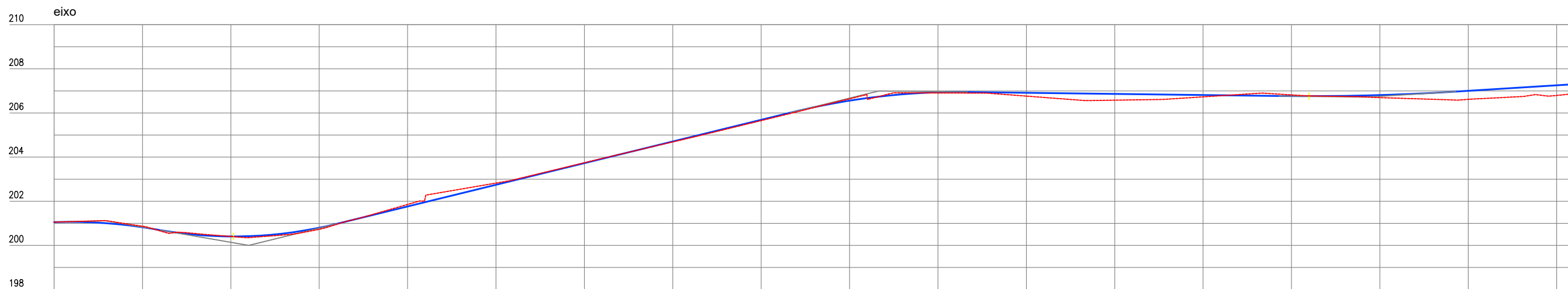


E: 478733.247
N: 9380537.667

0 1000 2000

PRANCHA - 1



Estaca	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Cota do terreno	201,055	200,888	200,405	200,730	201,857	202,825	203,745	204,689	205,655	206,642	206,907	206,764	206,580	206,730	206,819	206,696	206,618	206,795
Cota da terraplenagem	201,055	200,827	200,407	200,800	201,765	202,747	203,728	204,710	205,692	206,559	206,938	206,915	206,865	206,814	206,765	206,610	207,004	207,253
Cota vermelha	0,000	-0,041	0,001	0,070	-0,092	-0,079	-0,017	0,021	0,037	-0,083	0,030	0,151	0,285	0,084	-0,054	0,114	0,387	0,458

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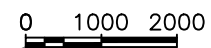
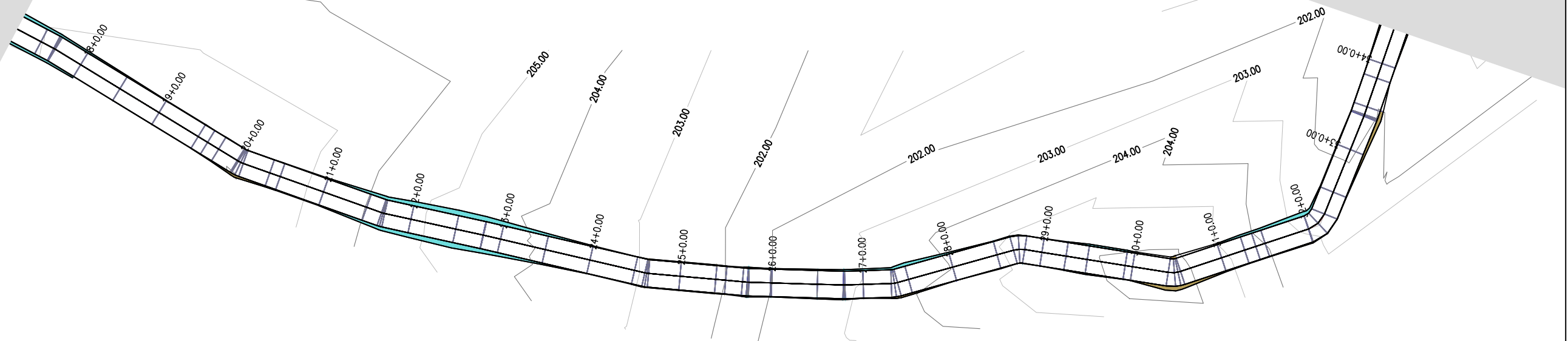
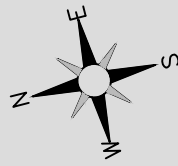
TERRENO NATURAL	PROJETADO	ESTRADA	BORDO	TALUDE	ATERRO	CORTE	CURVAS DE NÍVEL



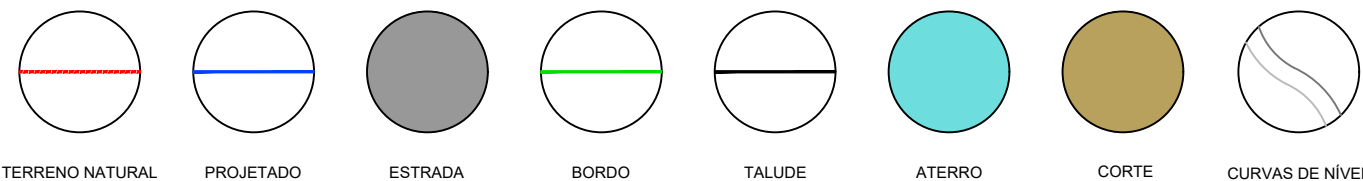
PREFEITURA MUNICIPAL DE MILHÃ
RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
1 / 13
ESCALA:
H 1/1000
V 1/200



Estaca	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Cota do terreno	206,873	207,178	207,809	207,872	206,725	205,233	204,193	203,530	202,535	201,991	203,054	204,045	205,470	206,168	205,162	202,826	201,917	201,580
Cota da terraplenagem	207,303	207,502	207,751	207,873	206,909	205,818	204,727	203,636	202,544	202,144	203,283	204,421	205,560	206,227	205,212	203,130	202,017	201,810
Cota vermella	0,430	0,324	0,142	0,001	0,184	0,584	0,534	0,105	0,009	0,154	0,229	0,377	0,090	0,060	0,030	0,303	0,100	0,250



PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

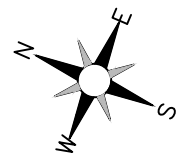
PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA: 2 / 13

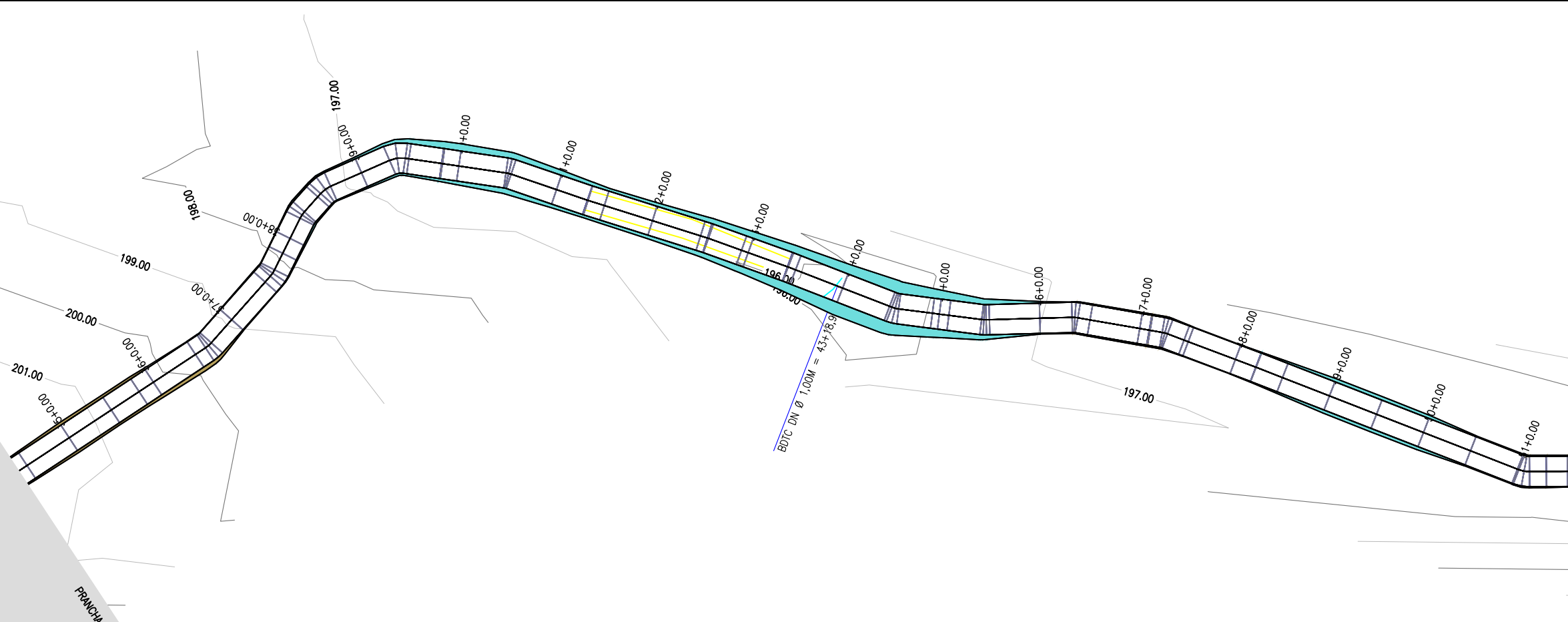
2 / 13

ESCALA:
 H 1/1000
 V 1/200

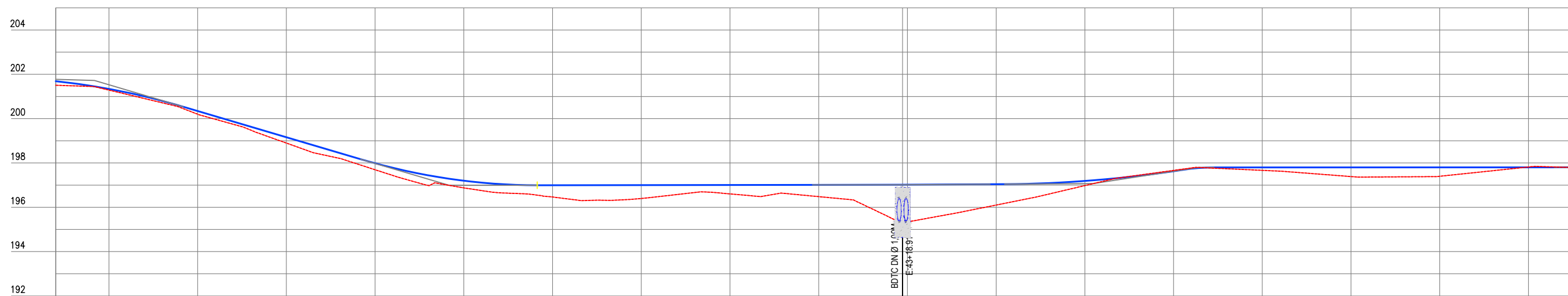
JOTA BARROS PROJETOS
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 CREA 53.900D-CE



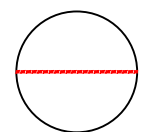
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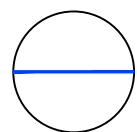
eixo



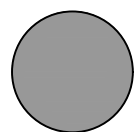
Estaca	34	35	36	37	38	39	40	41	42	43	43+18.91	45	46	47	48	49	50	51
Cota do terreno	201,506	201,289	200,201	198,897	197,694	196,875	196,464	196,397	196,605	196,481	195,438	196,100	196,979	197,664	197,667	197,386	197,400	197,818
Cota da terraplenagem	201,687	201,341	200,345	199,162	197,986	197,198	196,995	197,000	197,005	197,010	197,020	197,041	197,187	197,627	197,799	197,800	197,802	197,803
Cota vermilha	0,180	0,053	0,144	0,284	0,292	0,323	0,531	0,603	0,401	0,529	1,582	0,941	0,208	-0,037	0,132	0,414	0,402	-0,015



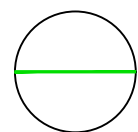
TERRENO NATURAL



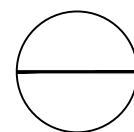
PROJETADO



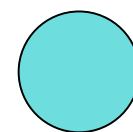
ESTRADA



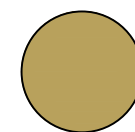
BORDO



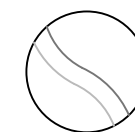
TALUDE



ATERRO



CORTE



CURVAS DE NÍVEL



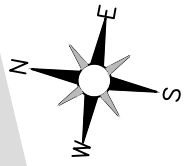
PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
3 / 13

ESCALA:
 H 1/1000
 V 1/200

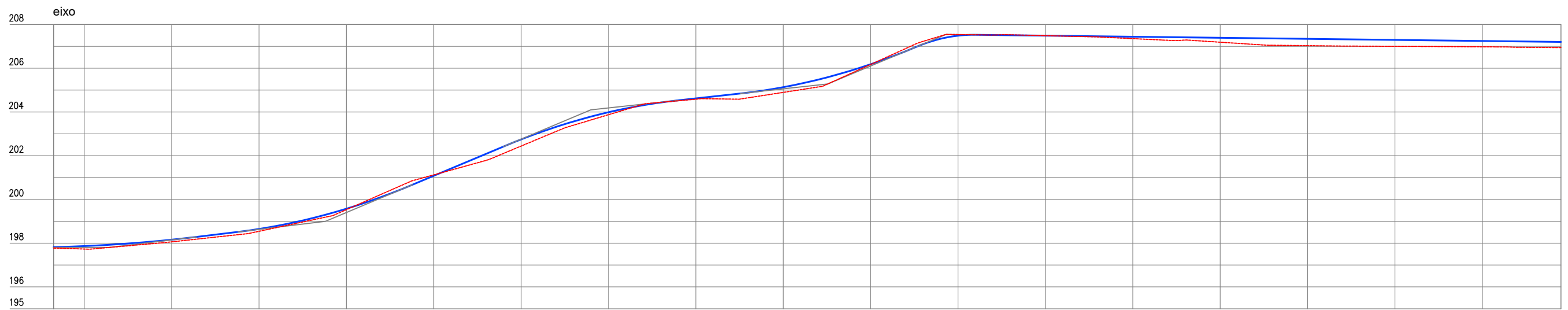
Arquit. Arthur Moreira Torquato
 CREA 53.900D-CE



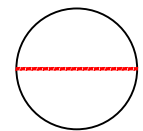
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PRANCHA - 3



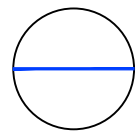
PRANCHA - 4



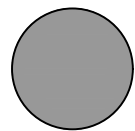
Estaca	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	68
Cota do terreno	197,776	197,732	198,061	198,543	199,533	201,124	202,441	203,875	204,585	204,896	206,174	207,540	207,490	207,355	207,191	207,032	207,003	206,980	206,943
Cota da terraplenagem	197,820	197,866	198,159	198,649	199,575	201,081	202,746	203,988	204,622	205,134	206,183	207,490	207,491	207,442	207,393	207,344	207,295	207,246	207,202
Cota vermelha	0,044	0,133	0,098	0,106	0,042	-0,043	0,306	0,113	0,037	0,238	0,009	-0,050	0,001	0,088	0,202	0,312	0,292	0,265	0,258



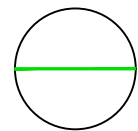
TERRENO NATURAL



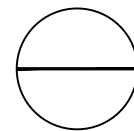
PROJETADO



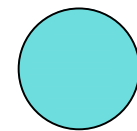
ESTRADA



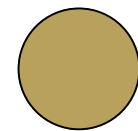
BORDO



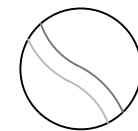
TALUDE



ATERRO



CORTE



CURVAS DE NÍVEL



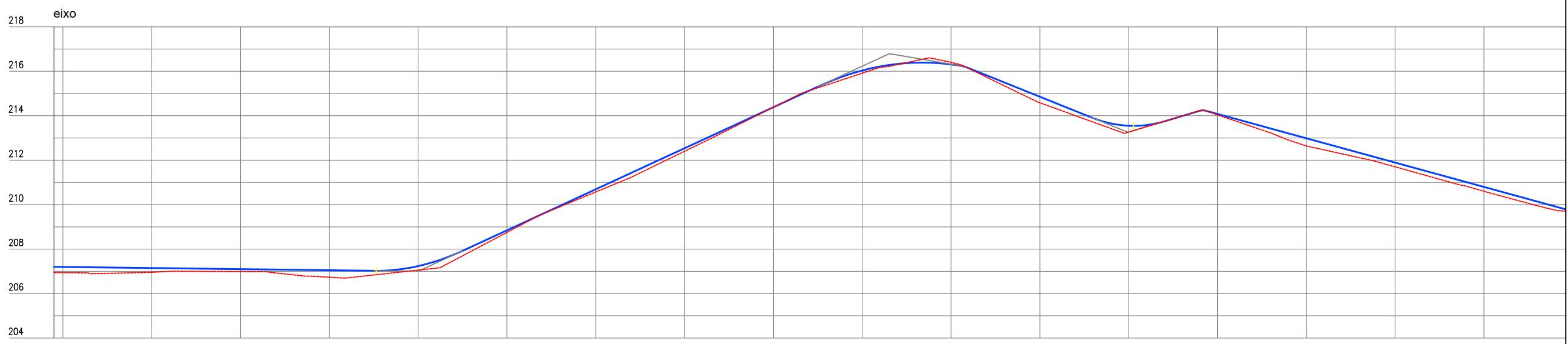
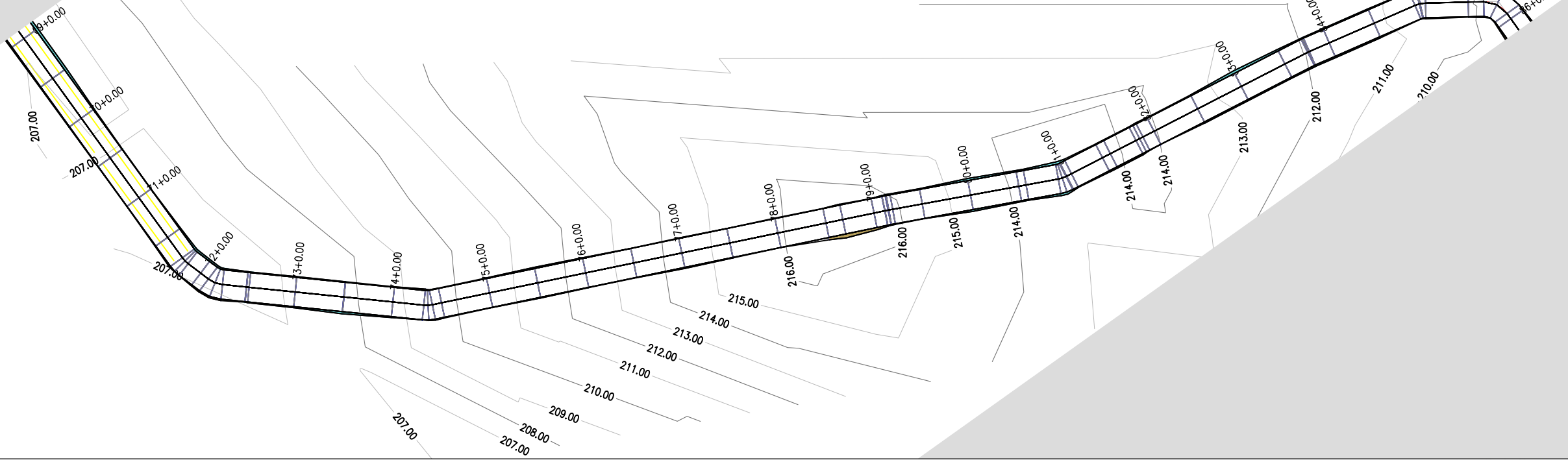
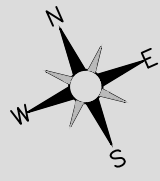
PREFEITURA MUNICIPAL DE MILHÃ
RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
4 / 13

ESCALA:
H 1/1000
V 1/200

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Eng.º Civil - CREA 53.900D - CE



Estação	08	09	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Cota do terreno	206,943	206,940	206,956	206,990	206,736	207,055	208,753	210,571	212,401	214,382	215,914	216,399	214,581	213,286	214,037	212,641	211,701	210,605
Cota da terraplenagem	207,202	207,197	207,147	207,088	207,049	207,236	208,846	210,692	212,538	214,383	216,033	216,308	214,853	213,549	214,081	212,987	211,892	210,798
Cota vertical	0,258	0,256	0,191	0,108	0,313	0,181	0,093	0,120	0,137	0,002	0,119	-0,091	0,272	0,283	0,043	0,346	0,191	0,193

TERRENO NATURAL	PROJETADO	ESTRADA	BORDO	TALUDE	ATERRO	CORTE	CURVAS DE NÍVEL

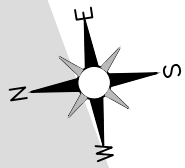


PREFEITURA MUNICIPAL DE MILHÃ
RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

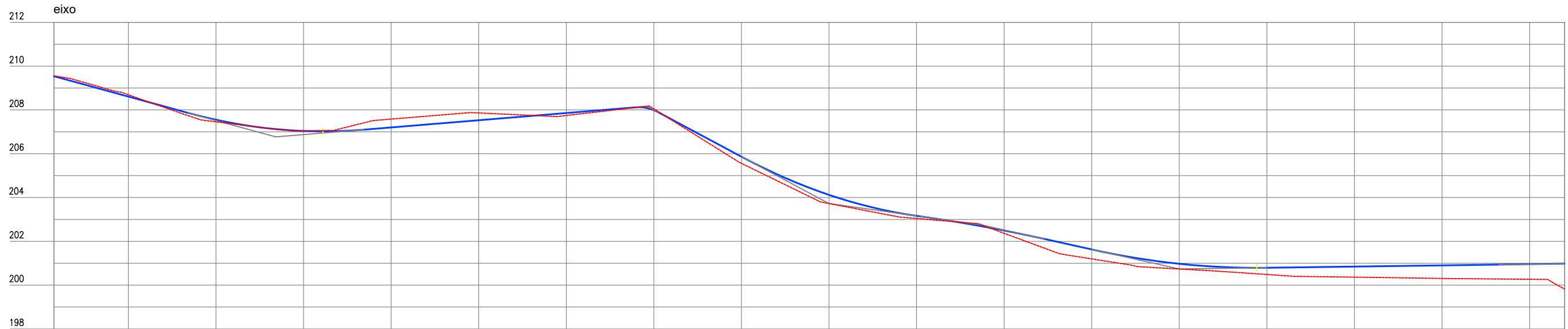
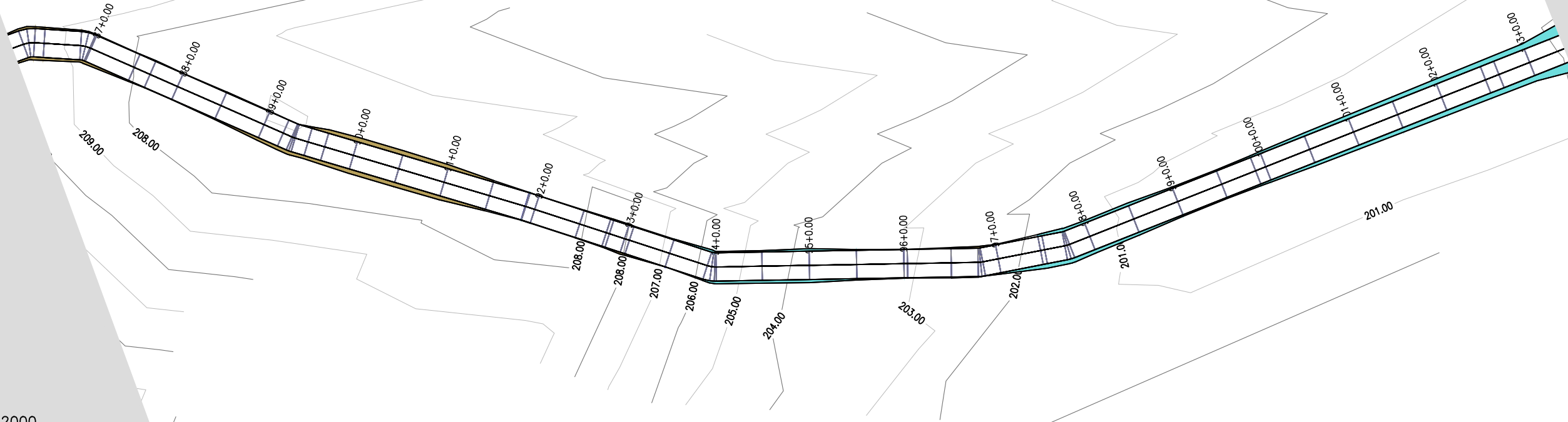
PROJETA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
5 / 13
 ESCALA:
 H 1/1000
 V 1/200

JOTA BARROS PROJETOS
 Arthur Moreira Torquato
 Eng.º Civil - CREA 53.900D - CE



0 1000 2000



Estaca	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	103
Cota do terreno	209,555	208,690	207,456	207,050	207,582	207,863	207,744	208,048	205,563	204,121	203,045	202,366	201,198	200,738	200,486	200,364	200,306	200,287	199,821
Cota da terraplenagem	209,540	208,610	207,552	207,039	207,201	207,529	207,858	207,987	205,864	204,121	203,165	202,495	201,629	200,975	200,783	200,847	200,902	200,987	200,382
Cota vermelha	-0,015	-0,080	0,094	-0,012	-0,381	-0,334	0,113	-0,062	0,301	0,383	0,120	0,129	0,431	0,236	0,307	0,483	0,596	0,680	1,161

TERRENO NATURAL	PROJETADO	ESTRADA	BORDO	TALUDE	ATERRO	CORTE	CURVAS DE NÍVEL

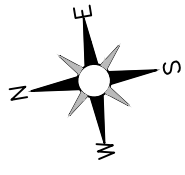


PREFEITURA MUNICIPAL DE MILHÃ
RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

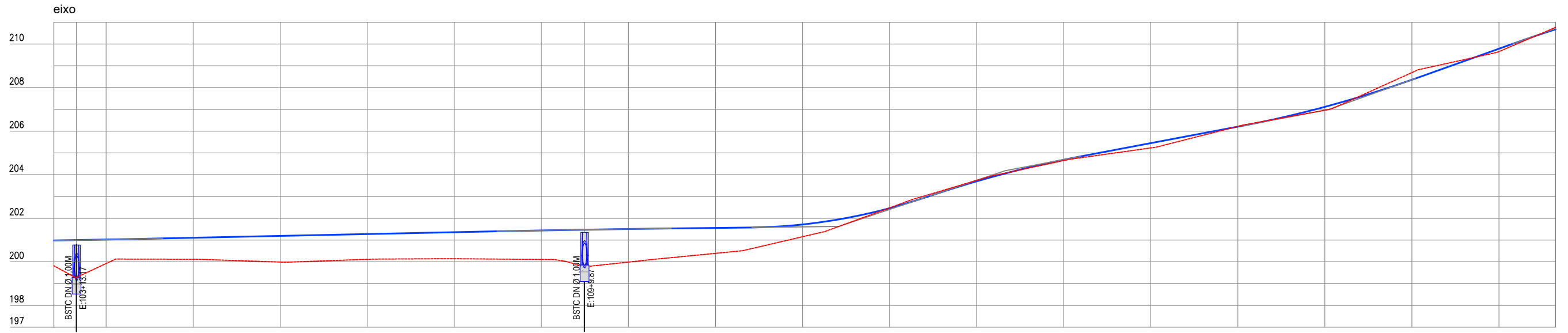
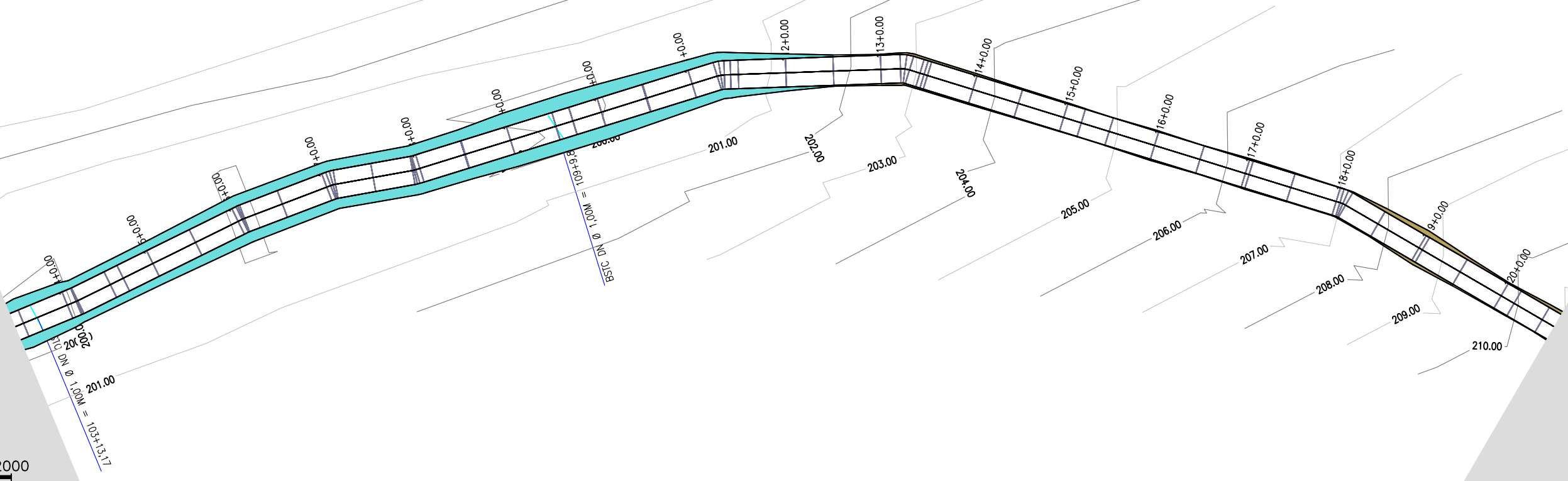
PROJETA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
6 / 13
 ESCALA:
 H 1/1000
 V 1/200

Arquivo: Jota Barrios Torquato
 Eng. Civil - CREA 53.900D-CE



0 1000 2000



Estaca	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	120	
Cota do terreno	199,821	199,279	199,922	200,118	200,114	200,140	200,110	199,988	200,389	201,152	202,478	203,739	204,648	205,231	206,216	206,961	208,687	209,651	210,766	
Cota da terraplenagem	200,982	200,999	201,024	201,105	201,274	201,355	201,440	201,506	201,556	201,713	202,461	203,696	204,686	205,448	206,204	207,114	208,359	209,784	210,672	
Cota vertical	1,161	1,720	1,102	0,987	1,200	1,160	1,218	1,330	1,705	1,518	1,167	0,562	-0,017	-0,044	0,038	0,217	-0,012	0,153	-0,328	0,133

TERRENO NATURAL	PROJETADO	ESTRADA	BORDO	TALUDE	ATERRO	CORTE	CURVAS DE NÍVEL

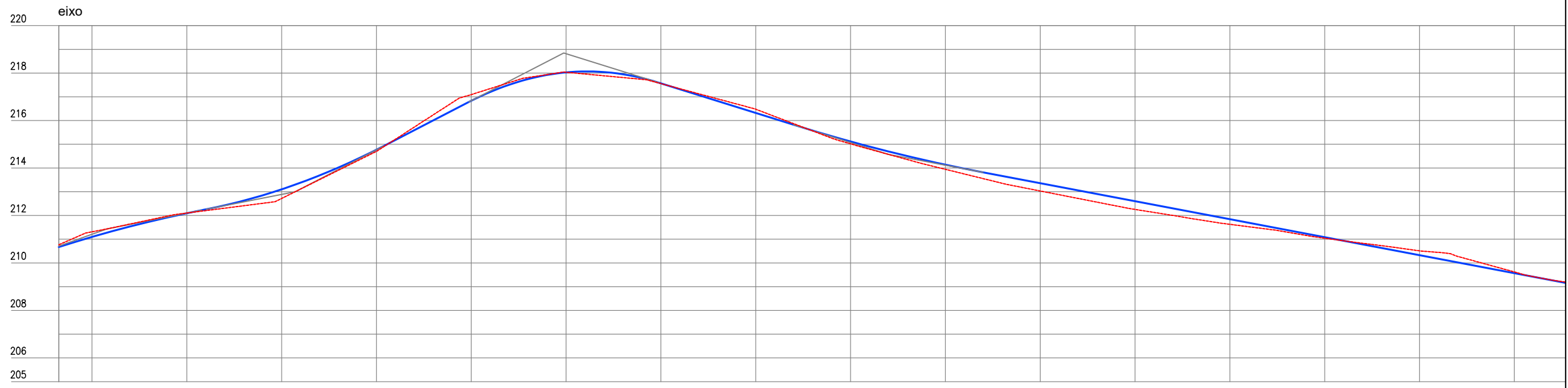
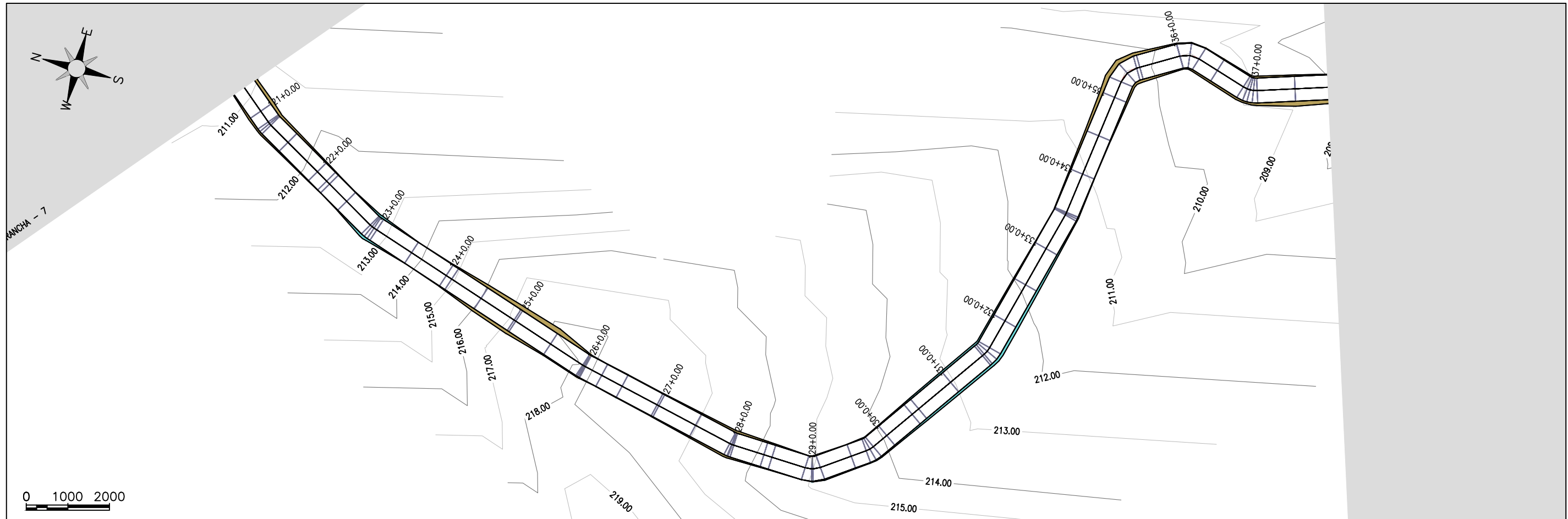


PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
7 / 13
 ESCALA:
 H 1/1000
 V 1/200

JOTA BARROS PROJETOS
 Arthur Moreira Torquato
 Eng. Civil, CREA 53.900D-CE



Estaca	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136
Cota do terreno	210,766	211,312	212,104	212,717	214,702	217,093	216,035	217,556	216,477	215,020	213,945	213,032	212,255	211,628	211,043	210,510	209,622
Cota da terraplenagem	210,672	211,097	212,095	213,102	214,771	216,833	216,028	217,568	216,320	215,117	214,139	213,361	212,603	211,845	211,086	210,328	209,570
Cota vermelha	-0,094	-0,215	-0,009	0,385	0,070	-0,260	-0,007	0,012	-0,157	0,096	0,194	0,329	0,348	0,216	0,043	-0,182	-0,052

Legend for the longitudinal profile:

- TERRENO NATURAL
- PROJETADO
- ESTRADA
- BORDO
- TALUDE
- ATERRO
- CORTE
- CURVAS DE NÍVEL

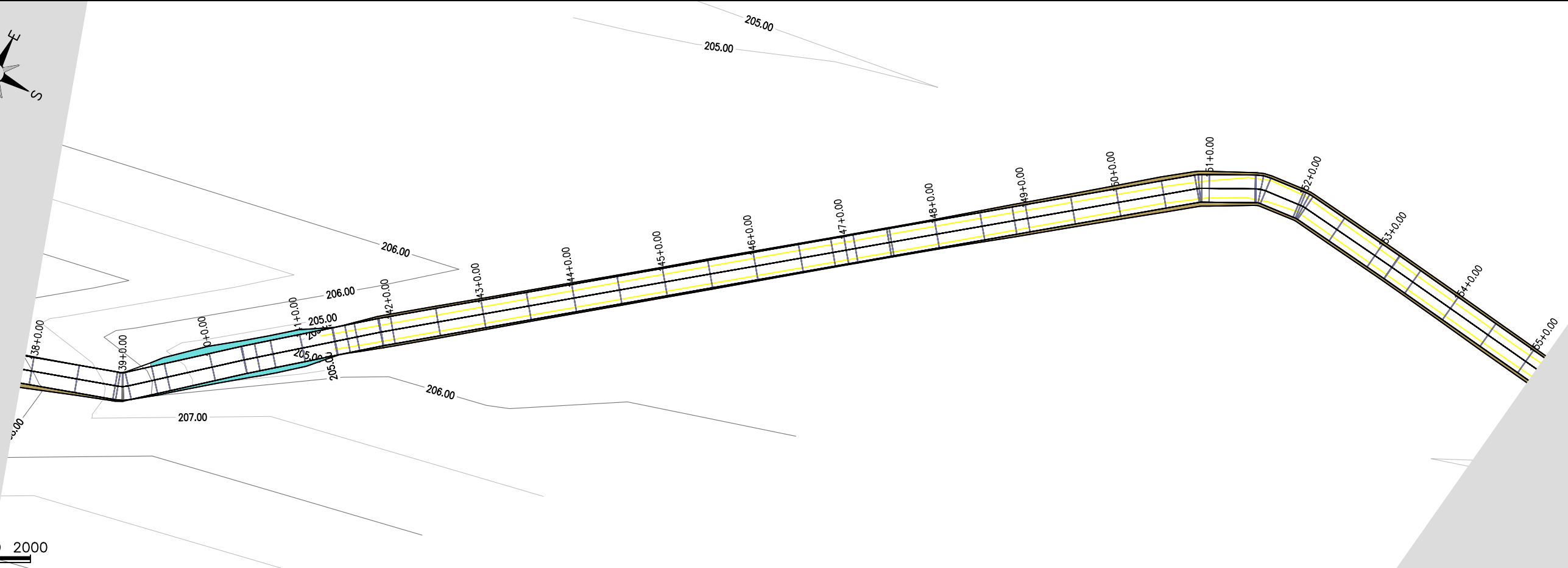
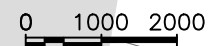
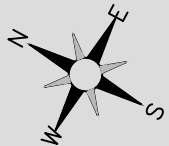


PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

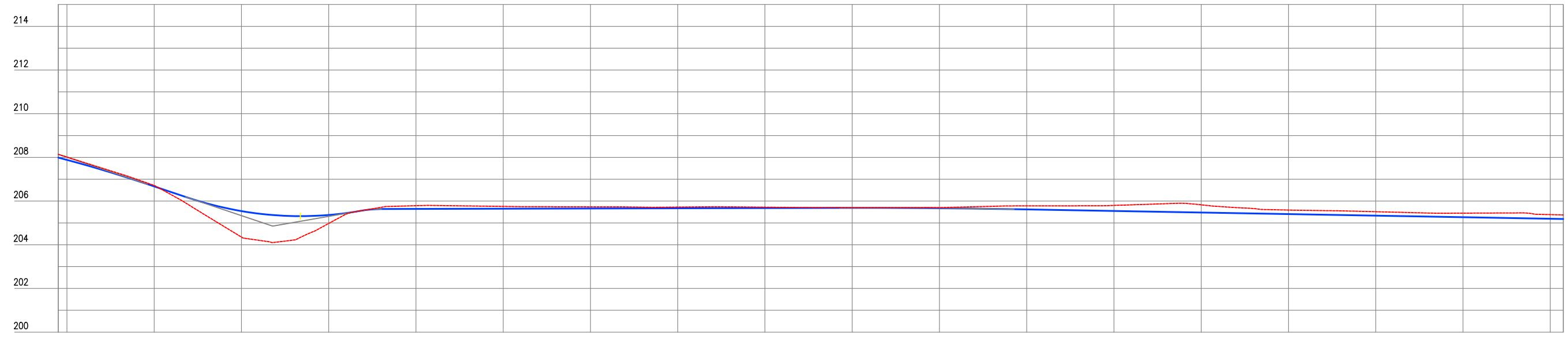
PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
8 / 13
 ESCALA:
 H 1/1000
 V 1/200

JOTA BARROS PROJETOS
 Arthur Moreira Torquato
 Eng.º Civil - CREA 53.900D - CE



eixo



Estação	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	
Cota do terreno	206,139	206,014	206,714	204,352	204,977	205,798	205,756	205,736	205,725	205,720	205,698	205,703	205,790	205,802	205,829	205,588	205,514	205,447	205,380	205,366
Cota da terraplenagem	207,991	207,585	206,670	205,542	205,364	205,641	205,651	205,661	205,671	205,681	205,691	205,674	205,618	205,547	205,476	205,404	205,333	205,262	205,191	205,180
Cota vermelha	-0,148	-0,129	-0,043	1,190	0,387	-0,147	-0,105	-0,076	-0,054	-0,039	-0,008	-0,028	-0,162	-0,255	-0,354	-0,184	-0,180	-0,185	-0,189	-0,186

TERRENO NATURAL	PROJETADO	ESTRADA	BORDO	TALUDE	ATERRO	CORTE	CURVAS DE NÍVEL

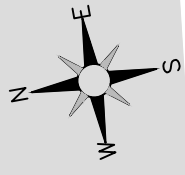


PREFEITURA MUNICIPAL DE MILHÃ
RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

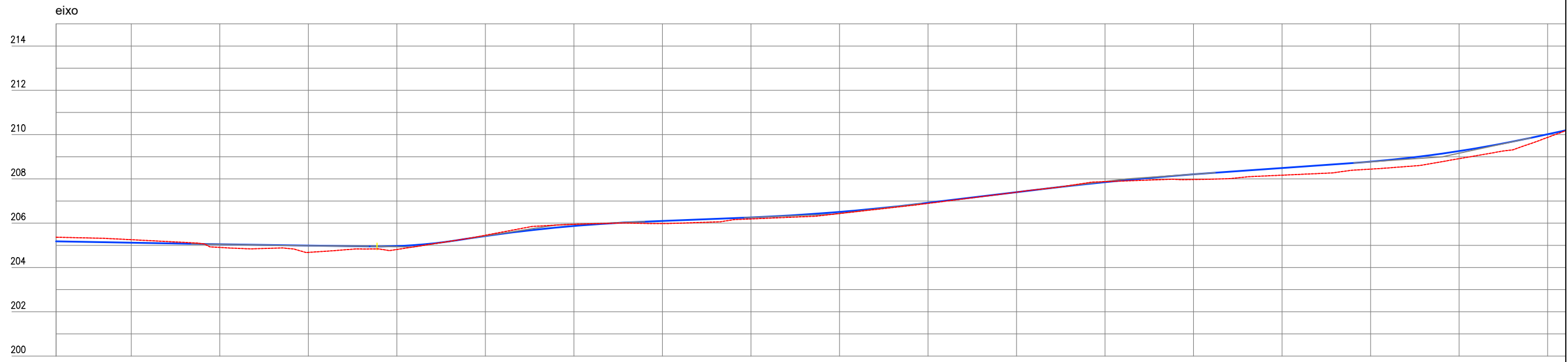
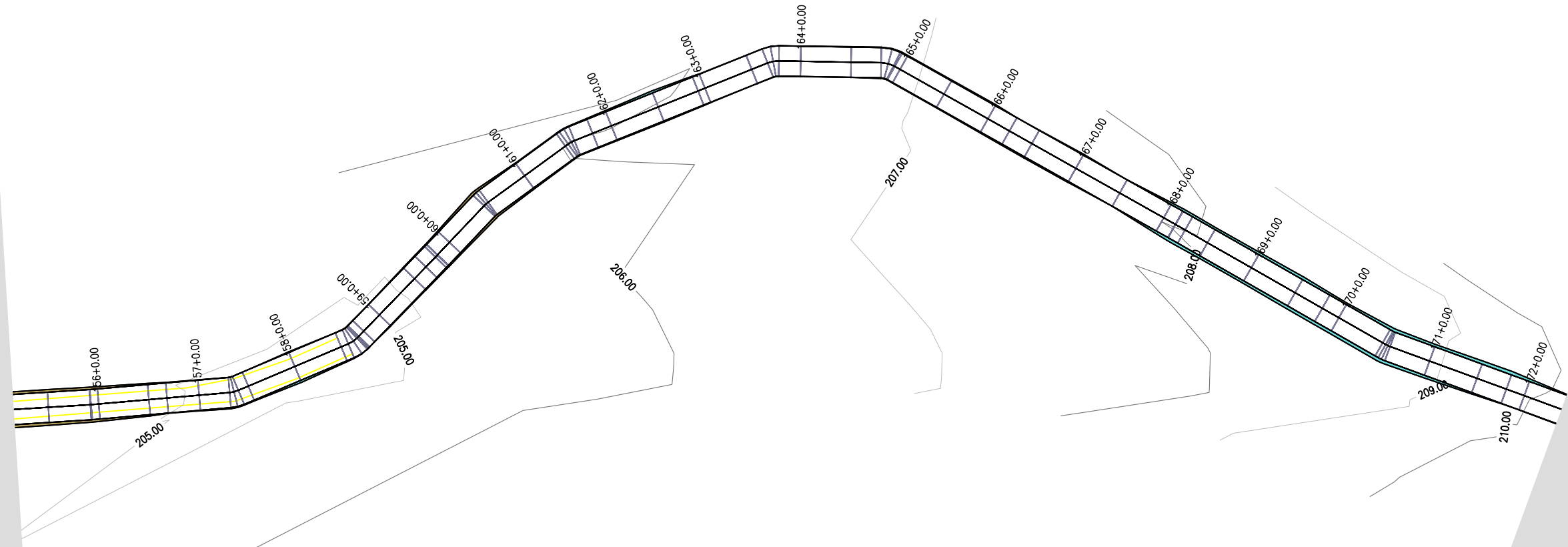
PROJETA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
9 / 13
 ESCALA:
 H 1/1000
 V 1/200

PROJETO: PROJETO
 ARTHUR MOREIRA TORQUATO
 CREA 53.900D-CE



0 1000 2000



Estaca	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172
Cota do terreno	205,366	205,255	204,905	204,682	204,813	205,456	205,953	205,985	206,193	206,437	206,894	207,401	207,876	207,972	208,168	208,441	208,913	209,874
Cota da terraplenagem	205,180	205,120	205,049	204,987	204,966	205,421	205,874	206,103	206,280	206,509	206,920	207,401	207,854	208,209	208,492	208,778	209,256	210,017
Cota da vermelha	-0,186	-0,135	0,144	0,305	0,153	-0,034	-0,079	0,117	0,067	0,072	0,026	0,000	-0,022	0,237	0,324	0,336	0,343	0,143

Legend for symbols used in the plan view:

- TERRENO NATURAL: Circle with a horizontal red line.
- PROJETADO: Circle with a horizontal blue line.
- ESTRADA: Solid grey circle.
- BORDO: Circle with a horizontal green line.
- TALUDE: Circle with a horizontal black line.
- ATERRO: Solid cyan circle.
- CORTE: Solid brown circle.
- CURVAS DE NÍVEL: Circle with two curved lines.

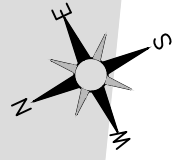


PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

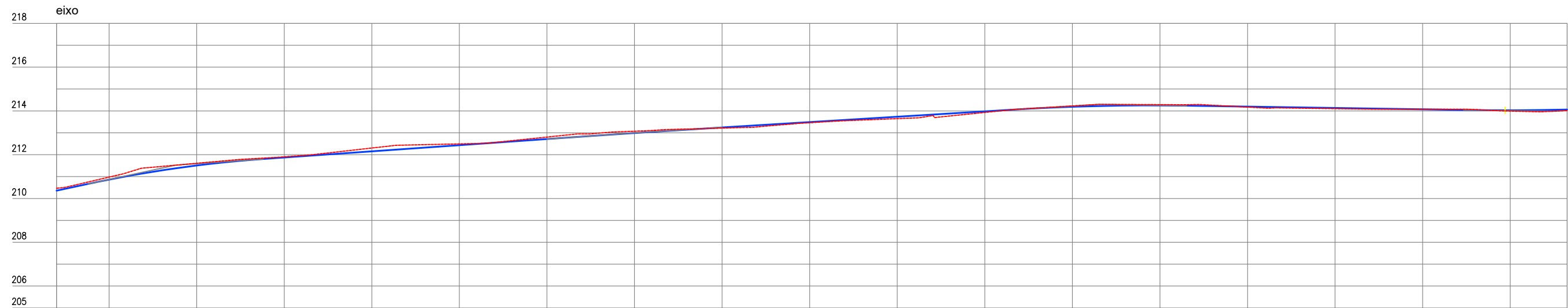
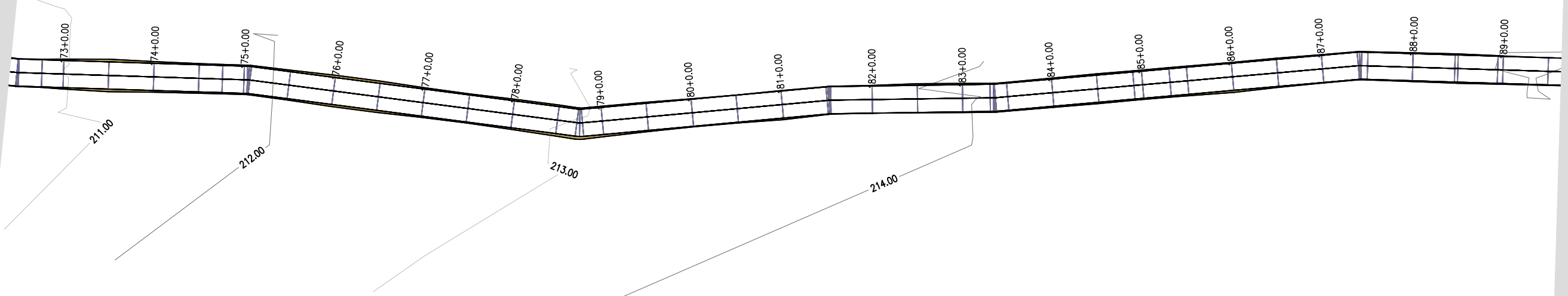
PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
10 / 13
 ESCALA:
 H 1/1000
 V 1/200

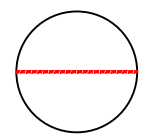
JOTA BARROS PROJETOS
 Arthur Moreira Torquato
 Eng. Civil - CREA 53.900D-CE



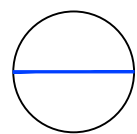
PRANCHA - 10
 0 1000 2000



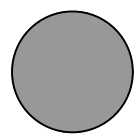
Cota Vermelha	Cota da terraplenagem	Cota do terreno	Estaca
-0,107	210,359	210,466	172
-0,113	210,863	210,976	173
-0,101	211,507	211,608	174
-0,031	211,872	211,903	175
-0,152	212,154	212,305	176
-0,059	212,436	212,494	177
-0,088	212,718	212,806	178
-0,083	212,991	213,074	179
0,030	213,245	213,216	180
0,030	213,490	213,461	181
0,068	213,736	213,648	182
0,050	213,981	213,931	183
-0,039	214,189	214,228	184
-0,036	214,251	214,287	185
0,022	214,196	214,175	186
0,031	214,135	214,104	187
-0,005	214,073	214,077	188
0,036	214,030	213,994	189
0,045	214,082	214,018	189



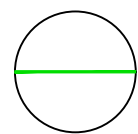
TERRENO NATURAL



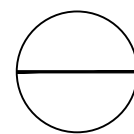
PROJETADO



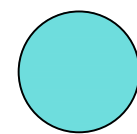
ESTRADA



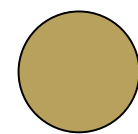
BORDO



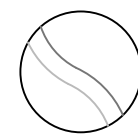
TALUDE



ATERRO



CORTE



CURVAS DE NÍVEL



PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

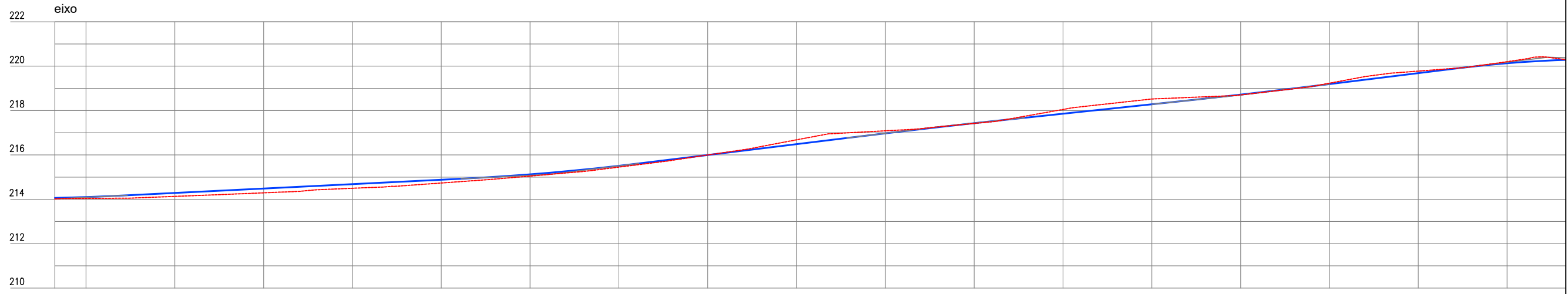
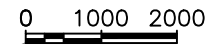
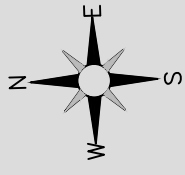
PRANCHA:

11 / 13

ESCALA:

H 1/1000
 V 1/200

JOTA BARROS PROJETOS
 Art.ºr. Moreira Torquato
 Eng.º Civil - CREA 53.900D - CE



Estaca	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206
Cota do terreno	214,018	214,040	214,132	214,292	214,497	214,735	215,048	215,451	215,999	216,681	217,068	217,420	218,050	218,522	218,704	219,234	219,779	220,203
Cota da terraplenagem	214,062	214,102	214,287	214,485	214,684	214,882	215,124	215,509	215,995	216,486	216,973	217,431	217,859	218,281	218,721	219,195	219,687	220,134
Cota vermelha	0,045	0,063	0,155	0,193	0,186	0,147	0,077	0,058	-0,003	-0,196	-0,115	0,011	-0,191	-0,240	0,017	-0,039	-0,092	-0,069

Legend for the longitudinal profile:

- TERRENO NATURAL
- PROJETADO
- ESTRADA
- BORDO
- TALUDE
- ATERRO
- CORTE
- CURVAS DE NÍVEL

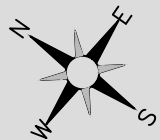


PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

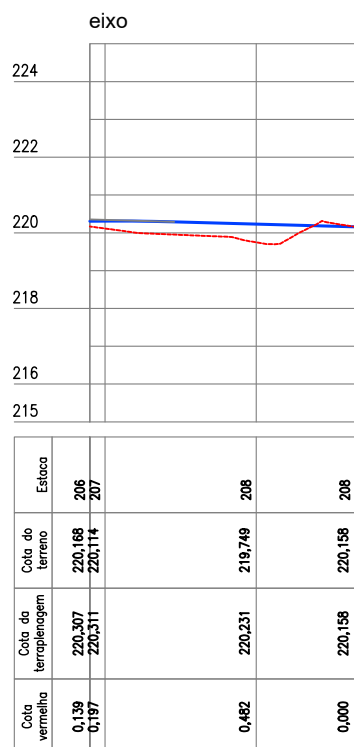
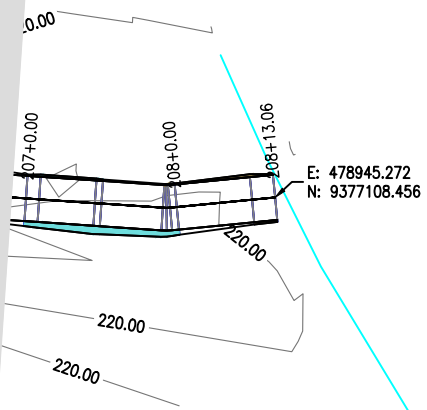
PRANCHA:
12 / 13
 ESCALA:
 H 1/1000
 V 1/200

JOTA BARROS PROJETOS
 Arthur Moreira Torquato
 Engº Civil - CREA 53.900D - CE

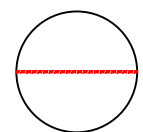


0 1000 2000

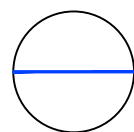
PRANCHA - 12



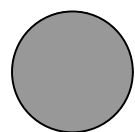
Artur Moreira Torquato
 Engº Civil - CREA 53900-D - CE



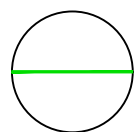
TERRENO NATURAL



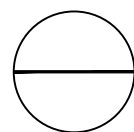
PROJETADO



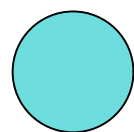
ESTRADA



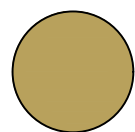
BORDO



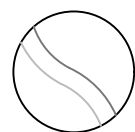
TALUDE



ATERRO



CORTE



CURVAS DE NÍVEL



PREFEITURA MUNICIPAL DE MILHÃ
 RECUPERAÇÃO DE ESTRADAS VICINAIS NO MUNICÍPIO MILHÃ-CE -
 TRECHO SÍTIO INGÁ A PEDRA FINA
ESTAQUEAMENTO E PERFIL LONGITUDINAL

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
 ARQUIVO: ESTRADA PEDRA FINA_GEO.DWG

PRANCHA:
13 / 13

ESCALA:
 H 1/1000
 V 1/200