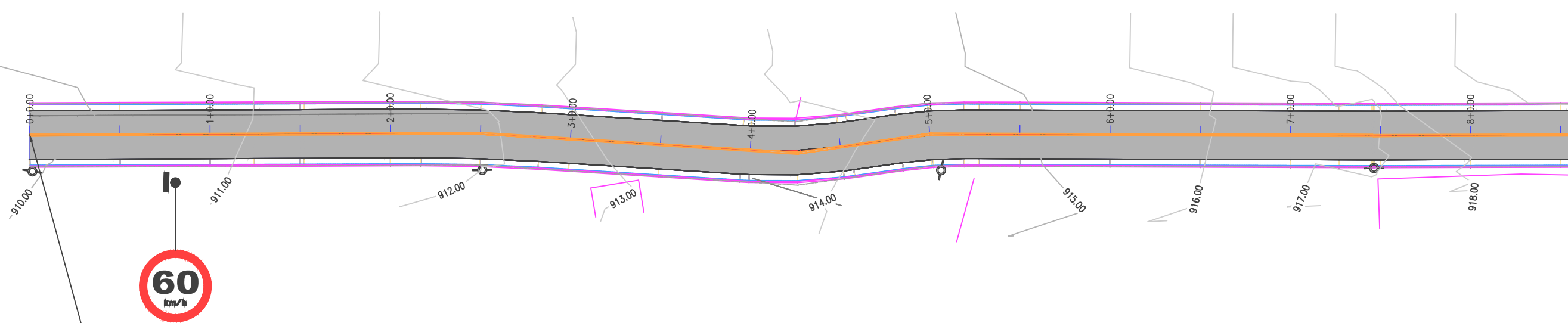
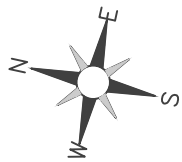


© 2024 Microsoft Corporation © 2023 Maxar © CNES (2023) Distribution Airbus DS

  
JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE

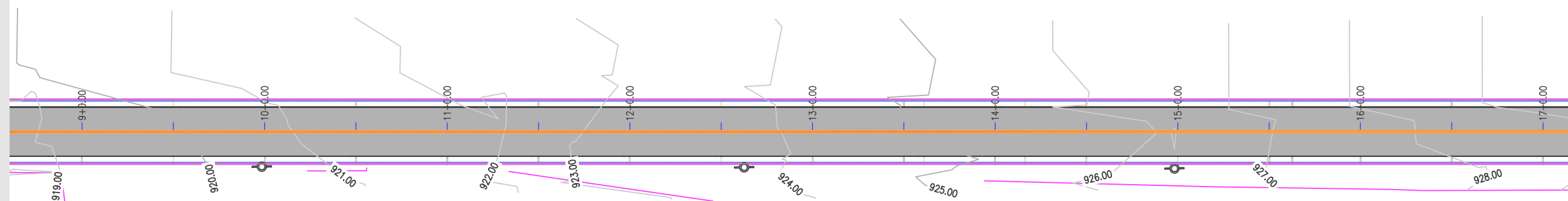
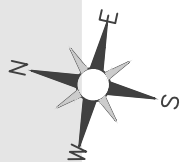


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		1 /01
<b>PLANTA GERAL - ESTRADA RAMPA INFINITY</b>		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/3000
ARQUIVO:	PLANTA GERAL_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	



E: 310340.477  
N: 9540308.751

PRANCHA -



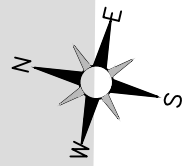
PRANCHA - 2

PRANCHA - 1

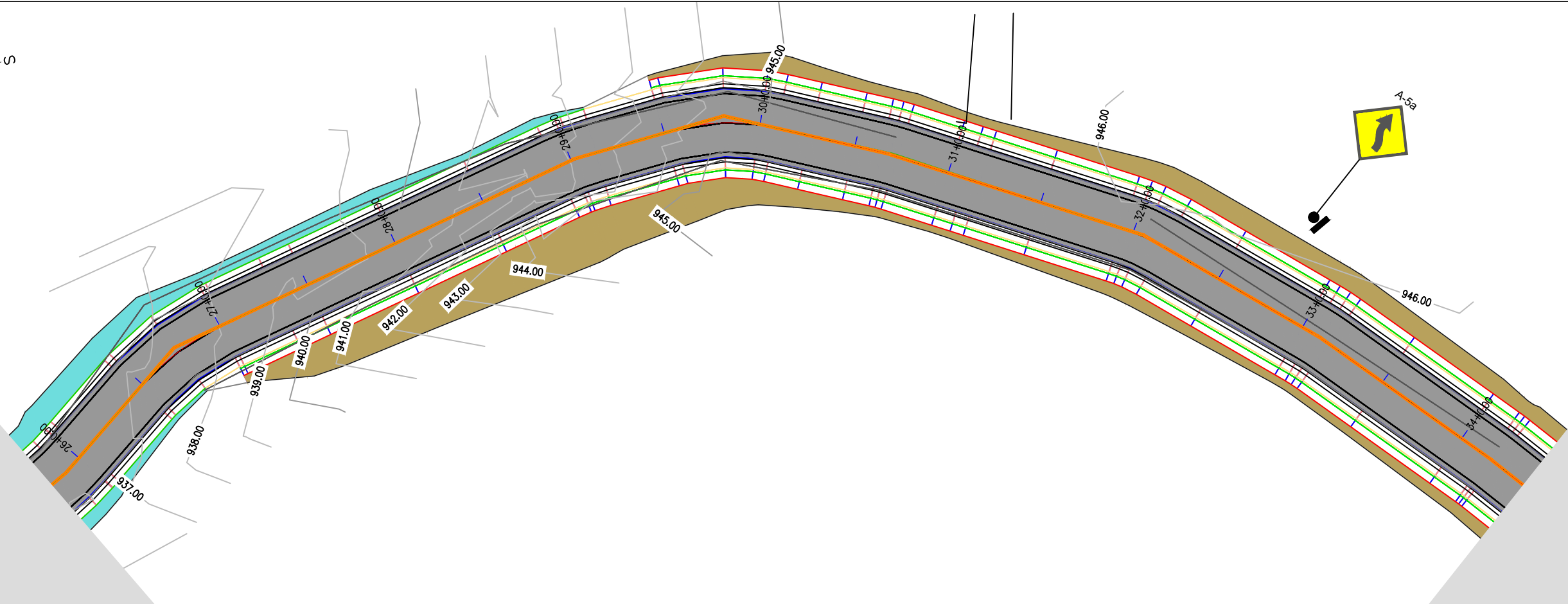
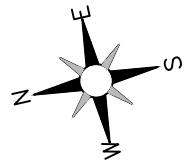
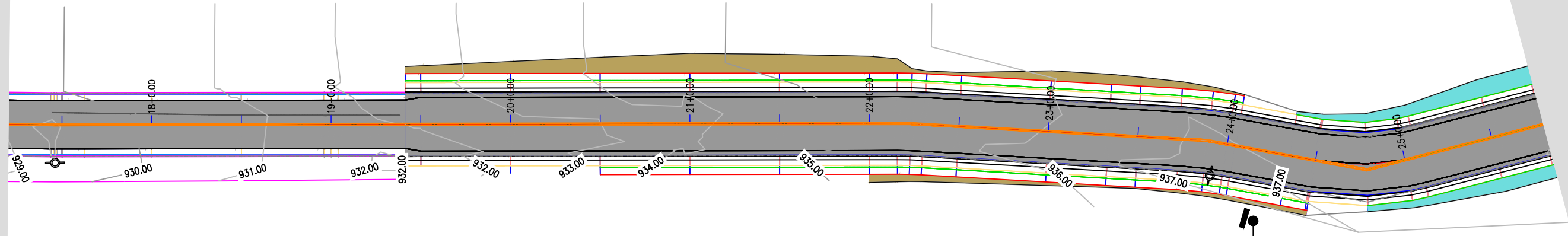
*Arthur Moreira Torquato*  
JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA: <b>1 /04</b>
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		
<b>PROJETO DE SINALIZAÇÃO - ESTRADA RAMPA INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA: 1/500
ARQUIVO:	SIN_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	



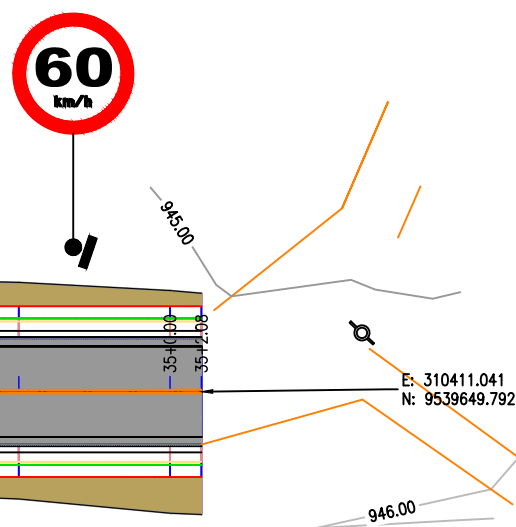
PRANCHA - 2



*Arthur Moreira Torquato*  
JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		2 /04
PROJETO DE SINALIZAÇÃO - ESTRADA RAMPA INFINITY		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/500
ARQUIVO:	SIN_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	



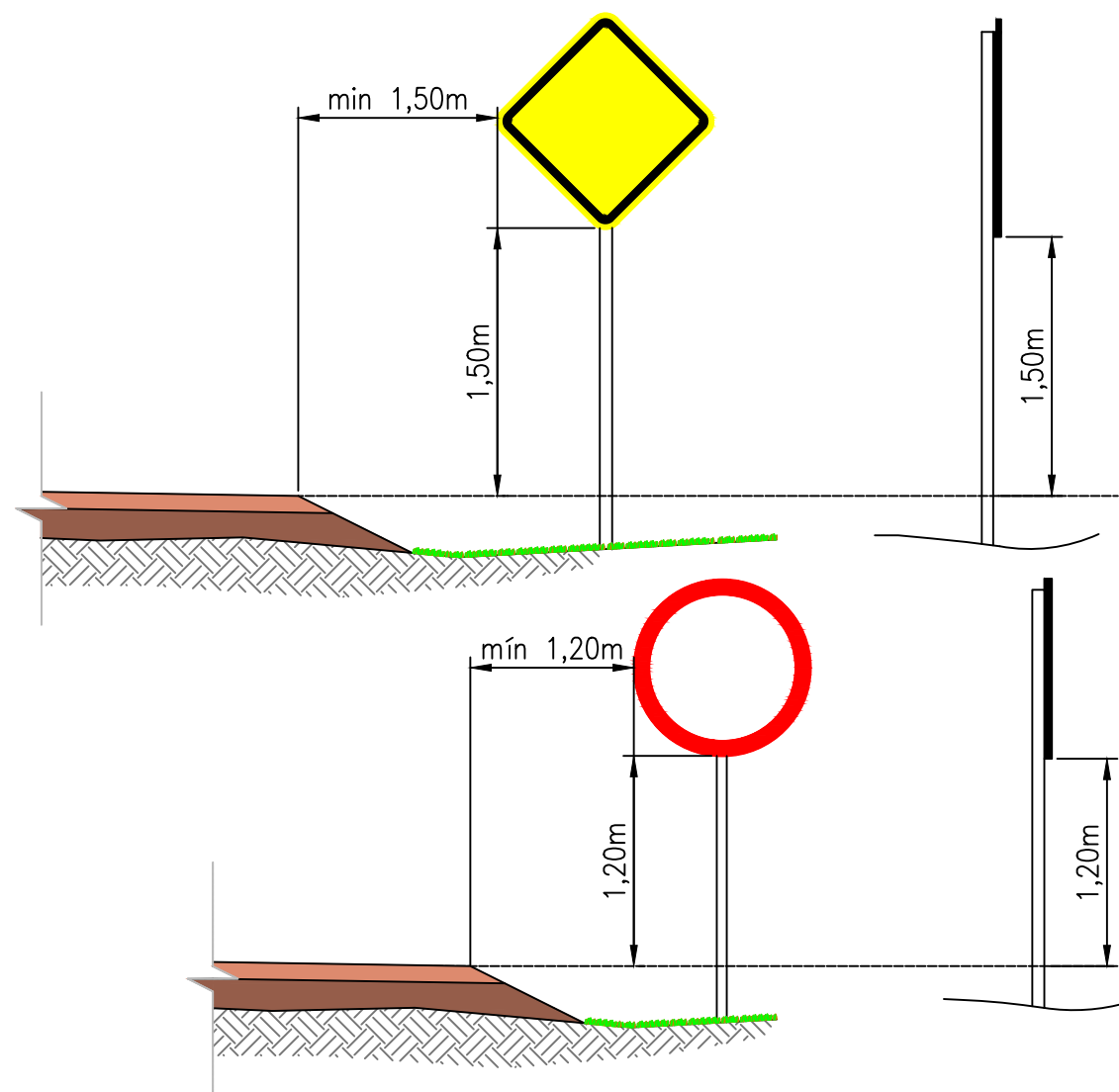
PRANCHA - 4

  
JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>3 /04</b>
<b>PROJETO DE SINALIZAÇÃO - ESTRADA RAMPA INFINITY</b>		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/500
ARQUIVO:	SIN_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	

Posicionamento transversal



PLACAS DE ADVERTÊNCIA

PLACAS	CÓDIGO	DIMENSÕES (m)	QUANTIDADE (un)
	A - 5a	0,80x0,80	01

PLACAS DE ADVERTÊNCIA

PLACAS	CÓDIGO	DIMENSÕES (m)	QUANTIDADE (un)
	R - 19	Ø = 0,60	02

NOTA 1:

As Placas Regulamentares tem as seguintes características:

Diâmetro	- 0,80m	Fundo	- Branco
Tarja Circular e Diagonal	- 0,07m	Tarja	- Vermelha
		Símbolo	- Preto
		Letra	- Preto
		Verso	- Preto

NOTA 2:

As Placas de Advertência tem as seguintes características:

Lado	- 0,80m	Fundo	- Amarelo
Orla externa	- 0,01m	Orla interna	- Preta
Orla interna	- 0,02m	Orla externa	- Amarela
		Símbolo	- Preto
		Verso	- Preto

JOTA BARROS PROJETOS  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE

RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3

PROJETO DE SINALIZAÇÃO - ESTRADA RAMPA INFINITY

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE

ARQUIVO: SIN\_RAMPA INFINITY (TRECHO NOVO)\_R0.DWG

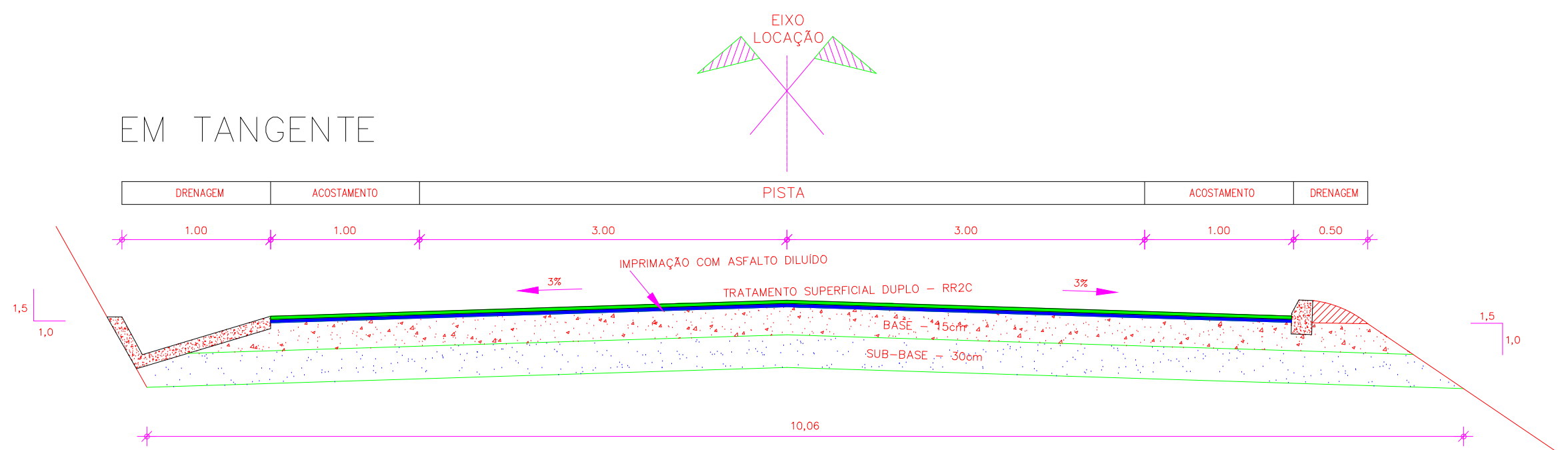
PRANCHA:

4 /04

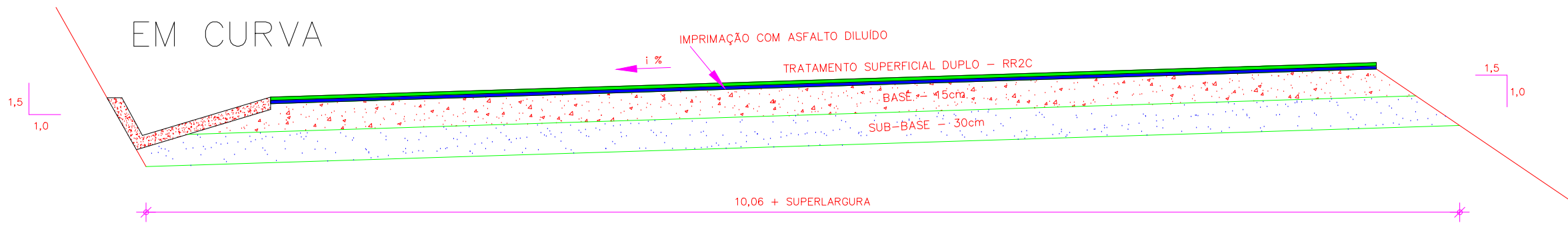
ESCALA:

S/ ESC

# EM TANGENTE





# EM CURVA



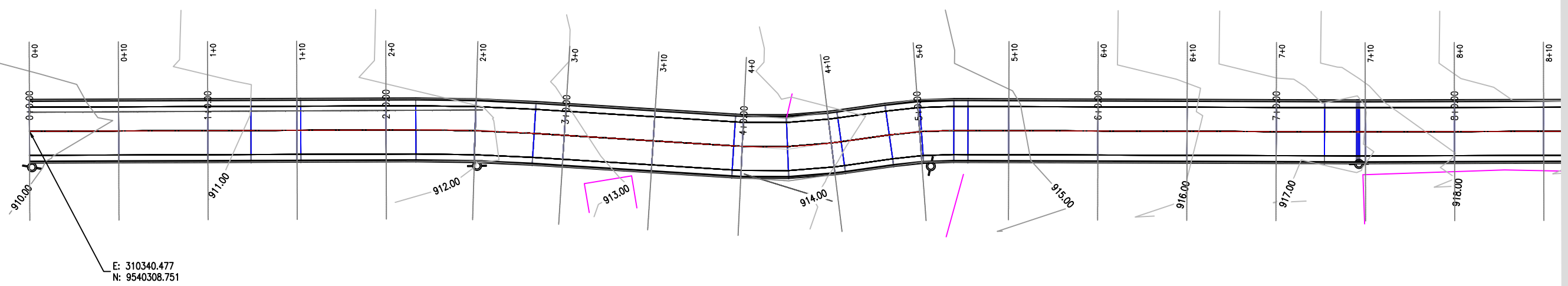
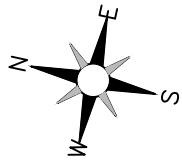
## SEQUÊNCIA EXECUTIVA

- 1 - EXECUÇÃO DA REGULARIZAÇÃO DO SUBLEITO COM OS ÚLTIMOS 60cm DA TERRAPLENAGEM
- 2 - EXECUÇÃO DA SUB-BASE (30cm) COM SOLOS DAS JAZIDA
- 3 - EXECUÇÃO DA BASE DE SOLO CIMENTO (20%)
- 4 - IMPRIMAÇÃO DA BASE CM- 15
- 5 - TRATAMENTO SUPERCIAL DUPLO - RR2C

  
**JOTA BARROS PROJETOS**  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE

 <b>JOTA BARROS PROJETOS</b> <small>RUA TANIELÃO, 2040 - BARRIO COELHO NETO, ALTOS        FONE: (85) 3042-0100        E-MAIL: contato@jotaprojetos.com.br        www.jotaprojetos.com.br</small>	<b>PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE</b>		PRANCHA: <b>1 / 1</b>
	<b>RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3</b>		
	<b>SEÇÃO TRANSVERSAL (SEÇÃO TIPO)</b>		ESCALA: <b>S/ESCALA</b>
	PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	
ARQUIVO:	ST_RAMPA INFINITY (TRECHO NOVO)_R0.DWG		



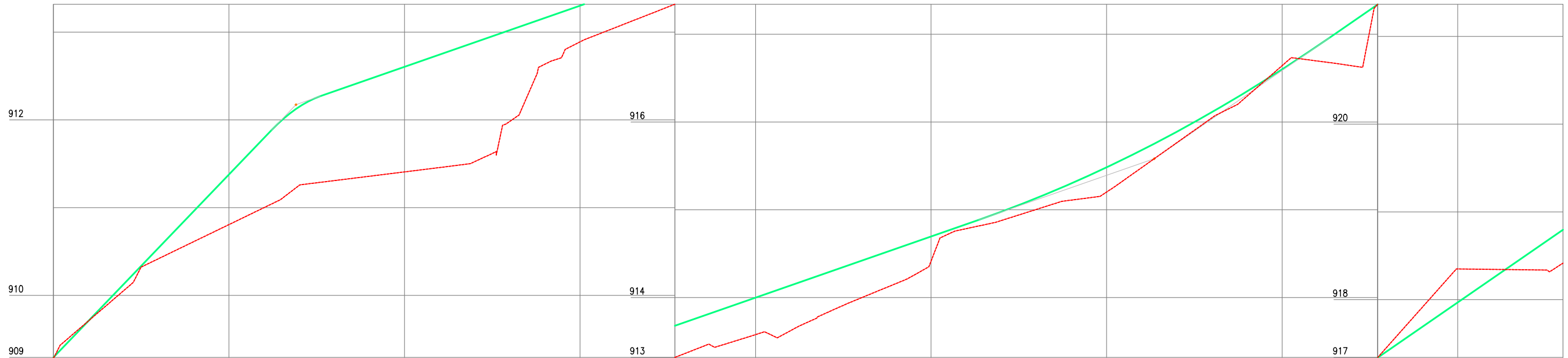


PRANCHA -

EST RAMPA

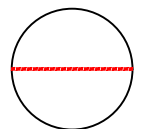
EST RAMPA

EST RAMPA

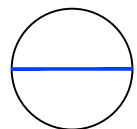


Estaca	Cota do terreno	Cota da terraplenagem	Cota vermelha
0	909,294	909,294	0,000
1	910,607	911,378	0,571
2	911,408	912,605	1,197
3	912,869	913,302	0,413
4	913,578	913,999	0,421
5	914,415	914,696	0,281
6	915,203	915,484	0,281
7	916,643	916,601	-0,042
8	918,350		
8	918,417		

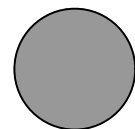
*Artur Moreira Torquato*  
**JOTA BARROS PROJETOS**  
 Artur Moreira Torquato  
 Engº Civil - CREA 53900D - CE



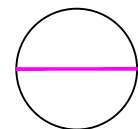
TERRENO NATURAL



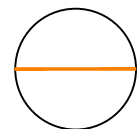
PROJETADO



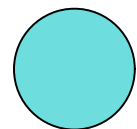
ESTRADA



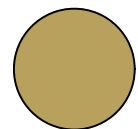
EDIFICAÇÃO



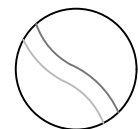
CALÇADA



ATERRO



CORTE



CURVAS DE NÍVEL



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE

RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3

**PROJETO GEOMÉTRICO - ESTRADA RAMPA INFINITY**

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE

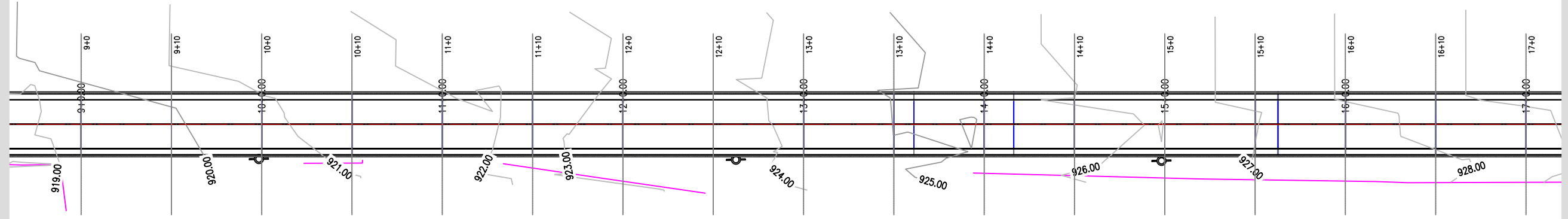
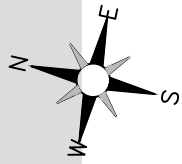
ARQUIVO: GEO\_RAMPA INFINITY (TRECHO NOVO)\_R0.DWG

PRANCHA:

**1 /05**

ESCALA:

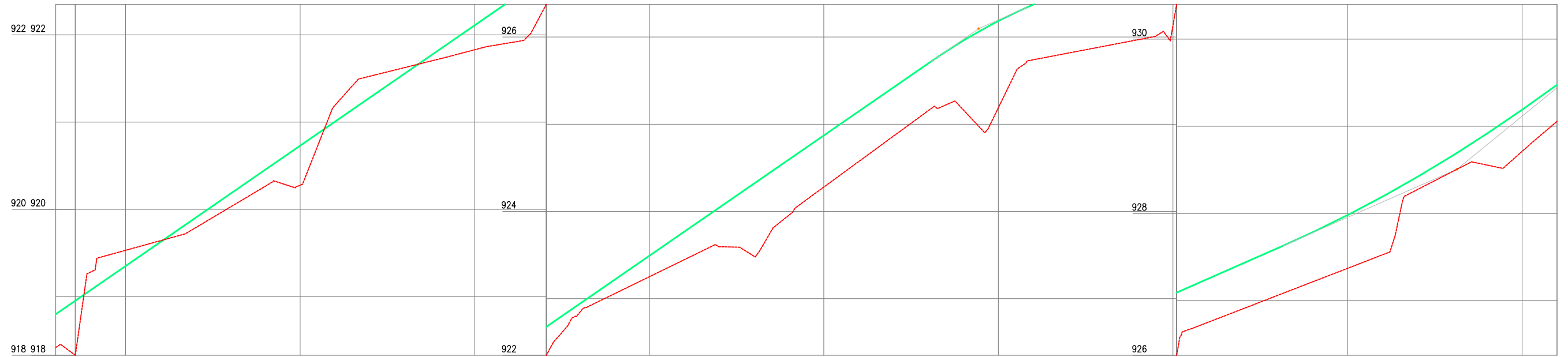
H 1/500  
V 1/50



EST RANPA

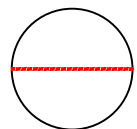
EST RANPA

EST RANPA

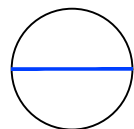


Estaca	8	9	10	11	12	13	14	15	16	17	17
Cota do terreno	918,417	919,530	920,276	921,829	923,251	924,279	925,189	926,130	927,372	928,712	929,057
Cota da terraplenagem	918,797	919,349	920,730	922,110	923,490	924,871	926,183	927,075	927,982		
Cota vermelha	0,380	-0,181	0,454	0,281	0,240	0,592	0,994	0,945	0,610		

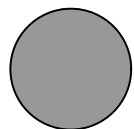
*JOTA BARROS PROJETOS*  
 Arthur Moreira Torquato  
 Eng.º Civil - CREA 53900D - CE



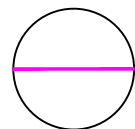
TERRENO NATURAL



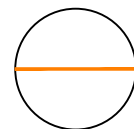
PROJETADO



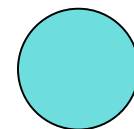
ESTRADA



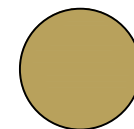
EDIFICAÇÃO



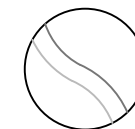
CALÇADA



ATERRO



CORTE



CURVAS DE NÍVEL



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE

RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3

PROJETO GEOMÉTRICO - ESTRADA RANPA INFINITY

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE

ARQUIVO: GEO\_RANPA INFINITY (TRECHO NOVO)\_R0.DWG

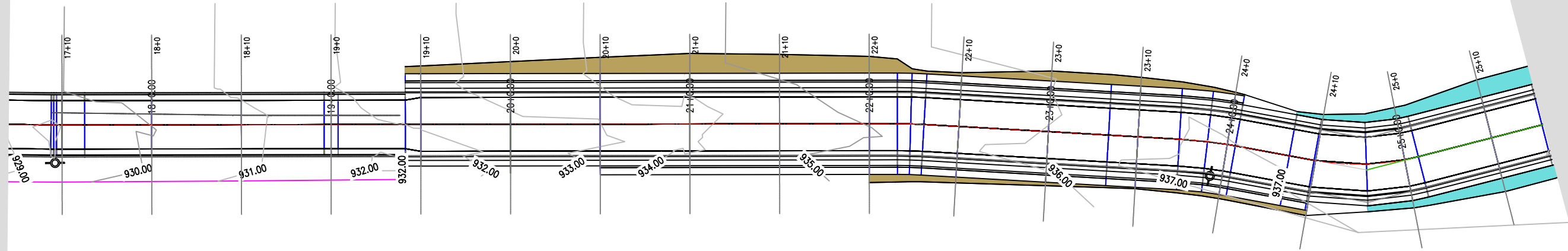
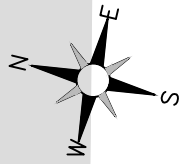
PRANCHA:

2 /05

ESCALA:

H 1/500  
V 1/50





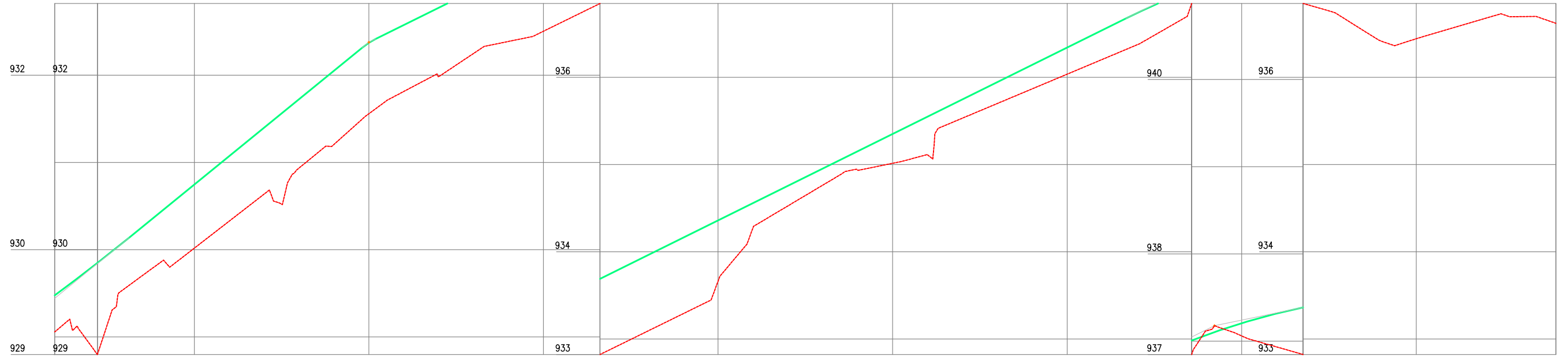
PRANCHA - 3

EST RAMPA

EST RAMPA

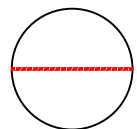
EST RAMPA

EST RAMPA

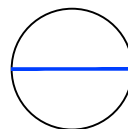


Cota Vermelha	Cota da terraplenagem	Cota do terreno	Estaca
0,419	929,476	929,057	17
0,729	930,746	930,017	18
0,813	932,371	931,558	19
0,864	933,368	932,504	20
0,897	934,359	933,661	21
0,536	935,350	935,014	22
0,305	936,340	936,036	23
0,147	937,206	937,059	24
		937,442	25
		937,618	25

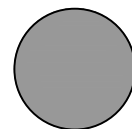
JOTA BARROS PROJETOS  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE



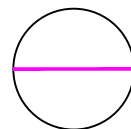
TERRENO NATURAL



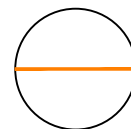
PROJETADO



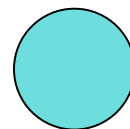
ESTRADA



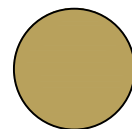
EDIFICAÇÃO



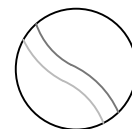
CALÇADA



ATERRO



CORTE



CURVAS DE NÍVEL



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE

RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3

PROJETO GEOMÉTRICO - ESTRADA RAMPA INFINITY

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE

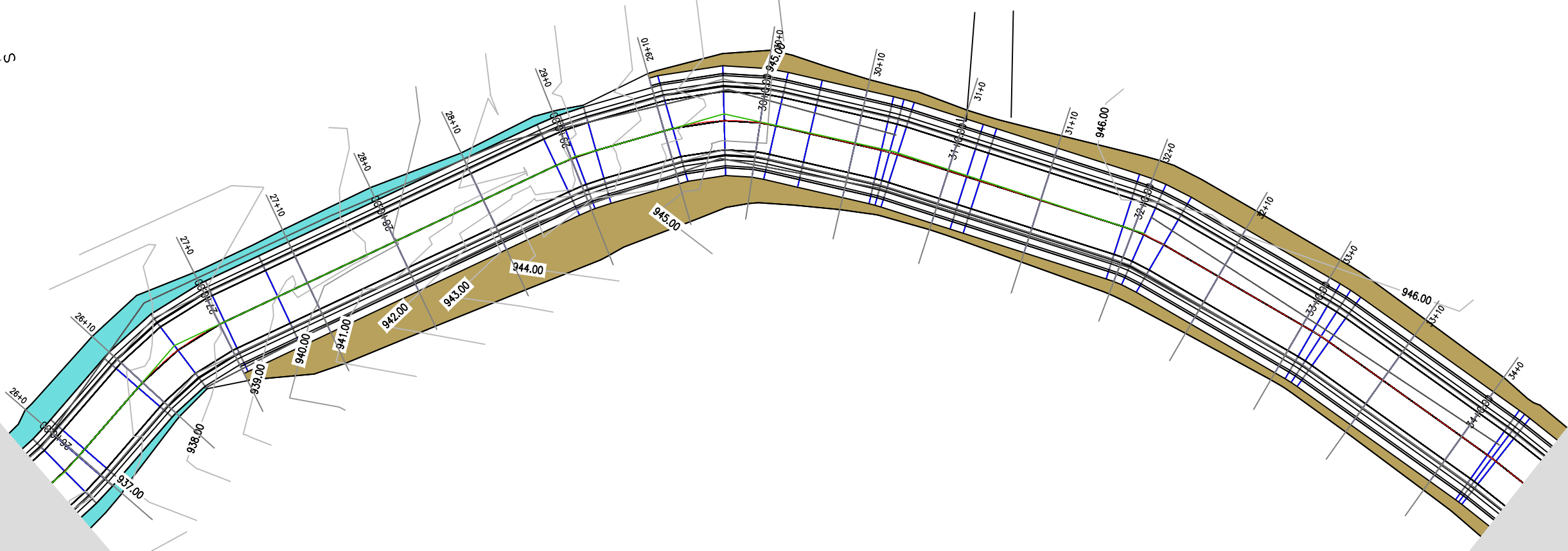
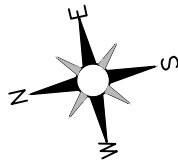
ARQUIVO: GEO\_RAMPA INFINITY (TRECHO NOVO)\_R0.DWG

PRANCHA:

3 /05

ESCALA:

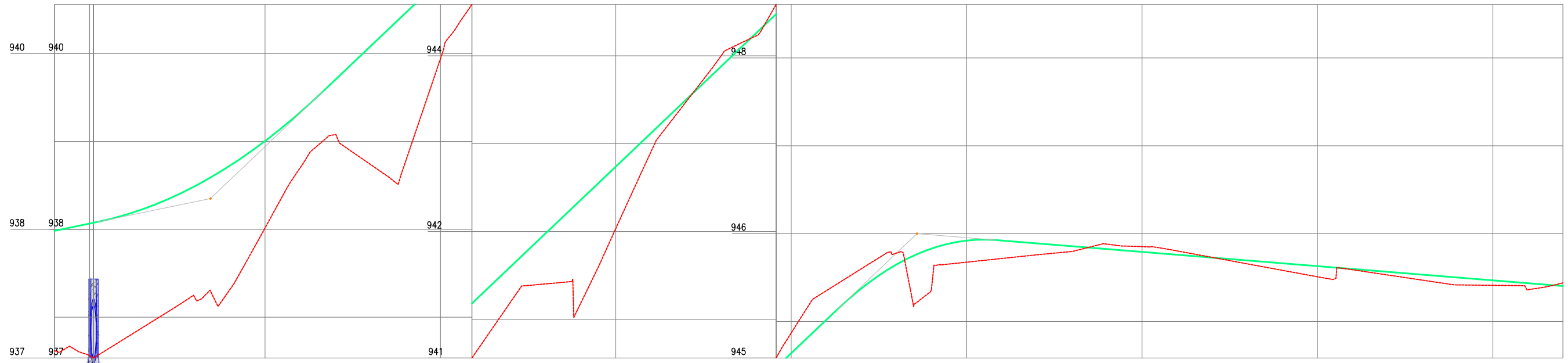
H 1/500  
V 1/50



EST RANPA

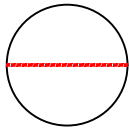
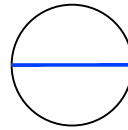
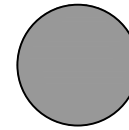
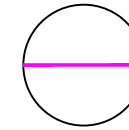
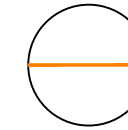
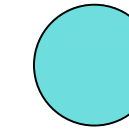
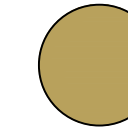
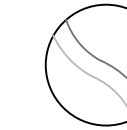
EST RANPA

EST RANPA



Estaca	Cota do terreno	Cota da terraplenagem	Cota vermelha
25	936,618	937,984	1,365
26	936,552	938,066	1,505
27	936,016	939,005	0,989
28	939,941	940,841	0,900
29	942,036	942,740	0,704
30	944,870	944,639	-0,232
31	945,675	945,921	0,246
32	945,853	945,792	-0,060
33	945,509	945,630	0,121
34	945,509	945,509	0,000
34	945,509	945,509	-0,000

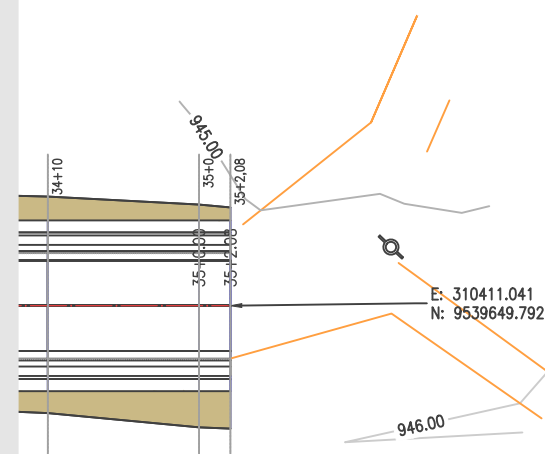
*Artur Moreira Torquato*  
 Eng.º Civil - CREA 53900D - CE

-  TERRENO NATURAL
-  PROJETADO
-  ESTRADA
-  EDIFICAÇÃO
-  CALÇADA
-  ATERRO
-  CORTE
-  CURVAS DE NÍVEL

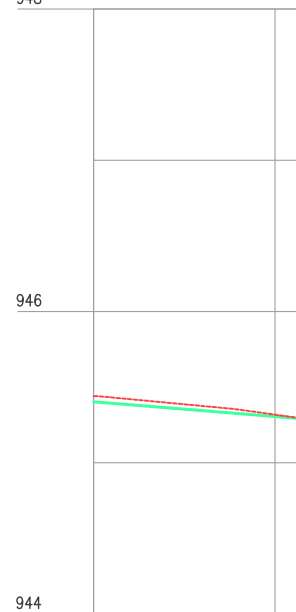


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
<b>PROJETO GEOMÉTRICO - ESTRADA RANPA INFINITY</b>	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_RANPA INFINITY (TRECHO NOVO)_R0.DWG

PRANCHA:	<b>4 /05</b>
ESCALA:	H 1/500 V 1/50

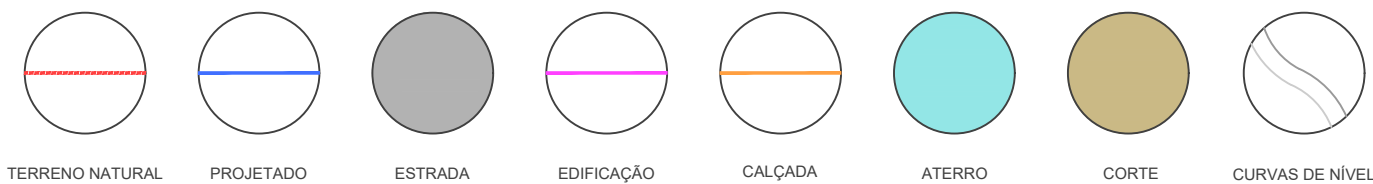


948 EST RAMPA

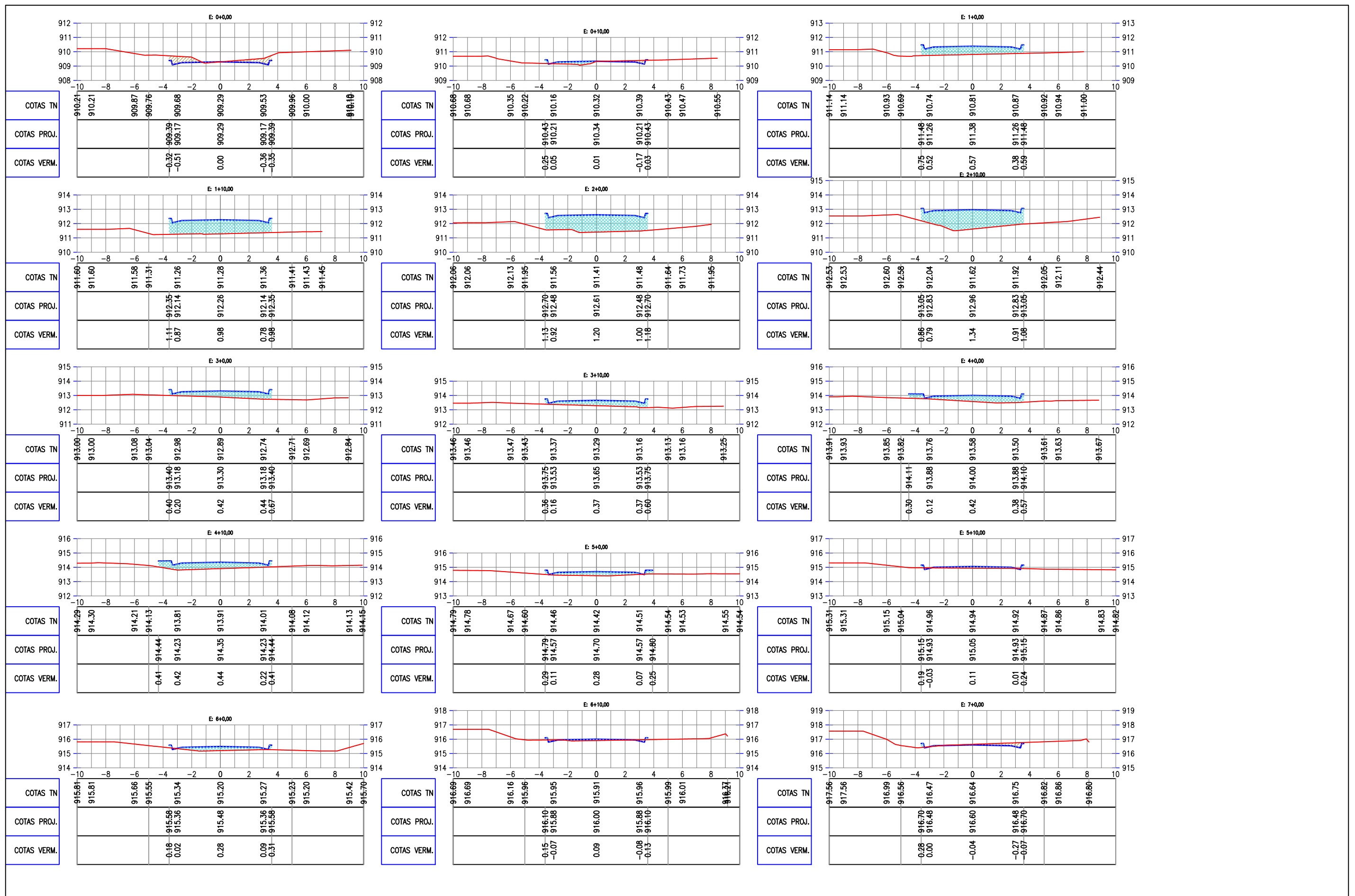


Cota Vermelha	Cota da terraplenagem	Cota do terreno	Estaca
-0,035	945,404	945,439	34
-0,012	945,307	945,319	35
0,000	945,290	945,290	35

  
**JOTA BARROS PROJETOS**  
 Arthur Moreira Torquato  
 Eng.º Civil - CREA 53900D - CE



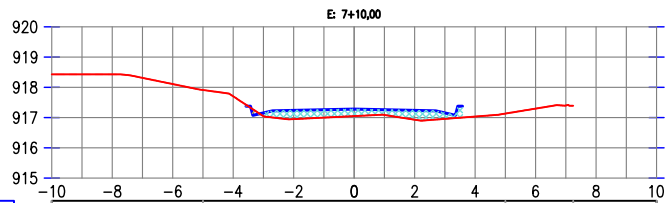
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>5 /05</b>
<b>PROJETO GEOMÉTRICO - ESTRADA RAMPA INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	GEO_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	H 1/500 V 1/50



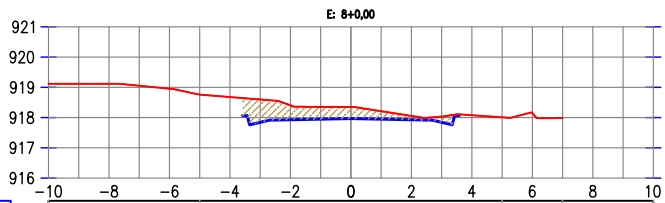
JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



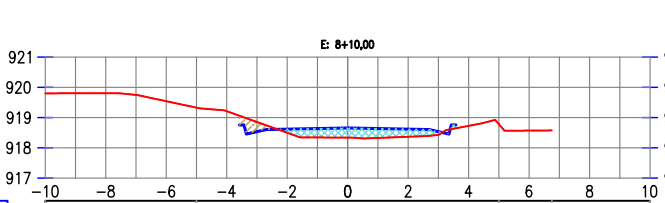
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		1 /05
<b>SEÇÕES TRANSVERSAIS - ESTRADA RAMPA INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	TERRA_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	1/250



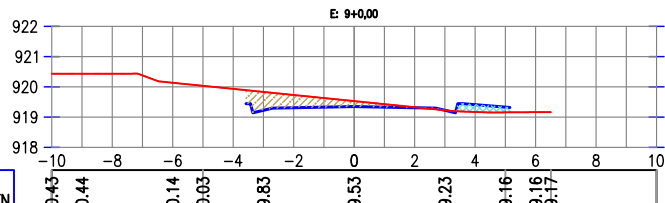
COTAS TN	918.43	918.43	918.11	917.91	917.04	917.05	916.96	917.13	917.30	917.39
COTAS PROJ.				917.37	917.16	917.28	917.16	917.37		
COTAS VERM.				-0.05	0.11	0.23	0.20	0.37		



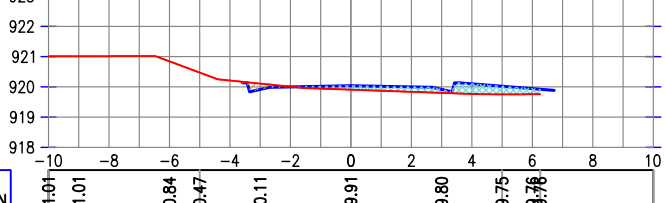
COTAS TN	919.12	918.95	918.76	918.60	918.35	918.03	918.01	918.15	917.98	
COTAS PROJ.				918.06	917.85	917.97	917.85	918.06		
COTAS VERM.				-0.58	-0.75	-0.38	-0.19	-0.04		



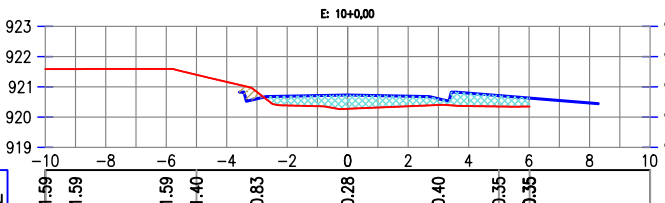
COTAS TN	919.80	919.54	919.33	918.85	918.34	918.43	918.78	918.57	918.57	
COTAS PROJ.				918.75	918.54	918.66	918.54	918.75		
COTAS VERM.				-0.31	-0.32	0.32	0.11	0.11		



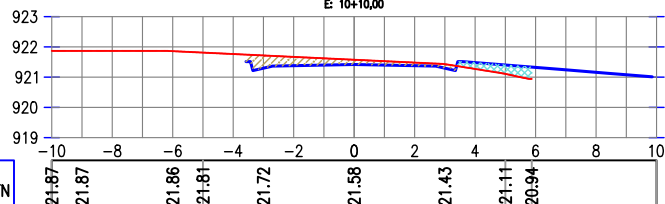
COTAS TN	920.44	920.14	920.03	919.83	919.53	919.23	919.16	919.16	919.17	
COTAS PROJ.				919.45	919.23	919.23	919.16	919.16		
COTAS VERM.				-0.45	-0.61	-0.18	0.00	0.17		



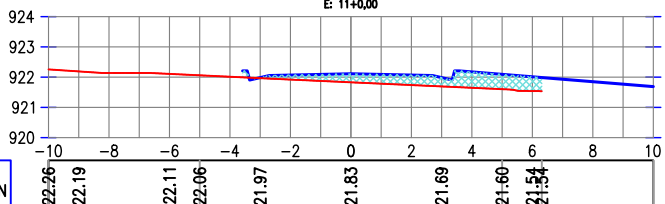
COTAS TN	921.01	921.01	920.84	920.47	920.11	919.91	919.80	919.75	919.76	
COTAS PROJ.				920.14	919.92	920.04	919.92	920.02	919.76	
COTAS VERM.				-0.03	-0.19	0.13	0.12	0.27	0.18	



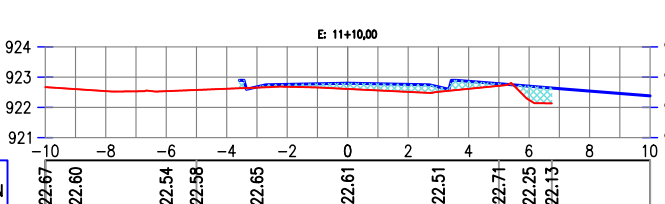
COTAS TN	921.59	921.59	921.40	920.83	920.28	920.40	920.35	920.35	920.45	
COTAS PROJ.				920.83	920.61	920.73	920.61	920.73	920.45	
COTAS VERM.				-0.24	-0.23	0.45	0.21	0.36	0.28	



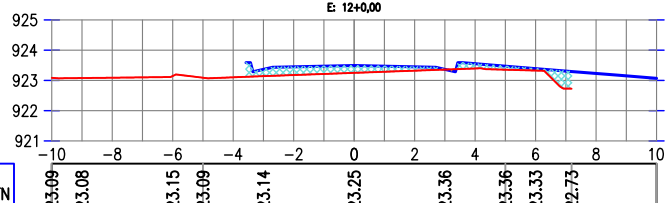
COTAS TN	921.87	921.86	921.81	921.72	921.58	921.43	921.11	920.94	921.08	
COTAS PROJ.				921.52	921.42	921.30	921.40	920.94	921.01	
COTAS VERM.				-0.23	-0.42	-0.16	-0.13	0.29	0.21	



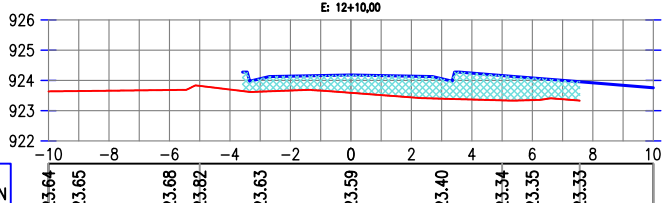
COTAS TN	922.26	922.19	922.11	922.06	921.97	921.83	921.69	921.60	921.54	
COTAS PROJ.				922.01	921.99	922.11	921.99	922.01	921.54	
COTAS VERM.				-0.21	0.02	0.28	0.29	0.49	0.47	



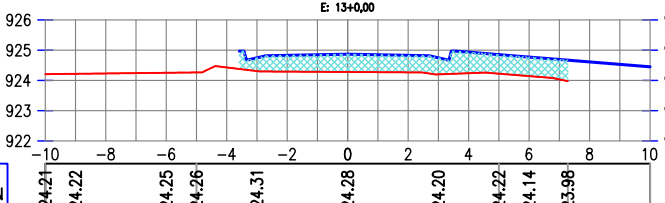
COTAS TN	922.67	922.60	922.54	922.58	922.65	922.61	922.51	922.71	922.46	
COTAS PROJ.				922.90	922.68	922.80	922.68	922.71	922.46	
COTAS VERM.				0.26	0.02	0.19	0.16	0.07	0.45	



COTAS TN	923.09	923.08	923.15	923.09	923.14	923.25	923.36	923.36	923.33	
COTAS PROJ.				923.59	923.37	923.49	923.37	923.47	923.33	
COTAS VERM.				-0.47	0.23	0.24	0.01	0.12	0.06	



COTAS TN	923.64	923.65	923.68	923.82	923.63	923.59	923.40	923.34	923.33	
COTAS PROJ.				924.28	924.06	924.18	924.06	923.34	923.33	
COTAS VERM.				-0.63	0.43	0.59	0.66	0.82	0.73	



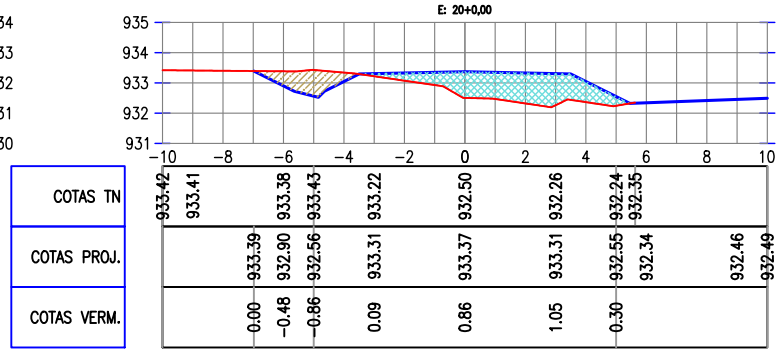
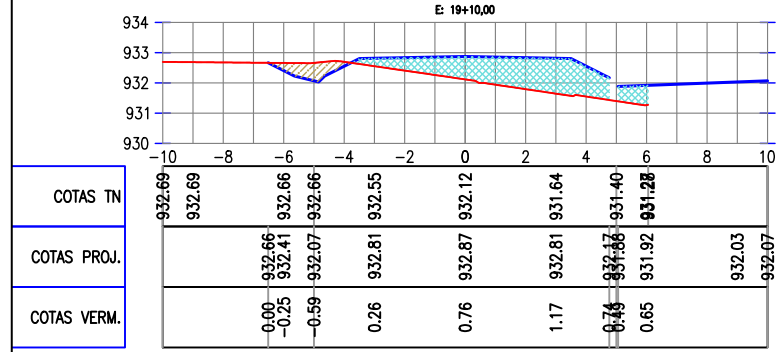
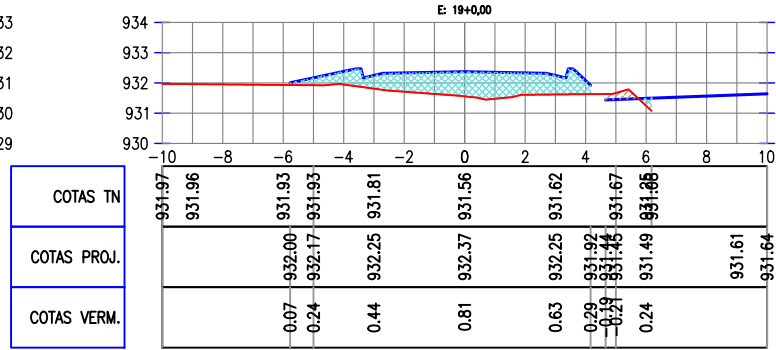
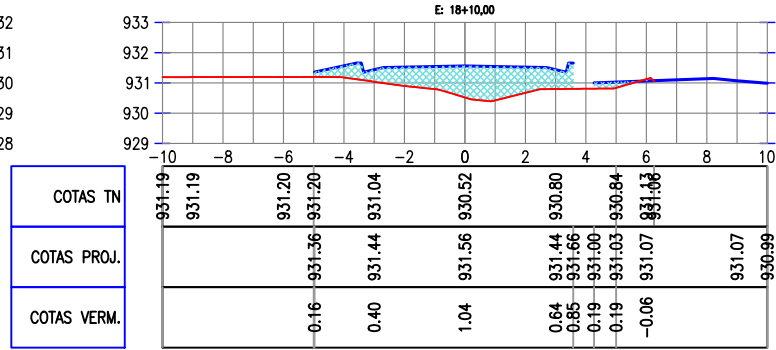
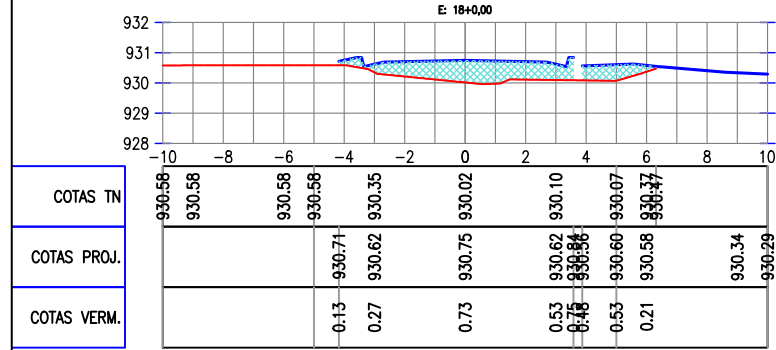
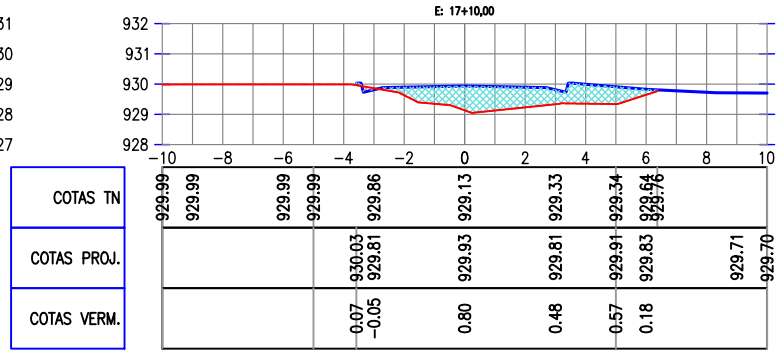
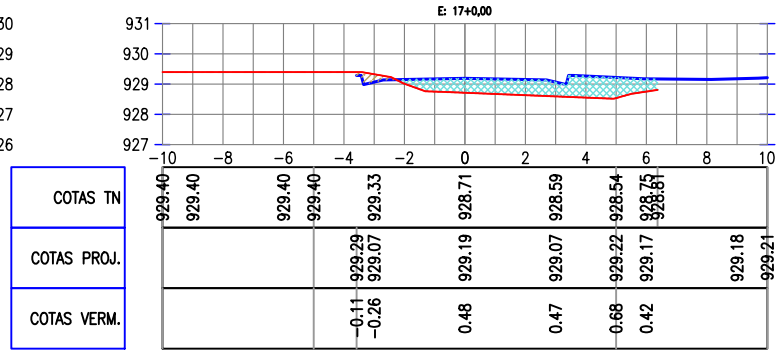
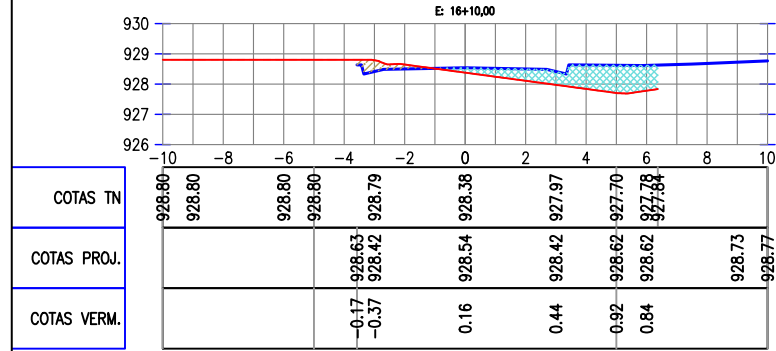
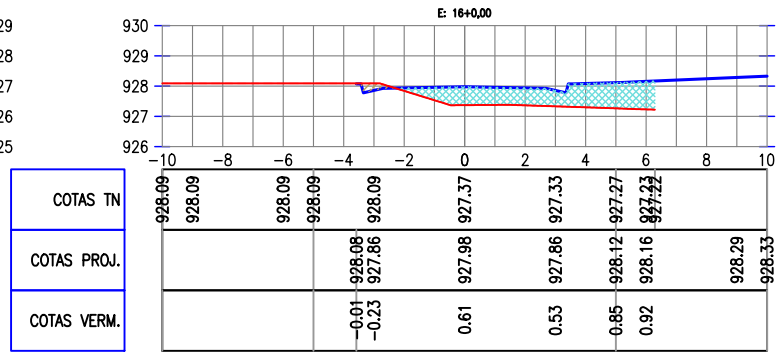
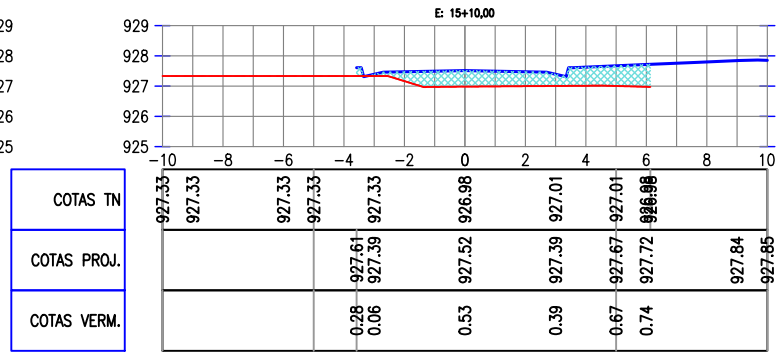
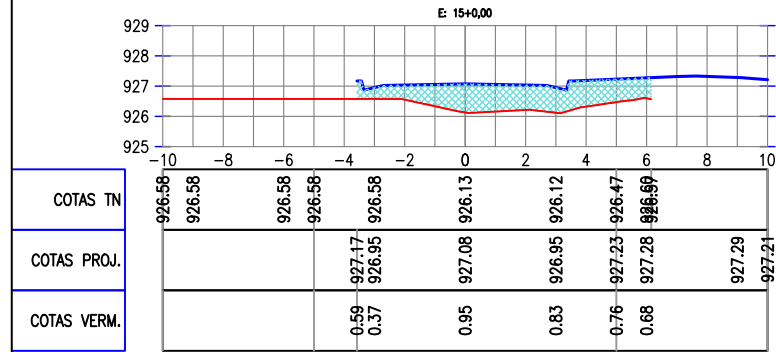
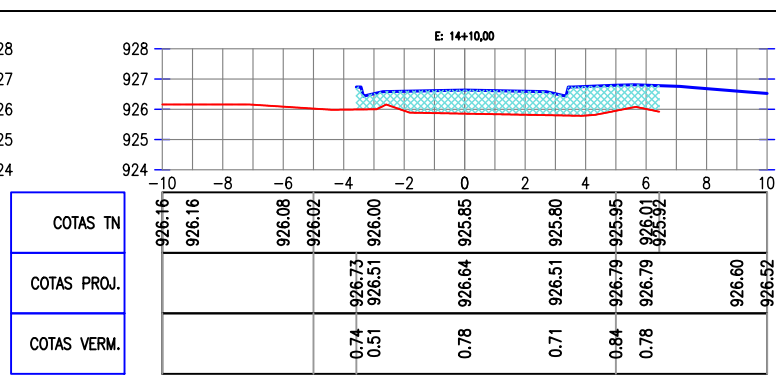
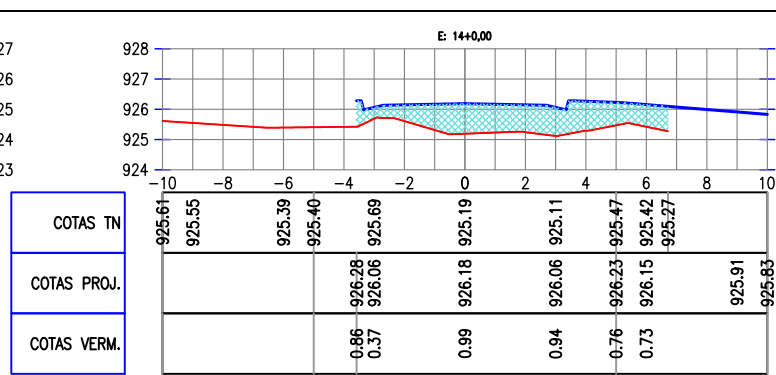
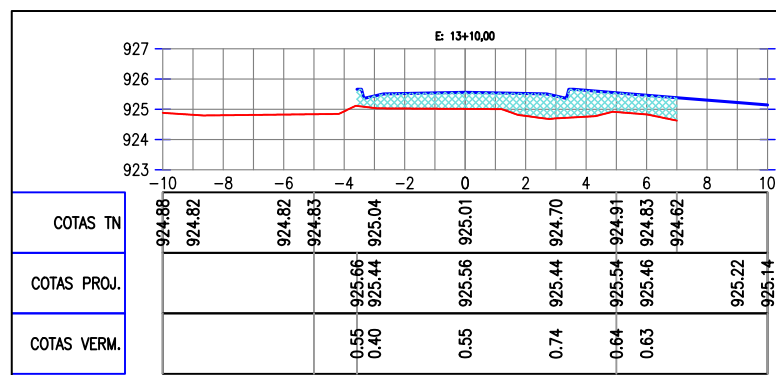
COTAS TN	924.21	924.22	924.25	924.26	924.31	924.28	924.20	924.22	923.98	
COTAS PROJ.				924.97	924.75	924.87	924.75	924.85	924.14	
COTAS VERM.				0.59	0.44	0.59	0.55	0.63	0.63	

  
**JOTA BARROS PROJETOS**  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>2 /05</b>
<b>SEÇÕES TRANSVERSAIS - ESTRADA RAMPA INFINITY</b>		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	





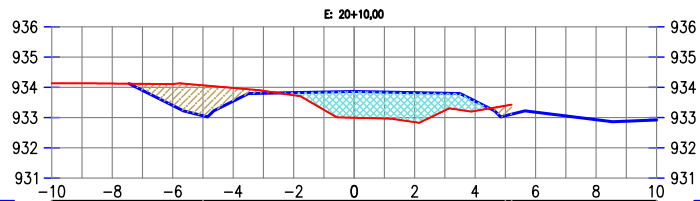
JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



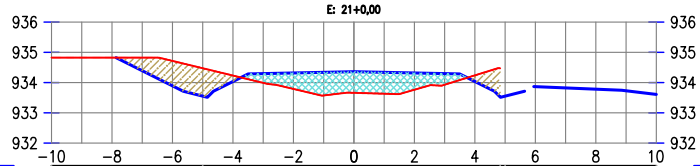
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
SEÇÕES TRANSVERSAIS - ESTRADA RAMPA INFINITY	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	TERRA_RAMPA INFINITY (TRECHO NOVO)_R0.DWG

PRANCHA:	3 /05
ESCALA:	1/250

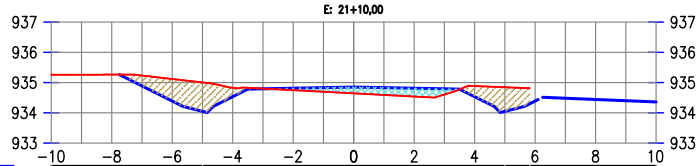




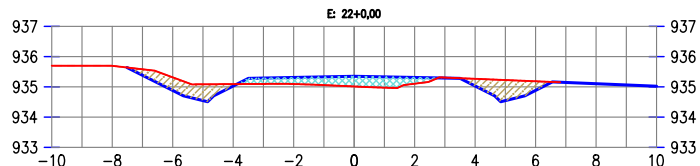
COTAS TN	934.13	934.13	934.11	934.07	933.89	932.99	933.24	933.49	933.18	932.88	932.92
COTAS PROJ.		934.12	933.40	933.06	933.80	933.86	933.80	933.06	933.18		
COTAS VERM.		0.00	-0.71	-1.01	-0.08	0.87	0.57	-0.33			



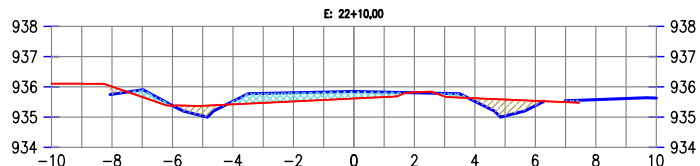
COTAS TN	934.83	934.83	934.72	934.48	933.99	933.66	933.93	934.47	933.61	933.73	933.61
COTAS PROJ.		934.83	933.89	933.55	934.30	934.36	934.30	933.55	933.61		
COTAS VERM.		0.00	-0.82	-0.92	0.31	0.70	0.37	-0.16			



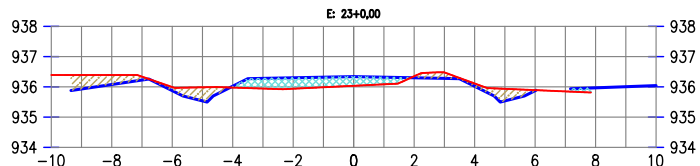
COTAS TN	935.26	935.26	935.12	935.01	934.80	934.64	934.60	934.85	934.81	934.40	934.36
COTAS PROJ.		935.26	934.39	934.05	934.79	934.85	934.79	934.05	934.81		
COTAS VERM.		0.00	-0.73	-0.96	-0.01	0.21	0.19	-0.80			



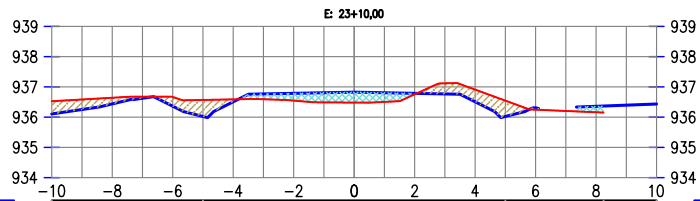
COTAS TN	935.70	935.70	935.31	935.08	935.10	935.01	935.31	935.23	935.18	935.15	935.06	935.02
COTAS PROJ.		935.64	934.88	934.55	935.29	935.35	935.29	934.55	935.18			
COTAS VERM.		0.00	-0.43	-0.54	0.19	0.34	-0.02	-0.68	-0.30			



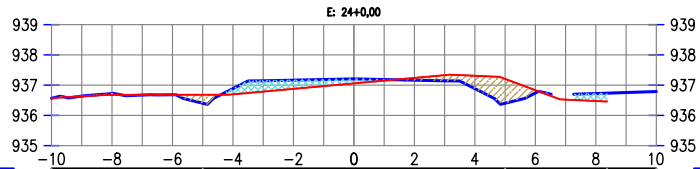
COTAS TN	936.10	936.10	935.38	935.37	935.47	935.62	935.68	935.58	935.54	935.48	935.62	935.63
COTAS PROJ.		935.75	935.38	935.04	935.78	935.84	935.78	935.04	935.54			
COTAS VERM.		-0.28	0.00	-0.33	0.31	0.23	0.10	-0.54	-0.16			



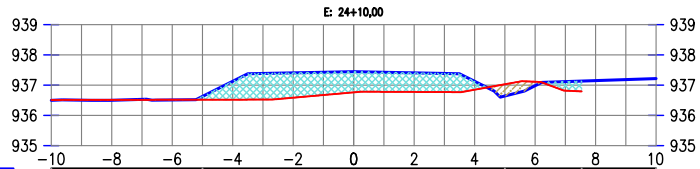
COTAS TN	936.39	936.39	935.99	935.99	935.94	936.04	936.48	935.94	935.89	935.81	936.04	936.04
COTAS PROJ.		936.39	935.87	935.54	936.28	936.34	936.28	935.54	935.89			
COTAS VERM.		-0.78	-0.12	-0.45	0.34	0.30	-0.20	-0.40	-0.02			



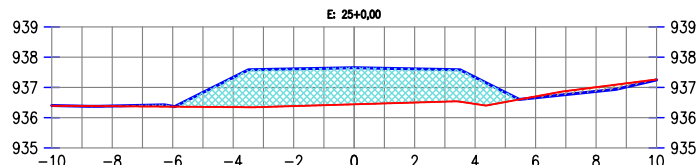
COTAS TN	936.53	936.53	936.67	936.57	936.59	936.48	937.12	936.55	936.25	936.15	936.40	936.43
COTAS PROJ.		936.25	936.36	936.02	936.77	936.83	936.77	936.02	936.25			
COTAS VERM.		-0.42	-0.33	-0.31	0.18	0.35	-0.35	-0.52	0.04			



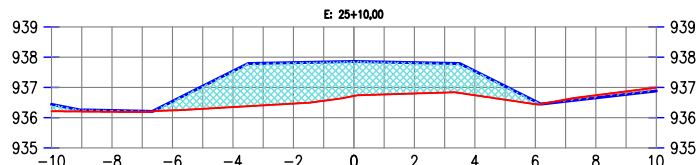
COTAS TN	936.57	936.57	936.68	936.68	936.79	937.06	937.33	937.21	936.83	936.76	936.79	936.79
COTAS PROJ.		936.64	936.68	936.40	937.15	937.21	937.15	936.40	936.83			
COTAS VERM.		0.01	0.00	-0.28	0.36	0.15	-0.19	-0.81	-0.09			



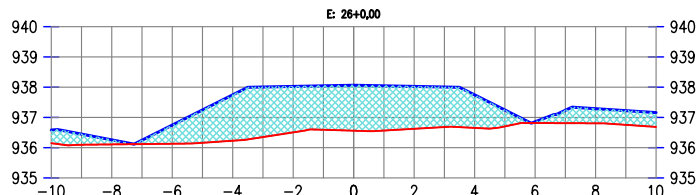
COTAS TN	936.51	936.51	936.52	936.52	936.52	936.76	936.77	936.64	937.03	937.11	936.79	937.22
COTAS PROJ.		936.50	936.51	936.63	937.39	937.45	937.39	936.64	937.03			
COTAS VERM.		-0.01	-0.01	0.11	0.86	0.69	0.62	-0.39	-0.13			



COTAS TN	936.40	936.40	936.36	936.36	936.35	936.44	936.53	936.52	936.70	937.14	937.26	937.26
COTAS PROJ.		936.38	936.36	936.83	937.59	937.65	937.59	936.83	936.70			
COTAS VERM.		0.01	-0.01	0.01	1.24	1.21	1.06	0.32	-0.04			



COTAS TN	936.21	936.21	936.24	936.29	936.41	936.72	936.83	936.59	936.45	936.87	937.00	937.00
COTAS PROJ.		936.25	936.54	937.04	937.80	937.86	937.80	936.54	936.45			
COTAS VERM.		0.23	0.30	0.75	1.39	1.14	0.97	0.45	0.09			

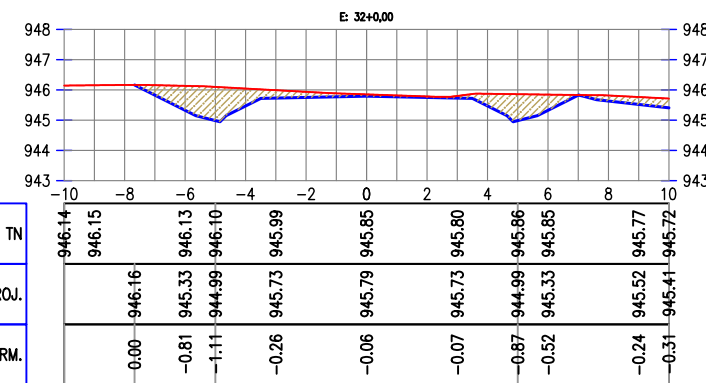
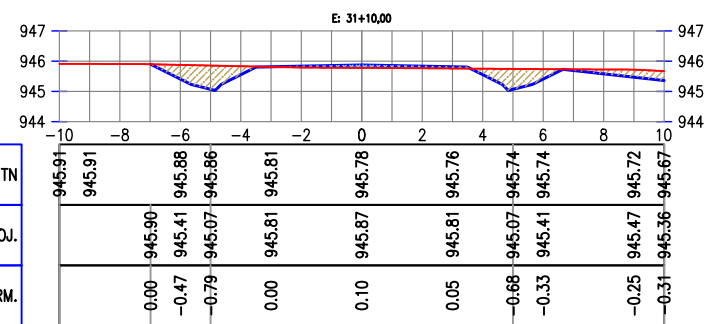
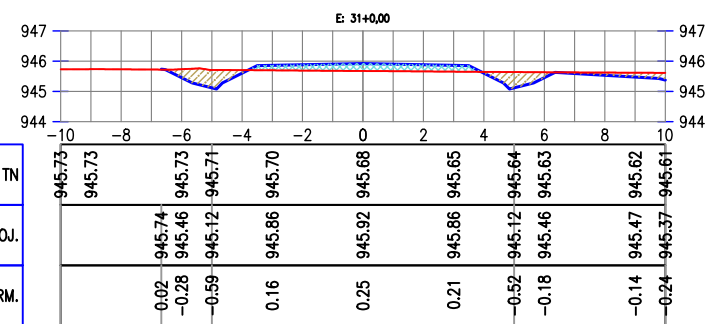
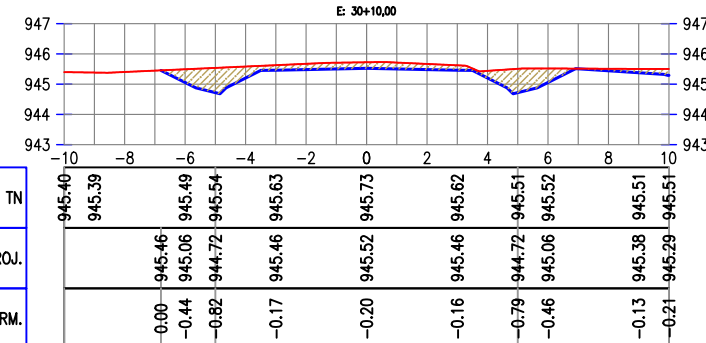
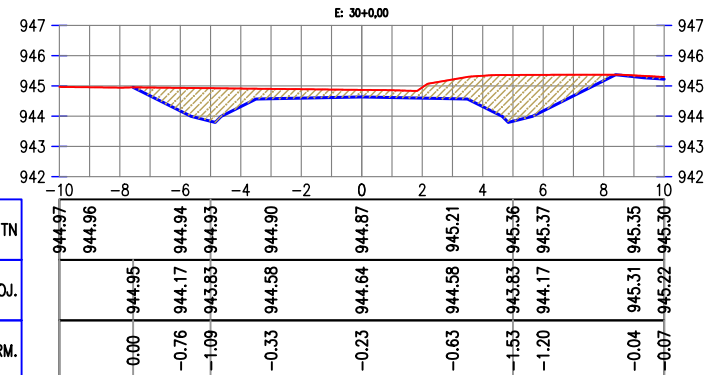
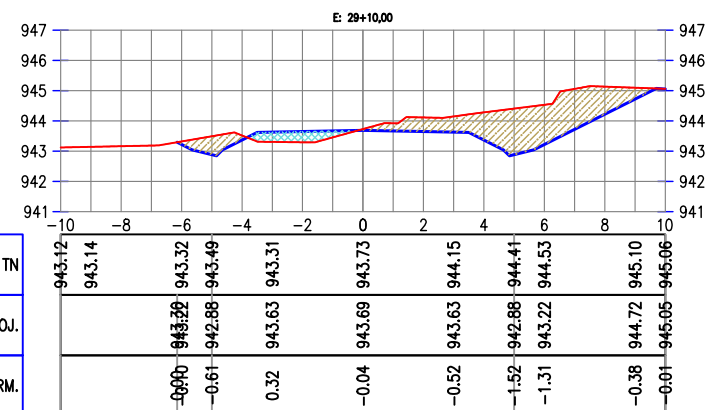
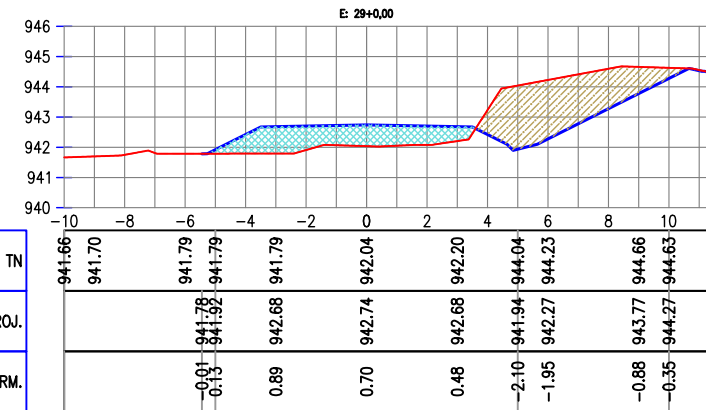
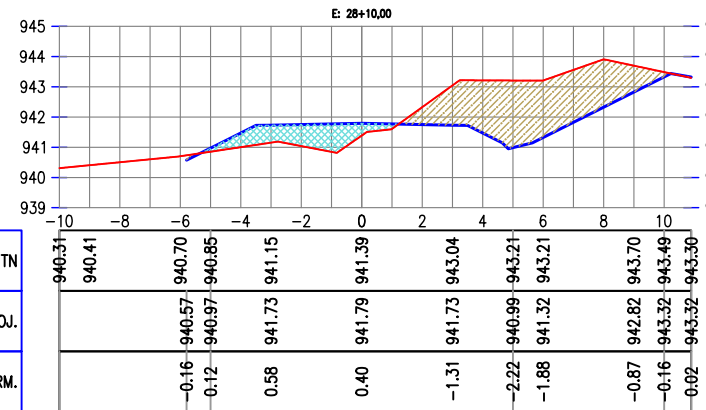
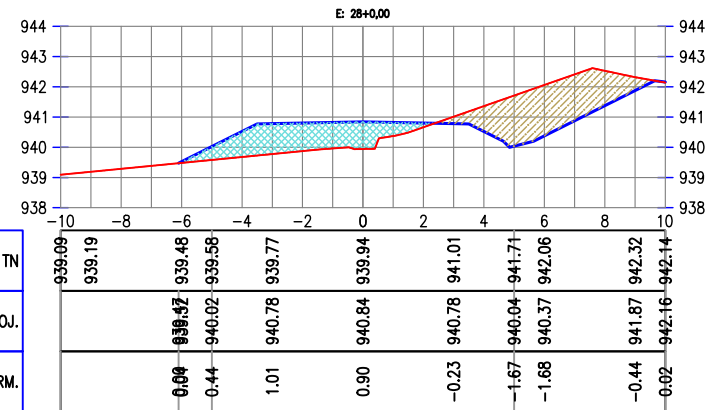
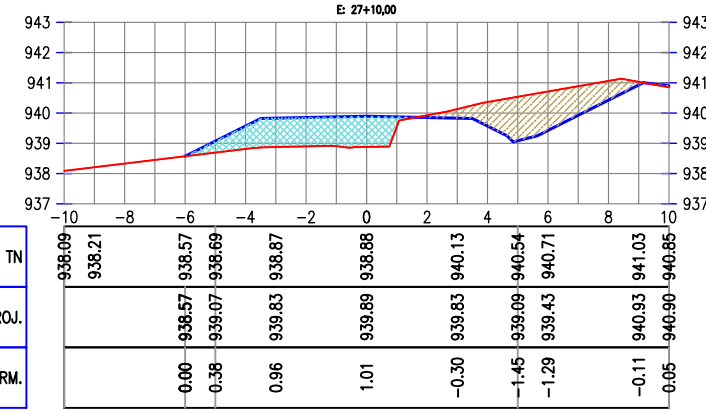
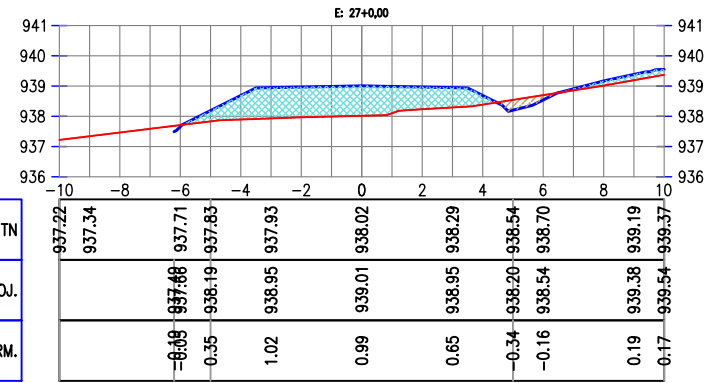
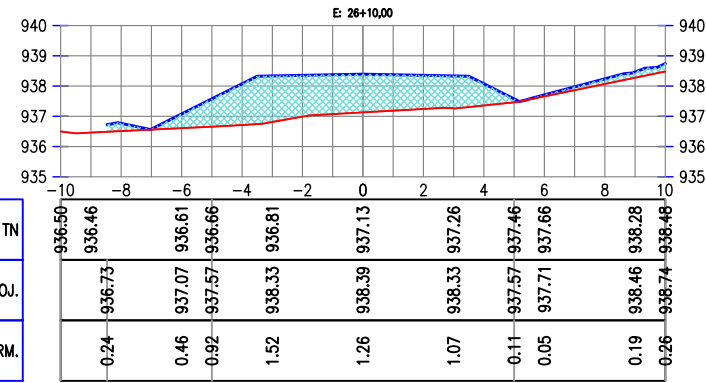


COTAS TN	936.15	936.15	936.13	936.16	936.35	936.56	936.68	936.70	936.82	936.76	936.69	936.69
COTAS PROJ.		936.45	936.75	937.25	938.01	938.07	938.01	936.70	936.82			
COTAS VERM.		0.43	0.35	0.62	1.66	1.50	1.32	0.54	0.04			

JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



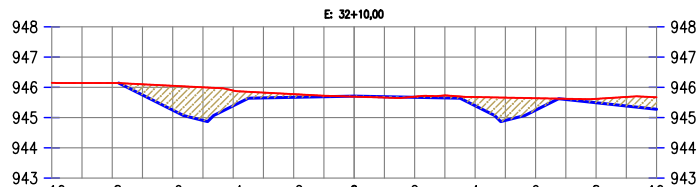
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		4 /05
SEÇÕES TRANSVERSAIS - ESTRADA RAMP INFINITY		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_RAMP INFINITY (TRECHO NOVO)_R0.DWG	



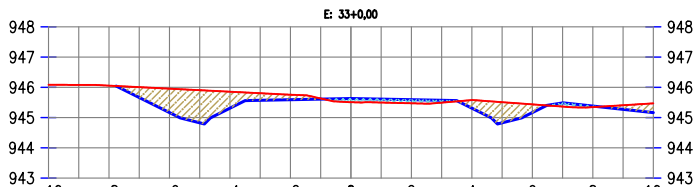
JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



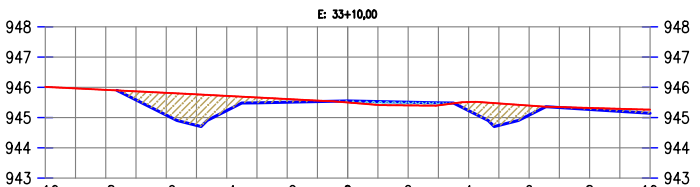
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		5 /05
SEÇÕES TRANSVERSAIS - ESTRADA RAMP INFINITY		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_RAMP INFINITY (TRECHO NOVO)_R0.DWG	



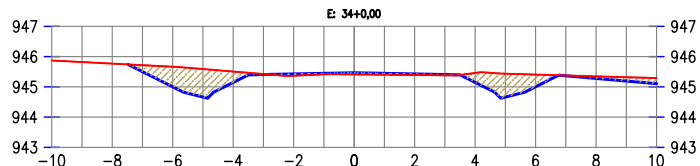
COTAS TN	946.15	946.14	946.05	946.00	945.83	945.69	945.73	945.66	945.64	945.68	945.67
COTAS PROJ.	946.14	945.25	944.91	946.00	945.83	945.71	945.73	944.91	945.25	945.38	945.67
COTAS VERM.	0.00	-0.81	-1.09	-0.18	0.02	-0.08	-0.75	-0.40	-0.30	-0.40	-0.40



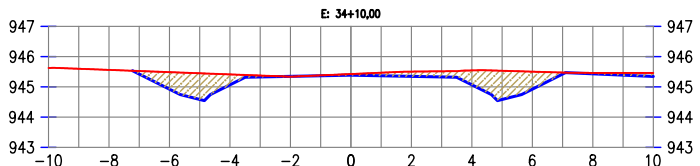
COTAS TN	946.06	946.08	945.96	945.91	945.81	945.51	945.49	945.51	945.44	945.41	945.47
COTAS PROJ.	946.04	945.16	944.83	945.81	945.63	945.57	945.49	944.83	945.16	945.27	945.41
COTAS VERM.	0.00	-0.79	-1.08	-0.24	0.12	0.08	-0.68	-0.27	-0.14	-0.31	-0.31



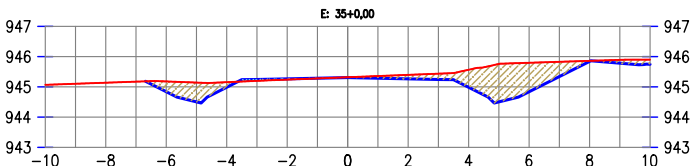
COTAS TN	946.01	945.97	945.82	945.77	945.67	945.50	945.40	945.47	945.40	945.29	945.27
COTAS PROJ.	945.90	945.08	944.75	945.77	945.59	945.55	945.40	944.75	945.08	945.21	945.27
COTAS VERM.	0.00	-0.73	-1.02	-0.18	0.05	0.08	-0.72	-0.31	-0.08	-0.12	-0.12



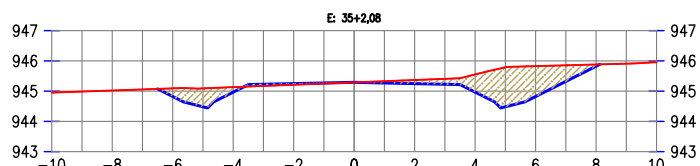
COTAS TN	945.87	945.82	945.67	945.59	945.42	945.41	945.38	945.44	945.41	945.32	945.29
COTAS PROJ.	945.74	945.00	944.66	945.41	945.47	945.41	945.38	944.66	945.00	945.19	945.29
COTAS VERM.	0.00	-0.86	-0.93	-0.02	0.06	0.03	-0.77	-0.40	-0.13	-0.19	-0.19



COTAS TN	945.62	945.60	945.49	945.45	945.37	945.42	945.52	945.53	945.50	945.46	945.46
COTAS PROJ.	945.53	944.92	944.58	945.45	945.33	945.39	945.52	944.58	944.92	945.39	945.46
COTAS VERM.	0.00	-0.57	-0.87	-0.05	-0.04	-0.19	-0.95	-0.58	-0.08	-0.12	-0.12



COTAS TN	945.07	945.10	945.18	945.18	945.20	945.32	945.44	945.76	945.80	945.89	945.90
COTAS PROJ.	945.18	944.84	944.50	945.14	945.25	945.31	945.25	944.50	944.84	945.78	945.90
COTAS VERM.	0.00	-0.34	-0.64	0.05	-0.01	-0.19	-1.26	-0.96	-0.11	-0.15	-0.15

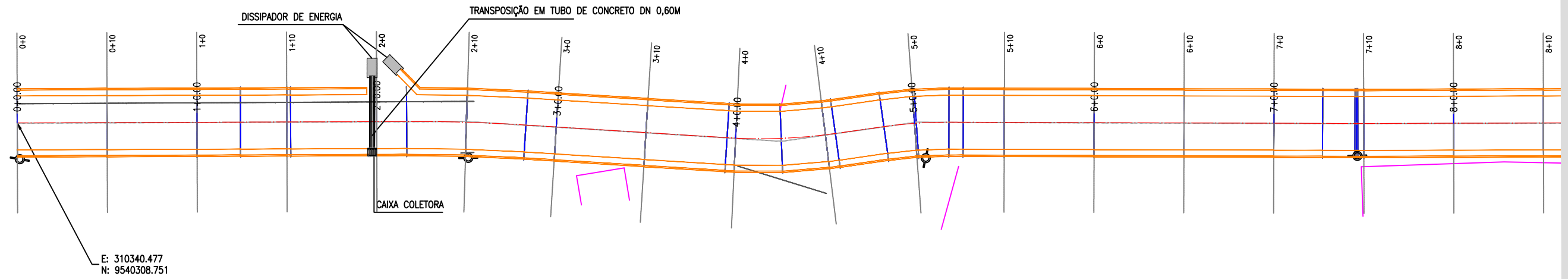
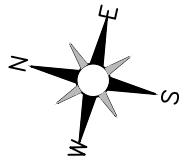


COTAS TN	944.95	944.99	945.09	945.09	945.17	945.29	945.41	945.79	945.83	945.91	945.95
COTAS PROJ.	945.07	944.82	944.49	945.09	945.23	945.29	945.41	944.49	944.82	945.89	945.95
COTAS VERM.	0.00	-0.27	-0.61	0.06	0.00	-0.18	-1.30	-1.00	0.00	0.00	0.00

JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		6 /05
SEÇÕES TRANSVERSAIS - ESTRADA RAMPA INFINITY		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_RAMPA INFINITY (TRECHO NOVO)_R0.DWG	

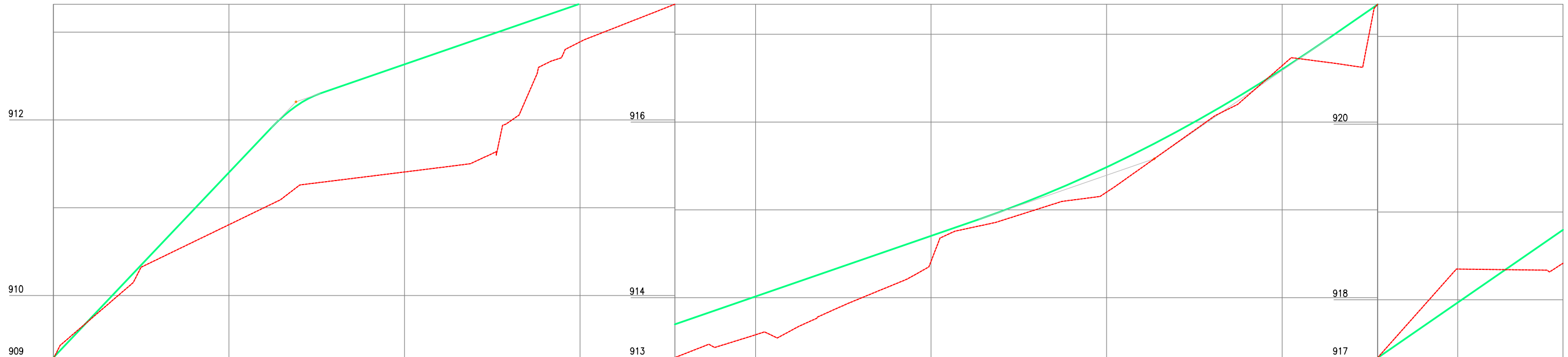


PRANCHA -

EST RAMPA

EST RAMPA

EST RAMPA



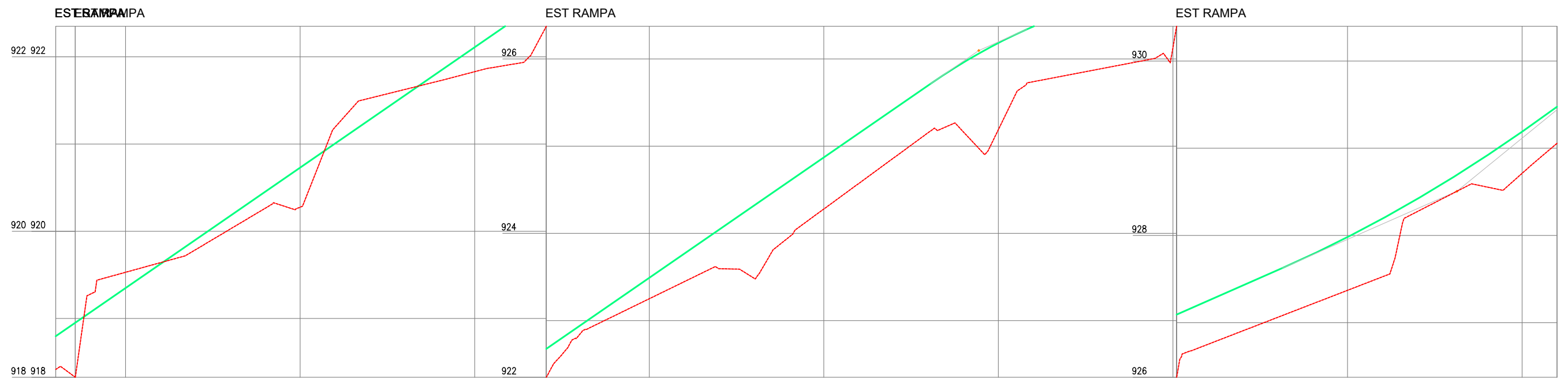
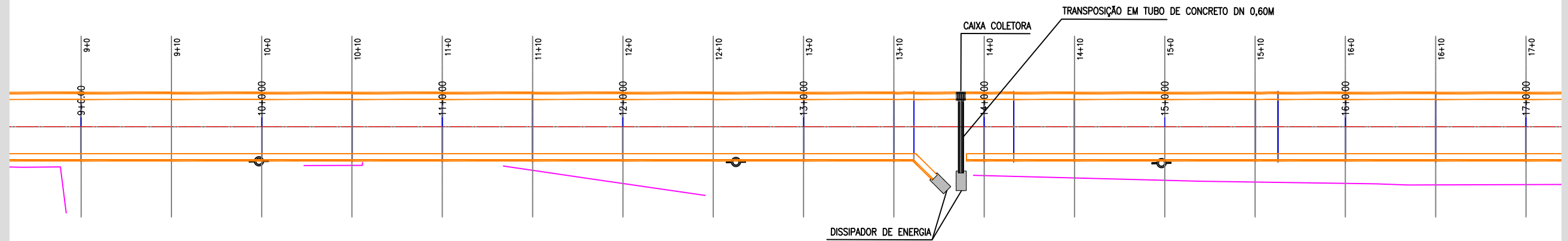
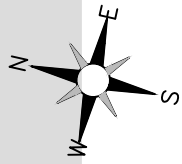
Estaca	0	1	2	3	4	5	6	7	8	8
Cota do terreno	909,294	910,807	911,408	912,889	913,578	914,415	915,203	916,643	918,350	918,417
Cota da terraplenagem	909,294	911,402	912,634	913,324	914,014	914,705	915,487	916,801	917,989	918,797
Cota vermelha	0,000	0,595	1,226	0,435	0,437	0,289	0,284	-0,042	-0,382	0,380

- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
- Sarjeta rtc 88-20
- Dispositivo de transposição

JOTA BARROS PROJETOS  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>1 / 09</b>
<b>PROJETO DE DRENAGEM - ESTRADA RAMPA INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DRE_RAMPA INFINITY (TRECHO NOVO)_R1.DWG	H 1/500 V 1/50



Cota vermelha	Cota da terraplenagem	Cota do terreno	Estaca
0,380	918,797	918,417	8
-0,181	919,349	919,530	9
0,464	920,730	920,276	10
0,281	922,110	921,829	11
0,240	923,490	923,251	12
0,592	924,871	924,279	13
0,994	926,183	925,189	14
0,945	927,075	926,130	15
0,610	927,982	927,372	16
0,477	929,189	928,712	17
0,419	929,576	929,057	17

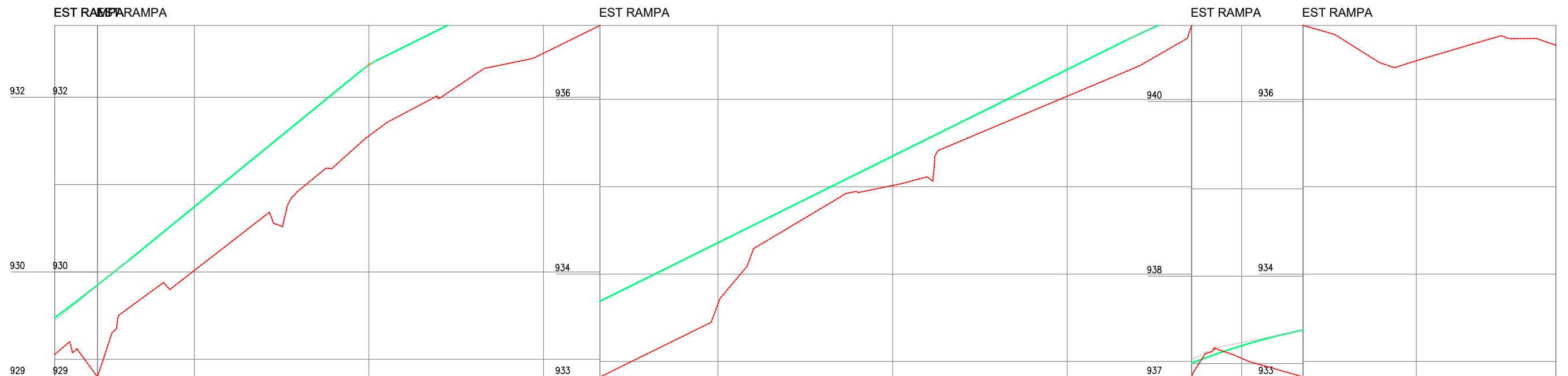
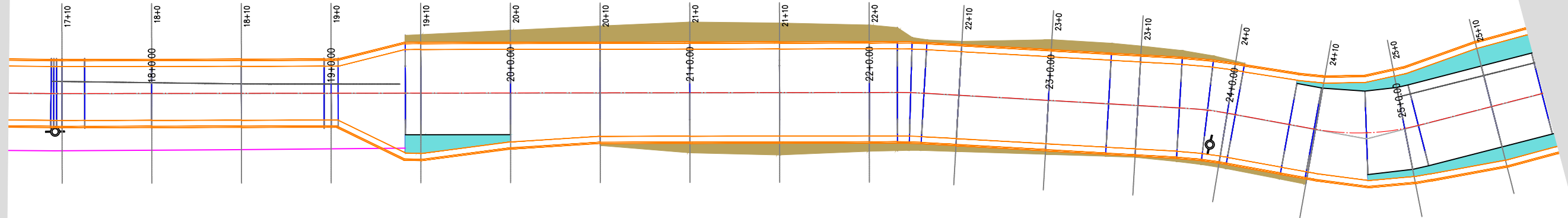
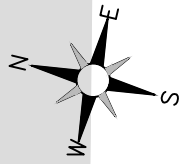
- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
- Sarjeta rtc 88-20
- Dispositivo de transposição

JOTA BARROS PROJETOS  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE







PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA: <b>2 / 09</b>
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		
<b>PROJETO DE DRENAGEM - ESTRADA RAMP A INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA: H 1/500 V 1/50
ARQUIVO:	DRE_RAMP A INFINITY (TRECHO NOVO)_R1.DWG	





Estaca	Cota do terreno	Cota da terraplenagem	Cota vermelha
17	929,057	929,476	0,419
18	930,017	930,746	0,729
19	931,558	932,371	0,813
20	932,504	933,368	0,864
21	933,661	934,359	0,697
22	935,014	935,350	0,336
23	936,036	936,340	0,305
24	937,059	937,206	0,147
25	936,442	937,654	1,211
25	936,618	937,984	1,365

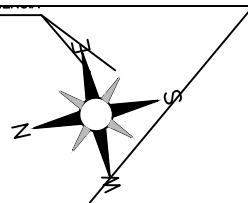
-  Transposição de segmentos de sarjeta
-  Vala de Drenagem - Tipo 02: 0,4mx0,4m
-  Sarjeta rtc 88-20
-  Dispositivo de transposição

  
 JOTA BARROS PROJETOS  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE

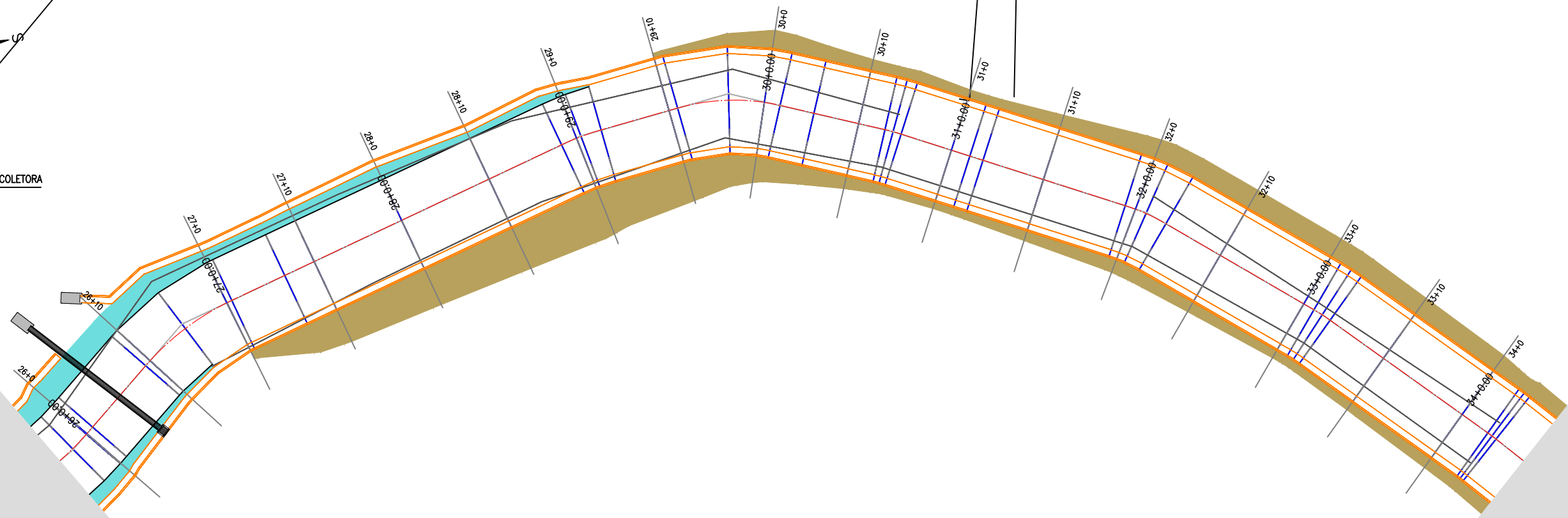


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>3 /09</b>
<b>PROJETO DE DRENAGEM - ESTRADA RAMPA INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DRE_RAMPA INFINITY (TRECHO NOVO)_R1.DWG	H 1/500 V 1/50





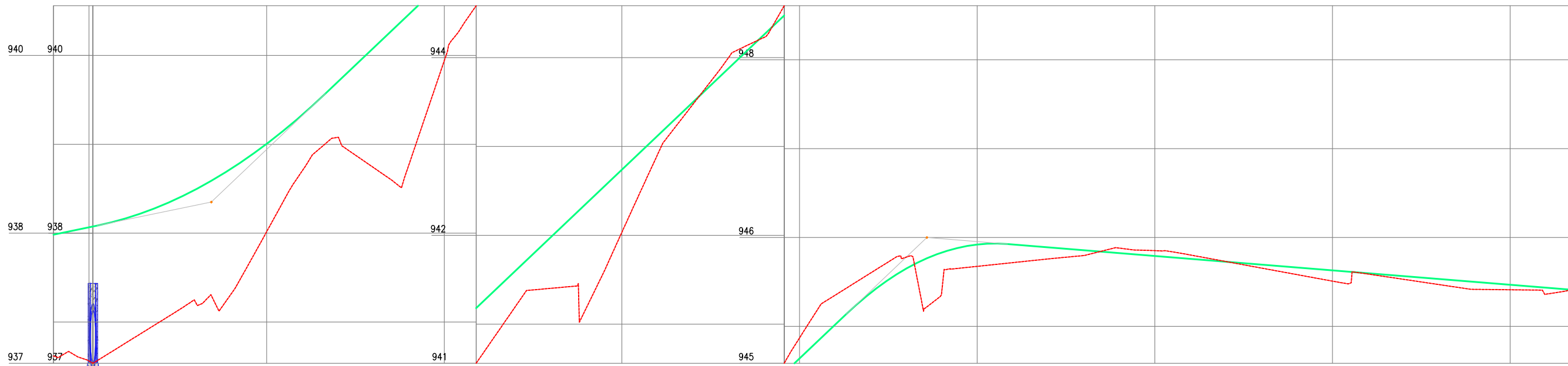
CAIXA COLETORA



EST RANPA

EST RANPA

EST RANPA



Estaca	Cota do terreno	Cota da terraplenagem	Cota vermelha
25	936,618	937,984	1,365
26	936,552	938,066	1,505
27	936,016	939,005	0,989
28	939,941	940,841	0,900
29	942,036	942,740	0,704
30	944,870	944,639	-0,232
31	945,675	945,921	0,246
32	945,853	945,792	-0,060
33	945,509	945,630	0,121
34	945,412	945,468	0,057
34	945,439	945,404	-0,035

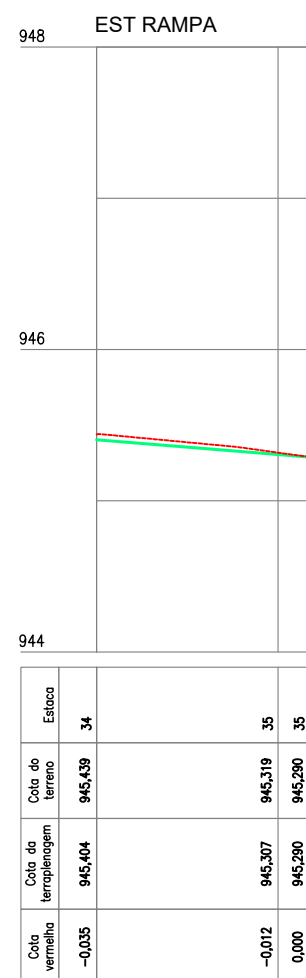
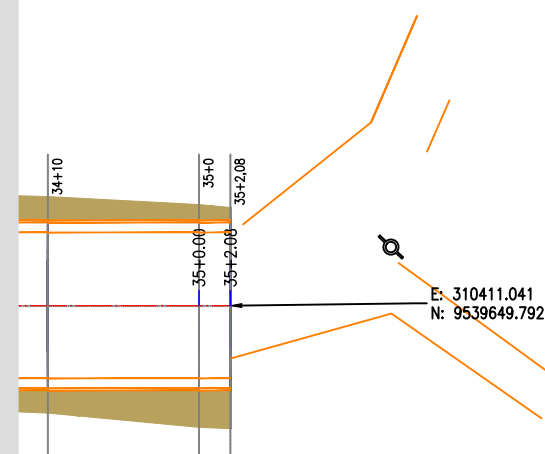
- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
- Sarjeta rtc 88-20
- Dispositivo de transposição

JOTA BARROS PROJETOS  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
<b>PROJETO DE DRENAGEM - ESTRADA RANPA INFINITY</b>	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	DRE_RANPA INFINITY (TRECHO NOVO)_R1.DWG

PRANCHA:	4 /09
ESCALA:	H 1/500 V 1/50



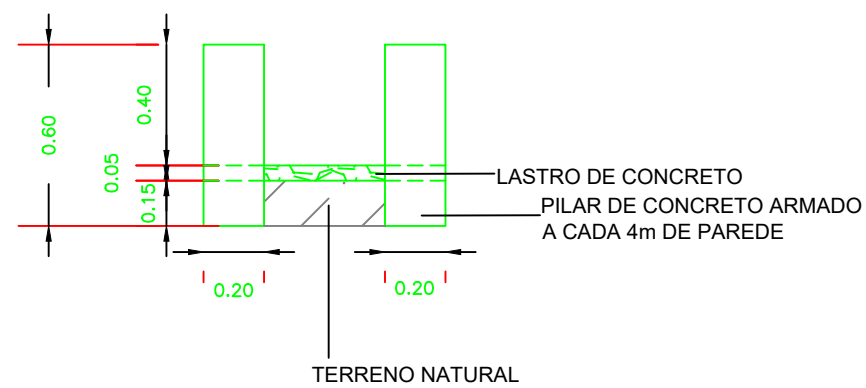
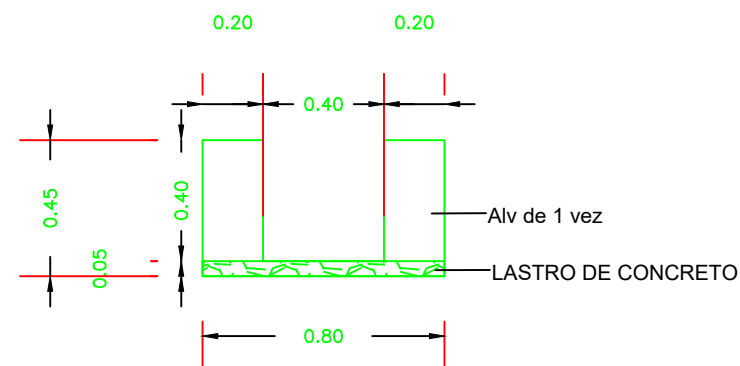
- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
- Sarjeta rtc 88-20
- Dispositivo de transposição

JOTA BARROS PROJETOS  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE

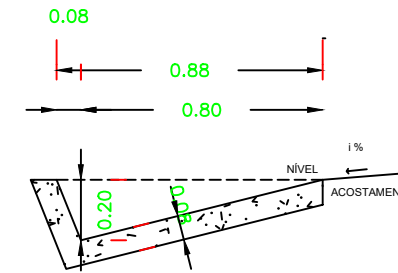


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>5 /09</b>
<b>PROJETO DE DRENAGEM - ESTRADA RAMPA INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DRE_RAMPA INFINITY (TRECHO NOVO)_R1.DWG	H 1/500 V 1/50

### Vala de Drenagem - Tipo 02: 0,4mx0,4m



### Sarjeta triangular de concreto- Tipo STC 88-20



SEÇÃO TRANSVERSAL  
ESCALA 1 : 20

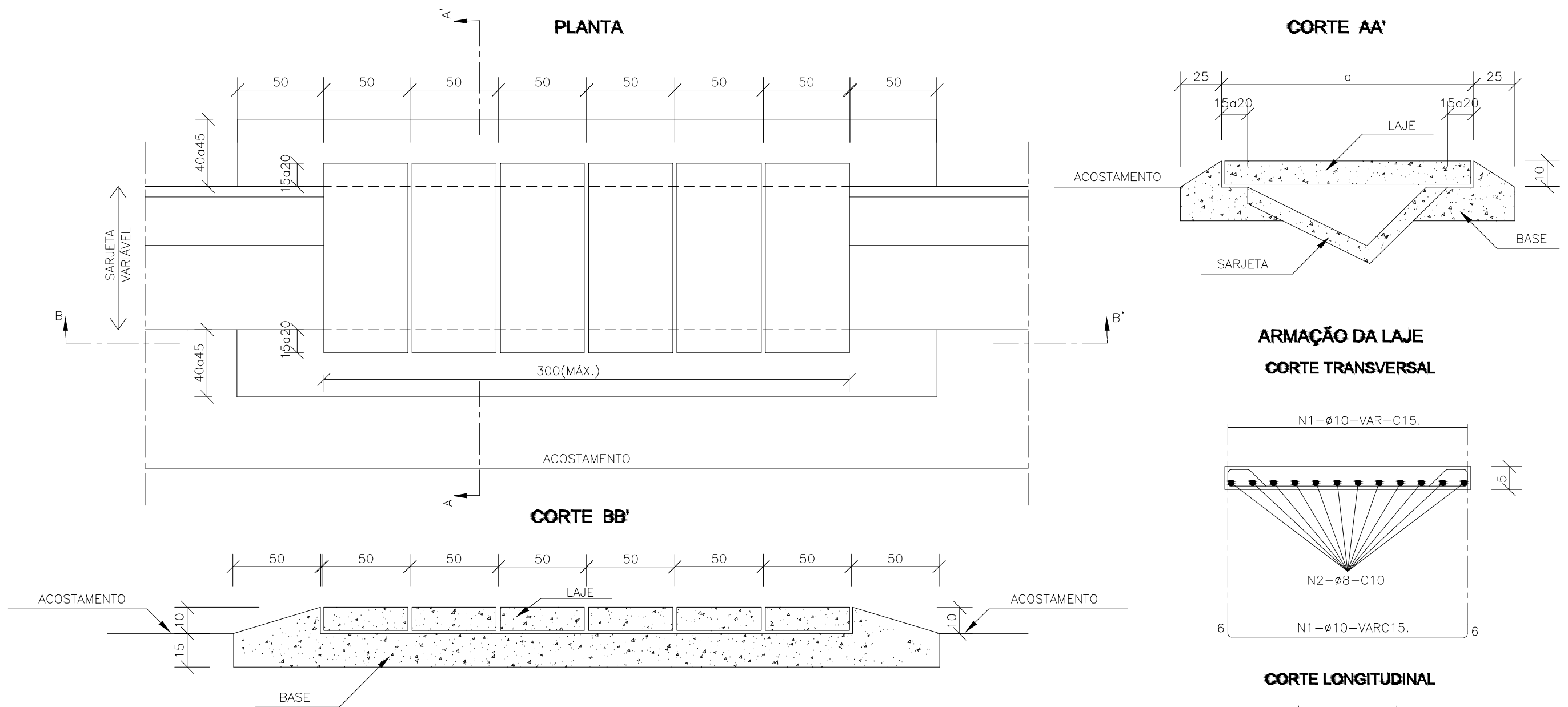
CONSUMOS MÉDIOS*		
ESCAVAÇÃO	m <sup>2</sup> /m	0,1773
APILOAMENTO MANUAL	m <sup>2</sup> /m	1,1917
GUIA DE MADEIRA	m/m	0,5959
CONCRETO FCK ≥ 20 MPA	m <sup>2</sup> /m	0,0893
ARGAMASSA ASFÁLTICA	kg/m	0,1265
FÓRMA	m <sup>2</sup> /m	0,2154

*Arthur Moreira Torquato*  
**JOTA BARROS PROJETOS**  
 Arthur Moreira Torquato  
 Eng<sup>o</sup> Civil - CREA 53900D - CE

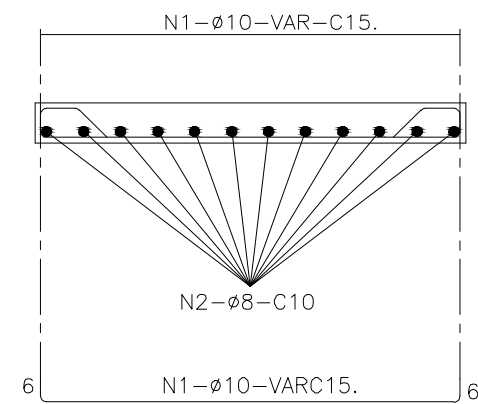


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>6 /09</b>
<b>PROJETO DE DRENAGEM - ESTRADA RAMP A INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DRE_RAMP A INFINITY (TRECHO NOVO)_R1.DWG	<b>SEM ESC</b>

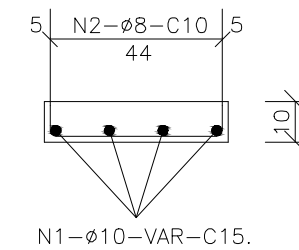
# TRANSPOSIÇÃO DE SEGMENTOS DE SARJETAS (II)



**ARMAÇÃO DA LAJE**  
**CORTE TRANSVERSAL**



**CORTE LONGITUDINAL**



**DIMENSÕES E CONSUMOS MÉDIOS POR METRO LINEAR**

TIPO	ADAPTÁVEL EM	a (cm)	ESCAVAÇÃO (m³/m)	CONCRETO		FORMAS (m²/m)	AÇO CA-50 (kg/m)		
				fck ≥ 15MPa (m³/m)	fck ≥ 25MPa (m³/m)		N1	N2	TOTAL
TSS03	STC01	170	0.20	0.160	0.170	2.24	7.94	7.78	15.72
TSS04	STC02/SZC01	140	0.20	0.160	0.140	1.88	6.62	6.48	13.10
TSS05	STC03	120	0.20	0.160	0.120	1.64	5.73	5.62	11.35
TSS06	STC04/SZC02	110	0.20	0.160	0.110	1.52	5.29	5.18	10.47

**NOTAS:**

- 1 - Dimensões em cm, bitola das barras de aço em mm;
- 2 - Utilizar para a laje concreto fck ≥ 25MPa e para a base concreto fck ≥ 15MPa;
- 3 - Utilizar o número de módulos de 1m necessários a cada acesso.



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		7 / 09
PROJETO DE DRENAGEM - ESTRADA RAMPa INFINITY		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DRE_RAMPa INFINITY (TRECHO NOVO)_R1.DWG	SEM ESC

JOTA BARROS PROJETOS  
Arthur Moreira Torquato  
Engº Civil - CREA 53900D - CE

# CAIXA COLETORA DE SARJETA (CCS) COM GRELHA DE CONCRETO (TCC-01)

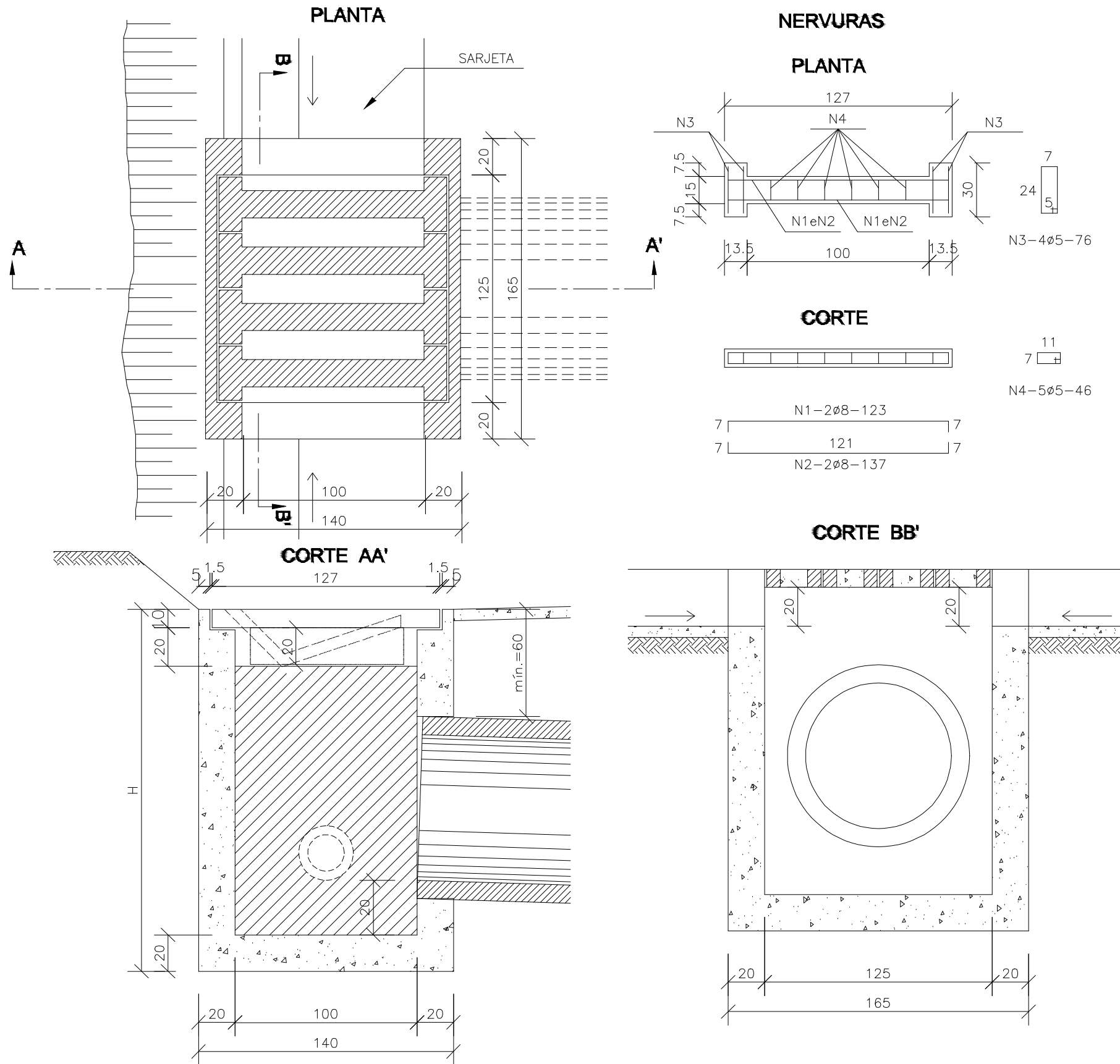


TABELA DE ARMADURA				
AÇO CA-50				
N	DIÂMETRO (mm)	COMPRIMENTO (m)	PESO UNITÁRIO (kg)	PESO TOTAL (kg)
1	8.0	2.46	0.40	0.99
2	8.0	2.74	0.40	1.10
3	5.0	3.04	0.16	0.49
4	5.0	2.76	0.16	0.44
Total				3.02

QUANTIDADES UNITÁRIAS (4 NERVURAS)		
TCC01		
Concreto fck ≥ 25MPa	m <sup>3</sup>	0.092
Aço CA-50	kg	12.08
Formas	m <sup>2</sup>	1.38

QUANTIDADES UNITÁRIAS (CAIXA)				
CONCRETO fck ≥ 15MPa (m <sup>3</sup> )				
H (m)	φ=60	φ=80	φ=100	φ=120
2.0	2.200/CCS01	2.100/CCS02	2.000/CCS03	1.900/CCS04
2.5	2.750/CCS05	2.650/CCS06	2.550/CCS07	2.450/CCS08
3.0	3.300/CCS09	3.200/CCS10	3.100/CCS11	3.000/CCS12
3.5	3.850/CCS13	3.750/CCS14	3.650/CCS15	3.550/CCS16
4.0	4.400/CCS17	4.300/CCS18	4.200/CCS19	4.100/CCS20
H (m)	CÓDIGO	FORMAS (m <sup>2</sup> )	ESCAVAÇÃO (m <sup>3</sup> )	APILOAMENTO (m <sup>3</sup> )
2.0	CCS01 a CCS04	20.30	15.00	5.00
2.5	CCS05 a CCS08	25.60	19.00	6.00
3.0	CCS09 a CCS12	30.90	23.00	7.00
3.5	CCS13 a CCS16	36.20	26.00	8.00
4.0	CCS17 a CCS20	41.50	30.00	9.00

  
**JOTA BARROS PROJETOS**  
 Arthur Moreira Torquato  
 Eng.º Civil - CREA 53900D - CE

**NOTAS:**

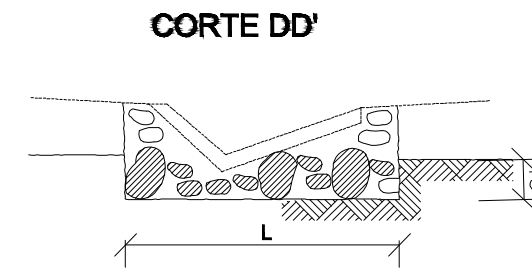
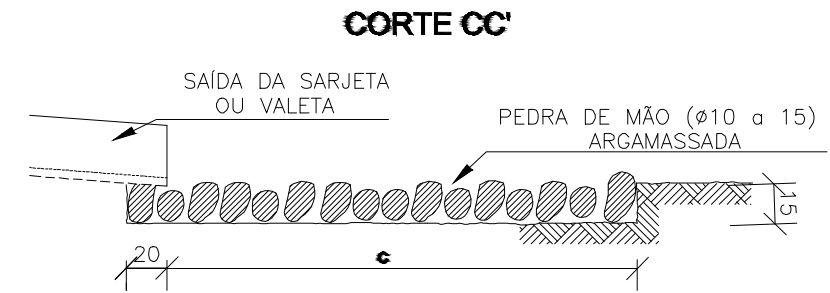
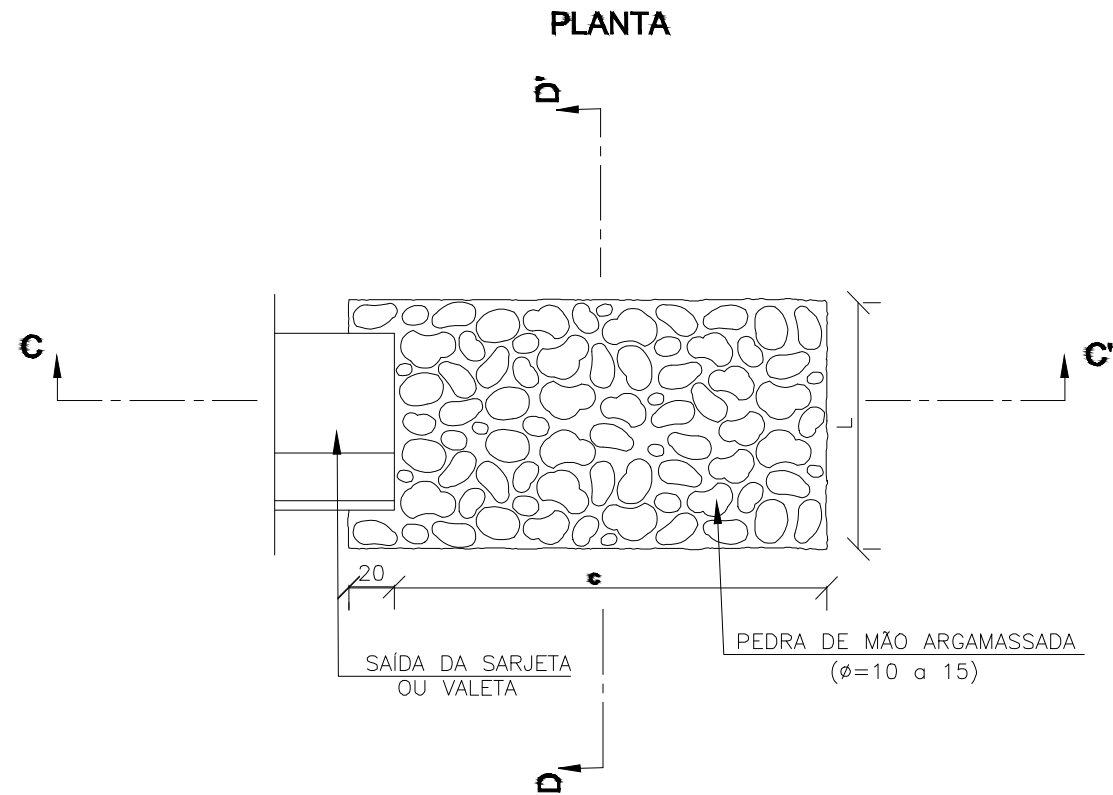
- 1 - Dimensões em cm;
- 2 - O dispositivo poderá, opcionalmente, receber a descarga de drenos rasos ou profundos;
- 3 - O dispositivo aplica-se a qualquer tipo de sarjeta especificado, inclusive do canteiro central. Ajustar, na obra, a conexão da sarjeta à caixa.



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		<b>8 /09</b>
<b>PROJETO DE DRENAGEM - ESTRADA RAMPa INFINITY</b>		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	<b>SEM ESC</b>
ARQUIVO:	DRE_RAMPa INFINITY (TRECHO NOVO)_R1.DWG	

# DISSIPADORES DE ENERGIA(I)

## APLICÁVEIS A SAÍDAS DE SARJETAS E VALETAS - DES



DIMENSÕES E CONSUMOS MÉDIOS PARA UMA UNIDADE					
TIPO	ADAPTÁVEL EM	C	L	PEDRA ARGAMASSADA (m³)	ESCAVAÇÃO (m³)
DES_01	STC03/04-SZC02	200	110	0,48	0,33
DES_02	STC02-SZC01	200	130	0,57	0,39
DES_03	STC01-VPC02/04	200	135	0,68	0,47
DES_04	VPC01/03	200	150	0,84	0,57

Notas:  
1- Dimensões em cm;

  
**JOTA BARROS PROJETOS**  
 Arthur Moreira Torquato  
 Engº Civil - CREA 53900D - CE



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA: <b>9 /09</b>
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		
<b>PROJETO DE DRENAGEM - ESTRADA RAMPA INFINITY</b>		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA: <b>SEM ESC</b>
ARQUIVO:	DRE_RAMPA INFINITY (TRECHO NOVO)_R1.DWG	