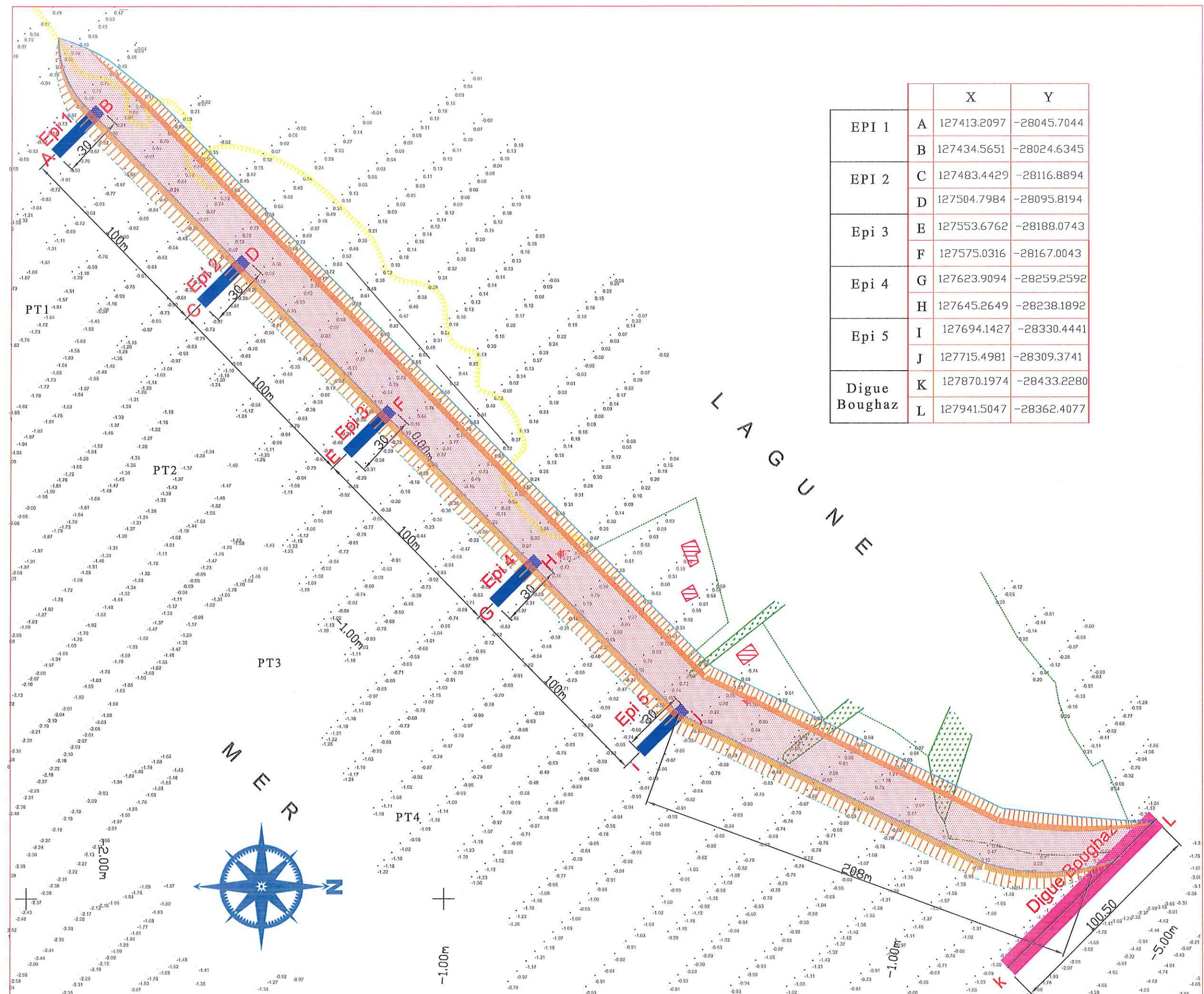
A.P.D

D.A.O

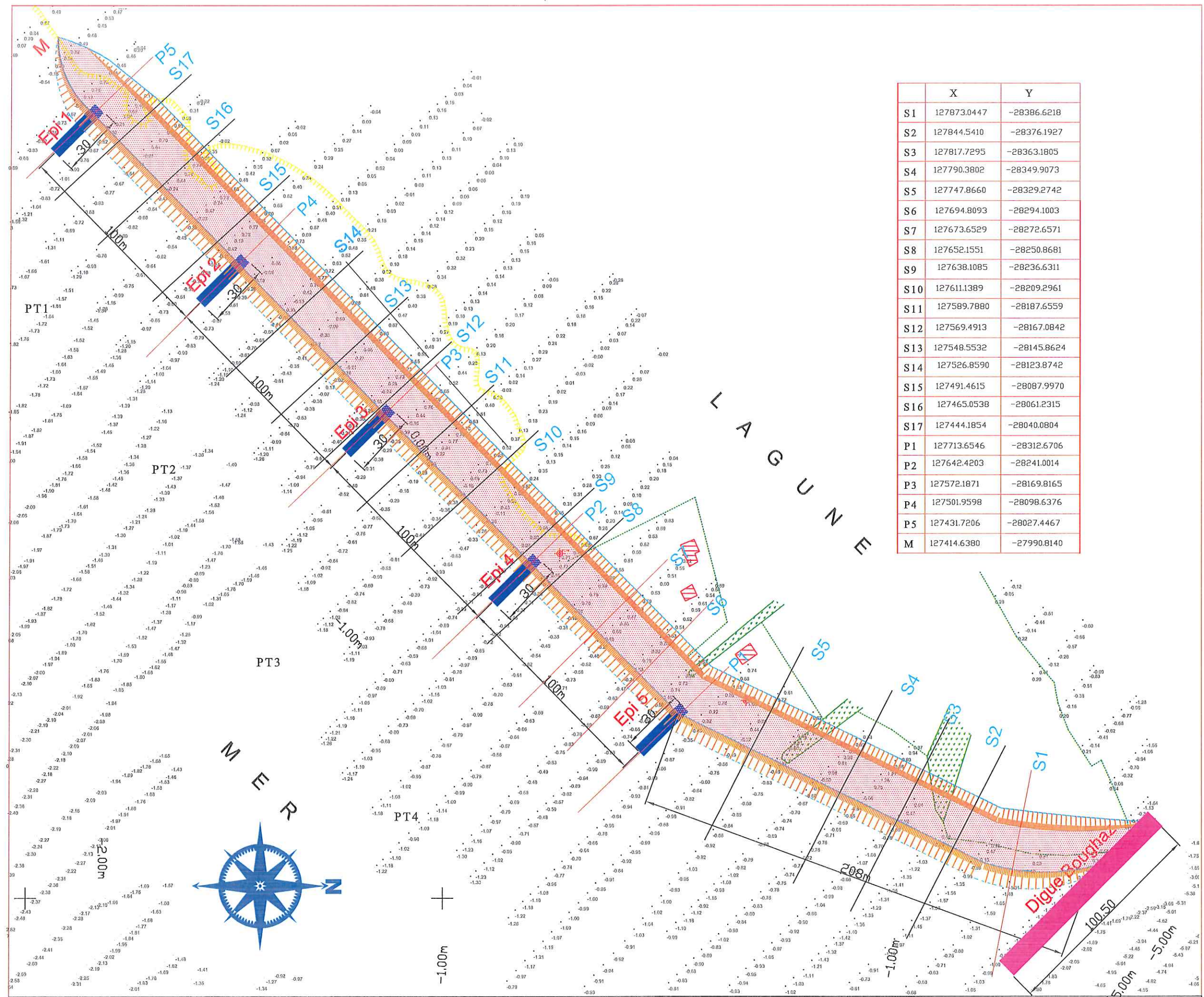
D.E

PLAN N°

Echelle :



		X	Y
EPI 1	A	127413.2097	-28045.7044
	B	127434.5651	-28024.6345
EPI 2	C	127483.4429	-28116.8894
	D	127504.7984	-28095.8194
Epi 3	E	127553.6762	-28188.0743
	F	127575.0316	-28167.0043
Epi 4	G	127623.9094	-28259.2592
	H	127645.2649	-28238.1892
Epi 5	I	127694.1427	-28330.4441
	J	127715.4981	-28309.3741
Digue Boughaz	K	127870.1974	-28433.2280
	L	127941.5047	-28362.4077



	X	Y
S1	127873.0447	-28386.6218
S2	127844.5410	-28376.1927
S3	127817.7295	-28363.1805
S4	127790.3802	-28349.9073
S5	127747.8660	-28329.2742
S6	127694.8093	-28294.1003
S7	127673.6529	-28272.6571
S8	127652.1551	-28250.8681
S9	127638.1085	-28236.6311
S10	127611.1389	-28209.2961
S11	127589.7880	-28187.6559
S12	127569.4913	-28167.0842
S13	127548.5532	-28145.8624
S14	127526.8590	-28123.8742
S15	127491.4615	-28087.9970
S16	127465.0538	-28061.2315
S17	127444.1854	-28040.0804
P1	127713.6546	-28312.6706
P2	127642.4203	-28241.0014
P3	127572.1871	-28169.8165
P4	127501.9598	-28098.6376
P5	127431.7206	-28027.4467
M	127414.6380	-27990.8140

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APAL



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DOSSIER D'APPEL D'OFFRES

PLAN D'IMPLANTATION
DES PROFILS EN TRAVERS



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DATE: Avril 2019

Plan N° 2

Echelle: 1/1750

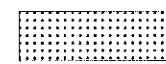
Version Provisoire

RECHARGEMENT : PROFILS EN TRAVERS, VUE EN PLAN ET ELEVATION

Profil n°: S1

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 46.82 m²

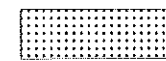
PC : -10.00 m

Cotes TN	-1.06	-1.13	-1.19	-1.30	-1.41	-1.45	-1.39	-1.31	-1.11	-0.21	0.43	0.59	0.48	0.39
Distances Cumulées	-39.11	-36.69	-31.79	-28.25	-24.65	-22.71	-17.96	-12.20	-9.25	-0.83	3.76	6.27		43.32
Cotes Projet							-1.41			1.60			2.00	0.48
Distances Cumulées							-15.05			0.00			20.00	27.61

Profil n°: S2

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 38.85 m²

PC : -15.00 m

Cotes TN	-1.18	-1.26	-1.45	-1.53	-1.56	-1.53	-1.29	-1.04	-0.66	-0.42	-0.01	0.23	0.56	0.83	0.75	0.67
Distances Cumulées	-39.71	-37.01	-31.93	-26.53	-23.49	-20.76	-14.85	-11.70	-7.26	-3.65	-0.70	1.80	4.86	14.26		37.63
Cotes Projet							-1.24				1.60			2.00	0.75	
Distances Cumulées							-14.18				0.00			20.00	26.25	

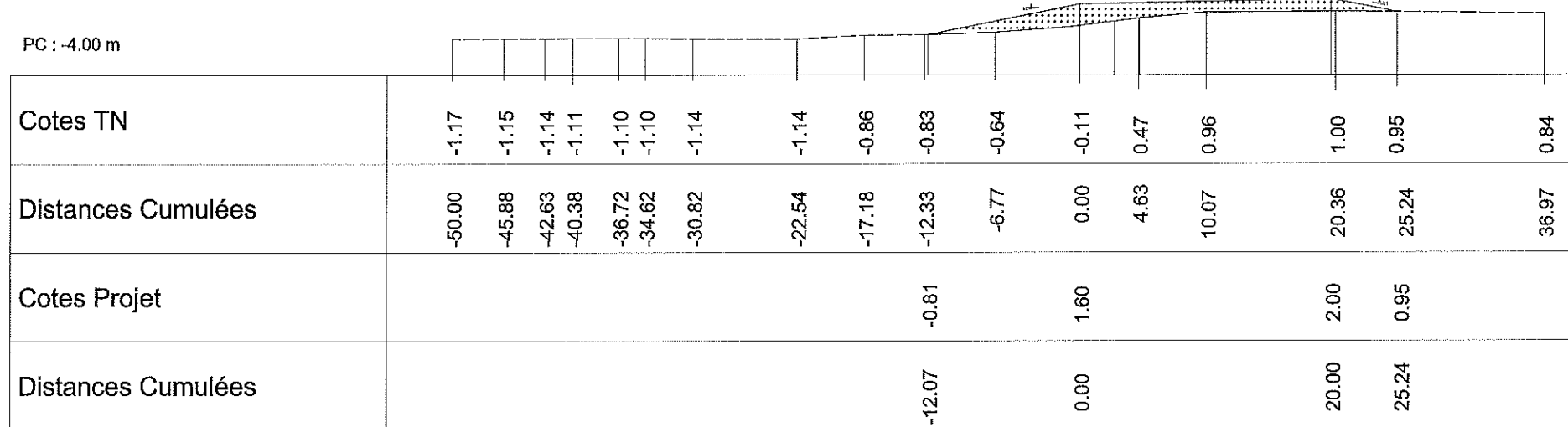
Profil n°: S3

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 34.95 m²

PC : -4.00 m



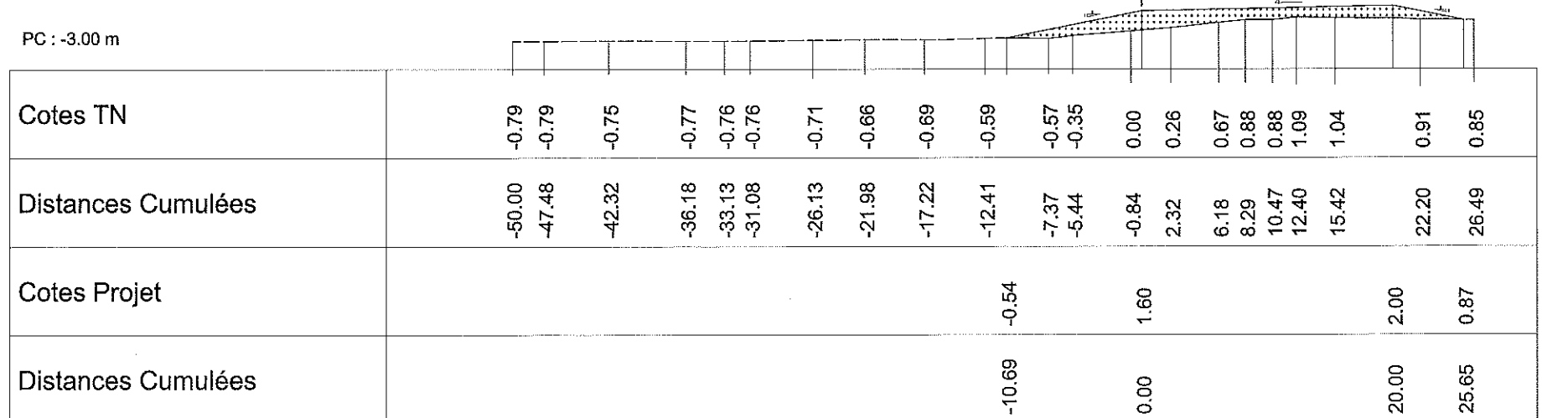
Profil n°: S4

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 32.62 m²

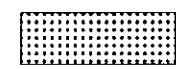
PC : -3.00 m



Profil n°: S5

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 40.68 m²

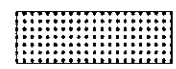
PC : -3.00 m

Cotes TN	-0.93	-0.90	-0.84	-0.83	-0.71	-0.72	-0.69	-0.68	-0.77	-0.65	-0.63	-0.59	-0.54	-0.51	-0.46	-0.39	-0.34	0.12	0.59	0.89	0.74	0.60	0.62	0.67	0.65
Distances Cumulées	-50.00	-45.91	-42.05	-39.78	-36.27	-33.84	-30.25	-27.58	-23.71	-20.13	-17.49	-13.67	-11.19	-7.55	-5.02	-2.32	-0.40	3.57	7.59	10.80	16.45	20.91	24.27	26.75	31.64
Cotes Projet													-0.54			1.60					2.00		0.67		
Distances Cumulées													-10.70			0.00					20.00		26.67		

Profil n°: S6

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

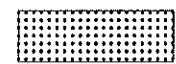
 Remblai (m²) : 39.03 m²

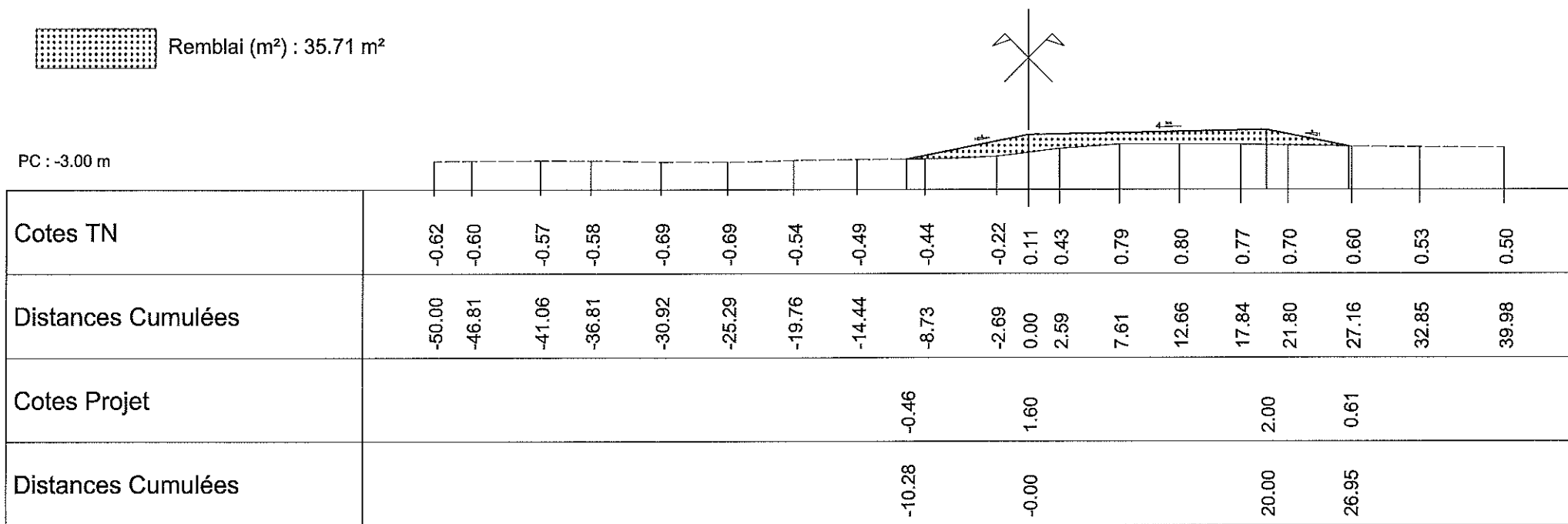
PC : -3.00 m

Cotes TN	-0.73	-0.80	-0.78	-0.68	-0.68	-0.61	-0.63	-0.48	-0.26	0.39	0.62	0.77	0.77	0.78	0.75	0.70	0.69	0.63	0.60	0.55	0.59
Distances Cumulées	-50.00	-43.24	-37.29	-30.55	-24.71	-18.79	-13.09	-7.25	-1.39	4.73	8.24	12.17	14.13	17.76	19.89	22.97	25.20	27.80	30.06	34.79	38.62
Cotes Projet									-0.57		1.60				2.00		0.65				
Distances Cumulées									-10.84		0.00				20.00		26.73				

Profil n°: S7

Echelle des longueurs : 1/500
 Echelle des altitudes : 1/500

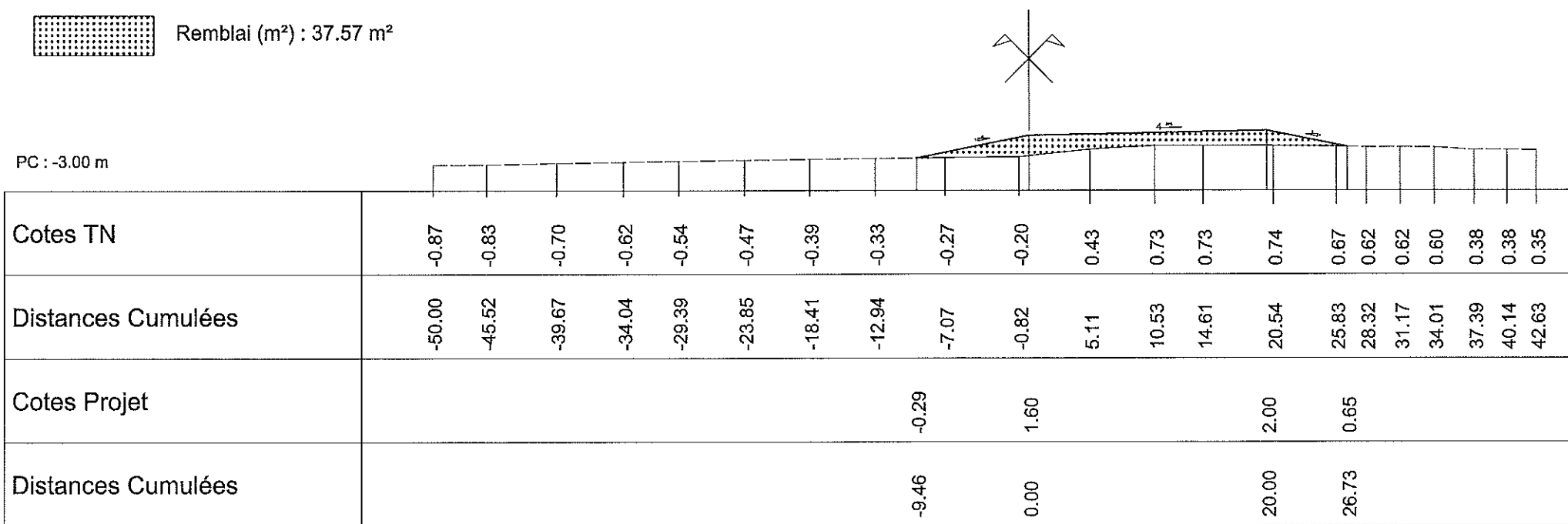
 Remblai (m²) : 35.71 m²



Profil n°: S8

Echelle des longueurs : 1/500
 Echelle des altitudes : 1/500

 Remblai (m²) : 37.57 m²



Profil n°: S9

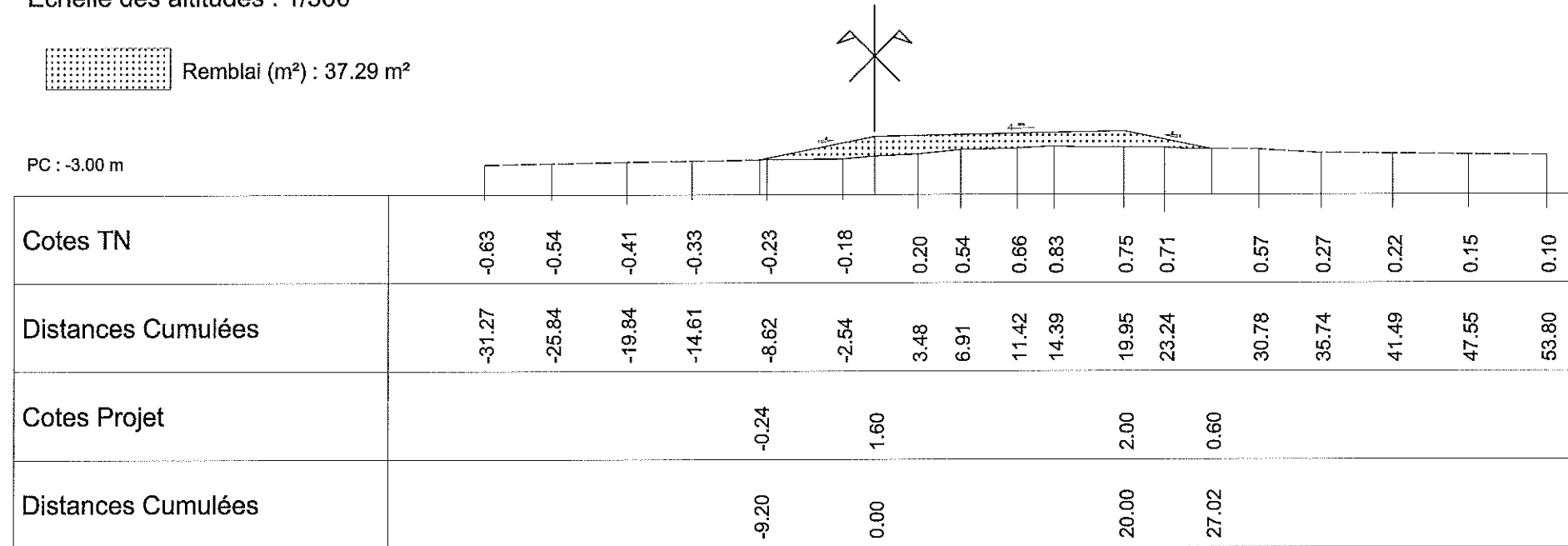
Echelle des longueurs : 1/500

Echelle des altitudes : 1/500



Remblai (m²) : 37.29 m²

PC : -3.00 m



Profil n°: S10

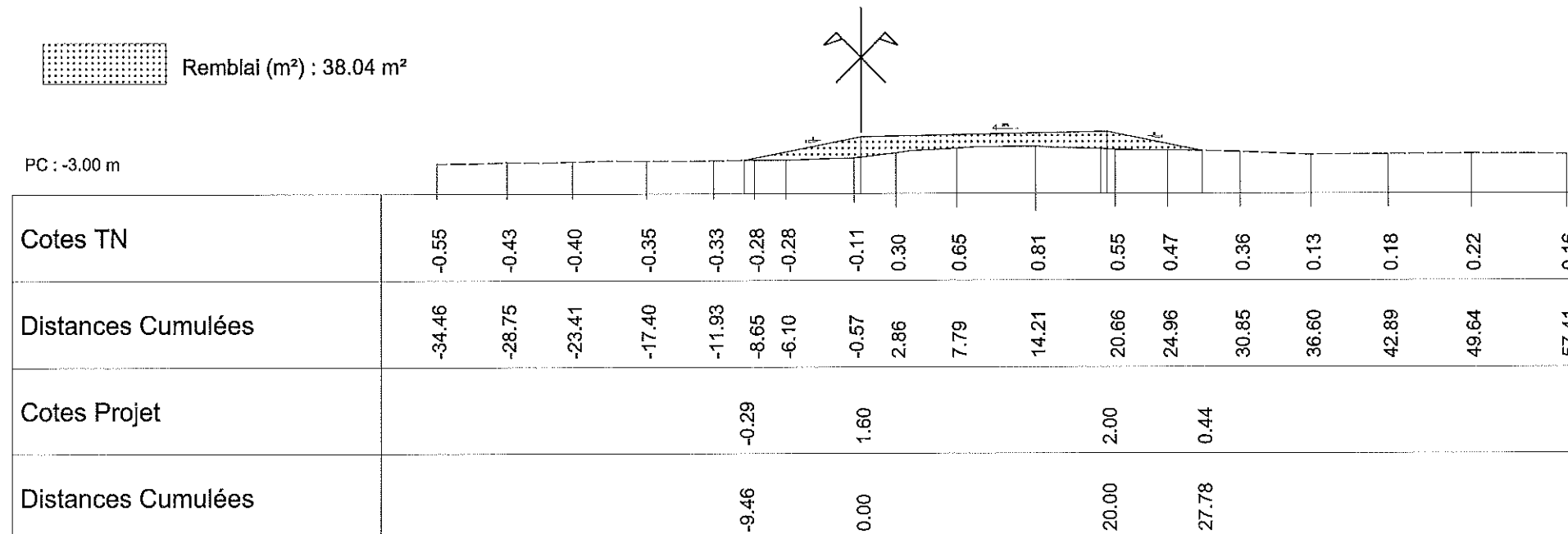
Echelle des longueurs : 1/500

Echelle des altitudes : 1/500



Remblai (m²) : 38.04 m²

PC : -3.00 m



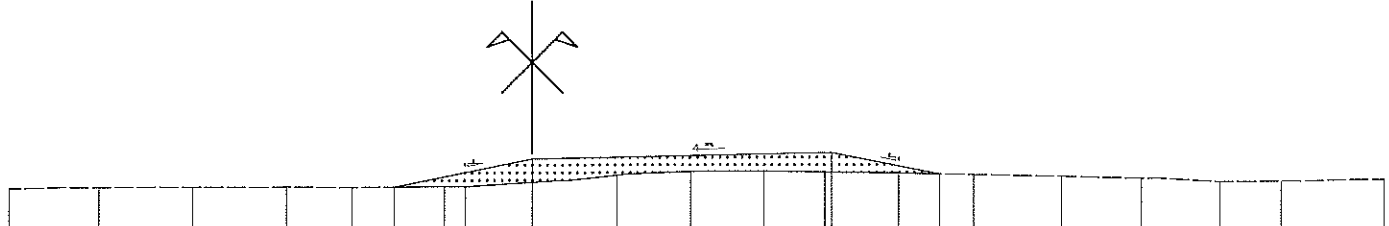
Profil n°: S11

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 36.64 m²

PC : -3.00 m



Cotes TN	-0.32	-0.25	-0.23	-0.22	-0.26	-0.21	0.06	0.52	0.75	0.76	0.70	0.63	0.51	0.40	0.26	0.02	0.06	0.15
Distances Cumulées	-34.94	-28.93	-22.67	-16.43	-12.04	-5.80	0.00	5.65	10.56	15.48	19.53	24.46	29.45	35.30	40.64	45.90	49.98	56.85
Cotes Projet						-0.24	1.60				2.00	0.56						
Distances Cumulées						-9.21	0.00				20.00	27.19						

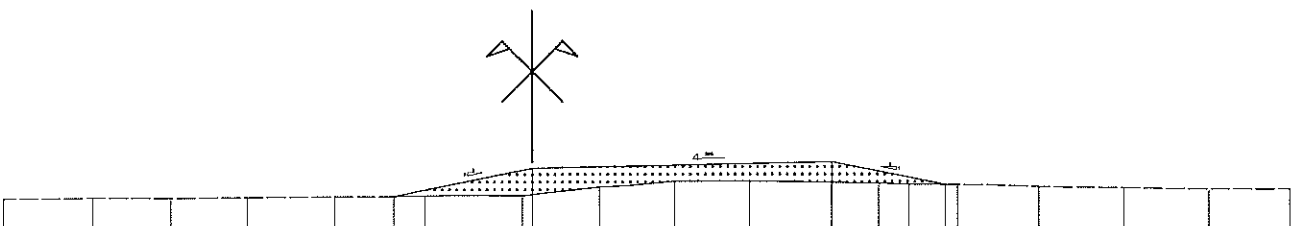
Profil n°: S12

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 38.75 m²

PC : -3.00 m



Cotes TN	-0.36	-0.31	-0.35	-0.30	-0.25	-0.22	-0.21	0.34	0.73	0.72	0.65	0.53	0.48	0.35	0.26	0.17	0.17
Distances Cumulées	-35.24	-29.32	-24.08	-18.97	-13.20	-7.14	-0.66	4.45	9.48	14.48	19.95	25.10	28.34	33.76	39.42	45.12	50.53
Cotes Projet						-0.24	1.60				2.00	0.49					
Distances Cumulées						-9.21	0.00				20.00	27.55					

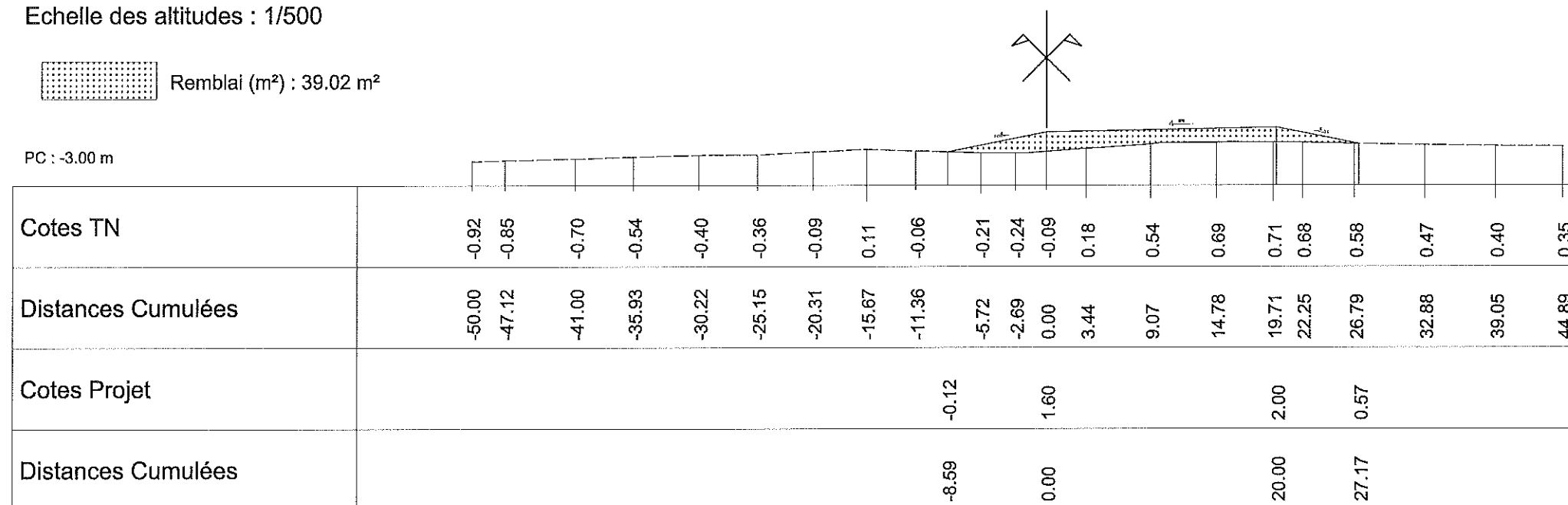
Profil n°: S13

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 39.02 m²

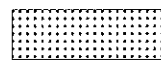
PC : -3.00 m



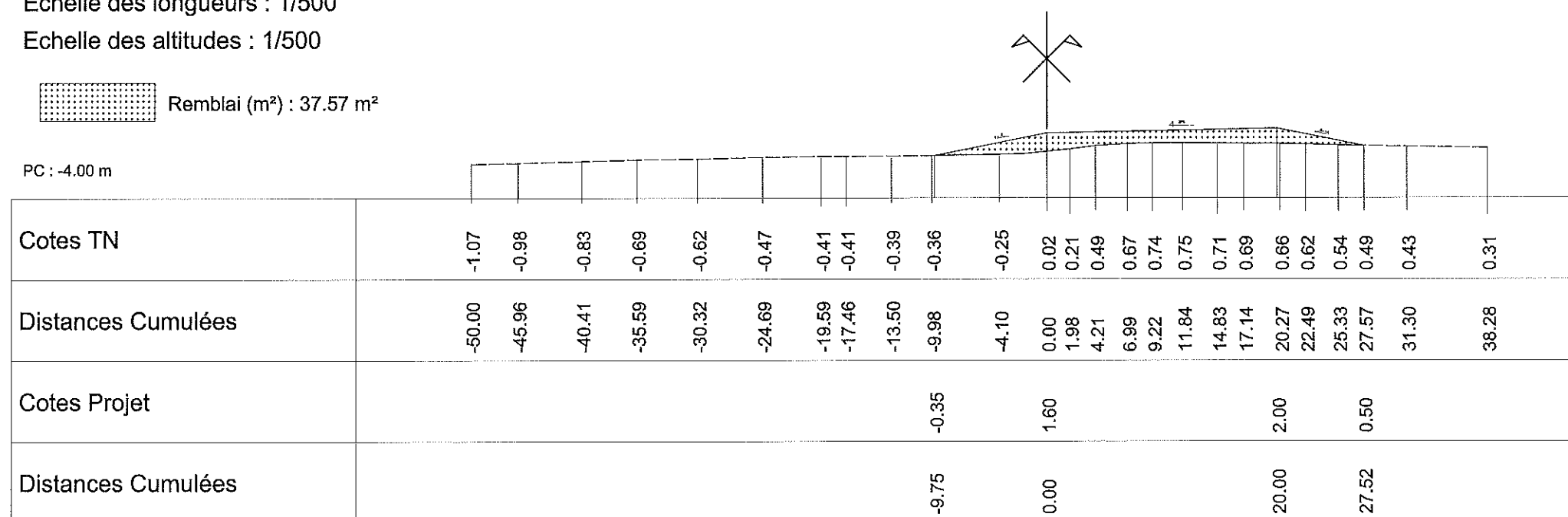
Profil n°: S14

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 37.57 m²

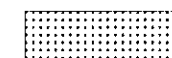
PC : -4.00 m



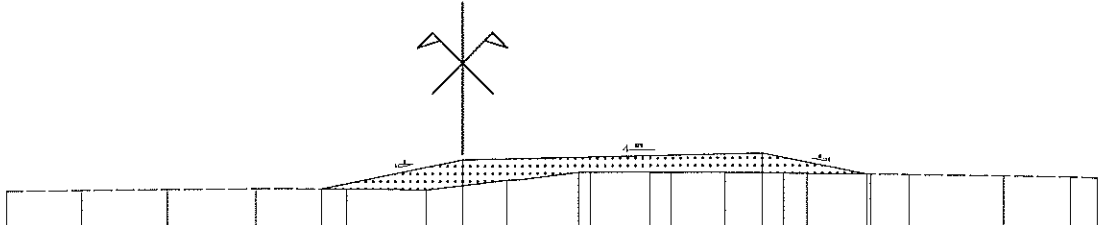
Profil n°: S15

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 38.10 m²

PC : -3.00 m

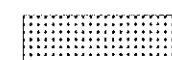


Cotes TN	-0.41	-0.36	-0.31	-0.27	-0.31	-0.39	-0.10	0.24	0.76	0.74	0.73	0.64	0.60	0.57	0.46	0.37	0.29
Distances Cumulées	-30.49	-25.43	-19.72	-13.84	-7.77	-2.42	0.00	2.95	7.75	13.91	17.52	22.98	27.21	29.78	36.11	40.57	42.37
Cotes Projet					-0.29	1.60					2.00	0.60					
Distances Cumulées					-9.45	0.00					20.00	26.99					

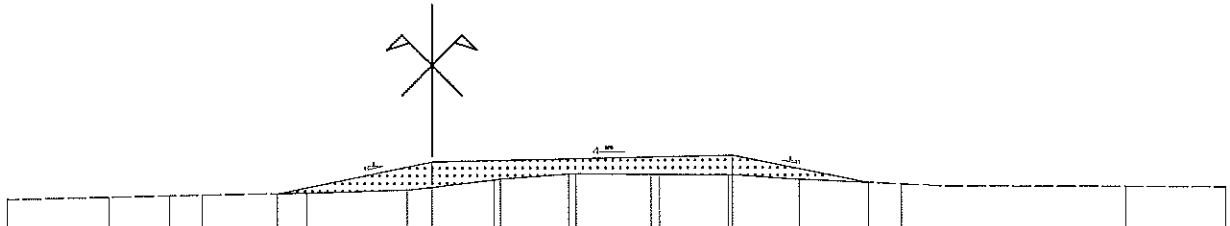
Profil n°: S16

Echelle des longueurs : 1/500

Echelle des altitudes : 1/500

 Remblai (m²) : 39.53 m²

PC : -3.00 m



Cotes TN	-0.81	-0.66	-0.58	-0.54	-0.43	-0.24	-0.07	0.40	0.78	0.74	0.70	0.40	0.08		-0.11	-0.17
Distances Cumulées	-28.31	-21.51	-17.49	-15.32	-8.36	-1.66	0.00	4.14	9.08	14.56	19.73	24.43	31.27		46.21	52.90
Cotes Projet					-0.46	1.60					2.00	0.19				
Distances Cumulées					-10.32	0.00					20.00	29.06				

Profil n°: S17

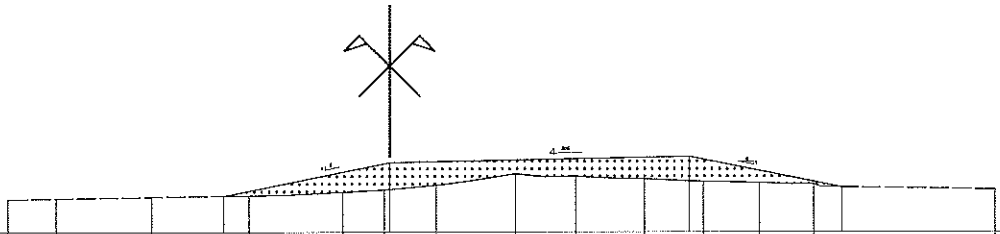
Echelle des longueurs : 1/500

Echelle des altitudes : 1/500



Remblai (m²) : 45.03 m²

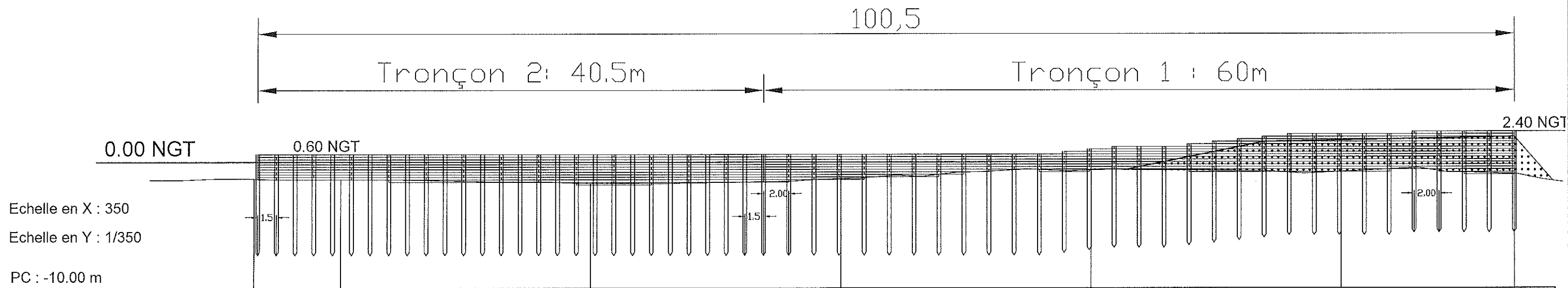
PC : -3.00 m



Cotes TN	-0.84	-0.77	-0.67	-0.58	-0.35	-0.21	0.09	0.85	0.69	0.52	0.34	0.28	0.17	-0.19
Distances Cumulées	-25.44	-22.22	-15.83	-9.33	-3.08	-0.35	3.11	8.39	12.42	17.00	20.92	24.69	28.31	40.37
Cotes Projet				-0.60		1.60				2.00			-0.03	
Distances Cumulées				-11.00		0.00				20.00			30.15	

DIGUE BOUGHAZ : PROFIL EN LONG, VUE EN PLAN ET ELEVATION

PROFIL EN LONG



Echelle en X : 350
Echelle en Y : 1/350
PC : -10.00 m

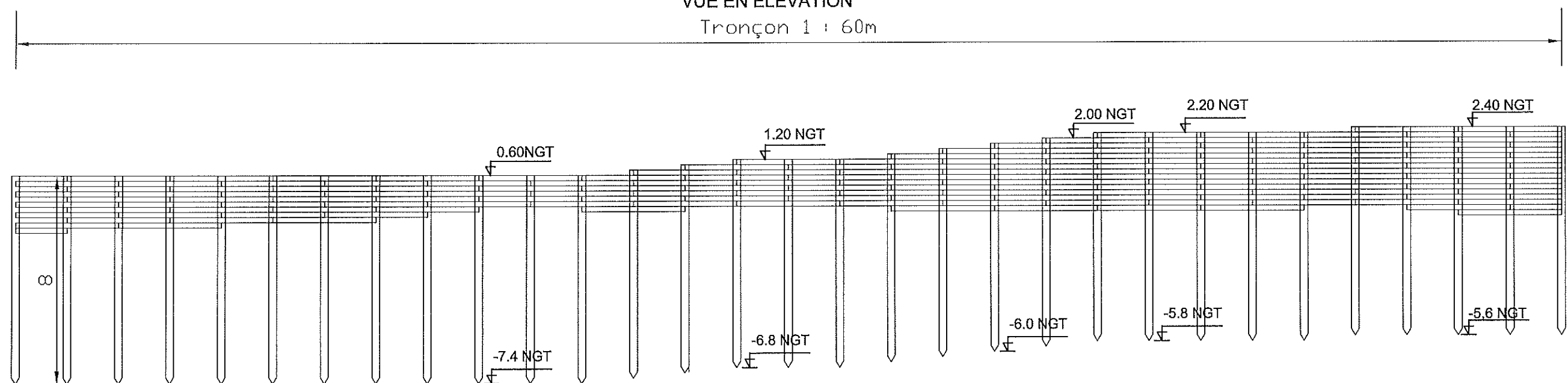
Altitudes TN	-1.34	-1.39	-1.68	-1.32	-0.66	-0.78	-0.96
Distances partielles TN	6.94	20.00	20.00	20.00	20.00	13.86	

DIGUE BOUGHAZ

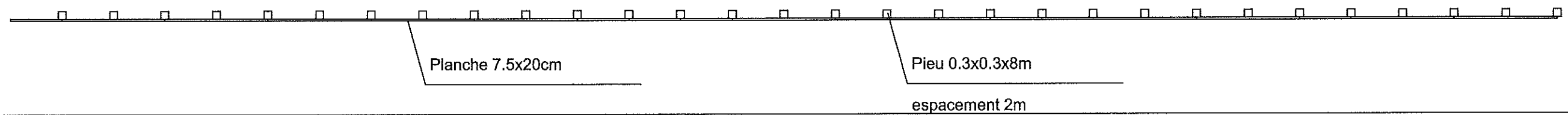
Ech: 1/175

VUE EN ELEVATION

Tronçon 1 : 60m



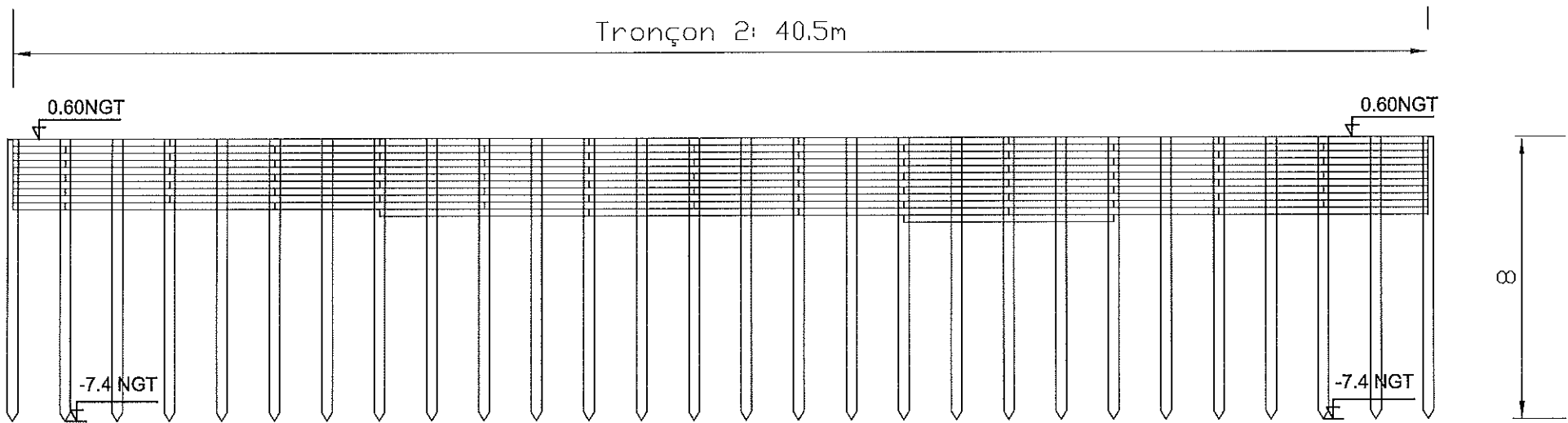
VUE EN PLAN



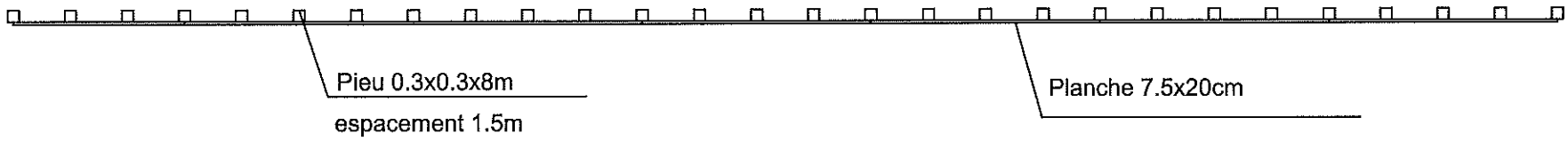
DIGUE BOUGHAZ

Ech: 1/150

VUE EN ELEVATION



VUE EN PLAN

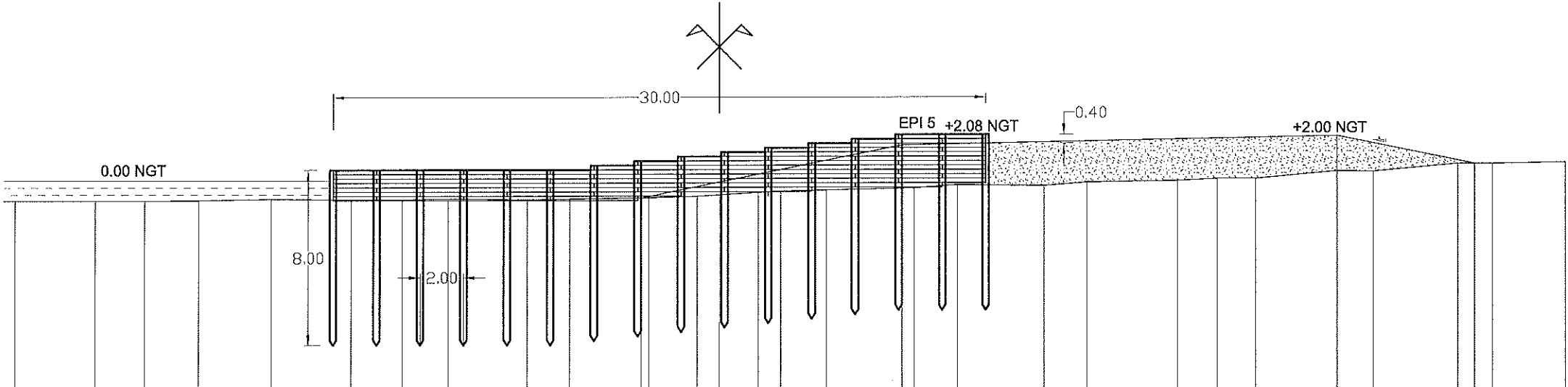


EPIS:PROFILS EN LONGS , VUE EN PLAN ET ELEVATION

Profil n°: P1

Echelle des longueurs : 1/250
Echelle des altitudes : 1/250

PC : -10.00 m

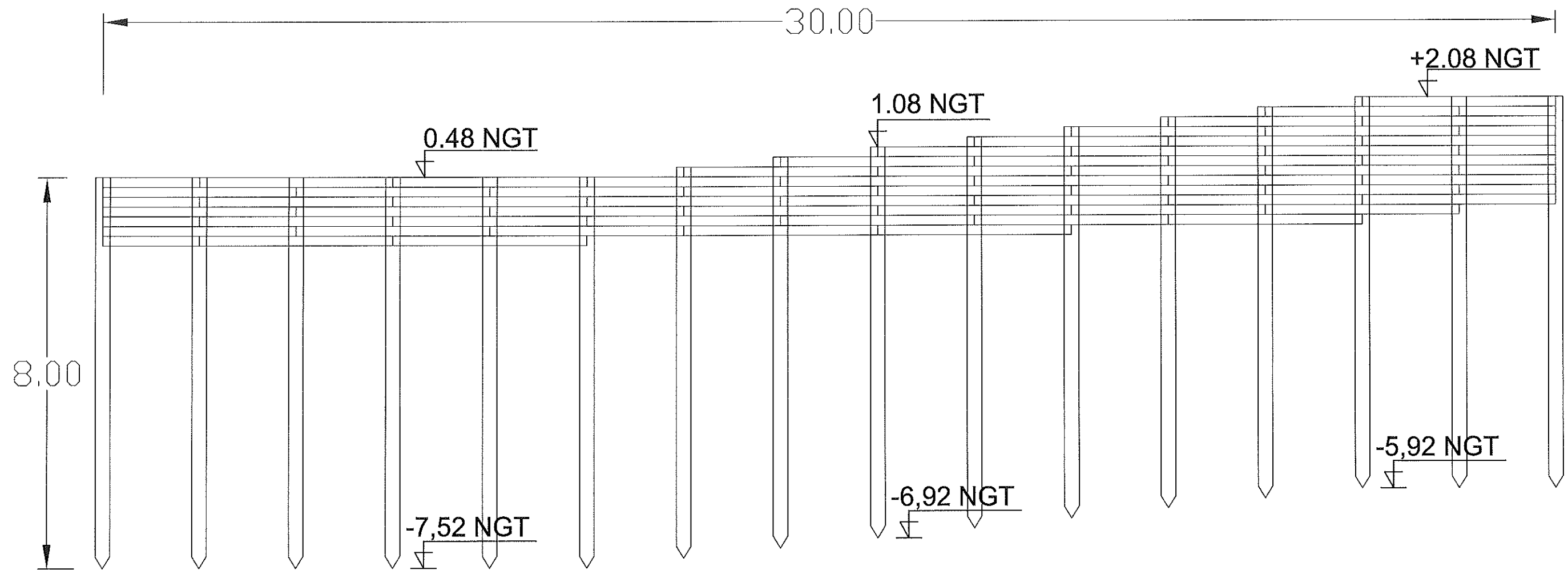


Cotes TN	-32.37	-28.69	-26.42	-23.95	-20.59	-16.92	-14.57	-12.46	-8.83	-6.85	-3.25	-1.01	0.00	1.79	2.81	4.92	8.96	10.95	14.93	16.89	21.08	22.88	24.65	28.35	30.04	33.95	35.55	38.87
Distances Cumulées	-0.92	-0.91	-0.91	-0.90	-0.83	-0.88	-0.88	-0.83	-0.87	-0.84	-0.79	-0.72	-0.66	-0.56	-0.50	-0.45	-0.36	-0.21	-0.26	-0.10	-0.04	0.06	0.06	0.40	0.38	0.74	0.73	0.78
Cotes Projet											-0.80	-0.078					1.60							2.00			0.73	
Distances Cumulées											-3.59	0.00					8.39							28.39		34.72		

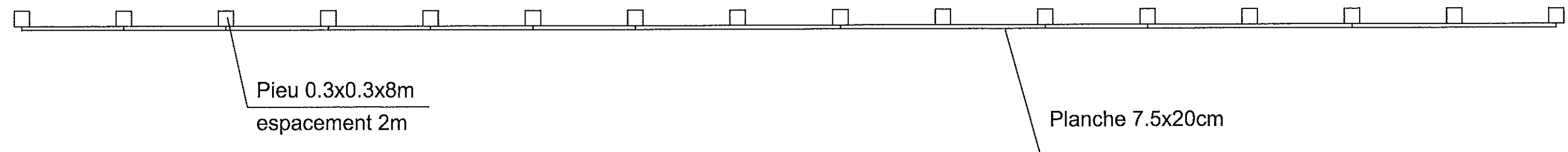
EPI 1

Ech: 1/100

VUE EN ELEVATION



VUE EN PLAN

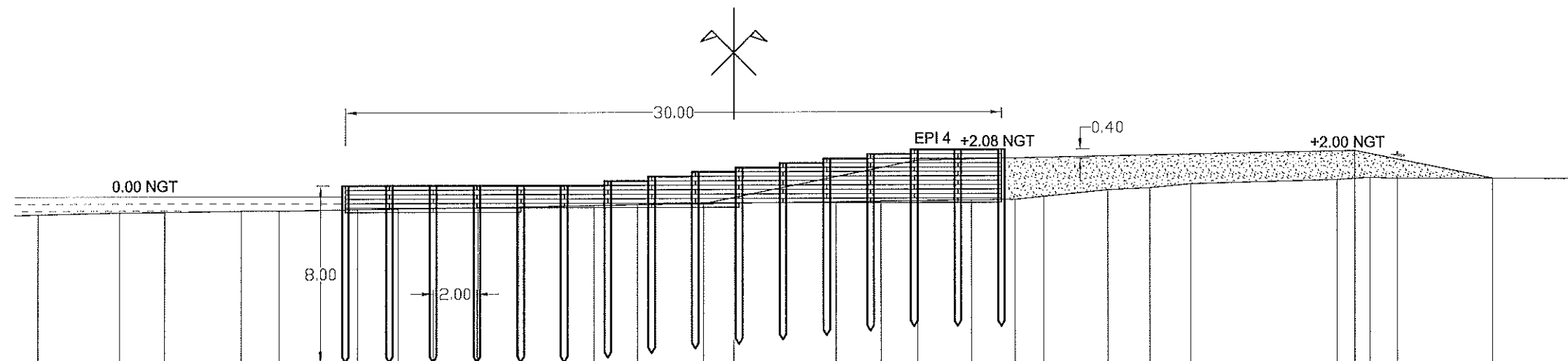


Profil n°: P2

Echelle des longueurs : 1/250

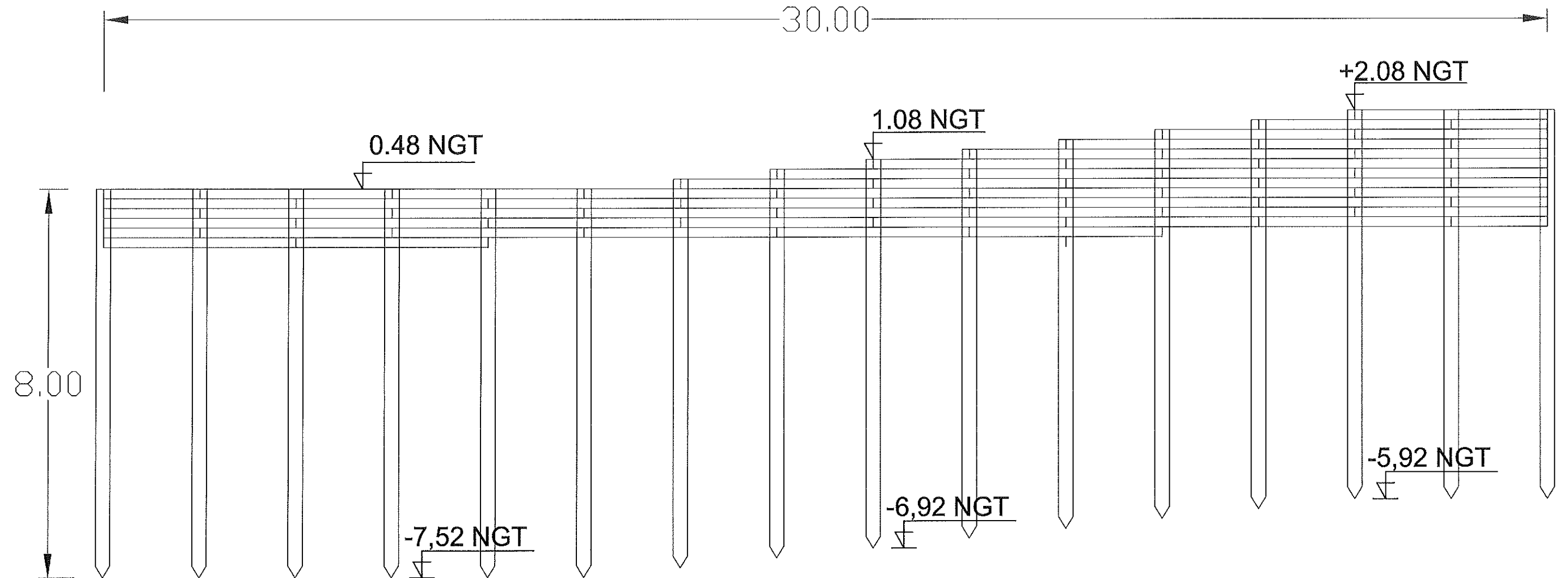
Echelle des altitudes : 1/250

PC : -10.00 m

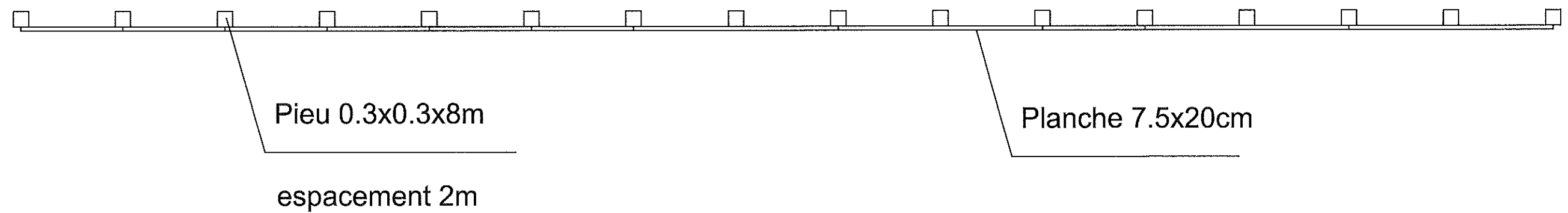


Cotes TN	-0.81	-0.72	-0.71	-0.65	-0.65	-0.59	-0.56	-0.52	-0.48	-0.43	-0.39	-0.33	-0.28	-0.24	-0.21	-0.19	-0.06	0.24	0.32	0.50	0.68	0.78	0.73	0.74	0.71
Distances Cumulées	-31.82	-28.09	-26.03	-22.54	-20.79	-17.21	-15.34	-11.71	-9.83	-6.39	-4.40	0.00	4.67	6.72	10.88	12.87	14.18	17.09	19.00	20.88	27.58	29.10	30.33	34.69	38.19
Cotes Projet												-0.35			1.60						2.00			0.74	
Distances Cumulées												-1.38			8.39						28.39			34.69	

EPI 2
Ech: 1/100
VUE EN ELEVATION



VUE EN PLAN

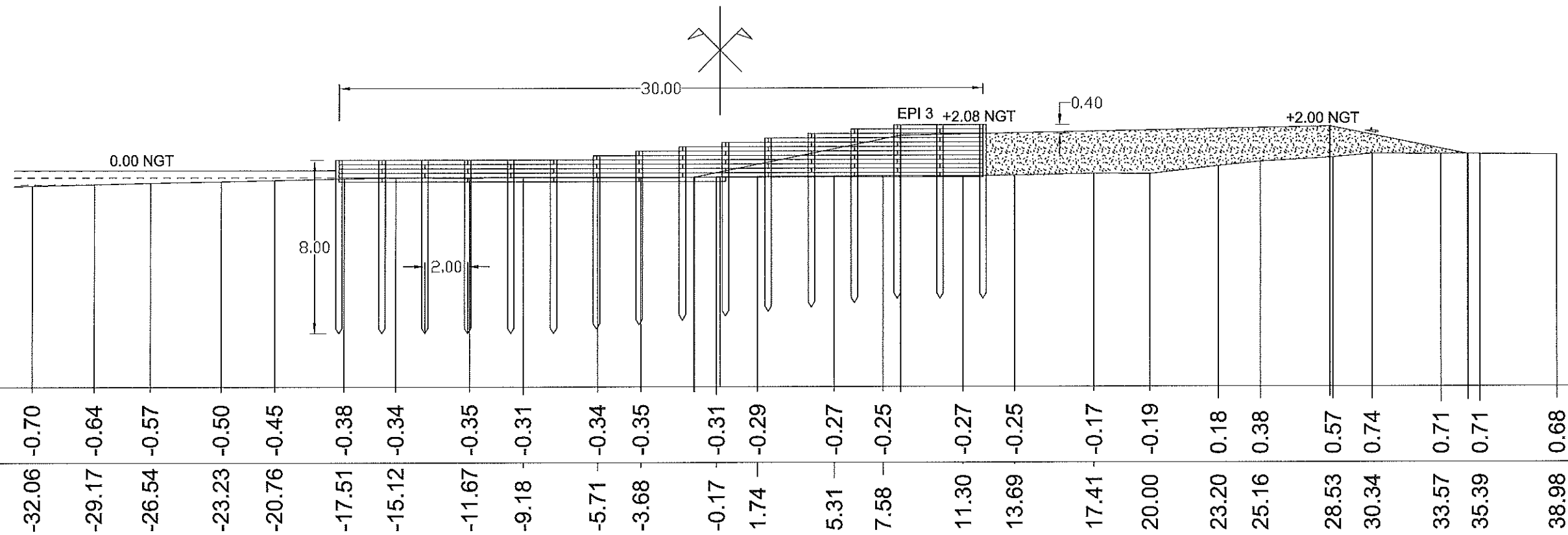


Profil n°: P3

Echelle des longueurs : 1/250

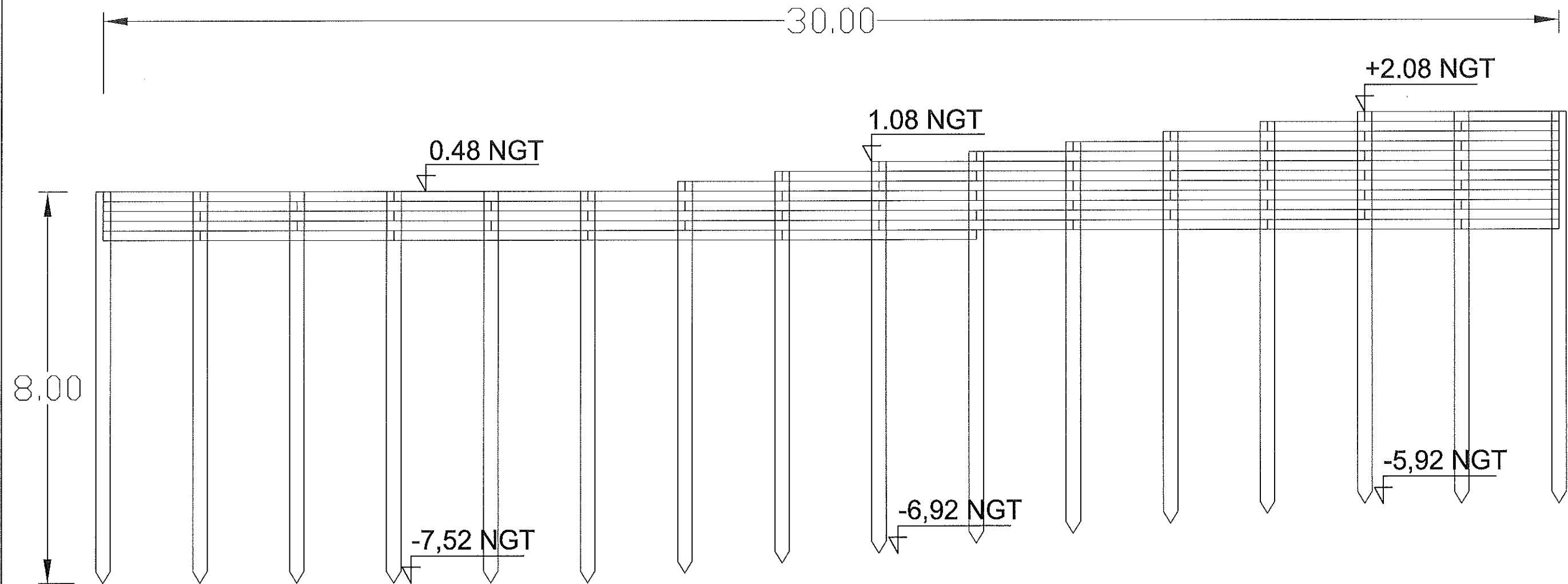
Echelle des altitudes : 1/250

PC : -10.00 m

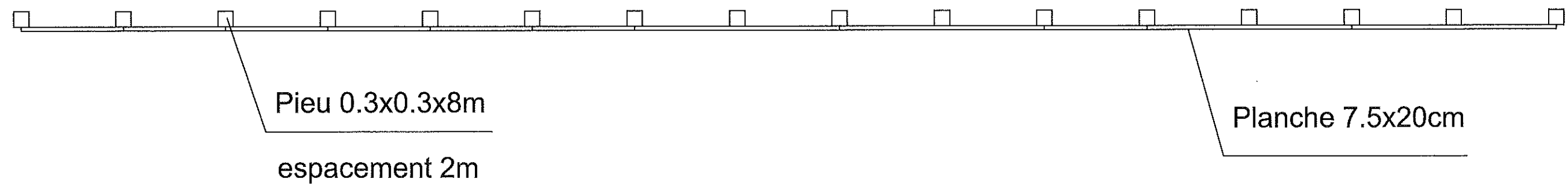


Cotes TN	-0.70	-0.64	-0.57	-0.50	-0.45	-0.38	-0.34	-0.35	-0.31	-0.34	-0.35	-0.31	-0.29	-0.27	-0.25	-0.27	-0.25	-0.17	-0.19	0.18	0.38	0.57	0.74	0.71	0.71	0.68
Distances Cumulées	-32.06	-29.17	-26.54	-23.23	-20.76	-17.51	-15.12	-11.67	-9.18	-5.71	-3.68	-0.17	1.74	5.31	7.58	11.30	13.69	17.41	20.00	23.20	25.16	28.53	30.34	33.57	35.39	38.98
Cotes Projet												-0.37 -0.078			1.60							2.00			0.71	
Distances Cumulées												-1.21 0.00		8.39								28.39		34.83		

EPI 3
Ech: 1/100
VUE EN ELEVATION



VUE EN PLAN

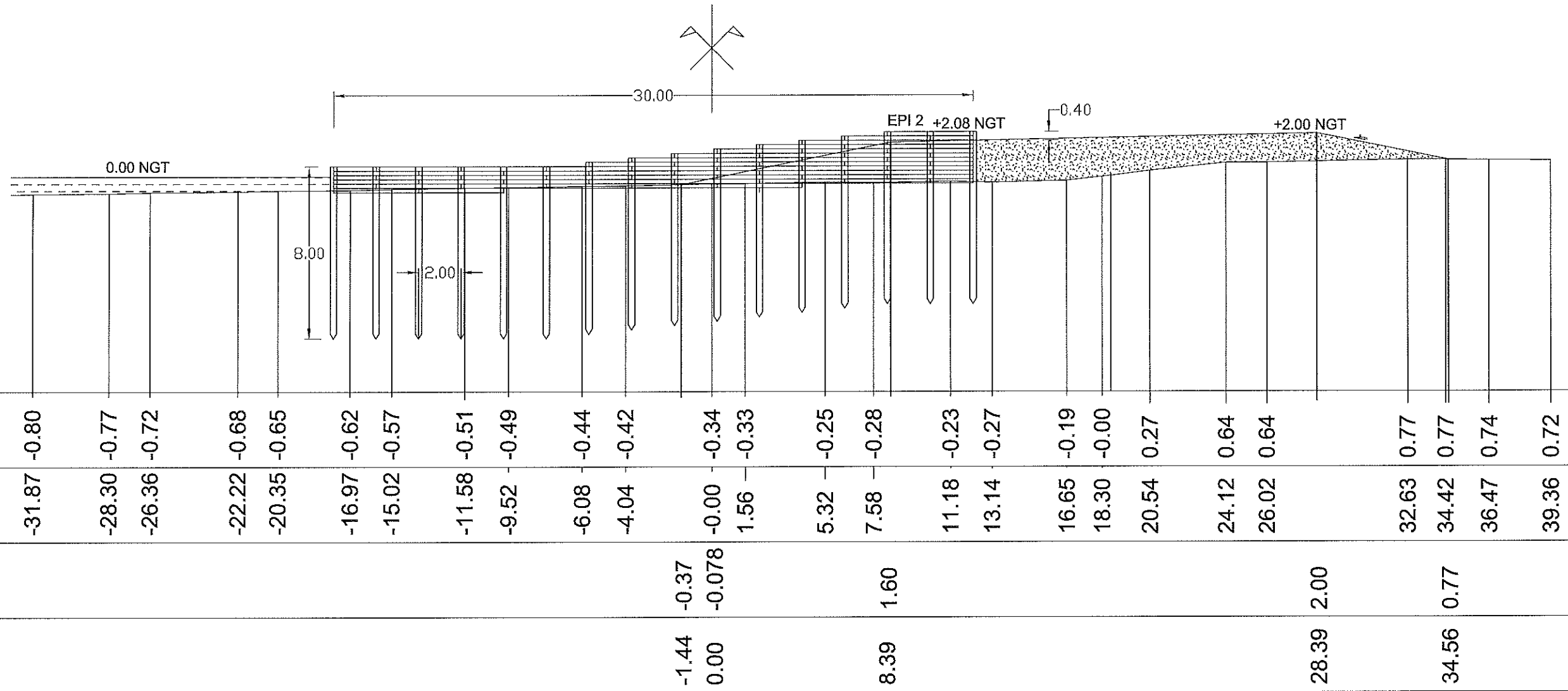


Profil n°: P4

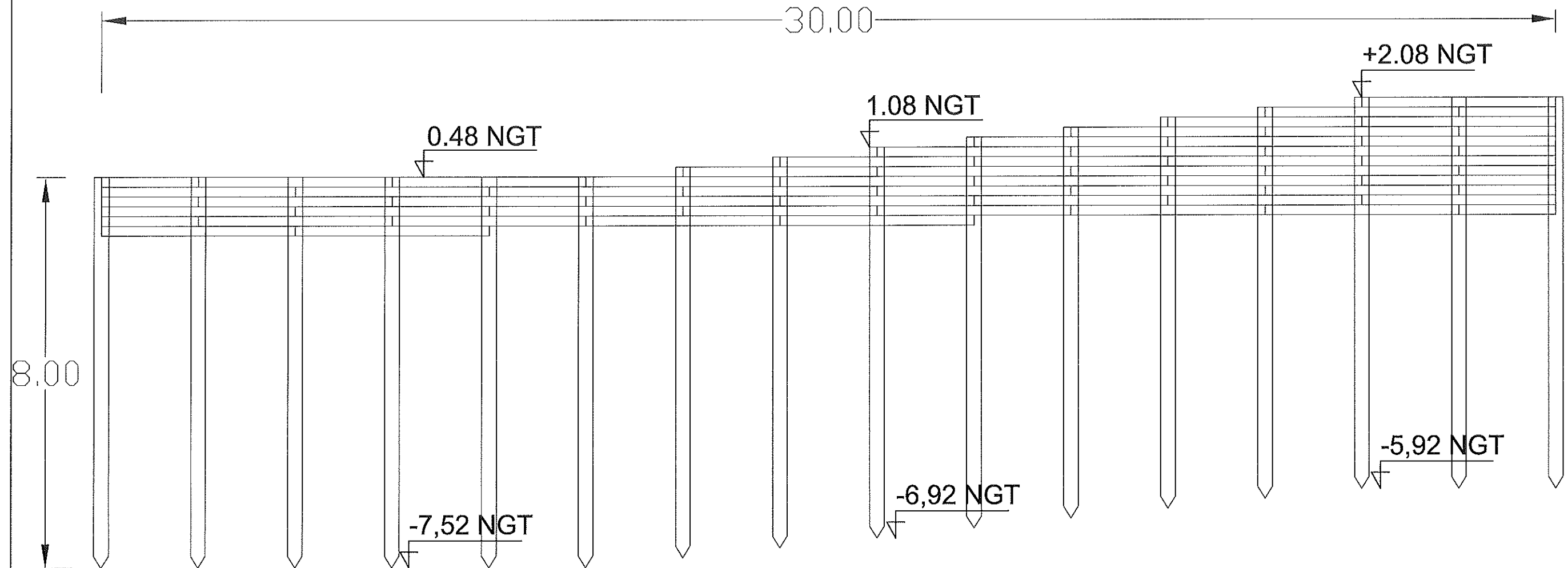
Echelle des longueurs : 1/250

Echelle des altitudes : 1/250

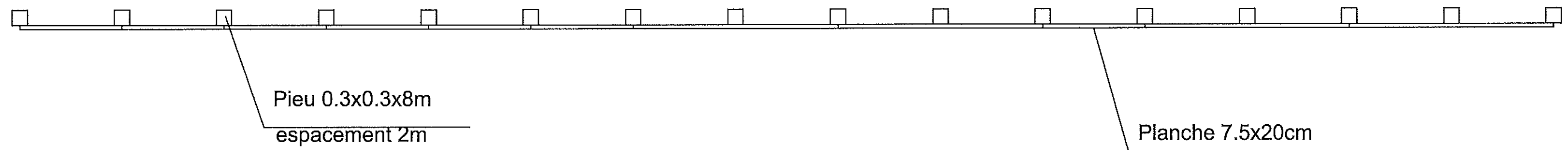
PC : -10.00 m



EPI 4
Ech: 1/100
VUE EN ELEVATION



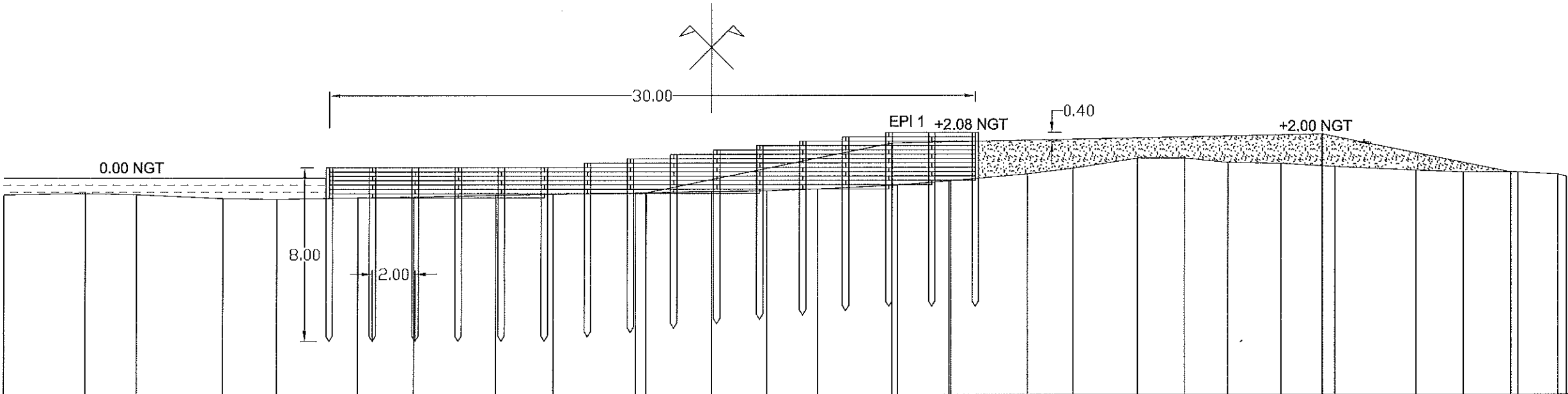
VUE EN PLAN



Profil n°: P5

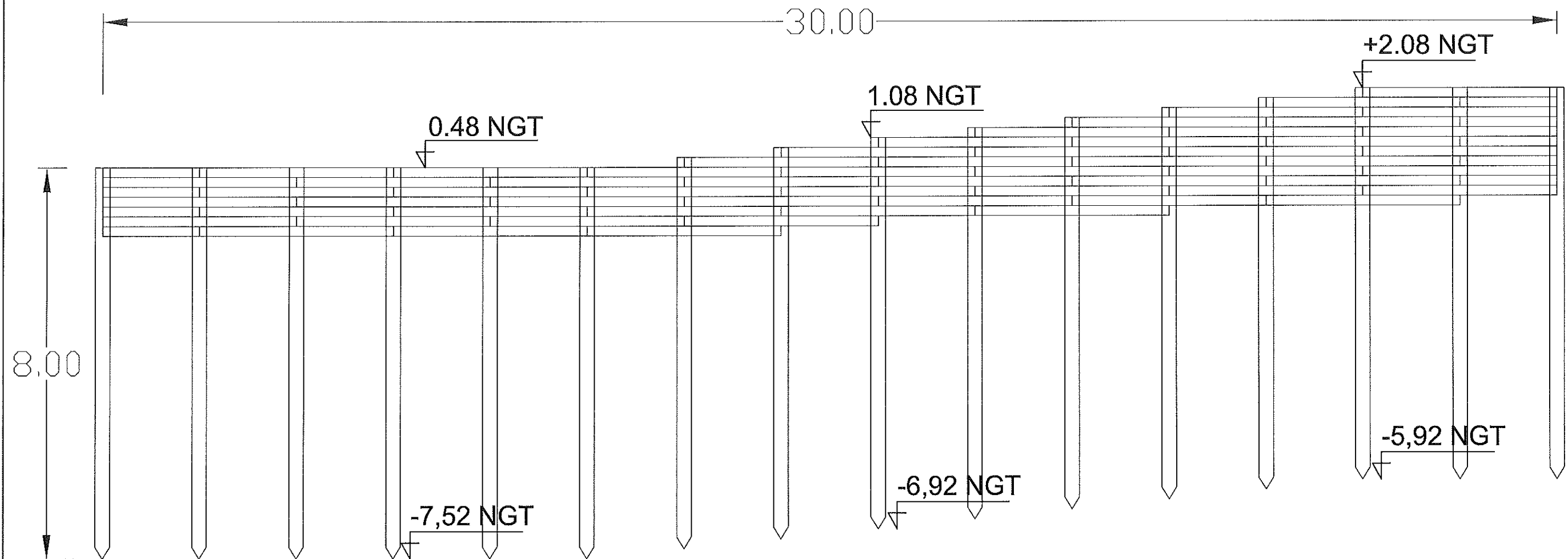
Echelle des longueurs : 1/250
Echelle des altitudes : 1/250

PC : -10.00 m

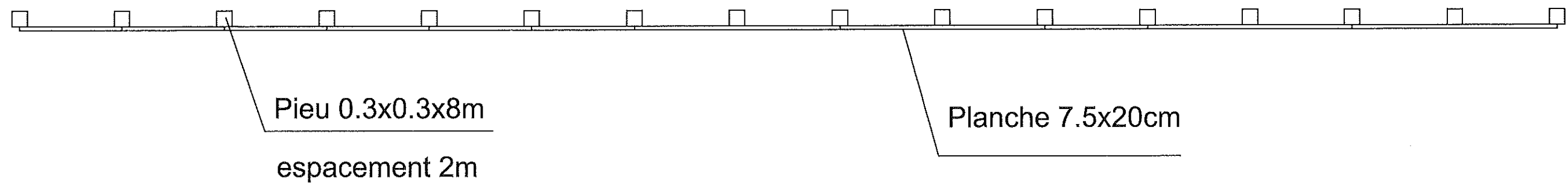


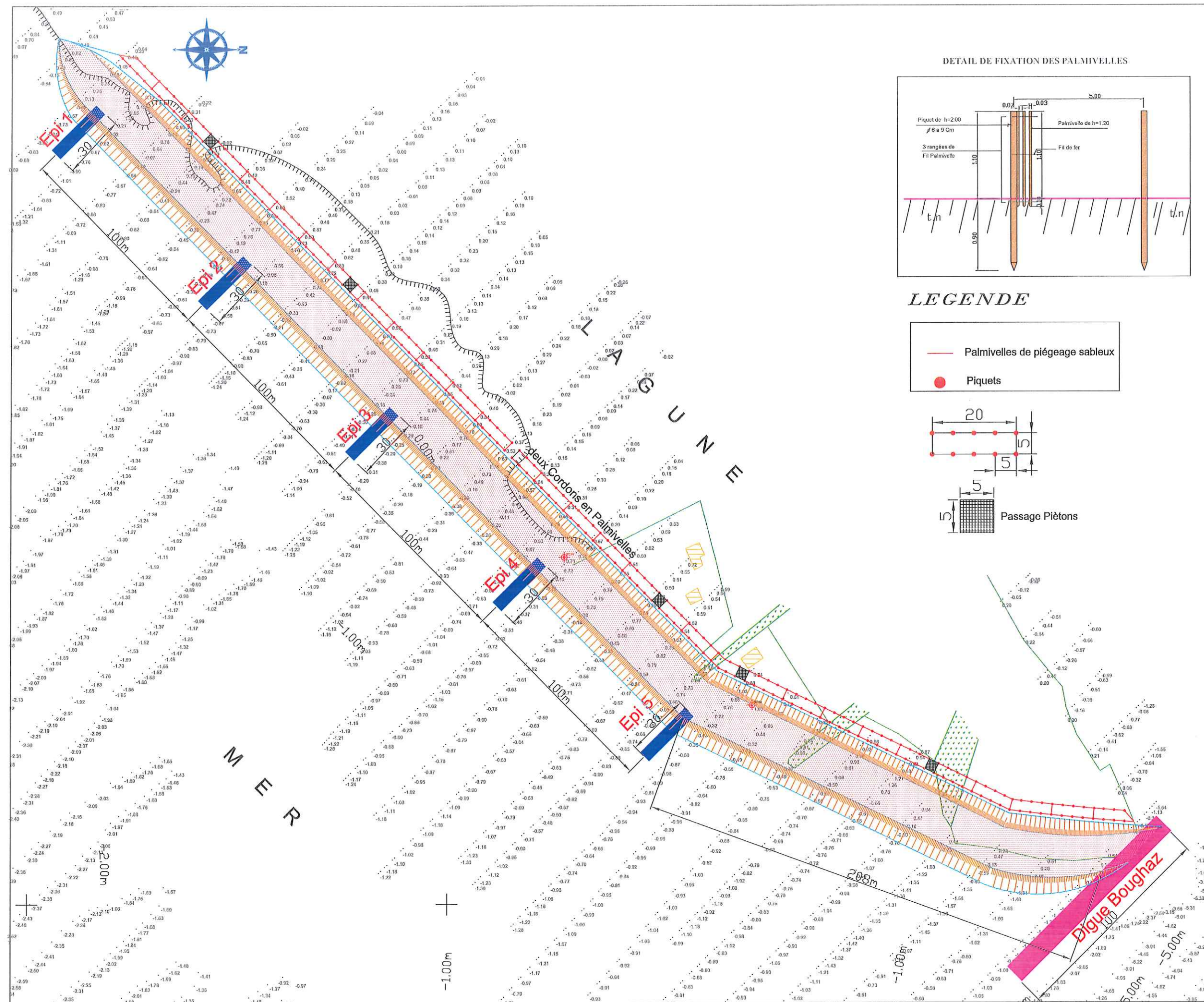
Cotes TN	-29.10	-26.72	-22.70	-20.20	-16.44	-13.82	-10.02	-7.36	-3.52	0.00	2.56	4.94	8.63	11.02	14.67	16.81	19.78	21.95	23.97	26.45	28.96	32.72	34.93	37.46	39.33
Distances Cumulées	-0.70	-0.76	-0.94	-0.98	-0.91	-0.87	-0.79	-0.75	-0.70	-0.62	-0.60	-0.51	-0.33	-0.14	0.18	0.43	0.89	0.90	0.69	0.65	0.51	0.33	0.25	0.25	0.15
Cotes Projet									-0.68	-0.078			1.60							2.00				0.25	
Distances Cumulées									-3.02	0.00			8.39							28.39				37.14	

EPI 5
Ech: 1/100
VUE EN ELEVATION

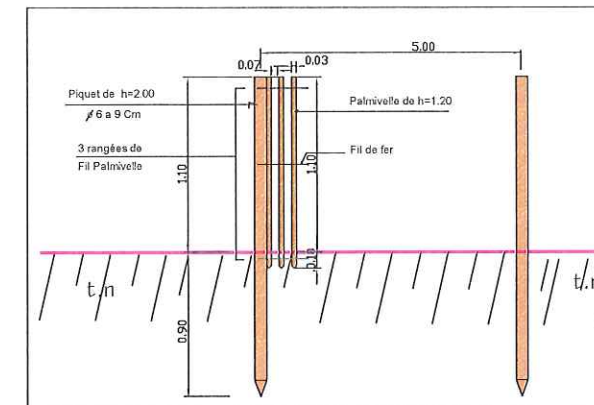


VUE EN PLAN





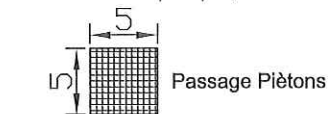
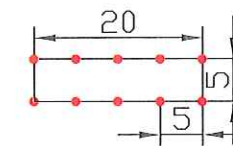
DETAIL DE FIXATION DES PALMIVELLES

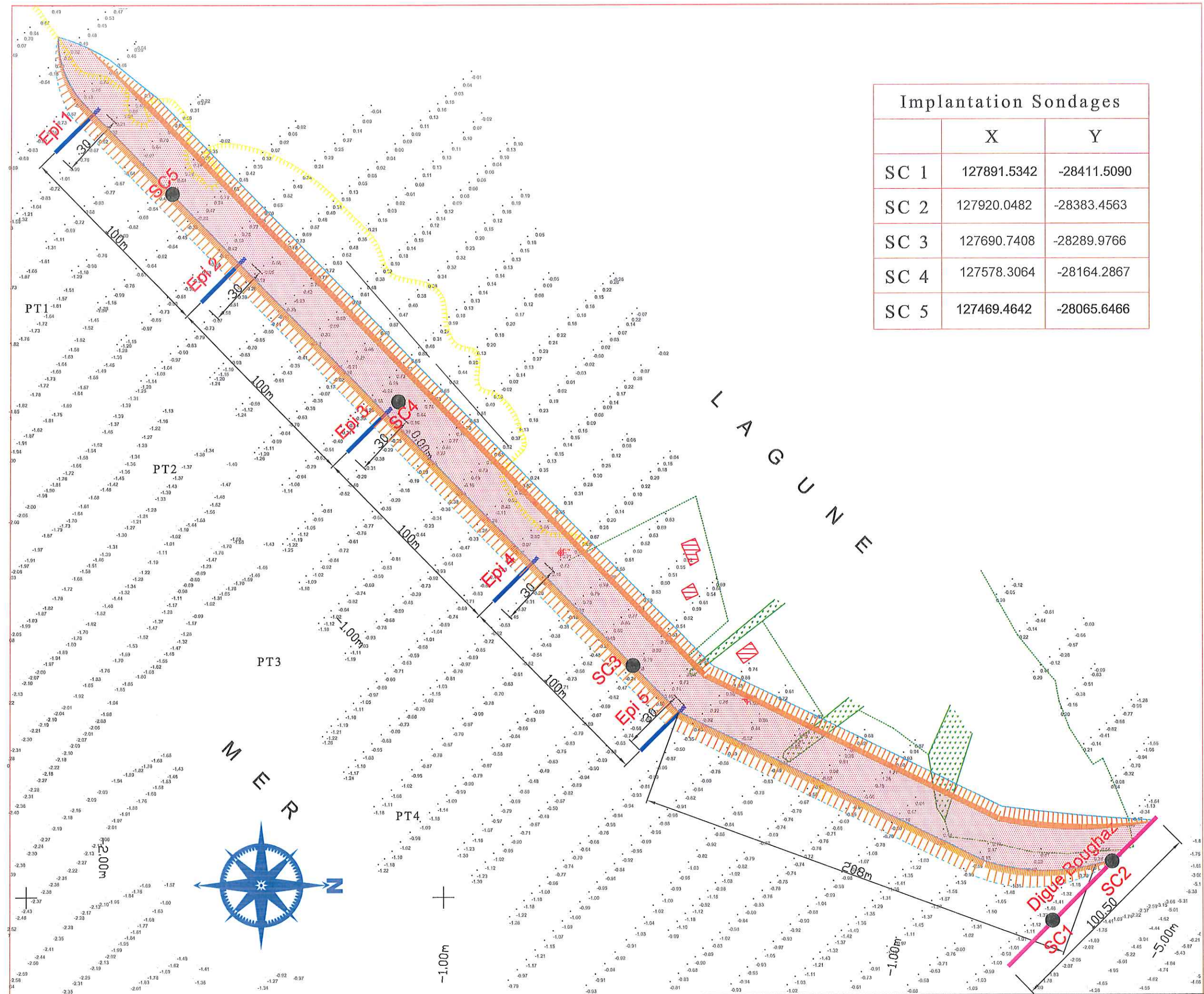


LEGENDE

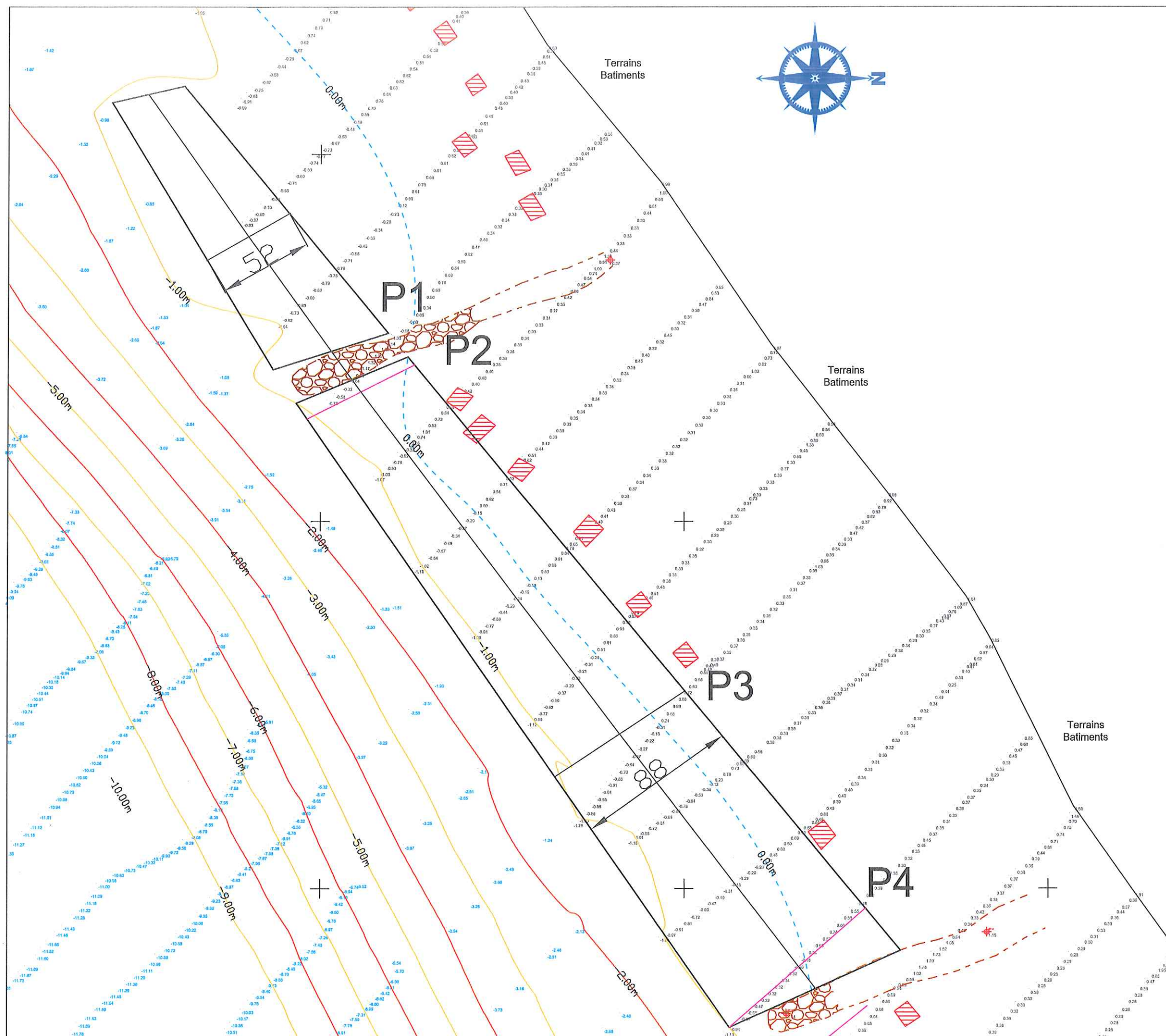
— Palmivelles de piégeage sableux

● Piquets





Implantation Sondages		
	X	Y
SC 1	127891.5342	-28411.5090
SC 2	127920.0482	-28383.4563
SC 3	127690.7408	-28289.9766
SC 4	127578.3064	-28164.2867
SC 5	127469.4642	-28065.6466



REPUBLIQUE TUNISIENNE
MINISTRE DES AFFAIRES LOCALES
ET DE L'ENVIRONNEMENT
AGENCE DE PROTECTION ET D'AMENAGEMENT DU LITTORAL
APAL



TRAVAUX D'INTERVENTION EN TECHNIQUES SOUPLES POUR
LA PROTECTION D'UN TRONÇON DE LITTORAL A GHAR EL MELH
DOSSIER D'APPEL D'OFFRES

**PLAN D'EXTRACTION
DU SABLE**



Immeuble CIMEP-4ème étage
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E-mail: maritec@planet.tn

DATE: Avril 2019

Plan N°	5	Indice
Echelle	1/2000	A

Version Provisoire

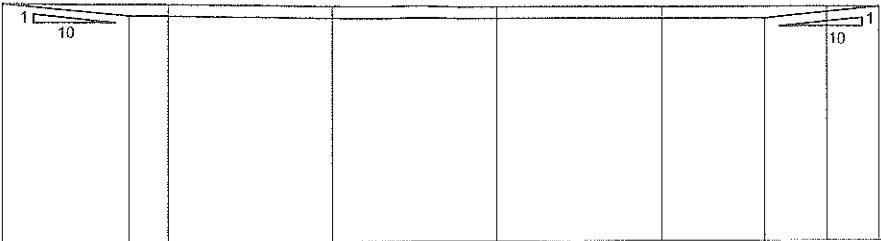
PROFILS EN TRAVERS DRAGAGES

Profil n°: 1

Echelle en Y : 1/500

Echelle en X : 1/500

PC : -15.00 m



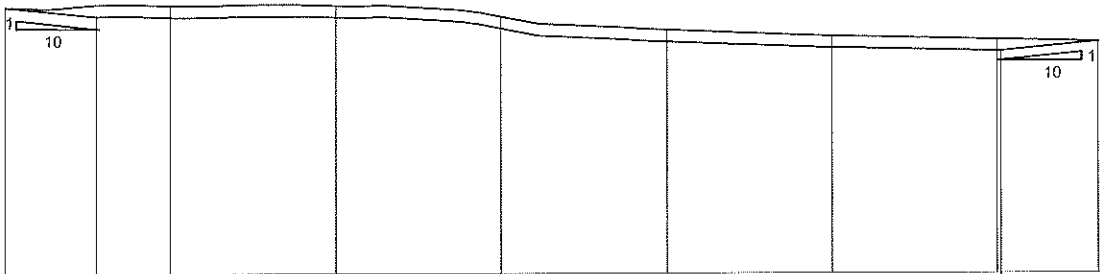
Altitudes TN	-0.65	-0.73	-0.89	-0.93	-0.95	-0.97	-0.97
Distances cumulées TN	0.00	10.00	20.00	30.00	40.00	50.00	53.15
Altitudes Projet	-0.65	-1.42 -1.43	-1.59	-1.63	-1.65	-1.66	-1.67 -0.97
Distances cumulées Projet	0.00	7.68 10.00	20.00	30.00	40.00	46.26	50.00 53.15

Profil n°: P2

Echelle en X : 1/500

Echelle en Y : 1/500

PC : -15.00 m



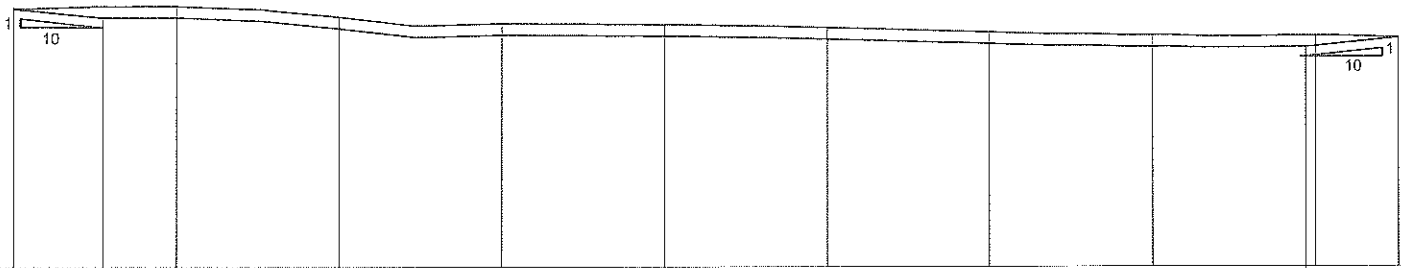
Altitudes TN	1.00	1.09	1.10	0.42	-0.39	-0.78	-0.98	-1.10
Distances cumulées TN	0.00	10.00	20.00	30.00	40.00	50.00	60.00	66.11
Altitudes Projet	1.00	0.45 0.39	0.40	-0.28	-1.09	-1.48	-1.68	-1.10
Distances cumulées Projet	0.00	10.00	20.00	30.00	40.00	50.00	60.00	66.11

Profil n°: P3

Echelle en Y : 1/1000

Echelle en X : 1/1000

PC : -15.00 m



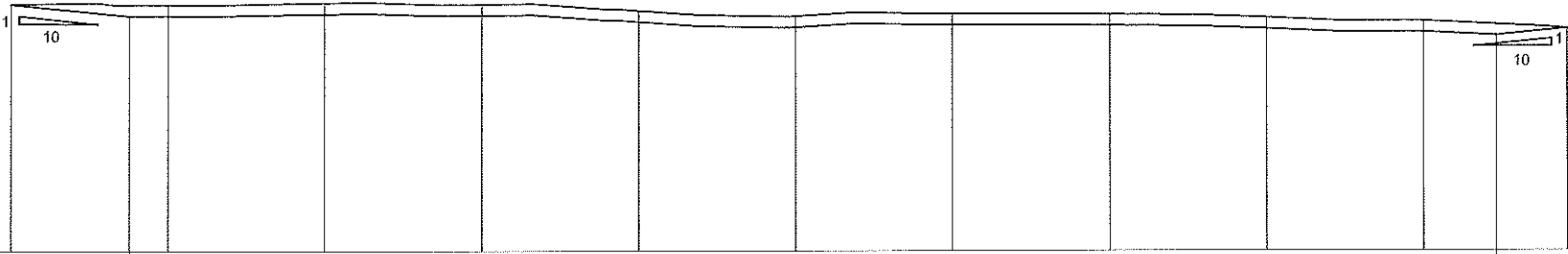
Altitudes TN	0.71	0.88	0.23	-0.18	-0.27	-0.45	-0.73	-0.93	-0.97	-1.09
Distances cumulées TN	0.00	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	85.08
Altitudes Projet	0.01	0.16	0.18	-0.47	-0.88	-0.97	-1.15	-1.43	-1.66	-1.09
Distances cumulées Projet	0.00	5.50	10.00	20.00	30.00	40.00	50.00	60.00	79.36	85.08

Profil n°: P4

Echelle en X : 1/1000

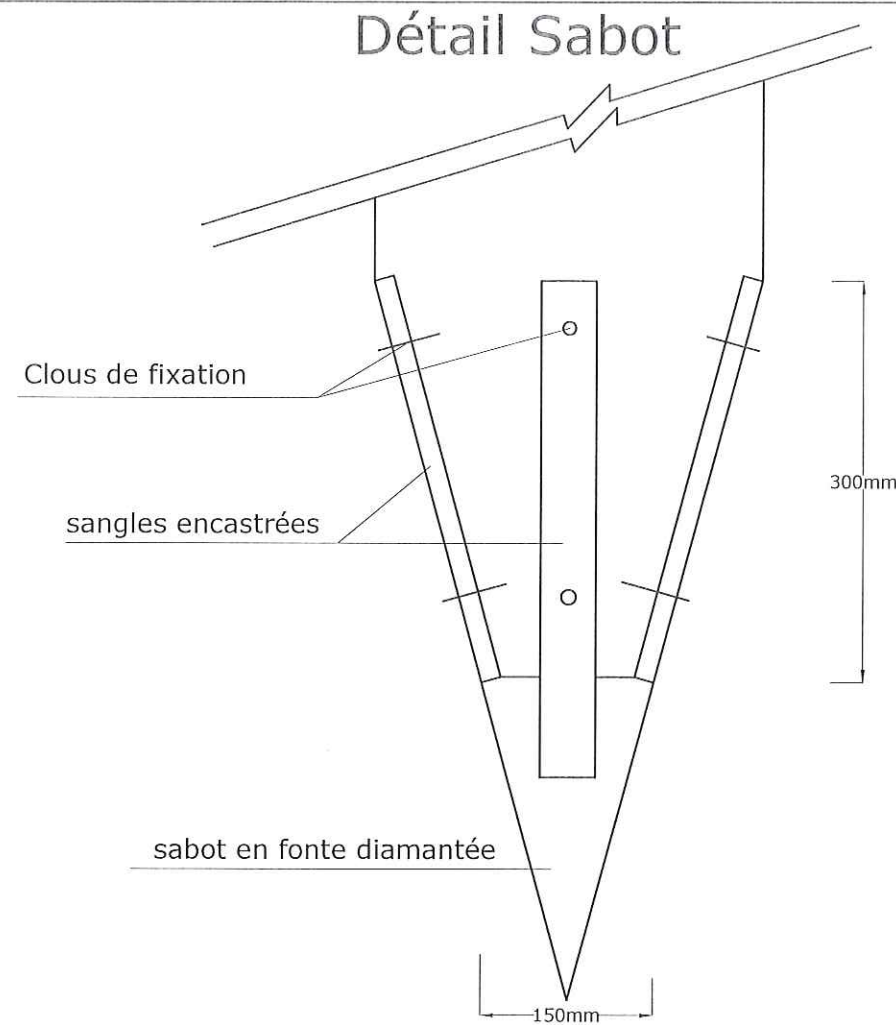
Echelle en Y : 1/1000

PC : -15.00 m

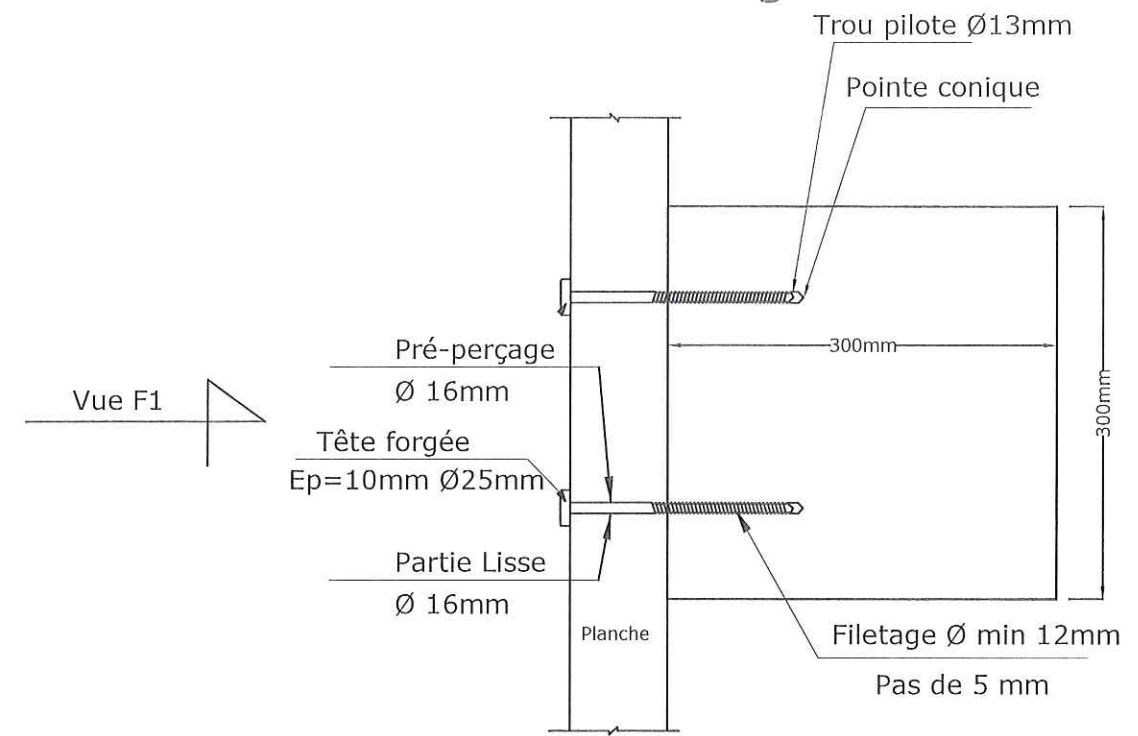


Altitudes TN	0.62	0.57	0.69	0.59	0.18	-0.16	-0.01	-0.06	-0.26	-0.49	-0.96
Distances cumulées TN	0.00	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	90.00	99.20
Altitudes Projet	0.62	-0.14	-0.01	-0.11	-0.52	-0.86	-0.71	-0.76	-0.96	-1.19	-0.96
Distances cumulées Projet	0.00	7.55	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	94.67

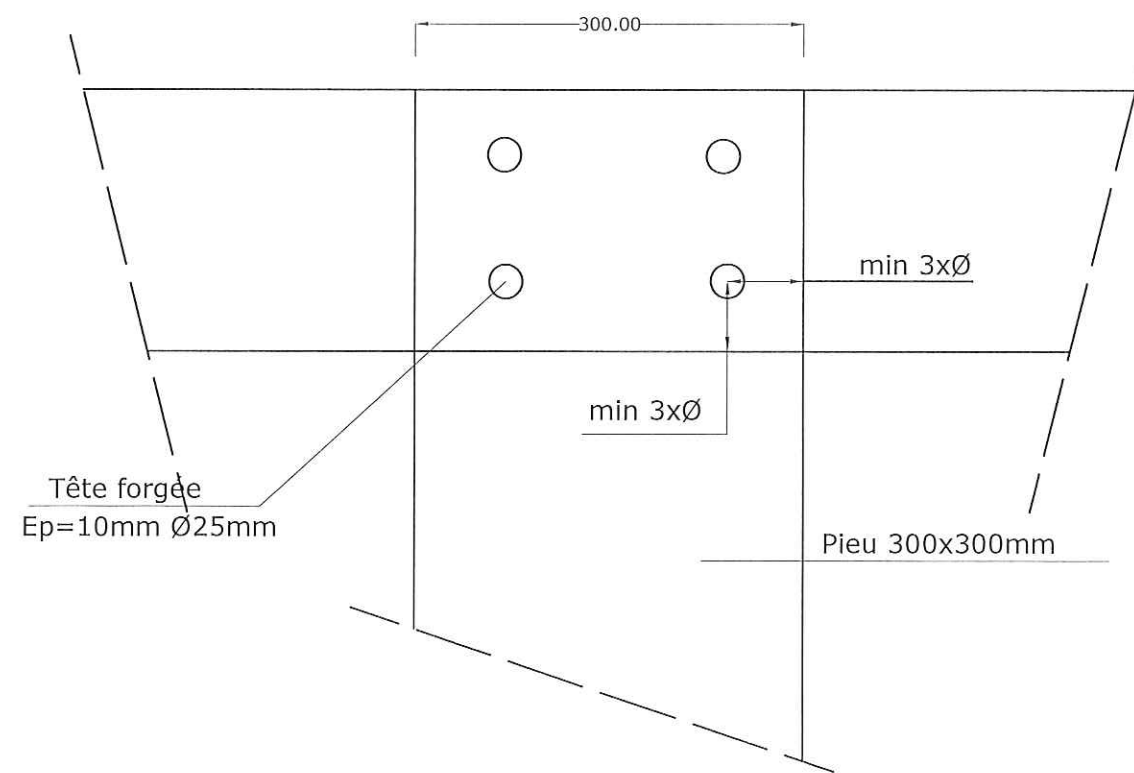
Détail Sabot



Détail Assemblage



Vue F1 (Appui intermediaire)



Vue F1 (Appui de rive)

