maître d'ouvrage

Ministère de la Transition Écologique et Solidaire

Liberté . Égalité . Fraternité
RÉPUBLIQUE FRANÇAISE
MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE
ET SOLIDAIRE

Direction Régionale de l'Environnement de l'Aménagement et du Logement de Bretagne
IST - DMMO - UMOA

N164

Mise en 2x2 voies secteur de Mur de Bretagne

4 Profil en long de la section courante

maître d'œuvre

Direction Interdépartementale des Routes - Ouest

Date : 22/04/2022

Direction Interdépartementale des Routes - Ouest
Service d'Ingénierie Routière et Ouvrages d'Art
6, rue Duguay-Trouin
44800 Saint-Herblain

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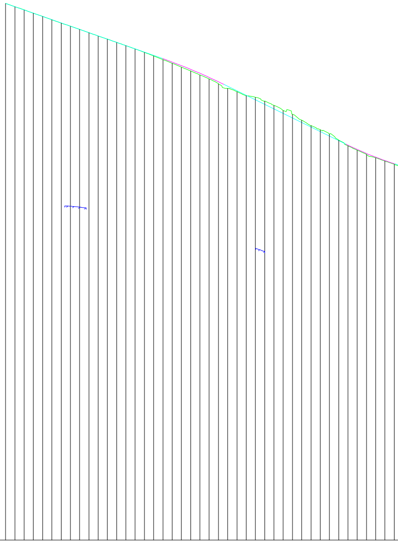
Profil dessiné par AutoPISTE
Profil : RN

Echelle en X : 1/5000

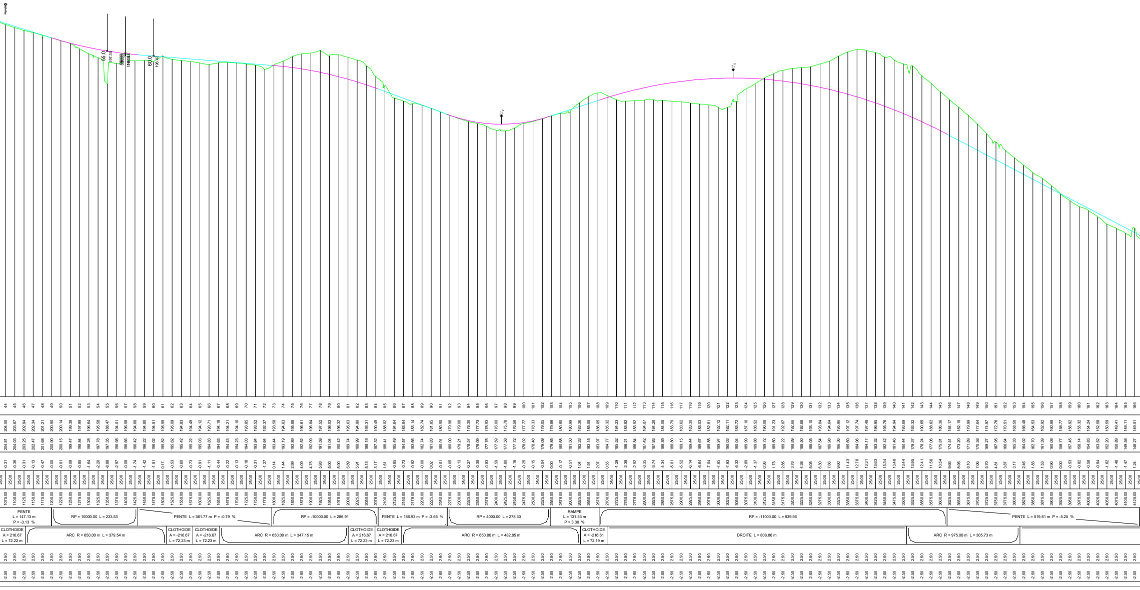
Echelle en Y : 1/500

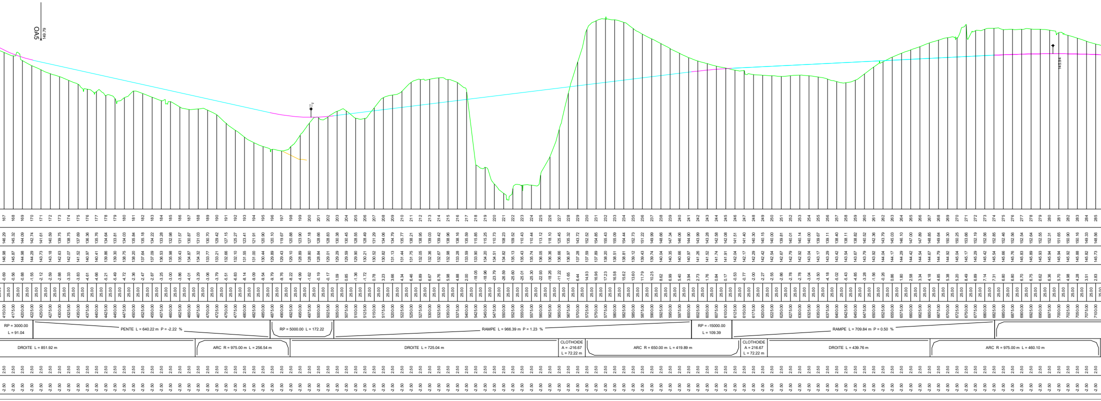


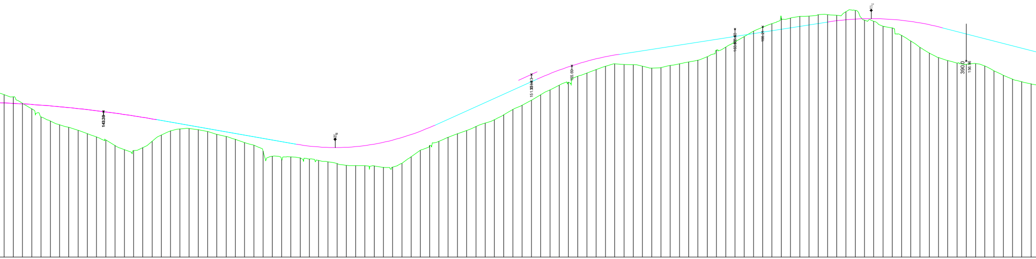
PC : 104.00 m

Numéro de profils en travers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Altitudes TN	248.86	247.98	247.10	246.23	245.34	244.46	243.57	242.70	241.84	240.95	240.06	239.21	238.33	237.46	236.56	235.64	234.69	233.71	232.69	231.66	230.61	229.57
Altitudes Projet		247.99	247.11	246.23	245.36	244.48	243.60	242.72	241.84	240.96	240.08	239.20	238.32	237.44	236.56	235.69	234.81	233.93	233.02	232.06	231.05	229.99
Ecarts TN - Projet		-0.01	-0.02	-0.00	-0.01	-0.01	-0.03	-0.01	-0.00	-0.01	-0.02	0.01	0.00	0.02	-0.00	-0.05	-0.12	-0.22	-0.33	-0.40	-0.44	-0.42
Distances partielles		25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Distances cumulées	0.00	25.00	50.00	75.00	100.00	125.00	150.00	175.00	200.00	225.00	250.00	275.00	300.00	325.00	350.00	375.00	400.00	425.00	450.00	475.00	500.00	525.00
Pentes et rampes	PENTE L = 424.02 m P = -3.52 %																	RP = -12000.00 L = 165.60				
Alignements droits et courbes	DROITE L = 521.97 m																					ARC R = 975.00 m L = 535.26 m
Dévers Gauche	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Dévers Droit	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50

Numéro de profils en travers	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
Altitudes TN	228.47	227.15	225.93	225.07	223.95	223.50	222.48	221.33	219.96	218.93	217.33	215.87	214.75	213.60	211.96	210.40	209.25	208.08	207.17	206.31	205.41
Altitudes Projet	228.87	227.70	226.49	225.26	224.04	222.82	221.59	220.37	219.14	217.92	216.70	215.47	214.25	213.02	211.80	210.58	209.41	208.33	207.34	206.42	205.59
Ecarts TN - Projet	-0.40	-0.55	-0.56	-0.20	-0.09	0.69	0.88	0.96	0.82	1.01	0.63	0.40	0.50	0.58	0.17	-0.18	-0.17	-0.25	-0.16	-0.11	-0.18
Distances partielles	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Distances cumulées	550.00	575.00	600.00	625.00	650.00	675.00	700.00	725.00	750.00	775.00	800.00	825.00	850.00	875.00	900.00	925.00	950.00	975.00	1000.00	1025.00	1050.00
Pentes et rampes		PENTE L = 329.65 m P = -4.90 %														RP = 7500.00 L = 132.60					
Alignements droits et courbes																					
Dévers Gauche	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Dévers Droit	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50


55.0
197.35
60.0
196.02
PENTE L = 147.13 m P = -3.13 %
RP = 10000.00 L = 233.53
PENTE L = 361.77 m P = -0.79 %
RP = -10000.00 L = 286.91
PENTE L = 186.93 m P = -3.66 %
RP = 4000.00 L = 278.30
RAMPE L = 131.53 m P = 3.30 %
RP = -11000.00 L = 939.96
PENTE L = 519.61 m P = -5.25 %
CLOTHOIDE A = 216.67 L = 72.22 m
ARC R = 650.00 m L = 379.54 m
CLOTHOIDE A = -216.67 L = 72.23 m
CLOTHOIDE A = -216.67 L = 72.23 m
ARC R = 650.00 m L = 347.15 m
CLOTHOIDE A = 216.67 L = 72.23 m
CLOTHOIDE A = 216.67 L = 72.23 m
ARC R = 650.00 m L = 482.85 m
CLOTHOIDE A = -216.61 L = 72.19 m
DROITE L = 808.86 m
ARC R = 975.00 m L = 305.73 m

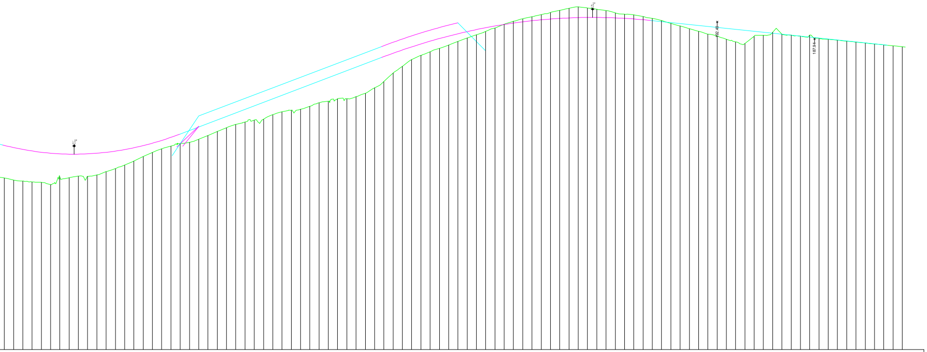




286	147.90	145.63	2.26	25.00	7125.00	2.50	-2.50
287	147.25	145.51	1.74	25.00	7150.00	2.50	-2.50
288	145.52	145.37	0.15	25.00	7175.00	2.50	-2.50
289	144.06	145.21	-1.15	25.00	7200.00	2.50	-2.50
290	141.85	145.03	-3.18	25.00	7225.00	2.50	-2.50
291	140.72	144.83	-4.10	25.00	7250.00	2.50	-2.50
292	139.71	144.61	-4.89	25.00	7275.00	2.50	-2.50
293	139.01	144.37	-5.35	25.00	7300.00	2.50	-2.50
294	138.24	144.11	-5.86	25.00	7325.00	2.50	-2.50
295	137.32	143.82	-6.51	25.00	7350.00	2.50	-2.50
296	136.41	143.53	-7.12	25.00	7375.00	2.50	-2.50
297	135.64	143.21	-7.57	25.00	7400.00	2.50	-2.50
298	134.13	142.87	-8.74	25.00	7425.00	2.50	-2.50
299	133.01	142.51	-9.50	25.00	7450.00	2.50	-2.50
300	132.76	142.13	-9.37	25.00	7475.00	2.50	-2.50
301	133.57	141.73	-8.16	25.00	7500.00	2.50	-2.50
302	135.23	141.31	-6.07	25.00	7525.00	2.50	-2.50
303	136.93	140.87	-3.94	25.00	7550.00	2.50	-2.50
304	138.07	140.44	-2.37	25.00	7575.00	2.50	-2.50
305	138.58	140.00	-1.42	25.00	7600.00	2.50	-2.50
306	138.70	139.56	-0.86	25.00	7625.00	2.50	-2.50
307	138.39	139.12	-0.73	25.00	7650.00	2.50	-2.50
308	137.90	138.68	-0.79	25.00	7675.00	2.50	-2.50
309	137.15	138.25	-1.09	25.00	7700.00	2.50	-2.50
310	136.56	137.81	-1.25	25.00	7725.00	2.50	-2.50
311	135.77	137.37	-1.60	25.00	7750.00	3.06	-1.05
312	134.92	136.93	-2.01	25.00	7775.00	2.99	-0.42
313	134.20	136.49	-2.30	25.00	7800.00	2.77	-2.17
314	132.61	136.05	-3.44	25.00	7825.00	2.50	-2.50
315	131.21	135.62	-4.41	25.00	7850.00	2.50	-2.50
316	130.34	135.18	-4.84	25.00	7875.00	2.50	-2.50
317	131.01	134.74	-3.74	25.00	7900.00	2.50	-2.50
318	130.76	134.31	-3.55	25.00	7925.00	2.50	-2.50
319	130.47	133.97	-3.50	25.00	7950.00	2.50	-2.50
320	130.06	133.73	-3.67	25.00	7975.00	2.50	-2.50
321	129.72	133.60	-3.88	25.00	8000.00	2.50	-2.50
322	129.23	133.57	-4.34	25.00	8025.00	2.50	-2.50
323	128.78	133.64	-4.86	25.00	8050.00	2.50	-2.50
324	128.68	133.82	-5.14	25.00	8075.00	2.50	-2.50
325	128.64	134.11	-5.46	25.00	8100.00	2.50	-2.50
326	128.62	134.49	-5.87	25.00	8125.00	2.50	-2.50
327	128.22	134.98	-6.77	25.00	8150.00	2.50	-2.50
328	128.29	135.58	-7.29	25.00	8175.00	2.50	-2.50
329	129.27	136.28	-7.00	25.00	8200.00	2.50	-2.50
330	131.07	137.08	-6.01	25.00	8225.00	2.50	-2.50
331	132.81	137.99	-5.18	25.00	8250.00	2.50	-2.50
332	134.13	139.00	-4.87	25.00	8275.00	2.50	-2.50
333	135.25	140.11	-4.86	25.00	8300.00	2.50	-2.50
334	136.35	141.23	-4.88	25.00	8325.00	2.50	-2.50
335	137.29	142.36	-5.07	25.00	8350.00	2.50	-2.50
336	138.17	143.48	-5.32	25.00	8375.00	2.50	-2.50
337	139.27	144.61	-5.34	25.00	8400.00	2.50	-2.50
338	140.20	145.73	-5.53	25.00	8425.00	2.50	-2.50
339	141.08	146.86	-5.78	25.00	8450.00	2.50	-2.50
340	142.38	147.98	-5.61	25.00	8475.00	2.50	-2.50
341	143.84	149.11	-5.27	25.00	8500.00	2.50	-2.50
342	145.03	150.23	-5.20	25.00	8525.00	2.50	-2.50
343	146.36	151.36	-5.00	25.00	8550.00	2.50	-2.50
344	147.82	152.48	-4.65	25.00	8575.00	2.50	-2.50
345	149.14	153.53	-4.39	25.00	8600.00	2.50	-2.50
346	150.43	154.50	-4.07	25.00	8625.00	2.50	-2.50
347	151.20	155.38	-4.18	25.00	8650.00	2.50	-2.50
348	152.83	156.19	-3.36	25.00	8675.00	2.50	-2.50
349	153.72	156.91	-3.19	25.00	8700.00	2.50	-2.50
350	154.67	157.54	-2.88	25.00	8725.00	2.50	-2.50
351	155.52	158.09	-2.57	25.00	8750.00	2.50	-2.50
352	156.16	158.56	-2.40	25.00	8775.00	2.50	-2.50
353	156.02	158.96	-2.94	25.00	8800.00	2.50	-2.50
354	155.95	159.35	-3.40	25.00	8825.00	2.50	-2.50
355	155.55	159.73	-4.18	25.00	8850.00	2.50	-2.50
356	155.06	160.12	-5.06	25.00	8875.00	2.50	-2.50
357	155.19	160.51	-5.32	25.00	8900.00	2.50	-2.50
358	155.74	160.90	-5.16	25.00	8925.00	2.50	-2.50
359	156.21	161.28	-5.08	25.00	8950.00	2.50	-2.50
360	156.69	161.67	-4.98	25.00	8975.00	2.50	-2.50
361	157.18	162.06	-4.88	25.00	9000.00	2.50	-2.50
362	158.10	162.45	-4.34	25.00	9025.00	2.50	-2.50
363	159.94	162.83	-2.89	25.00	9050.00	2.50	-2.50
364	160.67	163.22	-2.55	25.00	9075.00	2.50	-2.50
365	162.13	163.61	-1.48	25.00	9100.00	2.50	-2.50
366	163.58	164.00	-0.42	25.00	9125.00	2.50	-2.50
367	164.99	164.38	0.61	25.00	9150.00	2.50	-2.50
368	166.09	164.77	1.32	25.00	9175.00	2.50	-2.50
369	167.05	165.16	1.90	25.00	9200.00	2.50	-2.50
370	168.64	165.55	3.09	25.00	9225.00	2.50	-2.50
371	168.57	165.93	2.64	25.00	9250.00	2.50	-2.50
372	168.99	166.32	2.67	25.00	9275.00	2.50	-2.50
373	169.09	166.71	2.38	25.00	9300.00	2.50	-2.50
374	169.49	167.10	2.39	25.00	9325.00	2.50	-2.50
375	169.47	167.48	1.99	25.00	9350.00	2.50	-2.50
376	169.30	167.83	1.46	25.00	9375.00	2.50	-2.50
377	170.28	168.10	2.18	25.00	9400.00	2.50	-2.50
378	170.63	168.29	2.34	25.00	9425.00	2.50	-2.50
379	168.00	168.39	-0.39	25.00	9450.00	2.50	-2.50
380	167.71	168.41	-0.70	25.00	9475.00	2.50	-2.50
381	166.37	168.34	-1.98	25.00	9500.00	2.50	-2.50
382	165.89	168.20	-2.31	25.00	9525.00	2.50	-2.50
383	163.90	167.96	-4.06	25.00	9550.00	2.50	-2.50
384	162.36	167.65	-5.29	25.00	9575.00	2.50	-2.50
385	160.64	167.25	-6.61	25.00	9600.00	2.50	-2.50
386	159.08	166.77	-7.69	25.00	9625.00	2.50	-2.50
387	157.88	166.20	-8.33	25.00	9650.00	2.50	-2.50
388	157.10	165.57	-8.47	25.00	9675.00	2.50	-2.50
389	156.37	164.93	-8.56	25.00	9700.00	2.50	-2.50
390	156.08	164.28	-8.20	25.00	9725.00	2.50	-2.50
391	156.27	163.64	-7.37	25.00	9750.00	2.50	-2.50
392	155.59	163.00	-7.41	25.00	9775.00	2.50	-2.50
393	154.31	162.36	-8.04	25.00	9800.00	2.50	-2.50
394	153.11	161.71	-8.61	25.00	9825.00	2.50	-2.50
395	152.06	161.07	-9.01	25.00	9850.00	2.50	-2.50
396	151.35	160.43	-9.08	25.00	9875.00	2.50	-2.50
397	150.77	159.79	-9.02	25.00	9900.00	2.50	-2.50

RP = -31524.23 L = 709.98
PENTE L = 377.82 m P = -1.75 %
RP = 6000.00 L = 375.13
RAMPE L = 276.01 m P = 4.50 %
RP = -7500.00 L = 221.25
RAMPE L = 564.92 m P = 1.55 %
RP = -7500.00 L = 308.99
PENTE L = 260.08 m P = -2.57 %

DROITE L = 577.18 m
ARC R = 975.00 m L = 407.01 m
DROITE L = 1318.92 m
ARC R = 1200.00 m L = 786.87 m



398	150.34	159.15	-8.81		9925.00	2.50	-2.50
399	149.78	158.56	-8.78	25.00	9950.00	2.50	-2.50
400	149.52	158.05	-8.53	25.00	9975.00	2.50	-2.50
401	149.30	157.63	-8.34	25.00	10000.00	2.50	-2.50
402	149.16	157.30	-8.14	25.00	10025.00	2.50	-2.50
403	148.57	157.04	-8.48	25.00	10050.00	2.50	-2.50
404	150.64	156.87	-6.23	25.00	10075.00	2.50	-2.50
405	150.40	156.79	-6.38	25.00	10100.00	2.50	-2.50
406	150.87	156.78	-5.91	25.00	10125.00	2.50	-2.50
407	150.77	156.86	-6.09	25.00	10150.00	2.50	-2.50
408	151.18	157.03	-5.85	25.00	10175.00	2.50	-2.50
409	152.08	157.27	-5.19	25.00	10200.00	2.50	-2.50
410	152.91	157.60	-4.69	25.00	10225.00	2.50	-2.50
411	153.86	158.02	-4.15	25.00	10250.00	2.50	-2.50
412	154.94	158.51	-3.57	25.00	10275.00	2.50	-2.50
413	156.15	159.09	-2.94	25.00	10300.00	2.50	-2.50
414	157.26	159.75	-2.50	25.00	10325.00	2.50	-2.50
415	158.22	160.50	-2.28	25.00	10350.00	2.50	-2.50
416	158.97	161.33	-2.36	25.00	10375.00	2.50	-2.50
417	159.63	162.24	-2.62	25.00	10400.00	2.50	-2.50
418	159.98	163.19	-3.21	25.00	10425.00	2.50	-2.50
419	160.79	164.14	-3.35	25.00	10450.00	2.50	-2.50
420	161.83	165.09	-3.26	25.00	10475.00	2.50	-2.50
421	162.90	166.04	-3.14	25.00	10500.00	2.50	-2.50
422	163.94	166.99	-3.05	25.00	10525.00	2.50	-2.50
423	164.79	167.94	-3.15	25.00	10550.00	2.50	-2.50
424	165.46	168.89	-3.43	25.00	10575.00	2.50	-2.50
425	165.97	169.84	-3.87	25.00	10600.00	2.50	-2.50
426	166.25	170.79	-4.54	25.00	10625.00	2.50	-2.50
427	167.46	171.74	-4.28	25.00	10650.00	2.50	-2.50
428	168.22	172.69	-4.47	25.00	10675.00	2.50	-2.50
429	168.65	173.64	-4.98	25.00	10700.00	2.50	-2.50
430	168.93	174.59	-5.66	25.00	10725.00	2.50	-2.50
431	169.69	175.54	-5.84	25.00	10750.00	2.50	-2.50
432	170.65	176.49	-5.83	25.00	10775.00	2.50	-2.50
433	171.08	177.44	-6.36	25.00	10800.00	2.50	-2.50
434	171.73	178.38	-6.65	25.00	10825.00	2.50	-2.50
435	171.76	179.33	-7.58	25.00	10850.00	2.50	-2.50
436	172.34	180.28	-7.94	25.00	10875.00	2.50	-2.50
437	173.23	181.23	-8.00	25.00	10900.00	2.50	-2.50
438	174.72	182.18	-7.47	25.00	10925.00	2.50	-2.50
439	176.40	183.13	-6.73	25.00	10950.00	2.50	-2.50
440	178.71	184.05	-5.34	25.00	10975.00	2.50	-2.50
441	180.53	184.93	-4.40	25.00	11000.00	2.50	-2.50
442	182.33	185.76	-3.43	25.00	11025.00	2.50	-2.50
443	183.50	186.56	-3.05	25.00	11050.00	2.50	-2.50
444	184.48	187.31	-2.83	25.00	11075.00	2.50	-2.50
445	185.37	188.02	-2.65	25.00	11100.00	2.50	-2.50
446	186.27	188.69	-2.41	25.00	11125.00	2.50	-2.50
447	187.25	189.31	-2.06	25.00	11150.00	2.50	-2.50
448	188.18	189.90	-1.72	25.00	11175.00	2.50	-2.50
449	189.04	190.44	-1.40	25.00	11200.00	2.50	-2.50
450	189.94	190.94	-1.00	25.00	11225.00	2.50	-2.50
451	190.87	191.40	-0.53	25.00	11250.00	2.50	-2.50
452	191.87	191.82	0.05	25.00	11275.00	2.50	-2.50
453	192.68	192.20	0.48	25.00	11300.00	2.50	-2.50
454	193.37	192.54	0.84	25.00	11325.00	2.50	-2.50
455	193.91	192.83	1.08	25.00	11350.00	2.50	-2.50
456	194.51	193.08	1.43	25.00	11375.00	2.50	-2.50
457	195.06	193.29	1.77	25.00	11400.00	2.50	-2.50
458	195.65	193.46	2.19	25.00	11425.00	2.50	-2.50
459	196.19	193.59	2.60	25.00	11450.00	2.50	-2.50
460	196.57	193.67	2.90	25.00	11475.00	2.50	-2.50
461	196.28	193.72	2.57	25.00	11500.00	2.50	-2.50
462	195.92	193.72	2.20	25.00	11525.00	2.50	-2.50
463	195.58	193.68	1.91	25.00	11550.00	2.50	-2.50
464	194.96	193.60	1.36	25.00	11575.00	2.50	-2.50
465	194.59	193.47	1.11	25.00	11600.00	2.50	-2.50
466	194.40	193.31	1.09	25.00	11625.00	2.50	-2.50
467	193.97	193.10	0.87	25.00	11650.00	2.50	-2.50
468	193.46	192.86	0.60	25.00	11675.00	2.50	-2.50
469	192.87	192.59	0.28	25.00	11700.00	2.50	-2.50
470	192.13	192.33	-0.20	25.00	11725.00	2.50	-2.50
471	191.43	192.07	-0.64	25.00	11750.00	2.50	-2.50
472	190.69	191.81	-1.12	25.00	11775.00	2.50	-2.50
473	190.00	191.55	-1.54	25.00	11800.00	2.50	-2.50
474	189.20	191.28	-2.09	25.00	11825.00	2.50	-2.50
475	188.68	191.02	-2.34	25.00	11850.00	2.50	-2.50
476	187.83	190.76	-2.93	25.00	11875.00	2.50	-2.50
477	187.13	190.50	-3.36	25.00	11900.00	2.50	-2.50
478	186.70	190.24	-3.54	25.00	11925.00	2.50	-2.50
479	188.66	189.98	-1.31	25.00	11950.00	2.50	-2.50
480	188.89	189.71	-0.82	25.00	11975.00	2.50	-2.50
481	189.73	189.45	0.28	25.00	12000.00	2.50	-2.50
482	189.24	189.19	0.05	25.00	12025.00	2.50	-2.50
483	188.97	188.93	0.04	25.00	12050.00	2.50	-2.50
484	188.66	188.67	-0.01	25.00	12075.00	2.50	-2.50
485	188.95	188.40	0.55	25.00	12100.00	2.50	-2.50
486	188.07	188.14	-0.07	25.00	12125.00	2.50	-2.50
487	187.81	187.88	-0.07	25.00	12150.00	2.50	-2.50
488	187.57	187.62	-0.05	25.00	12175.00	2.50	-2.50
489	187.31	187.36	-0.05	25.00	12200.00	2.50	-2.50
490	187.06	187.09	-0.04	25.00	12225.00	2.50	-2.50
491	186.81	186.83	-0.02	25.00	12250.00	2.50	-2.50
492	186.56	186.57	-0.01	25.00	12275.00	2.50	-2.50
493	186.31	186.31	-0.00	25.00	12300.00	2.50	-2.50
494	186.05			25.00	12325.00	2.50	-2.50
495	185.80			25.00	12350.00	2.50	-2.50

RP = 7500.00 L = 477.60

RAMPE L = 545.52 m P = 3.80 %

RP = -15000.00 L = 726.81

PENTE L = 638.98 m P = -1.05 %

DROITE L = 1030.69 m

ARC R = 2500.00 m L = 1091.45 m

DROITE
L = 33.84 m