

ESTADO DE GOIÁS
SECRETARIA DE INFRA-ESTRUTURA
Agência Goiana de Infraestrutura e Transporte - GOINFRA

**ELABORAÇÃO DE PROJETOS BÁSICO E EXECUTIVO,
DE ENGENHARIA PARA PAVIMENTAÇÃO, DA
RODOVIA GO-221.**

RODOVIA	: GO-221
TRECHO	: Doverlândia – Trevo GO-194
EXTENSÃO	: 23,68 km
CÓDIGO SRE	: 221EGO0097 – 221EGO00100 – 221EGO00110
LOTE	: Único

**VOLUME 3A – NOTAS DE SERVIÇO E
VOLUME DE TERRAPLENAGEM**

OUTUBRO/2021

SUMÁRIO

1. APRESENTAÇÃO.....	3
1.1. DADOS.....	3
1.2. INFORMAÇÕES SOBRE O CONTRATO	3
2. MAPA DE SITUAÇÃO	5
3. NOTAS DE SERVIÇO.....	7
3.1. NOTA DE SERVIÇO – TERRAPLENAGEM (LINHA TRONCO)	7
3.2. NOTA DE SERVIÇO – PAVIMENTAÇÃO (LINHA TRONCO).....	20
3.3. NOTAS DE SERVIÇO – INTERSEÇÃO 01.....	31
3.4. NOTAS DE SERVIÇO – INTERSEÇÃO 02.....	34
4. CÁLCULO DE VOLUMES	39
4.1. FICHA DE CUBAÇÃO – LINHA TRONCO GO 221	39
4.2. FICHA DE CUBAÇÃO – INTERSEÇÃO 01	66
4.3. FICHA DE CUBAÇÃO – INTERSEÇÃO 02	68
5. TERMO DE ENCERRAMENTO	70

1. APRESENTAÇÃO

1. APRESENTAÇÃO

Apresentamos o **Volume 3A – Notas de Serviço e Volume de Terraplenagem**, que faz parte integrante do Projeto Executivo de Engenharia da Rodovia: GO-221, Trecho: Doverlândia / Trevo GO-194, elaborado pela RUDRA ENGENHARIA LTDA.

O Projeto de Engenharia para as Obras de Implantação e Pavimentação na Fase de Projeto Básico, em seus diversos volumes, é apresentado com a seguinte composição:

- **Volume 1 - Relatório do Projeto:** editado em formato A-4, contém basicamente uma sinopse de cada estudo e projeto, as soluções, os resultados obtidos, os quantitativos, ele destina-se ao uso de técnicos que queiram ter um conhecimento geral do projeto e as firmas construtoras interessadas na licitação da obra, razão por que ele reúne todos os elementos que sejam de interesse para a concorrência e construção;
- **Volume 2 - Projetos Executivos:** em formato A-3, apresenta os quantitativos dos serviços, as plantas, desenhos, croquis e listagens de serviços necessários para a implantação das obras e perfeita compreensão dos serviços a executar;
- **Volume 3A - Notas de Serviço e Volume de Terraplenagem:** editado em formato A-4, contém os dados Planialtimétricos do terreno e de projeto necessárias à execução da obra, inclusive com a cubagem dos movimentos de terra;
- **Volume 3B - Estudos Geotécnicos:** editado em formato A-4, contém os boletins de sondagem e os resultados dos ensaios de laboratório realizados com os materiais do subleito, dos cortes, dos empréstimos e das ocorrências de materiais para pavimentação, com suas respectivas análises;
- **Volume 4 – Orçamento e Planejamento:** editado em formato A-4, contém os quantitativos dos serviços propostos, as composições pertinentes a cada serviço, cronograma físico e financeiro, relação do equipamento mínimo e relação do pessoal necessário, permitindo dessa forma, explicitar os valores estimados para execução da obra;
- **Volume 5 - Estudos Ambientais:** editado em formato A-4, contém os levantamentos ambientais, as medidas de proteção ambiental com seus respectivos quantitativos;
- **Volume 6 - Projeto de Desapropriação:** editado em formato A-4, contém os levantamentos cadastral das propriedades e dos proprietários, bem como os croquis individuais e estimativa de valores das desapropriações.

1.1. DADOS

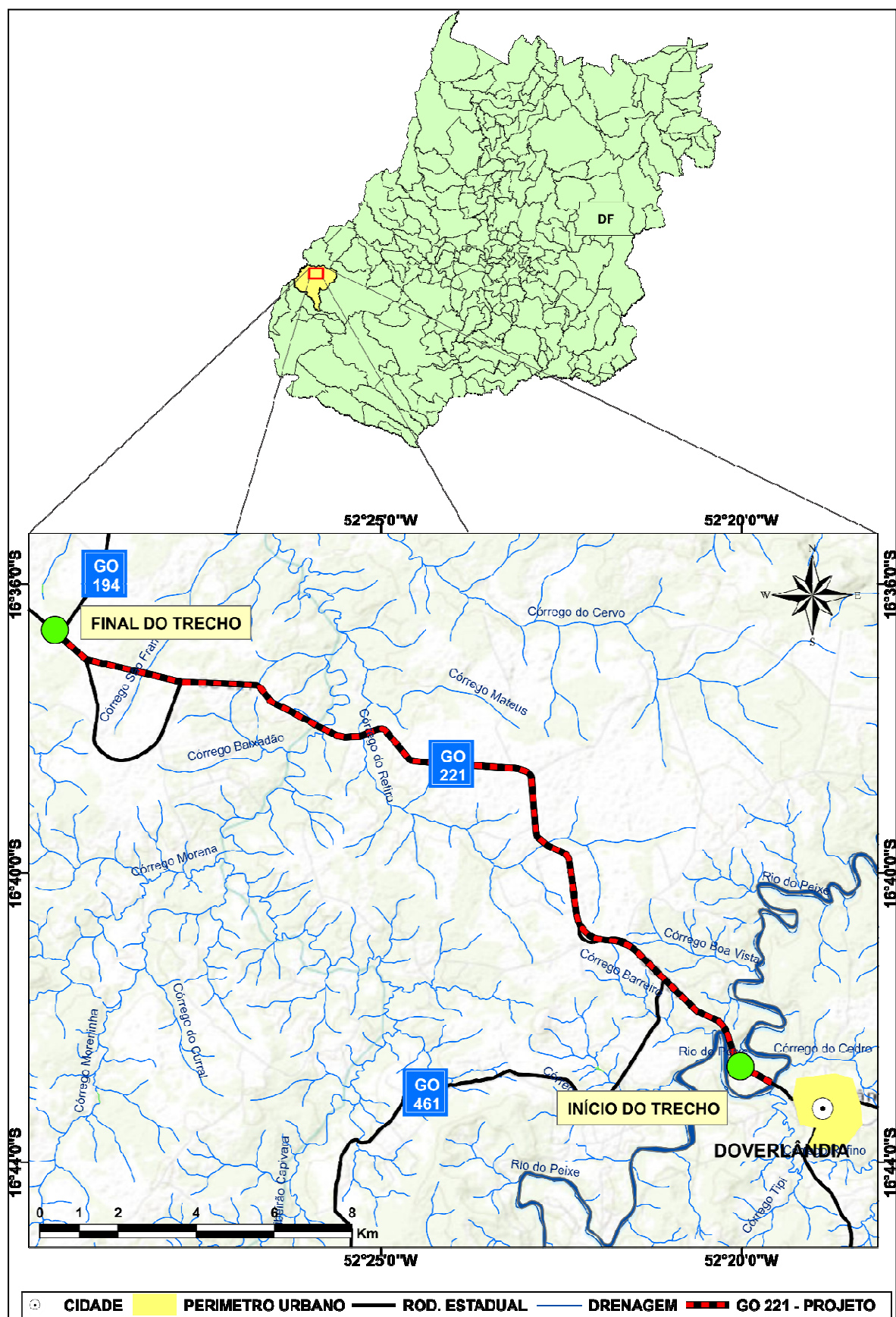
- **Rodovia:** GO-221
- **Trecho:** Doverlândia / Trevo GO-194
- **Extensão:** 23,68 km

1.2. INFORMAÇÕES SOBRE O CONTRATO

- **Supervisão:** FUNDEPEC
- **Fiscalização:** GOINFRA
- **Elaboração:** Rudra Engenharia Ltda.
- **Data da assinatura:** 15/01/2021

2. MAPA DE SITUAÇÃO

2. MAPA DE SITUAÇÃO



3. NOTAS DE SERVIÇO

3. NOTAS DE SERVIÇO

3.1. NOTA DE SERVIÇO – TERRAPLENAGEM (LINHA TRONCO)

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo						Lado Direito				
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-6.481	480,005	-5.900	479,511	-3.00	0+0.000			479,688	480,814	1,126	5,900	479,511	-3.00	9,496	477,114
-6.373	480,027	-5.900	479,553	-3.00	1+0.000			479,730	480,130	0,400	5,900	479,553	-3.00	6,147	479,801
-6.199	479,894	-5.900	479,595	-3.00	2+0.000			479,772	480,405	0,273	5,900	479,595	-3.00	6,068	479,763
-6.155	479,893	-5.900	479,637	-3.00	3+0.000		PCV	479,814	480,103	0,289	5,900	479,637	-3.00	6,180	479,918
-6.157	479,946	-5.900	479,689	-3.00	4+0.000			479,866	480,156	0,290	5,900	479,689	-3.00	6,105	479,894
-6.184	480,090	-5.900	479,807	-3.00	5+0.000			479,984	480,169	0,185	5,900	479,807	-3.00	6,122	480,029
-6.284	480,384	-5.900	480,000	-3.00	6+0.000			480,177	480,367	0,190	5,900	480,000	-3.00	6,368	480,468
-6.476	480,845	-5.900	480,269	-3.00	7+0.000			480,446	480,925	0,479	5,900	480,269	-3.00	6,445	480,814
-6.966	481,680	-5.900	480,614	-3.00	8+0.000			480,791	481,230	0,439	5,900	480,614	-3.00	6,288	481,002
-6.709	481,843	-5.900	481,034	-3.00	9+0.000			481,211	481,657	0,446	5,900	481,034	-3.00	6,343	481,477
-6.946	482,577	-5.900	481,530	-3.00	10+0.000			481,707	482,187	0,480	5,900	481,530	-3.00	6,356	481,987
-7.066	483,268	-5.900	482,102	-3.00	11+0.000			482,279	482,667	0,388	5,900	482,102	-3.00	6,320	482,522
-7.225	484,074	-5.900	482,749	-3.00	12+0.000			482,926	483,271	0,345	5,900	482,749	-3.00	6,305	483,155
-6.979	484,551	-5.900	483,472	-3.00	13+0.000			483,649	484,031	0,382	5,900	483,472	-3.00	6,409	483,981
-6.783	485,154	-5.900	484,271	-3.00	14+0.000			484,448	484,891	0,443	5,900	484,271	-3.00	8,892	482,277
-6.853	486,098	-5.900	485,146	-3.00	15+0.000			485,323	485,833	0,510	5,900	485,146	-3.00	6,528	485,773
-6.397	486,593	-5.900	486,096	-3.00	16+0.000		PTV	486,273	486,841	0,568	5,900	486,096	-3.00	6,458	486,653
-6.243	487,455	-5.900	487,112	-3.00	17+0.000			487,289	487,812	0,523	5,900	487,112	-3.00	6,111	487,323
-6.193	488,431	-5.900	488,138	-3.00	18+0.000			488,315	488,793	0,478	5,900	488,138	-3.00	6,436	488,674
-6.109	489,373	-5.900	489,164	-3.00	19+0.000			489,341	489,814	0,473	5,900	489,164	-3.00	6,405	489,668
-6.322	490,611	-5.900	490,189	-3.00	20+0.000			490,366	490,821	0,455	5,900	490,189	-3.00	6,400	490,689
-6.056	491,371	-5.900	491,215	-3.00	21+0.000			491,392	491,872	0,480	5,900	491,215	-3.00	6,353	491,668
-6.397	492,738	-5.900	492,241	-3.00	22+0.000			492,418	492,872	0,454	5,900	492,241	-3.00	6,303	492,644
-6.273	493,639	-5.900	493,267	-3.00	23+0.000			493,444	493,876	0,432	5,900	493,267	-3.00	6,127	493,494
-6.313	494,705	-5.900	494,292	-3.00	24+0.000			494,469	494,866	0,397	5,900	494,292	-3.00	6,124	494,516
-6.331	495,749	-5.900	495,318	-3.00	25+0.000			495,495	495,867	0,372	5,900	495,318	-3.00	6,218	495,636
-6.265	496,709	-5.900	496,344	-3.00	26+0.000			496,521	496,899	0,378	5,900	496,344	-3.00	6,060	496,504
-6.046	497,516	-5.900	497,370	-3.00	27+0.000			497,547	497,901	0,354	5,900	497,370	-3.00	5,982	497,452
-6.175	498,670	-5.900	498,395	-3.00	28+0.000			498,572	498,857	0,285	5,900	498,395	-3.00	6,023	498,518
-6.222	499,743	-5.900	499,421	-3.00	29+0.000			499,598	499,942	0,344	5,900	499,421	-3.00	6,275	499,796
-6.370	500,917	-5.900	500,447	-3.00	30+0.000			500,624	500,957	0,333	5,900	500,447	-3.00	6,235	500,782
-6.094	501,708	-5.900	501,514	-2.30	31+0.000			501,650	501,969	0,319	5,900	501,473	-2.30	5,964	501,537
-6.184	502,889	-5.900	502,606	-1.18	32+0.000			502,675	503,018	0,343	5,900	502,498	-1.18	6,041	502,640
-9.305	507,103	-5.900	503,698	-0.05	33+0.000			503,701	504,027	0,326	5,900	503,524	-0.05	5,933	503,557
-9.147	506,996	-5.900	503,750	0.00	33+0.952	TS	PCV	503,750	504,075	0,325	5,900	503,573	0.00	5,940	503,613
-7.848	506,712	-5.900	504,763	1.07	34+0.000			504,700	504,969	0,269	6,113	504,517	1.07	6,245	504,649
-6.151	505,964	-5.900	505,713	2.20	35+0.000			505,584	505,897	0,313	6,202	505,398	2.20	6,615	505,811
-6.155	506,795	-5.900	506,540	3.30	36+0.000			506,346	506,749	0,403	6,555	506,129	3.30	7,210	506,784
-6.047	507,390	-5.900	507,242	4.35	37+0.000			506,986	507,367	0,381	6,515	506,702	4.35	7,584	507,771
-6.042	507,415	-5.900	507,273	4.40	37+0.952	SC		507,013	507,390	0,377	6,500	506,727	4.40	7,633	507,860
-6.081	507,944	-5.900	507,764	4.40	38+0.000			507,504	507,890	0,386	6,500	507,218	4.40	10,174	510,892
-6.332	508,592	-5.900	508,160	4.40	39+0.000			507,900	508,296	0,396	6,500	507,614	4.40	10,740	511,855
-6.597	509,132	-5.900	508,434	4.40	40+0.000			508,175	508,613	0,438	6,500	507,889	4.40	10,615	512,004
-6.579	509,266	-5.900	508,587	4.40	41+0.000			508,327	508,778	0,451	6,500	508,041	4.40	12,062	513,603
-6.401	509,119	-5.900	508,618	4.40	42+0.000			508,358	508,769	0,411	6,500	508,072	4.40	12,308	513,880
-6.372	508,999	-5.900	508,527	4.40	43+0.000			508,267	508,661	0,394	6,500	507,981	4.40	12,429	513,910
-6.126	508,540	-5.900	508,314	4.40	44+0.000			508,054	508,484	0,430	6,500	507,768	4.40	12,043	513,311
-6.087	508,166	-5.900	507,979	4.40	45+0.000			507,719	508,152	0,433	6,500	507,433	4.40	10,343	511,277
-6.160	507,782	-5.900	507,522	4.40	46+0.000		PTV	507,263	507,712	0,449	6,500	506,977	4.40	7,917	508,394
-6.108	507,194	-5.900	506,986	4.40	47+0.000			506,727	507,146	0,419	6,500	506,441	4.40	6,856	506,796
-6.004	506,553	-5.900	506,449	4.40	48+0.000			506,189	506,587	0,398	6,500	505,903	4.40	6,856	506,796
-5.990	506,385	-5.900	506,296	4.40	48+5.698		PCV	506,036	506,441	0,405	6,500	505,750	4.40	6,594	505,687
-5.975	506,002	-5.900	505,927	4.40	49+0.000			505,667	506,068	0,401	6,500	505,381	4.40	6,926	505,098
-5.961	505,578	-5.900	505,517	4.40	50+0.000			505,257	505,661	0,404	6,500	504,971	4.40	6,698	505,169
-5.946	505,204	-5.900	505,235	4.40	51+0.000			504,975	505,349	0,374	6,500	504,689	4.40	6,712	504,901
-5.943	505,052	-5.900	505,080	4.40	52+0.000			504,820	505,205	0,385	6,500	504,534	4.40	6,724	504,758
-5.996	505,149	-5.900	505,053	4.40	53+0.000			504,794	505,219	0,425	6,500	504,508	4.40	6,620	504,628
-6.062	505,316	-5.900													

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo						Lado Direito				
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-6.311	517,254	-6,126	517,069	-3.00	85+0.000			517,253	517,714	0,461	5,900	517,321	-3.00	6,402	517,823
-6.387	517,335	-6,213	517,161	-3.00	86+0.000			517,347	517,830	0,483	5,900	517,482	-3.00	6,264	517,845
-7.001	517,631	-6,568	517,198	-3.38	87+0.000			517,420	517,933	0,513	5,900	517,619	-3.38	6,459	518,178
-7.108	517,792	-6,500	517,184	-4.40	87+19.507	SC		517,470	517,978	0,508	5,900	517,729	-4.40	6,560	518,389
-7.108	517,793	-6,500	517,185	-4.40	88+0.000			517,471	517,979	0,508	5,900	517,730	-4.40	6,538	518,369
-7.107	517,820	-6,500	517,213	-4.40	89+0.000			517,499	518,041	0,542	5,900	517,759	-4.40	6,502	518,361
-7.248	517,968	-6,500	517,220	-4.40	90+0.000			517,506	518,053	0,547	5,900	517,765	-4.40	6,331	518,196
-7.243	517,947	-6,500	517,204	-4.40	91+0.000			517,490	518,032	0,542	5,900	517,750	-4.40	6,526	518,376
-7.347	518,014	-6,500	517,167	-4.40	92+0.000			517,453	517,996	0,543	5,900	517,713	-4.40	6,520	518,333
-7.172	517,780	-6,500	517,108	-4.40	93+0.000			517,394	517,964	0,570	5,900	517,653	-4.40	6,311	518,064
-7.411	517,938	-6,500	517,026	-4.40	94+0.000			517,312	517,904	0,592	5,900	517,572	-4.40	6,288	517,960
-7.415	517,838	-6,500	516,923	-4.40	95+0.000			517,209	517,771	0,562	5,900	517,468	-4.40	6,010	517,578
-7.323	517,620	-6,500	516,798	-4.40	96+0.000			517,084	517,496	0,412	5,900	517,343	-4.40	5,991	517,434
-7.249	517,399	-6,500	516,650	-4.40	97+0.000			516,936	517,352	0,416	5,900	517,196	-4.40	6,089	517,385
-7.183	517,164	-6,500	516,481	-4.40	98+0.000			516,767	517,256	0,489	5,900	517,026	-4.40	6,131	517,258
-6.778	516,567	-6,500	516,289	-4.40	99+0.000			516,575	517,021	0,446	5,900	516,835	-4.40	6,020	516,955
-6.748	516,324	-6,500	516,076	-4.40	100+0.000		PTV	516,362	516,822	0,460	5,900	516,622	-4.40	6,363	516,313
-6.810	516,193	-6,500	515,883	-4.40	100+17.244			516,169	516,601	0,432	5,900	516,428	-4.40	6,783	515,840
-6.809	516,160	-6,500	515,852	-4.40	101+0.000			516,138	516,565	0,427	5,900	516,397	-4.40	6,816	515,787
-6.711	515,838	-6,500	515,627	-4.40	102+0.000			515,913	516,342	0,429	5,900	516,173	-4.40	6,982	515,452
-6.736	515,639	-6,500	515,403	-4.40	103+0.000			515,689	516,104	0,415	5,900	515,949	-4.40	6,808	515,343
-6.668	515,346	-6,500	515,179	-4.40	104+0.000			515,465	515,892	0,427	5,900	515,724	-4.40	6,439	515,365
-6.912	515,366	-6,500	514,954	-4.40	105+0.000			515,240	515,651	0,411	5,900	515,500	-4.40	6,610	515,027
-6.873	515,103	-6,500	514,730	-4.40	106+0.000			515,016	515,366	0,350	5,900	515,275	-4.40	6,857	514,638
-6.630	514,636	-6,500	514,505	-4.40	107+0.000			514,791	515,122	0,331	5,900	515,051	-4.40	6,802	514,450
-6.730	514,511	-6,500	514,281	-4.40	108+0.000		PCV	514,567	514,957	0,390	5,900	514,827	-4.40	6,718	514,281
-6.791	514,364	-6,500	514,073	-4.40	109+0.000			514,359	514,777	0,418	5,900	514,619	-4.40	6,971	513,905
-6.895	514,376	-6,500	513,982	-4.40	110+0.000			514,268	514,629	0,361	5,900	514,527	-4.40	7,087	513,736
-6.838	514,361	-6,500	514,023	-4.40	111+0.000			514,309	514,688	0,379	5,900	514,569	-4.40	8,773	512,654
-6.891	514,589	-6,500	514,198	-4.40	112+0.000			514,484	514,961	0,477	5,900	514,743	-4.40	10,769	511,497
-6.908	514,913	-6,500	514,505	-4.40	113+0.000			514,791	515,381	0,590	5,900	515,050	-4.40	9,622	512,569
-7.101	515,423	-6,500	514,822	-4.40	113+14.981	CS		515,108	515,749	0,641	5,900	515,368	-4.40	6,943	514,672
-7.314	515,710	-6,564	514,959	-4.14	114+0.000			515,231	515,861	0,630	5,900	515,475	-4.14	5,922	515,496
-7.212	516,309	-6,507	515,603	-3.09	115+0.000			515,804	516,218	0,414	5,900	515,986	-3.09	6,003	516,089
-9.761	513,951	-6,201	516,324	-3.00	116+0.000			516,510	516,846	0,336	5,900	516,626	-3.00	6,335	516,336
-6.444	517,537	-6,074	517,166	-3.00	117+0.000			517,349	517,688	0,339	5,900	517,398	-3.00	6,171	517,669
-6.463	518,451	-5,900	517,887	-3.00	117+14.981	ST		518,064	518,399	0,335	5,900	518,064	-3.00	6,233	518,397
-6.344	518,587	-5,900	518,143	-3.00	118+0.000			518,320	518,658	0,338	5,900	518,304	-3.00	6,216	518,620
-6.475	519,823	-5,900	519,248	-3.00	119+0.000			519,425	519,778	0,353	5,900	519,342	-3.00	6,216	519,658
-6.555	521,140	-5,900	520,485	-3.00	120+0.000		PTV	520,662	521,108	0,446	5,900	520,513	-3.00	6,328	520,941
-6.418	522,373	-5,900	521,855	-2.74	121+0.000			522,016	522,456	0,440	5,900	521,839	-2.74	6,402	522,341
-6.136	523,502	-5,900	523,265	-2.06	122+0.000			523,387	523,776	0,389	5,900	523,210	-2.06	6,223	523,533
-6.506	525,282	-5,900	524,676	-1.38	123+0.000			524,757	525,160	0,403	5,900	524,580	-1.38	5,973	524,653
-6.727	526,913	-5,900	526,086	-0.70	124+0.000		PCV	526,127	526,538	0,411	5,900	525,950	-0.70	6,195	526,246
-6.263	527,828	-5,900	527,465	-0.02	125+0.000			527,466	527,800	0,334	5,900	527,289	-0.02	6,189	527,578
-6.258	527,859	-5,900	527,501	0.00	125+0.546	TS		527,501	527,826	0,325	5,900	527,324	0.00	6,172	527,596
-6.066	528,900	-5,900	528,734	0.66	126+0.000			528,695	528,935	0,240	6,047	528,513	0.66	6,187	528,654
-7.730	531,719	-5,900	529,889	1.34	127+0.000			529,810	530,044	0,234	6,120	529,627	1.34	6,611	530,118
-8.154	533,186	-5,900	530,932	2.02	128+0.000			530,812	531,068	0,256	6,271	530,624	2.02	8,846	533,199
-9.081	535,041	-5,900	531,861	2.70	129+0.000			531,701	532,000	0,299	6,449	531,508	2.70	9,795	534,854
-8.792	535,563	-5,900	532,671	3.29	130+0.000			532,477	532,826	0,349	6,309	532,269	3.29	9,754	535,715
-8.753	535,544	-5,900	532,691	3.30	130+0.546	SC		532,496	532,842	0,346	6,300	532,288	3.30	9,752	535,741
-11.258	538,691	-5,900	533,334	3.30	131+0.000			533,139	533,523	0,384	6,300	532,931	3.30	10,525	537,157
-7.851	535,834	-5,900	533,883	3.30	132+0.000			533,688	534,070	0,382	6,300	533,480	3.30	9,970	537,150
-7.891	536,309	-5,900	534,318	3.30	133+0.000			534,123	534,525	0,402	6,300	533,916	3.30	10,294	537,910
-7.386	536,126	-5,900	534,641	3.30	134+0.000			534,446	534,900	0,454	6,300	534,238	3.30	11,557	539,495
-6.288	535,238	-5,900	534,849	3.30	135+0.000			534,655	535,135	0,480	6,300	534,447</			

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo						Lado Direito				
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-8.214	529.303	-5.900	526.989	-3.00	167+0.000			527.166	527.955	0.789	5.900	526.989	-3.00	6.681	527.770
-8.201	529.729	-5.900	527.428	-3.00	168+0.000		PTV	527.605	528.389	0.784	5.900	527.428	-3.00	6.593	528.121
-7.904	529.926	-5.900	527.922	-3.00	169+0.000			528.099	528.912	0.813	5.900	527.922	-3.00	6.730	528.752
-7.555	530.088	-5.900	528.432	-3.00	170+0.000			528.609	529.428	0.819	5.900	528.432	-3.00	6.753	529.285
-6.813	529.856	-5.900	528.943	-3.00	171+0.000			529.120	529.951	0.831	5.900	528.943	-3.00	6.811	529.854
-6.718	530.272	-5.900	529.453	-3.00	172+0.000			529.630	530.486	0.856	5.900	529.453	-3.00	6.782	530.335
-6.585	530.649	-5.900	529.964	-3.00	173+0.000			530.141	531.059	0.918	5.900	529.964	-3.00	6.855	530.919
-6.517	531.091	-5.900	530.474	-3.00	174+0.000			530.651	531.624	0.973	5.900	530.474	-3.00	7.013	531.587
-6.521	531.606	-5.900	530.984	-3.00	175+0.000			531.161	532.105	0.944	5.900	530.984	-3.00	7.028	532.112
-6.478	532.072	-5.900	531.495	-3.00	176+0.000			531.672	532.635	0.963	5.900	531.495	-3.00	6.970	532.565
-6.455	532.560	-5.900	532.005	-3.00	177+0.000			532.182	533.216	1.034	5.900	532.005	-3.00	6.996	533.101
-6.895	533.511	-5.900	532.516	-3.00	178+0.000			532.693	533.770	1.077	5.900	532.516	-3.00	7.053	533.669
-7.066	534.192	-5.900	533.026	-3.00	179+0.000			533.203	534.318	1.115	5.900	533.026	-3.00	7.170	534.296
-7.699	535.336	-5.900	533.536	-3.00	180+0.000			533.713	534.812	1.099	5.900	533.536	-3.00	7.573	535.210
VER INTERSEÇÃO 01															
-6.478	547.247	-5.900	546.669	-3.00	207+0.000			546.846	547.516	0.670	5.900	546.669	-3.00	6.511	547.280
-6.537	547.762	-5.900	547.126	-3.00	208+0.000			547.303	547.984	0.681	5.900	547.126	-3.00	6.533	547.759
-6.527	548.209	-5.900	547.582	-3.00	209+0.000			547.759	548.442	0.683	5.900	547.582	-3.00	6.577	548.259
-6.599	548.738	-5.900	548.038	-3.00	210+0.000			548.215	548.824	0.609	5.900	548.038	-3.00	6.572	548.711
-6.510	549.105	-5.900	548.495	-3.00	211+0.000			548.672	549.290	0.618	5.900	548.495	-3.00	6.563	549.158
-6.491	549.542	-5.900	548.951	-3.00	212+0.000			549.128	549.775	0.647	5.900	548.951	-3.00	6.507	549.558
-6.526	550.033	-5.900	549.408	-3.00	213+0.000			549.585	550.244	0.659	5.900	549.408	-3.00	6.666	550.174
-6.564	550.527	-5.900	549.864	-3.00	214+0.000			550.041	550.662	0.621	5.900	549.864	-3.00	6.656	550.620
-6.504	550.925	-5.900	550.320	-3.00	215+0.000			550.497	551.076	0.579	5.900	550.320	-3.00	6.597	551.017
-6.516	551.393	-5.900	550.777	-3.00	216+0.000			550.954	551.541	0.587	5.900	550.777	-3.00	6.627	551.503
-6.442	551.776	-5.900	551.233	-3.00	217+0.000			551.410	551.994	0.584	5.900	551.233	-3.00	6.596	551.929
-6.445	552.234	-5.900	551.689	-3.00	218+0.000			551.866	552.437	0.571	5.900	551.689	-3.00	6.621	552.410
-6.404	552.649	-5.900	552.146	-3.00	219+0.000			552.323	552.844	0.521	5.900	552.146	-3.00	6.590	552.836
-6.406	553.108	-5.900	552.602	-3.00	220+0.000			552.779	553.310	0.531	5.900	552.602	-3.00	6.604	553.306
-6.411	553.570	-5.900	553.059	-3.00	221+0.000			553.236	553.745	0.509	5.900	553.059	-3.00	6.596	553.755
-6.400	554.015	-5.900	553.515	-3.00	222+0.000			553.692	554.185	0.493	5.900	553.515	-3.00	6.571	554.186
-6.431	554.502	-5.900	553.971	-3.00	223+0.000			554.148	554.659	0.511	5.900	553.971	-3.00	6.588	554.660
-6.423	554.951	-5.900	554.428	-3.00	224+0.000			554.605	555.123	0.518	5.900	554.428	-3.00	6.622	555.150
-6.458	555.442	-5.900	554.884	-3.00	225+0.000			555.061	555.596	0.535	5.900	554.884	-3.00	6.617	555.601
-6.459	555.900	-5.900	555.341	-3.00	226+0.000			555.518	556.026	0.508	5.900	555.341	-3.00	6.600	556.041
-6.425	556.322	-5.900	555.797	-3.00	227+0.000			555.974	556.448	0.474	5.900	555.797	-3.00	6.603	556.500
-6.458	556.811	-5.900	556.253	-3.00	228+0.000			556.430	556.918	0.488	5.900	556.253	-3.00	6.663	557.017
-6.472	557.282	-5.900	556.710	-3.00	229+0.000			556.887	557.358	0.471	5.900	556.710	-3.00	6.662	557.471
-6.452	557.718	-5.900	557.166	-3.00	230+0.000			557.343	557.822	0.479	5.900	557.166	-3.00	6.535	557.801
-6.840	558.562	-5.900	557.622	-3.00	231+0.000			557.799	558.306	0.507	5.900	557.622	-3.00	6.834	558.557
-6.991	559.170	-5.900	558.079	-3.00	232+0.000			558.256	558.783	0.527	5.900	558.079	-3.00	6.407	558.586
-7.002	559.637	-5.900	558.535	-3.00	233+0.000			558.712	559.236	0.524	5.900	558.535	-3.00	6.754	559.389
-7.600	560.692	-5.900	558.992	-3.00	234+0.000			559.169	559.696	0.527	5.900	558.992	-3.00	7.337	560.429
-7.844	561.392	-5.900	559.448	-3.00	235+0.000			559.625	560.147	0.522	5.900	559.485	-3.00	7.827	561.412
-7.503	561.569	-5.900	559.966	-3.00	236+0.000			560.143	560.613	0.470	5.900	560.043	-3.00	7.325	561.468
-7.258	561.842	-5.900	560.484	-3.00	237+0.000			560.661	561.095	0.434	5.900	560.601	-3.00	6.682	561.383
-6.996	562.098	-5.900	561.002	-3.00	238+0.000			561.179	561.585	0.406	5.900	561.159	-3.00	6.755	562.014
-6.720	562.071	-5.900	561.252	-3.00	238+9.662	TS		561.429	561.834	0.405	5.900	561.429	-3.00	6.383	561.911
-6.508	562.042	-5.983	561.517	-3.00	239+0.000			561.696	562.097	0.401	5.899	561.717	-3.00	6.515	562.333
-6.587	562.516	-6.101	562.031	-3.00	240+0.000			562.214	562.633	0.419	5.900	562.275	-3.00	6.269	562.644
-6.517	562.959	-6.107	562.549	-3.00	241+0.000			562.732	563.149	0.417	5.900	562.833	-3.00	6.244	563.177
-6.825	563.481	-6.402	563.058	-3.00	242+0.000			563.250	563.632	0.382	5.900	563.391	-3.00	6.156	563.647
-6.802	563.956	-6.417	563.572	-3.05	243+0.000			563.768	564.123	0.355	5.900	563.948	-3.05	6.138	564.186
-6.679	564.189	-6.300	563.810	-3.30	243+9.662	SC		564.018	564.366	0.348	5.900	564.213	-3.30	6.122	564.435
-6.581	564.359	-6.300	564.078	-3.30	244+0.000			564.286	564.631	0.345	5.900	564.480	-3.30	6.136	564.716
-6.664	564.959	-6.300	564.595	-3.30	245+0.000			564.803	565.135	0.332	5.900	564.998	-3.30	6.089	565.187
-6.667	565.481	-6.300	565.113	-3.30	246+0.000			565.321	565.616	0.295	5.900	565.516	-3.30	6.102	565.718
-6.593	565.924	-6.300	565.631	-3.30	247+0.000			565.839	566.100	0.261	5.900	566.034	-3.30	6.041	566.175
-6.710	566.559	-6.300	566.149	-3.30	248+0.000			566.357	566.628</						

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo						Eixo					Lado Direito				
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-6.697	577,771	-6.046	577,120	-3.00	277+0.000			577,302	577,506	0.204	5,900	577,341	-3.00	6.340	577,780
-6.322	577,454	-5.900	577,032	-3.00	277+19.387	ST		577,209	577,382	0.173	5,900	577,209	-3.00	6.428	576,857
-6.316	577,444	-5.900	577,029	-3.00	278+0.000			577,206	577,379	0.173	5,900	577,204	-3.00	6.432	576,850
-6.180	577,170	-5.900	576,889	-3.00	279+0.000			577,066	577,236	0.170	5,900	577,025	-3.00	5.905	577,022
-5.952	576,759	-5.900	576,707	-3.00	280+0.000			576,884	577,021	0.137	5,900	576,803	-3.00	5.993	576,741
-6.009	576,409	-5.900	576,482	-3.00	281+0.000			576,659	576,766	0.107	5,900	576,537	-3.00	5.956	576,594
-6.274	575,964	-5.900	576,214	-3.00	282+0.000			576,391	576,472	0.081	5,900	576,229	-3.00	5.983	576,173
-5.912	575,915	-5.900	575,902	-3.00	283+0.000			576,079	576,112	0.033	5,900	575,902	-3.00	6.014	575,826
-6.074	575,432	-5.900	575,548	-3.00	284+0.000		PTV	575,725	575,697	-0.028	5,900	575,548	-3.00	6.203	575,346
-6.503	574,778	-5.900	575,180	-2.51	285+0.000			575,328	575,238	-0.090	5,900	575,151	-2.51	6.350	574,852
-6.476	574,454	-5.900	574,838	-1.38	286+0.000			574,920	574,756	-0.164	5,900	574,743	-1.38	6.397	574,412
-6.778	573,911	-5.900	574,496	-0.26	287+0.000			574,512	574,281	-0.231	5,900	574,335	-0.26	6.482	573,947
-7.065	573,641	-5.900	574,417	0.00	287+4.618	TS		574,417	574,171	-0.246	5,900	574,240	0.00	6.496	573,843
-7.277	573,237	-5.900	574,154	0.87	288+0.000			574,103	573,837	-0.266	6,078	573,921	0.87	6.986	573,316
-6.626	573,328	-5.900	573,812	1.99	289+0.000			573,695	573,373	-0.322	6,202	573,509	1.99	7.186	572,853
-6.710	572,930	-5.900	573,470	3.11	290+0.000			573,287	572,864	-0.423	6,512	573,084	3.11	8.148	571,994
-7.218	572,245	-5.900	573,124	4.16	291+0.000			572,878	572,341	-0.537	6,560	572,605	4.16	8.239	571,486
-7.272	572,129	-5.900	573,044	4.40	291+4.618	SC		572,784	572,218	-0.566	6,500	572,498	4.40	8.078	571,446
-7.302	571,795	-5.900	572,729	4.40	292+0.000			572,470	571,854	-0.616	6,500	572,184	4.40	8.255	571,014
-7.557	571,216	-5.900	572,321	4.40	293+0.000			572,061	571,395	-0.666	6,500	571,775	4.40	8.398	570,510
-7.613	570,771	-5.900	571,913	4.40	294+0.000			571,653	570,942	-0.711	6,500	571,367	4.40	8.378	570,115
-7.778	570,252	-5.900	571,504	4.40	295+0.000			571,245	570,462	-0.783	6,500	570,959	4.40	8.745	569,462
-7.880	569,776	-5.900	571,096	4.40	296+0.000			570,836	569,991	-0.845	6,500	570,550	4.40	8.703	569,082
-8.016	569,277	-5.900	570,688	4.40	297+0.000		PCV	570,428	569,539	-0.889	6,500	570,142	4.40	9.020	568,462
-7.988	568,900	-5.900	570,292	4.40	298+0.000			570,032	569,125	-0.907	6,500	569,746	4.40	9.141	567,985
-7.993	568,544	-5.900	569,939	4.40	299+0.000			569,679	568,764	-0.915	6,500	569,393	4.40	9.140	567,633
-8.291	568,036	-5.900	569,630	4.40	300+0.000			569,370	568,415	-0.955	6,500	569,084	4.40	9.206	567,280
-8.581	567,578	-5.900	569,365	4.40	301+0.000			569,106	568,095	-1.011	6,500	568,820	4.40	9.489	566,827
-8.750	567,245	-5.900	569,145	4.40	302+0.000			568,886	567,813	-1.073	6,500	568,600	4.40	9.625	566,516
-8.819	567,023	-5.900	568,969	4.40	303+0.000			568,710	567,582	-1.128	6,500	568,424	4.40	9.766	566,247
-9.246	566,607	-5.900	568,838	4.40	304+0.000			568,578	567,373	-1.205	6,500	568,292	4.40	9.757	566,121
-8.926	566,733	-5.900	568,750	4.40	305+0.000			568,491	567,290	-1.201	6,500	568,205	4.40	9.670	566,092
-8.496	566,976	-5.900	568,707	4.40	306+0.000			568,448	567,288	-1.160	6,500	568,162	4.40	9.589	566,103
-8.552	566,941	-5.900	568,709	4.40	307+0.000			568,449	567,283	-1.166	6,500	568,163	4.40	9.419	566,217
-8.579	566,968	-5.900	568,754	4.40	308+0.000		PTV	568,494	567,345	-1.149	6,500	568,208	4.40	9.536	566,184
-9.305	566,572	-5.900	568,842	4.40	309+0.000			568,583	567,434	-1.149	6,500	568,297	4.40	9.446	566,333
-8.897	566,946	-5.900	568,943	4.40	310+0.000			568,684	567,473	-1.211	6,500	568,398	4.40	9.396	566,467
-8.822	567,096	-5.900	569,044	4.40	311+0.000			568,785	567,575	-1.210	6,500	568,499	4.40	9.399	566,566
-8.880	567,158	-5.900	569,145	4.40	312+0.000			568,885	567,645	-1.240	6,500	568,599	4.40	9.572	566,551
-8.902	567,189	-5.900	569,191	4.40	312+9.062			568,931	567,710	-1.221	6,500	568,645	4.40	9.532	566,624
-8.910	567,239	-5.900	569,246	4.40	313+0.000			568,986	567,781	-1.205	6,500	568,700	4.40	9.472	566,719
-8.895	567,350	-5.900	569,347	4.40	314+0.000			569,087	567,943	-1.144	6,500	568,801	4.40	9.337	566,910
-8.886	567,457	-5.900	569,448	4.40	315+0.000			569,188	568,129	-1.059	6,500	568,902	4.40	9.653	566,800
-8.606	567,745	-5.900	569,548	4.40	316+0.000			569,289	568,303	-0.986	6,500	569,003	4.40	9.516	566,992
-8.493	567,920	-5.900	569,649	4.40	317+0.000			569,390	568,474	-0.916	6,500	569,104	4.40	9.140	567,344
-8.369	568,104	-5.900	569,750	4.40	318+0.000			569,491	568,689	-0.802	6,500	569,205	4.40	9.012	567,530
-8.438	568,159	-5.900	569,851	4.40	319+0.000			569,591	568,866	-0.725	6,500	569,305	4.40	9.960	566,998
-8.311	568,345	-5.900	569,952	4.40	320+0.000			569,692	568,996	-0.696	6,500	569,406	4.40	10.120	566,993
-8.332	568,431	-5.900	570,053	4.40	321+0.000			569,793	569,008	-0.785	6,500	569,507	4.40	10.002	567,172
-8.280	568,567	-5.900	570,154	4.40	322+0.000			569,894	569,021	-0.873	6,500	569,608	4.40	9.419	567,662
-8.419	568,575	-5.900	570,254	4.40	323+0.000			569,995	569,163	-0.832	6,500	569,709	4.40	8.995	568,045
-8.556	568,585	-5.900	570,355	4.40	324+0.000			570,096	569,271	-0.825	6,500	569,810	4.40	9.075	568,093
-8.815	568,513	-5.900	570,456	4.40	325+0.000			570,196	569,419	-0.777	6,500	569,910	4.40	9.244	568,081
-8.644	568,727	-5.900	570,557	4.40	326+0.000			570,297	569,491	-0.806	6,500	570,011	4.40	8.963	568,369
-7.611	569,517	-5.900	570,658	4.40	327+0.000			570,398	569,592	-0.806	6,500	570,112	4.40	9.323	568,230
-7.706	569,554	-5.900	570,759	4.40	328+0.000			570,499	569,691	-0.808	6,500	570,213	4.40	10.375	567,630
-7.891	569,532	-5.900	570,860	4.40	329+0.000			570,600	569,768	-0.832	6,500	570,314	4.		

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo					Lado Direito					
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-9,740	568,243	-5,900	570,803	-3,00	362+0.000			570,980	569,173	-1,807	5,900	570,803	-3,00	10,339	567,843
-9,849	567,914	-5,900	570,547	-3,00	363+0.000			570,724	568,996	-1,728	5,900	570,547	-3,00	9,938	567,855
-9,924	567,587	-5,900	570,270	-3,00	364+0.000			570,447	568,791	-1,656	5,900	570,270	-3,00	9,824	567,654
-9,719	567,427	-5,900	569,973	-3,00	365+0.000			570,150	568,609	-1,541	5,900	569,973	-3,00	10,003	567,237
-9,691	567,128	-5,900	569,655	-3,00	366+0.000			569,832	568,392	-1,440	5,900	569,655	-3,00	9,944	566,959
-9,730	566,764	-5,900	569,318	-3,00	367+0.000			569,495	568,150	-1,345	5,900	569,318	-3,00	10,008	566,579
-9,361	566,652	-5,900	568,959	-3,00	368+0.000			569,136	567,879	-1,257	5,900	568,959	-3,00	10,030	566,206
-9,513	566,172	-5,900	568,581	-3,00	369+0.000			568,758	567,313	-1,445	5,900	568,581	-3,00	10,346	565,617
-9,404	565,846	-5,900	568,182	-3,00	370+0.000			568,359	566,136	-2,223	5,900	568,182	-3,00	10,163	565,340
-10,019	565,016	-5,900	567,762	-3,00	371+0.000			567,939	565,175	-2,764	5,900	567,762	-3,00	10,758	564,524
-10,473	564,274	-5,900	567,323	-3,00	372+0.000			567,500	564,274	-3,226	5,900	567,323	-3,00	11,260	563,749
-10,999	563,463	-5,900	566,862	-3,00	373+0.000			567,039	563,713	-3,326	5,900	566,862	-3,00	11,170	563,349
-11,093	562,920	-5,900	566,382	-3,00	374+0.000			566,559	563,208	-3,351	5,900	566,382	-3,00	11,073	562,933
-11,150	562,380	-5,900	565,881	-3,00	375+0.000			566,058	562,722	-3,336	5,900	565,881	-3,00	11,572	562,099
-11,061	561,919	-5,900	565,359	-3,00	376+0.000			565,536	562,122	-3,414	5,900	565,359	-3,00	11,827	561,408
-11,146	561,320	-5,900	564,817	-3,00	377+0.000			564,994	561,546	-3,448	5,900	564,817	-3,00	11,234	561,262
-11,078	560,803	-5,900	564,255	-3,00	378+0.000			564,432	561,025	-3,407	5,900	564,255	-3,00	10,832	560,967
-11,040	560,246	-5,900	563,672	-3,00	379+0.000			563,849	560,362	-3,487	5,900	563,672	-3,00	10,931	560,318
-10,930	559,716	-5,900	563,069	-3,00	380+0.000			563,246	559,796	-3,450	5,900	563,069	-3,00	10,973	559,687
-10,804	559,176	-5,900	562,446	-3,00	381+0.000			562,623	559,221	-3,402	5,900	562,446	-3,00	10,790	559,186
-10,240	558,909	-5,900	561,802	-3,00	382+0.000			561,979	558,755	-3,224	5,900	561,802	-3,00	10,663	558,626
-11,693	557,276	-5,900	561,138	-3,00	383+0.000			561,315	558,126	-3,189	5,900	561,138	-3,00	11,119	557,659
-11,295	556,856	-5,900	560,453	-3,00	384+0.000			560,630	557,194	-3,436	5,900	560,453	-3,00	11,632	556,631
-12,203	555,546	-5,900	559,748	-3,00	385+0.000			559,925	556,196	-3,729	5,900	559,748	-3,00	11,949	555,715
-12,596	554,559	-5,900	559,022	-3,00	386+0.000			559,199	555,283	-3,916	5,900	559,022	-3,00	12,016	554,945
-12,572	553,829	-5,900	558,277	-3,00	387+0.000			558,454	554,397	-4,057	5,900	558,277	-3,00	12,630	553,790
-12,086	553,387	-5,900	557,510	-3,00	388+0.000			557,687	553,579	-4,108	5,900	557,510	-3,00	11,907	553,506
-11,212	553,183	-5,900	556,724	-3,00	389+0.000			556,901	552,770	-4,131	5,900	556,724	-3,00	11,523	552,975
-12,225	551,700	-5,900	555,917	-3,00	390+0.000			556,094	552,013	-4,081	5,900	555,917	-3,00	12,132	551,762
-12,132	550,934	-5,900	555,089	-3,00	391+0.000			555,266	551,310	-3,956	5,900	555,089	-3,00	12,170	550,909
-11,341	550,613	-5,900	554,241	-3,00	392+0.000			554,418	550,563	-3,855	5,900	554,241	-3,00	12,834	549,619
-11,399	549,707	-5,900	553,373	-3,00	393+0.000			553,550	549,889	-3,661	5,900	553,373	-3,00	12,926	548,689
-11,096	549,020	-5,900	552,484	-3,00	394+0.000			552,661	548,943	-3,718	5,900	552,484	-3,00	11,102	549,016
-10,973	548,193	-5,900	551,575	-3,00	395+0.000		PTV	551,752	548,093	-3,659	5,900	551,575	-3,00	11,068	548,129
-10,344	547,693	-5,900	550,656	-3,00	396+0.000			550,833	547,189	-3,644	5,900	550,656	-3,00	10,820	547,376
-10,875	546,420	-5,900	549,736	-3,00	397+0.000			549,913	546,290	-3,623	5,900	549,736	-3,00	10,962	546,362
-10,505	545,747	-5,900	548,817	-3,00	398+0.000			548,994	545,579	-3,415	5,900	548,817	-3,00	10,617	545,672
-10,462	544,856	-5,900	547,898	-3,00	399+0.000			548,075	544,765	-3,310	5,900	547,932	-3,00	10,486	544,875
-10,102	544,177	-5,900	546,978	-3,00	400+0.000			547,155	543,822	-3,333	5,900	547,083	-3,00	10,753	543,847
-10,466	543,015	-5,900	546,059	-3,00	401+0.000			546,236	542,975	-3,261	5,900	546,233	-3,00	10,718	543,021
-10,457	542,984	-5,900	546,022	-3,00	401+0.814		TS	546,199	542,941	-3,258	5,900	546,199	-3,00	10,702	542,997
-10,656	542,207	-6,274	545,129	-3,00	402+0.000			545,317	542,144	-3,173	5,900	545,384	-3,00	10,618	542,238
-10,659	541,418	-6,481	544,203	-3,00	403+0.000			544,398	541,298	-3,100	5,900	544,534	-3,00	10,585	541,411
-10,333	540,580	-6,317	543,257	-3,50	404+0.000			543,478	540,378	-3,100	5,899	543,685	-3,50	10,797	540,419
-10,820	539,825	-7,227	542,220	-4,69	405+0.000			542,559	539,315	-3,244	5,899	542,835	-4,69	10,939	539,475
-10,404	539,237	-7,456	541,202	-5,87	406+0.000			541,640	539,030	-2,610	5,900	541,986	-5,87	11,112	538,511
-9,691	538,284	-6,751	540,244	-7,05	407+0.000			540,720	538,106	-2,614	5,900	541,136	-7,05	10,919	537,790
-9,644	538,244	-6,700	540,207	-7,10	407+0.814		SC	540,683	538,069	-2,614	5,900	541,102	-7,10	10,926	537,751
-9,274	537,609	-6,700	539,325	-7,10	408+0.000			539,801	537,532	-2,269	5,900	540,220	-7,10	11,086	536,762
-9,191	536,745	-6,700	538,406	-7,10	409+0.000			538,882	536,589	-2,293	5,900	539,301	-7,10	11,103	535,832
-8,919	536,008	-6,700	537,487	-7,10	410+0.000			537,962	535,821	-2,141	5,900	538,381	-7,10	10,805	535,111
-8,797	535,170	-6,700	536,567	-7,10	411+0.000			537,043	535,022	-2,021	5,900	537,462	-7,10	10,428	534,443
-8,579	534,396	-6,700	535,648	-7,10	412+0.000			536,124	534,224	-1,900	5,900	536,543	-7,10	10,018	533,797
-8,419	533,794	-6,700	534,940	-7,10	412+15.408			535,415	533,621	-1,794	5,900	535,834	-7,10	9,956	533,130
-8,363	533,620	-6,700	534,729	-7,10	413+0.000			535,204	533,443	-1,761	5,900	535,623	-7,10	9,977	532,905
-8,067	532,898	-6,700	533,809	-7,10	414+0.000			534,285	532,770	-1,515	5,900	534,704	-7,10	9,236	532,480
-7,986	532,033	-6,700	532,890	-7,10											

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo						Lado Direito				
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-14.009	508,839	-5.900	514,245	5.30	446+0.000			513,932	509,877	-4,055	6,500	513,588	5.30	11,808	510,049
-10.318	511,954	-5.900	514,899	5.30	447+0.000			514,587	512,770	-1,817	6,500	514,242	5.30	8,939	512,616
-6.736	515,122	-5.900	515,680	5.30	448+0.000			515,367	515,435	0,068	6,500	515,022	5.30	6,563	515,085
-6.389	517,075	-5.900	516,586	5.30	449+0.000			516,273	517,522	1,249	6,500	515,929	5.30	7,213	516,642
-6.308	518,027	-5.900	517,618	5.30	450+0.000			517,305	518,172	0,867	6,500	516,961	5.30	7,628	518,089
-6.905	519,781	-5.900	518,776	5.30	451+0.000			518,463	519,586	1,123	6,500	518,119	5.30	7,978	519,597
-7.396	521,556	-5.900	520,060	5.30	452+0.000		PTV	519,747	520,364	0,617	6,500	519,403	5.30	8,056	520,958
-6.291	521,798	-5.900	521,407	5.30	453+0.000			521,094	522,204	1,110	6,500	520,750	5.30	8,111	522,360
-6.186	522,632	-5.900	522,346	5.30	453+13.945			522,034	522,848	0,814	6,500	521,689	5.30	8,070	523,259
-6.070	522,924	-5.900	522,754	5.30	454+0.000			522,441	523,132	0,691	6,500	522,097	5.30	8,063	523,660
-6.058	523,995	-5.900	524,101	5.30	455+0.000			523,788	525,413	1,625	6,500	523,444	5.30	8,343	525,287
-5.945	525,418	-5.900	525,448	5.30	456+0.000			525,135	526,046	0,911	6,500	524,791	5.30	7,909	526,200
-6.587	526,337	-5.900	526,795	5.30	457+0.000			526,482	527,139	0,657	6,500	526,138	5.30	7,610	527,248
-5.920	528,162	-5.900	528,142	5.30	458+0.000			527,829	528,909	1,080	6,500	527,485	5.30	7,811	528,796
-6.915	528,812	-5.900	529,489	5.30	459+0.000			529,176	529,748	0,572	6,500	528,832	5.30	7,488	529,820
-7.060	530,062	-5.900	530,836	5.30	460+0.000		PCV	530,523	530,710	0,187	6,500	530,178	5.30	7,105	530,784
-8.692	530,280	-5.900	532,141	5.30	461+0.000			531,828	531,678	-0,150	6,500	531,484	5.30	6,794	531,777
-9.223	531,148	-5.900	533,364	5.30	462+0.000			533,051	532,595	-0,456	6,500	532,706	5.30	6,541	532,679
-9.116	532,359	-5.900	534,503	5.30	463+0.000			534,190	534,018	-0,172	6,500	533,846	5.30	6,740	533,686
-9.136	533,402	-5.900	535,560	5.30	464+0.000			535,247	532,857	-2,390	6,500	534,903	5.30	8,126	533,818
-9.394	534,204	-5.900	536,533	5.30	465+0.000			536,221	533,632	-2,589	6,500	535,876	5.30	8,377	534,625
-8.606	535,236	-5.900	537,040	5.30	465+11.141	CS		536,727	535,779	-0,948	6,500	536,383	5.30	7,371	535,802
-9.298	535,132	-5.900	537,397	4.84	466+0.000			537,111	535,283	-1,828	6,712	536,786	4.84	8,530	535,574
-8.725	536,260	-5.900	538,144	3.81	467+0.000			537,919	535,997	-1,922	6,734	537,663	3.81	9,217	536,007
-9.033	536,718	-5.900	538,807	2.76	468+0.000			538,644	536,849	-1,795	6,241	538,457	2.76	8,332	537,063
-7.832	538,096	-5.900	539,385	1.68	469+0.000			539,286	537,652	-1,634	6,231	539,099	1.68	8,160	537,813
-8.412	538,204	-5.899	539,880	0.60	470+0.000			539,844	538,492	-1,352	6,047	539,663	0.60	7,199	538,895
-8.449	538,421	-5.900	540,120	0.00	470+11.141	ST		540,120	538,767	-1,353	5,900	539,943	0.00	7,274	539,026
-8.455	538,589	-5.900	540,292	-0.48	471+0.000			540,320	538,877	-1,443	5,900	540,143	-0.48	7,604	539,008
-8.180	539,102	-5.900	540,621	-1.56	472+0.000			540,713	539,155	-1,558	5,900	540,536	-1.56	7,720	539,323
-7.636	539,710	-5.900	540,868	-2.64	473+0.000			541,023	539,542	-1,481	5,900	540,846	-2.64	7,791	539,585
-8.160	539,567	-5.900	541,073	-3.00	474+0.000			541,250	539,503	-1,747	5,900	541,073	-3.00	6,660	540,567
-7.340	540,257	-5.900	541,217	-3.00	475+0.000		PTV	541,394	540,024	-1,370	5,900	541,217	-3.00	6,493	540,822
-7.172	540,472	-5.900	541,320	-3.00	476+0.000			541,497	540,353	-1,144	5,900	541,320	-3.00	6,167	541,142
-6.703	540,887	-5.900	541,422	-3.00	477+0.000			541,599	540,562	-1,037	5,900	541,422	-3.00	6,026	541,549
-6.749	540,959	-5.900	541,525	-3.00	478+0.000			541,702	540,739	-0,963	5,900	541,525	-3.00	6,124	541,749
-6.499	541,228	-5.900	541,627	-3.00	479+0.000			541,804	540,966	-0,838	5,900	541,627	-3.00	6,202	541,930
-6.568	541,285	-5.900	541,730	-3.00	480+0.000			541,907	541,152	-0,755	5,900	541,730	-3.00	6,595	541,267
-5.905	541,829	-5.900	541,833	-3.00	481+0.000			542,010	541,310	-0,700	5,900	541,833	-3.00	6,478	541,447
-6.599	541,469	-5.900	541,935	-3.00	482+0.000			542,112	541,484	-0,628	5,900	541,935	-3.00	6,136	542,171
-6.608	541,566	-5.900	542,038	-3.00	483+0.000			542,215	541,590	-0,625	5,900	542,038	-3.00	6,151	542,289
-6.451	541,773	-5.900	542,140	-3.00	484+0.000			542,317	541,710	-0,607	5,900	542,140	-3.00	6,278	542,518
-6.352	541,942	-5.900	542,243	-3.00	485+0.000			542,420	541,853	-0,567	5,900	542,243	-3.00	5,937	542,280
-6.423	541,997	-5.900	542,345	-3.00	486+0.000			542,522	541,948	-0,574	5,900	542,345	-3.00	6,226	542,128
-6.329	542,162	-5.900	542,448	-3.00	487+0.000			542,625	541,998	-0,627	5,900	542,448	-3.00	6,068	542,616
-6.290	542,291	-5.900	542,551	-3.00	488+0.000			542,728	542,191	-0,537	5,900	542,551	-3.00	6,135	542,786
-6.533	542,231	-5.900	542,653	-3.00	489+0.000			542,830	542,293	-0,537	5,900	542,653	-3.00	6,436	542,296
-6.706	542,219	-5.900	542,756	-3.00	490+0.000			542,933	542,411	-0,522	5,900	542,756	-3.00	6,412	542,414
-6.058	542,753	-5.900	542,858	-3.00	491+0.000			543,035	542,485	-0,550	5,900	542,858	-3.00	6,371	542,544
-6.112	542,820	-5.900	542,961	-3.00	492+0.000			543,138	542,575	-0,563	5,900	542,961	-3.00	6,333	542,672
-6.648	542,565	-5.900	543,063	-3.00	493+0.000			543,240	542,649	-0,591	5,900	543,063	-3.00	6,393	542,735
-6.715	542,623	-5.900	543,166	-3.00	494+0.000			543,343	542,738	-0,605	5,900	543,166	-3.00	6,443	542,804
-6.663	542,760	-5.900	543,269	-3.00	495+0.000			543,446	542,812	-0,634	5,900	543,269	-3.00	6,503	542,867
-6.704	542,835	-5.900	543,371	-3.00	496+0.000			543,548	542,950	-0,598	5,900	543,371	-3.00	6,390	543,044
-6.612	542,999	-5.900	543,474	-3.00	497+0.000			543,651	543,454	-0,197	5,900	543,474	-3.00	6,137	543,315
-6.600	543,110	-5.900	543,576	-3.00	498+0.000			543,753	543,395	-0,358	5,900	543,576	-3.00	6,320	543,296
-6.546	543,248	-5.900	543,679	-3.00	499+0.000			543,856	543,449	-0,407	5,900	543,679	-3.00	6,362	543,371

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo					Lado Direito					
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-6.848	557,721	-6.700	557,819	-7.10	532+0.000			558,295	557,787	-0.508	5,900	558,714	-7.10	8,508	556,976
-6.847	558,258	-6.700	558,355	-7.10	533+0.000			558,831	558,516	-0.315	5,900	559,250	-7.10	8,205	557,714
-7.138	558,600	-6.700	558,892	-7.10	534+0.000			559,367	558,740	-0.627	5,900	559,786	-7.10	8,101	558,319
-7.148	559,129	-6.700	559,428	-7.10	535+0.000			559,903	559,281	-0.622	5,900	560,322	-7.10	7,777	559,071
-7.286	559,573	-6.700	559,964	-7.10	536+0.000			560,439	559,753	-0.686	5,900	560,858	-7.10	7,900	559,525
-7.289	560,107	-6.700	560,500	-7.10	537+0.000			560,976	560,277	-0.699	5,900	561,394	-7.10	8,122	559,913
-7.442	560,541	-6.700	561,036	-7.10	538+0.000			561,512	560,673	-0.839	5,900	561,930	-7.10	8,308	560,325
-7.667	560,927	-6.700	561,572	-7.10	539+0.000			562,048	561,071	-0.977	5,900	562,467	-7.10	8,464	560,757
-7.744	561,412	-6.700	562,108	-7.10	540+0.000		PCV	562,584	561,590	-0.994	5,900	563,003	-7.10	8,640	561,176
-7.903	561,797	-6.700	562,599	-7.10	540+18.898			563,075	562,055	-1.020	5,900	563,494	-7.10	9,116	561,350
-7.906	561,823	-6.700	562,627	-7.10	541+0.000			563,102	562,084	-1.018	5,900	563,521	-7.10	9,151	561,354
-7.881	562,323	-6.700	563,110	-7.10	542+0.000			563,586	562,496	-1.090	5,900	564,005	-7.10	8,417	562,327
-8.145	562,596	-6.700	563,559	-7.10	543+0.000			564,035	562,604	-1.431	5,900	564,454	-7.10	8,765	562,544
-8.478	562,788	-6.700	563,973	-7.10	544+0.000			564,448	562,685	-1.763	5,900	564,867	-7.10	8,427	563,183
-8.544	563,122	-6.700	564,351	-7.10	545+0.000			564,827	563,221	-1.606	5,900	565,246	-7.10	8,052	563,811
-8.566	563,452	-6.700	564,695	-7.10	546+0.000			565,171	564,081	-1.090	5,900	565,590	-7.10	7,976	564,206
-8.385	563,880	-6.700	565,004	-7.10	547+0.000			565,480	564,485	-0.995	5,900	565,899	-7.10	7,980	564,512
-8.471	564,097	-6.700	565,278	-7.10	548+0.000			565,754	564,728	-1.026	5,900	566,172	-7.10	8,019	564,760
-8.634	564,228	-6.700	565,517	-7.10	549+0.000			565,992	565,006	-0.986	5,900	566,411	-7.10	7,903	565,076
-8.439	564,561	-6.700	565,721	-7.10	550+0.000			566,196	565,299	-0.897	5,900	566,615	-7.10	7,674	565,433
-8.086	564,854	-6.700	565,778	-7.10	550+6.359	CS		566,254	565,331	-0.923	5,900	566,673	-7.10	7,704	565,470
-8.950	564,819	-7.321	565,905	-6.29	551+0.000			566,365	565,420	-0.945	5,899	566,737	-6.29	7,677	565,551
-9.186	564,934	-7.405	566,121	-5.11	552+0.000			566,499	565,473	-1.026	5,900	566,801	-5.11	7,649	565,635
-8.406	565,182	-6.674	566,336	-3.93	553+0.000			566,598	565,416	-1.182	5,901	566,830	-3.93	7,610	565,691
-8.135	565,361	-6.475	566,468	-3.00	554+0.000			566,665	565,462	-1.201	5,900	566,824	-3.00	7,582	565,703
-8.110	565,346	-6.379	566,500	-3.00	555+0.000			566,692	565,547	-1.145	5,900	566,784	-3.00	7,413	565,775
-7.665	565,416	-6.032	566,505	-3.00	556+0.000			566,686	565,563	-1.123	5,898	566,708	-3.00	7,447	565,675
-7.548	565,401	-5.900	566,500	-3.00	556+6.359	ST		566,677	565,558	-1.119	5,900	566,677	-3.00	7,326	565,726
-7.668	565,289	-5.900	566,468	-3.00	557+0.000			566,645	565,490	-1.155	5,900	566,597	-3.00	7,372	565,616
-7.629	565,239	-5.900	566,392	-3.00	558+0.000			566,569	565,418	-1.151	5,900	566,452	-3.00	7,422	565,437
-7.500	565,214	-5.900	566,281	-3.00	559+0.000			566,458	565,312	-1.146	5,900	566,281	-3.00	7,366	565,304
-7.474	565,087	-5.900	566,136	-3.00	560+0.000			566,313	565,198	-1.115	5,900	566,136	-3.00	7,086	565,345
-7.567	564,844	-5.900	565,955	-3.00	561+0.000			566,132	565,021	-1.111	5,900	565,955	-3.00	7,392	564,960
-7.717	564,528	-5.900	565,739	-3.00	562+0.000			565,916	564,598	-1.318	5,900	565,739	-3.00	7,638	564,581
-7.729	564,269	-5.900	565,489	-3.00	563+0.000			565,666	564,182	-1.484	5,900	565,489	-3.00	7,835	564,199
-7.875	563,887	-5.900	565,203	-3.00	564+0.000			565,380	563,822	-1.558	5,900	565,203	-3.00	7,914	563,861
-6.920	564,203	-5.900	564,883	-3.00	565+0.000			565,060	563,526	-1.534	5,900	564,883	-3.00	7,851	563,582
-7.937	563,170	-5.900	564,527	-3.00	566+0.000			564,704	563,158	-1.546	5,900	564,527	-3.00	7,681	563,340
-7.926	562,786	-5.900	564,137	-3.00	567+0.000			564,314	562,791	-1.523	5,900	564,137	-3.00	7,839	562,844
-7.882	562,390	-5.900	563,711	-3.00	568+0.000			563,888	562,394	-1.494	5,900	563,711	-3.00	7,536	562,621
-7.642	562,090	-5.900	563,251	-3.00	569+0.000			563,428	562,123	-1.305	5,900	563,251	-3.00	7,664	562,075
-7.407	561,751	-5.900	562,756	-3.00	570+0.000		PTV	562,933	561,888	-1.045	5,900	562,756	-3.00	7,341	561,795
-7.339	561,283	-5.900	562,243	-3.00	571+0.000			562,420	561,186	-1.234	5,900	562,243	-3.00	7,321	561,295
-7.630	560,577	-5.900	561,730	-3.00	572+0.000			561,907	560,500	-1.407	5,900	561,730	-3.00	6,795	561,134
-7.643	560,055	-5.900	561,217	-3.00	573+0.000			561,394	559,975	-1.419	5,900	561,217	-3.00	7,092	560,423
-7.640	559,544	-5.900	560,704	-3.00	574+0.000			560,881	559,518	-1.363	5,900	560,704	-3.00	6,928	560,019
-7.524	559,109	-5.900	560,192	-3.00	575+0.000			560,369	559,115	-1.254	5,900	560,192	-3.00	7,349	559,226
-7.561	558,572	-5.900	559,679	-3.00	576+0.000			559,856	558,770	-1.086	5,900	559,679	-3.00	7,049	558,912
-7.932	557,811	-5.900	559,166	-3.00	577+0.000			559,343	558,067	-1.276	5,900	559,166	-3.00	6,971	558,452
-8.209	557,114	-5.900	558,653	-3.00	578+0.000			558,830	557,189	-1.641	5,900	558,653	-3.00	6,979	557,934
-8.296	556,543	-5.900	558,140	-3.00	579+0.000			558,317	556,644	-1.673	5,900	558,140	-3.00	6,601	557,673
-8.307	556,023	-5.900	557,627	-3.00	580+0.000			557,804	555,988	-1.816	5,900	557,627	-3.00	6,886	556,970
-8.500	555,382	-5.900	557,115	-3.00	581+0.000			557,292	555,405	-1.887	5,900	557,115	-3.00	7,377	556,130
-8.648	554,770	-5.900	556,602	-3.00	582+0.000			556,779	554,753	-2.026	5,900	556,602	-3.00	7,586	555,478
-8.793	554,160	-5.900	556,089	-3.00	583+0.000			556,266	553,779	-2.487	5,900	556,089	-3.00	8,929	554,070
-9.099	553,444	-5.900	555,576	-3.00	584+0.000			555,753	553,288	-2.465	5,900	555,576	-3.00	8,254	554,007
-9.112	552,922	-5.900	555,063	-3.00	585+0.000			555,240	552,870	-2.370	5,900	555,063	-3		

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo					Lado Direito					
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-11,257	533,543	-5,900	537,115	-3,00	620+0,000			537,292	533,732	-3,560	5,900	537,115	-3,00	9,662	534,607
-11,062	533,161	-5,900	536,602	-3,00	621+0,000			536,779	533,119	-3,660	5,900	536,602	-3,00	10,098	533,803
-11,012	532,681	-5,900	536,089	-3,00	622+0,000			536,266	532,699	-3,567	5,900	536,089	-3,00	9,919	533,409
-11,012	532,168	-5,900	535,576	-3,00	623+0,000			535,753	532,143	-3,610	5,900	535,576	-3,00	9,961	532,869
-10,876	531,746	-5,900	535,063	-3,00	624+0,000			535,240	531,667	-3,573	5,900	535,063	-3,00	9,772	532,482
-10,882	531,229	-5,900	534,551	-3,00	625+0,000			534,728	531,201	-3,527	5,900	534,551	-3,00	9,765	531,974
-10,723	530,823	-5,900	534,038	-3,00	626+0,000			534,215	530,755	-3,460	5,900	534,038	-3,00	10,026	531,287
-10,594	530,396	-5,900	533,525	-3,00	627+0,000		PCV	533,702	530,345	-3,357	5,900	533,525	-3,00	10,238	530,633
-10,580	529,906	-5,900	533,026	-3,00	628+0,000			533,203	529,981	-3,222	5,900	533,026	-3,00	9,381	530,705
-10,345	529,592	-5,900	532,555	-3,00	629+0,000			532,732	529,653	-3,079	5,900	532,555	-3,00	9,766	529,978
-10,376	529,128	-5,900	532,112	-3,00	630+0,000			532,289	529,306	-2,983	5,900	532,112	-3,00	9,790	529,519
-10,201	528,830	-5,900	531,697	-3,00	631+0,000			531,874	528,997	-2,877	5,900	531,697	-3,00	9,564	529,255
-10,162	528,469	-5,900	531,310	-3,00	632+0,000			531,487	528,635	-2,852	5,900	531,310	-3,00	9,571	528,863
-10,150	528,118	-5,900	530,951	-3,00	633+0,000			531,128	528,357	-2,771	5,900	530,951	-3,00	9,419	528,605
-10,023	527,871	-5,900	530,620	-3,00	634+0,000			530,797	527,984	-2,813	5,900	530,620	-3,00	9,522	528,206
-9,948	527,618	-5,900	530,317	-3,00	635+0,000			530,494	527,687	-2,807	5,900	530,317	-3,00	9,531	527,896
-10,139	527,216	-5,900	530,042	-3,00	636+0,000			530,219	527,470	-2,749	5,900	530,042	-3,00	9,614	527,566
-9,924	527,111	-5,900	529,794	-3,00	637+0,000			529,971	527,364	-2,607	5,900	529,794	-3,00	9,320	527,514
-10,207	526,704	-5,900	529,575	-3,00	638+0,000			529,752	527,148	-2,604	5,900	529,575	-3,00	9,334	527,286
-10,471	526,336	-5,900	529,383	-3,00	639+0,000		PTV	529,560	527,150	-2,410	5,900	529,383	-3,00	9,646	526,886
-10,867	525,894	-5,900	529,206	-3,00	640+0,000			529,383	527,108	-2,275	5,900	529,206	-3,00	9,914	526,530
-10,841	525,734	-5,900	529,029	-3,00	641+0,000			529,206	525,686	-3,520	5,900	529,029	-3,00	10,458	525,990
-11,120	525,371	-5,900	528,851	-3,00	642+0,000			529,028	526,825	-2,203	5,900	528,851	-3,00	9,125	526,701
-11,715	524,797	-5,900	528,674	-3,00	643+0,000			528,851	526,689	-2,162	5,900	528,674	-3,00	10,025	525,924
-10,529	525,410	-5,900	528,496	-3,00	644+0,000			528,673	526,542	-2,131	5,900	528,496	-3,00	9,159	526,323
-9,513	525,910	-5,900	528,319	-3,00	645+0,000			528,496	526,439	-2,057	5,900	528,319	-3,00	8,989	526,260
-9,564	525,699	-5,900	528,142	-3,00	646+0,000			528,319	526,322	-1,997	5,900	528,142	-3,00	8,758	526,236
-9,468	525,585	-5,900	527,964	-3,00	647+0,000			528,141	526,119	-2,022	5,900	527,964	-3,00	8,803	526,029
-9,437	525,429	-5,900	527,787	-3,00	648+0,000			527,964	526,038	-1,926	5,900	527,787	-3,00	8,622	525,972
-9,051	525,508	-5,900	527,609	-3,00	649+0,000			527,786	525,998	-1,788	5,900	527,609	-3,00	8,791	525,682
-8,872	525,450	-5,900	527,432	-3,00	650+0,000			527,609	525,883	-1,726	5,900	527,432	-3,00	8,460	525,725
-8,768	525,342	-5,900	527,254	-3,00	651+0,000			527,431	525,814	-1,617	5,900	527,254	-3,00	8,202	525,720
-8,553	525,308	-5,900	527,077	-3,00	652+0,000			527,254	525,796	-1,458	5,900	527,077	-3,00	8,024	525,661
-8,232	525,345	-5,900	526,900	-3,00	653+0,000			527,077	525,708	-1,369	5,900	526,900	-3,00	7,822	525,619
-8,079	525,269	-5,900	526,722	-3,00	654+0,000			526,899	525,674	-1,225	5,900	526,722	-3,00	7,621	525,575
-7,836	525,254	-5,900	526,545	-3,00	655+0,000			526,722	525,613	-1,109	5,900	526,545	-3,00	7,387	525,553
-7,821	525,087	-5,900	526,367	-3,00	656+0,000			526,544	525,538	-1,006	5,900	526,367	-3,00	7,133	525,545
-7,497	525,125	-5,900	526,190	-3,00	657+0,000			526,367	525,462	-905	5,900	526,190	-3,00	6,759	525,617
-7,305	525,076	-5,900	526,013	-3,00	658+0,000			526,190	525,341	-849	5,900	526,013	-3,00	6,437	525,655
-7,155	524,999	-5,900	525,835	-3,00	659+0,000			526,012	525,222	-790	5,900	525,835	-3,00	6,148	525,670
-6,978	524,939	-5,900	525,658	-3,00	660+0,000			525,835	525,103	-732	5,900	525,658	-3,00	6,309	525,385
-6,860	524,840	-5,900	525,480	-3,00	661+0,000			525,657	524,990	-667	5,900	525,480	-3,00	6,248	525,248
-6,518	524,891	-5,900	525,303	-3,00	662+0,000			525,480	524,901	-579	5,900	525,303	-3,00	6,157	525,131
-6,539	524,700	-5,900	525,125	-3,00	663+0,000			525,302	524,803	-499	5,900	525,125	-3,00	6,271	524,878
-6,444	524,585	-5,900	524,948	-3,00	664+0,000			525,125	524,618	-407	5,900	524,948	-3,00	6,384	524,625
-6,585	524,314	-5,900	524,771	-3,00	665+0,000			524,948	524,396	-452	5,900	524,771	-3,00	6,267	524,526
-6,472	524,212	-5,900	524,593	-3,00	666+0,000			524,770	524,160	-610	5,900	524,593	-3,00	6,454	524,224
-6,550	523,983	-5,900	524,416	-3,00	667+0,000			524,593	523,948	-645	5,900	524,416	-3,00	6,420	524,069
-6,485	523,848	-5,900	524,238	-3,00	668+0,000			524,415	523,742	-673	5,900	524,238	-3,00	5,925	524,222
-6,652	523,560	-5,900	524,061	-3,00	669+0,000			524,238	523,507	-731	5,900	524,061	-3,00	6,652	523,559
-6,616	523,406	-5,900	523,883	-3,00	670+0,000		PCV	524,060	523,269	-791	5,900	523,883	-3,00	6,240	523,657
-6,766	523,119	-5,900	523,696	-3,00	671+0,000			523,873	523,006	-867	5,900	523,696	-3,00	6,117	523,552
-6,352	523,189	-5,900	523,490	-3,00	672+0,000			523,667	522,738	-929	5,900	523,490	-3,00	6,931	522,802
-6,497	522,866	-5,900	523,263	-3,00	673+0,000			523,440	522,406	-1,034	5,900	523,263	-3,00	7,124	522,447
-6,630	522,564	-5,900	523,051	-2,44	674+0,000			523,195	522,077	-1,118	5,900	523,018	-2,44	7,155	522,181
-6,478	522,484	-5,900	522,870	-1,02	675+0,000			522,930	521,778	-1,152	5,900	522,753	-1,02	7,227	521,868
-7,101	521,927	-5,900	522,728	0,00	675+14,311	TS		522,728	521,552	-1,176	5,900	522,551	0,0,		

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo					Lado Direito					
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-8,471	503,140	-5,900	504,855	-3,00	706+0,000			505,032	502,963	-2,069	5,900	504,855	-3,00	7,283	503,933
-7,802	502,697	-5,900	503,965	-3,00	707+0,000			504,142	501,863	-2,279	5,900	503,965	-3,00	8,290	502,372
-8,405	501,386	-5,900	503,056	-3,00	708+0,000			503,233	500,820	-2,413	5,900	503,056	-3,00	7,963	501,681
-8,398	500,462	-5,900	502,128	-3,00	709+0,000			502,305	500,368	-1,937	5,900	502,128	-3,00	7,729	500,908
-8,941	499,152	-5,900	501,179	-3,00	710+0,000			501,356	499,130	-2,226	5,900	501,179	-3,00	8,077	499,728
-8,876	498,228	-5,900	500,212	-3,00	711+0,000			500,389	498,154	-2,235	5,900	500,212	-3,00	7,710	499,005
-8,788	497,300	-5,900	499,225	-3,00	712+0,000			499,402	497,170	-2,232	5,900	499,225	-3,00	8,166	497,714
-8,216	496,675	-5,900	498,218	-3,00	713+0,000			498,395	496,078	-2,317	5,900	498,218	-3,00	9,106	496,081
-8,540	495,432	-5,900	497,192	-3,00	714+0,000			497,369	495,022	-2,347	5,900	497,192	-3,00	7,980	495,805
-8,679	494,294	-5,900	496,147	-3,00	715+0,000			496,324	494,078	-2,246	5,900	496,147	-3,00	7,923	494,798
-7,843	493,787	-5,900	495,082	-3,00	716+0,000			495,259	493,322	-1,937	5,900	495,082	-3,00	7,757	493,844
-7,745	492,767	-5,900	493,997	-3,00	717+0,000			494,174	492,714	-1,460	5,900	493,997	-3,00	7,566	492,887
-7,234	492,004	-5,900	492,893	-3,00	718+0,000			493,070	492,149	-0,921	5,900	492,893	-3,00	7,067	492,115
-6,306	491,498	-5,900	491,769	-3,00	719+0,000			491,946	491,728	-0,218	5,900	491,769	-3,00	6,086	491,645
-6,272	490,998	-5,900	490,626	-3,00	720+0,000		PTV	490,803	491,304	0,501	5,900	490,626	-3,00	6,587	491,314
-7,039	490,612	-5,900	489,473	-3,00	721+0,000			489,650	490,905	1,255	5,900	489,473	-3,00	7,356	490,929
-7,865	490,285	-5,900	488,320	-3,00	722+0,000			488,497	490,511	2,014	5,900	488,320	-3,00	8,103	490,524
-8,778	490,046	-5,900	487,168	-3,00	723+0,000			487,345	490,171	2,826	5,900	487,168	-3,00	8,924	490,192
-9,719	489,834	-5,900	486,015	-3,00	724+0,000			486,192	489,889	3,697	5,900	486,015	-3,00	9,892	490,007
-10,678	489,640	-5,900	484,862	-3,00	725+0,000			485,039	489,580	4,541	5,900	484,863	-3,00	10,991	489,954
-11,665	489,474	-5,900	483,709	-3,00	726+0,000			483,886	489,295	5,409	5,900	483,789	-3,00	11,827	489,716
-12,543	489,199	-5,900	482,556	-3,00	727+0,000			482,733	488,967	6,234	5,900	482,715	-3,00	12,578	489,393
-12,727	489,115	-5,900	482,288	-3,00	727+4,652	TS		482,465	488,855	6,390	5,900	482,465	-3,00	12,802	489,367
-13,709	488,786	-6,314	481,391	-3,00	728+0,000			481,580	488,540	6,960	5,897	481,641	-3,00	13,517	489,261
-17,949	488,432	-6,654	480,228	-3,00	729+0,000			480,427	488,062	7,635	5,898	480,566	-3,00	17,182	488,761
-18,684	488,103	-6,525	479,035	-3,68	730+0,000			479,274	487,550	8,276	5,898	479,491	-3,68	17,802	488,305
-20,176	487,344	-7,490	477,748	-4,98	731+0,000			478,122	486,825	8,703	5,899	478,416	-4,98	17,939	487,365
-21,004	486,370	-8,009	476,465	-6,29	732+0,000			476,969	486,020	9,051	5,900	477,340	-6,29	18,077	486,427
-20,247	485,142	-7,278	475,263	-7,60	733+0,000			475,816	486,149	10,333	5,901	476,264	-7,60	18,839	486,112
-19,821	484,833	-6,900	475,003	-7,90	733+4,652	SC		475,548	485,952	10,404	5,900	476,014	-7,90	18,962	485,986
-19,780	483,908	-6,900	474,118	-7,90	734+0,000			474,663	484,920	10,257	5,900	475,129	-7,90	19,242	485,381
-19,610	482,585	-6,900	472,965	-7,90	735+0,000			473,510	484,041	10,531	5,900	473,976	-7,90	19,073	484,059
-19,433	481,255	-6,900	471,812	-7,90	736+0,000			472,357	482,939	10,582	5,900	472,823	-7,90	19,591	483,425
-19,481	480,150	-6,900	470,659	-7,90	737+0,000			471,204	482,355	11,151	5,900	471,670	-7,90	20,063	482,744
-20,753	480,269	-6,900	469,506	-7,90	738+0,000			470,052	481,979	11,927	5,900	470,518	-7,90	21,017	482,544
-20,802	480,281	-6,900	469,469	-7,90	738+0,657			470,014	481,976	11,962	5,900	470,480	-7,90	21,048	482,538
-21,922	480,285	-6,900	468,354	-7,90	739+0,000			468,899	481,850	12,951	5,900	469,365	-7,90	21,699	482,073
-22,870	480,080	-6,900	467,201	-7,90	740+0,000			467,746	481,644	13,898	5,900	468,212	-7,90	22,524	481,746
-23,634	479,691	-6,900	466,048	-7,90	741+0,000			466,593	481,177	14,584	5,900	467,059	-7,90	23,350	481,419
-24,280	479,185	-6,900	464,895	-7,90	742+0,000			465,440	480,448	15,008	5,900	465,906	-7,90	23,807	480,723
-24,675	478,619	-6,900	463,934	-7,90	742+16,663	CS		464,480	479,693	15,213	5,900	464,946	-7,90	23,937	479,893
-25,029	478,495	-7,180	463,736	-7,68	743+0,000			464,287	479,545	15,258	5,900	464,740	-7,68	23,979	479,729
-26,210	477,742	-8,002	462,624	-6,38	744+0,000			463,134	478,677	15,543	5,900	463,510	-6,38	24,329	478,849
-25,710	476,661	-7,558	461,598	-5,07	745+0,000			461,981	478,126	16,145	5,899	462,280	-5,07	24,667	477,958
-24,509	475,509	-6,494	460,584	-3,76	746+0,000			460,829	476,700	15,871	5,898	461,050	-3,76	28,026	476,999
-24,917	474,639	-6,663	459,476	-3,00	747+0,000			459,676	475,723	16,047	5,898	459,820	-3,00	28,211	475,952
-24,764	473,661	-6,346	458,332	-3,00	748+0,000			458,523	474,328	15,805	5,898	458,588	-3,00	28,425	474,935
-24,522	472,917	-5,900	457,385	-3,00	748+16,663	ST		457,562	473,425	15,863	5,900	457,562	-3,00	28,496	473,978
-24,567	472,770	-5,900	457,193	-3,00	749+0,000			457,370	473,451	16,081	5,900	457,357	-3,00	28,582	473,859
-24,834	471,884	-5,900	456,040	-3,00	750+0,000			456,217	472,825	16,608	5,900	456,125	-3,00	29,217	473,262
-27,914	470,721	-5,900	454,887	-3,00	751+0,000			455,064	470,867	15,803	5,900	454,894	-3,00	29,419	472,233
-27,299	469,572	-5,900	453,734	-3,00	752+0,000			453,911	469,204	15,293	5,900	453,734	-3,00	29,312	470,966
-23,167	466,759	-5,900	452,581	-3,00	753+0,000			452,758	467,542	14,784	5,900	452,581	-3,00	29,005	469,506
-22,289	464,727	-5,900	451,429	-3,00	754+0,000			451,606	465,663	14,057	5,900	451,429	-3,00	28,326	467,674
-22,047	463,333	-5,900	450,276	-3,00	755+0,000			450,453	463,596	13,143	5,900	450,276	-3,00	24,305	465,591
-21,862	461,995	-5,900	449,123	-3,00	756+0,000			449,300	462,383	13,083	5,900	449,123	-3,00	23,723	463,856
-21,184	460,164	-5,900	447,970	-3,00	757+0,000		PCV	448,147	461,161	13,014	5,900	447,970	-3,00	23,926	46

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo					Lado Direito					
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-8.031	461,748	-5.900	459,618	4.70	789+0.000			459,340	462,203	2,863	6,500	459,035	4.70	10,115	462,650
-7.908	461,560	-5.900	459,552	4.70	790+0.000			459,275	461,973	2,698	6,500	458,969	4.70	9,935	462,404
-7.739	461,170	-5.900	459,331	4.70	791+0.000			459,054	461,647	2,593	6,500	458,749	4.70	9,810	462,059
-7.954	461,009	-5.900	458,955	4.70	792+0.000			458,678	461,395	2,717	6,500	458,373	4.70	9,874	461,746
-8.643	461,167	-5.900	458,424	4.70	793+0.000			458,147	461,656	3,509	6,500	457,842	4.70	10,292	461,633
-9.333	461,171	-5.900	457,738	4.70	794+0.000			457,461	461,607	4,146	6,500	457,155	4.70	10,746	461,401
-9.772	460,969	-5.900	457,097	4.70	794+15.562	CS		456,820	461,369	4,549	6,500	456,514	4.70	10,856	460,870
-9.935	460,916	-5.900	456,881	4.44	795+0.000			456,619	461,315	4,696	6,565	456,328	4.44	10,943	460,705
-10.369	460,284	-5.900	455,815	3.26	796+0.000			455,623	460,884	5,261	6,530	455,410	3.26	10,078	458,957
-9.625	458,319	-5.900	454,594	2.09	797+0.000			454,471	458,618	4,147	6,205	454,285	2.09	9,197	457,277
-8.654	455,972	-5.900	453,218	0.91	798+0.000		PTV	453,164	455,897	2,733	6,084	452,982	0.91	8,771	455,668
-8.718	454,905	-5.900	452,087	0.00	798+15.562	ST		452,087	454,045	1,958	5,900	451,910	0.00	7,854	453,864
-8.302	454,167	-5.900	451,764	-0.26	799+0.000			451,780	453,627	1,847	5,900	451,603	-0.26	7,717	453,420
-7.847	452,258	-5.900	450,310	-1.44	800+0.000			450,395	451,816	1,421	5,900	450,218	-1.44	7,482	451,800
-8.311	451,268	-5.900	448,856	-2.61	801+0.000			449,010	450,727	1,717	5,900	448,833	-2.61	7,974	450,907
-7.797	449,346	-5.900	447,449	-3.00	802+0.000			447,626	448,545	0,919	5,900	447,449	-3.00	7,239	448,788
-7.141	447,305	-5.900	446,064	-3.00	803+0.000			446,241	446,751	0,510	5,900	446,064	-3.00	6,721	446,885
-6.557	445,336	-5.900	444,680	-3.00	804+0.000			444,857	445,027	0,170	5,900	444,680	-3.00	6,237	445,017
-5.986	443,238	-5.900	443,295	-3.00	805+0.000			443,472	443,052	-0,420	5,900	443,295	-3.00	5,927	443,322
-6.189	441,718	-5.900	441,911	-3.00	806+0.000		PCV	442,088	441,253	-0,835	5,900	441,911	-3.00	6,921	441,230
-7.412	439,537	-5.900	440,545	-3.00	807+0.000			440,722	439,326	-1,396	5,900	440,545	-3.00	7,658	439,374
-7.836	438,024	-5.900	439,315	-3.00	808+0.000			439,492	438,015	-1,477	5,900	439,315	-3.00	7,522	438,234
-7.833	436,949	-5.900	438,238	-3.00	809+0.000			438,415	437,063	-1,352	5,900	438,238	-3.00	7,681	437,051
-7.782	436,060	-5.900	437,315	-3.00	810+0.000			437,492	436,355	-1,137	5,900	437,315	-3.00	7,691	436,121
-13.646	431,382	-5.900	436,546	-3.00	811+0.000			436,723	435,872	-0,851	5,900	436,546	-3.00	11,775	432,629
-13.875	430,614	-5.900	435,930	-3.00	812+0.000			436,107	435,581	-0,526	5,900	435,930	-3.00	12,334	431,641
-16.907	428,131	-5.900	435,469	-3.00	813+0.000			435,646	435,413	-0,233	5,900	435,469	-3.00	12,160	431,295
-15.609	428,688	-5.900	435,161	-3.00	814+0.000			435,338	435,347	0,009	5,900	435,161	-3.00	15,930	428,474
-12.865	430,364	-5.900	435,007	-3.00	815+0.000		PTV	435,184	435,359	0,175	5,900	435,007	-3.00	17,140	427,514
-5.914	435,002	-5.900	434,988	-3.00	816+0.000			435,165	435,501	0,336	5,900	434,988	-3.00	13,235	430,098
PONTE 02															
-9.548	432,556	-5.900	434,988	-3.00	818+0.000		PCV	435,165	435,501	0,336	5,900	434,988	-3.00	6,297	434,723
-6.194	435,307	-5.900	435,013	-3.00	819+0.000			435,190	435,882	0,692	5,900	435,013	-3.00	6,462	435,575
-7.769	437,082	-5.900	435,213	-3.00	820+0.000			435,390	436,819	1,429	5,900	435,213	-3.00	7,481	436,793
-9.108	438,821	-5.900	435,612	-3.00	821+0.000			435,789	438,366	2,577	5,900	435,612	-3.00	8,981	438,693
-10.391	440,804	-5.900	436,314	-1.27	822+0.000			436,389	440,450	4,061	5,900	436,212	-1.27	10,309	440,621
-11.604	442,847	-5.900	437,143	1.20	822+17.402	PC		437,072	442,589	5,517	5,900	436,895	1.20	12,136	443,132
-11.805	443,186	-5.900	437,281	1.59	823+0.000			437,188	442,911	5,723	6,300	436,999	1.59	12,927	443,626
-12.985	445,449	-5.900	438,363	3.00	824+0.000			438,186	445,517	7,331	6,300	437,997	3.00	18,450	447,058
-17.748	448,320	-5.900	439,562	3.00	825+0.000			439,385	448,192	8,807	6,300	439,196	3.00	20,957	450,763
-20.246	452,216	-5.900	440,960	3.00	826+0.000			440,783	450,220	9,437	6,300	440,594	3.00	21,324	452,528
-20.697	453,420	-5.900	441,714	3.00	826+9.742			441,537	451,271	9,734	6,300	441,348	3.00	21,594	453,551
-20.853	454,422	-5.900	442,558	3.00	827+0.000		PTV	442,381	452,384	10,003	6,300	442,192	3.00	23,004	455,806
-20.555	455,897	-5.900	444,331	3.00	828+0.000			444,154	454,607	10,453	6,300	443,965	3.00	22,480	457,055
-20.611	457,750	-5.900	446,129	3.00	829+0.000			445,952	457,951	11,999	6,300	445,763	3.00	22,019	458,392
-20.657	459,506	-5.900	447,839	1.51	830+0.000			447,750	459,990	12,240	6,300	447,561	1.51	22,094	460,265
-20.662	459,680	-5.900	448,008	1.20	830+2.082	PT		447,937	460,243	12,306	5,900	447,760	1.20	22,515	461,285
-20.579	461,058	-5.900	449,469	-1.34	831+0.000			449,548	461,730	12,182	5,900	449,371	-1.34	21,110	461,491
-20.385	462,564	-5.900	451,169	-3.00	832+0.000			451,346	463,623	12,277	5,900	451,180	-3.00	21,238	463,428
-19.846	463,822	-5.900	452,967	-3.00	833+0.000			453,144	464,859	11,715	5,900	453,006	-3.00	20,917	464,933
-19.432	465,206	-5.900	454,764	-3.00	834+0.000			454,941	466,175	11,234	5,900	454,833	-3.00	19,795	465,638
-19.034	466,606	-5.900	456,562	-3.00	835+0.000			456,739	467,593	10,854	5,900	456,659	-3.00	19,330	466,999
-18.809	468,180	-5.900	458,360	-3.00	836+0.000			458,537	468,603	10,066	5,900	458,485	-3.00	19,051	468,547
-19.256	470,424	-5.900	460,158	-3.00	837+0.000			460,335	471,675	11,340	5,900	460,312	-3.00	18,672	469,994
-20.936	473,902	-5.900	461,956	-3.00	838+0.000			462,133	475,060	12,927	5,900	462,138	-3.00	19,229	472,377
-20.683	475,446	-5.900	463,754	-3.00	839+0.000			463,931	476,226	12,295	5,900	463,965	-3.00	19,840	474,814
-19.748	476,309	-5.900	465,552	-3.00	840+0.000			465,729	477,155	11,426	5,900	465,791	-3.00	19,774	476,575
-18.752	477,112	-5.900	467,349	-3.00	841+0.000			467,526	477,704	10,178	5,900	467,617	-3.00	18,9,98	

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo					Lado Direito					
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-9,271	515,853	-5,900	512,483	-3,00	871+0,000		PTV	512,660	515,496	2,836	5,900	512,586	-3,00	9,071	515,757
-9,330	516,260	-5,900	512,830	-3,00	872+0,000			513,007	515,932	2,925	5,900	512,917	-3,00	9,140	516,157
-9,474	516,737	-5,900	513,163	-3,00	873+0,000			513,340	516,309	2,969	5,900	513,233	-3,00	9,020	516,353
-9,379	516,975	-5,900	513,496	-3,00	874+0,000			513,673	516,640	2,967	5,900	513,550	-3,00	8,870	516,520
-9,061	516,990	-5,900	513,830	-3,00	875+0,000			514,007	516,890	2,883	5,900	513,866	-3,00	8,890	516,857
-8,919	517,181	-5,900	514,163	-3,00	876+0,000			514,340	517,014	2,674	5,900	514,183	-3,00	8,625	516,908
-8,691	517,286	-5,900	514,496	-3,00	877+0,000			514,673	517,051	2,378	5,900	514,500	-3,00	8,412	517,011
-8,429	517,408	-5,900	514,878	-2,16	878+0,000			515,006	517,128	2,122	5,900	514,829	-2,16	8,188	517,117
-7,977	517,352	-5,900	515,275	-1,08	879+0,000			515,339	517,192	1,853	5,900	515,162	-1,08	7,978	517,240
-7,702	517,474	-5,900	515,672	0,00	880+0,000			515,672	517,298	1,626	5,899	515,495	0,00	7,720	517,316
-7,701	517,474	-5,900	515,673	0,00	880+0,043	TS		515,673	517,303	1,630	5,900	515,496	0,00	7,720	517,316
-7,500	517,669	-5,900	516,069	1,08	881+0,000			516,005	517,485	1,480	6,147	515,821	1,08	7,817	517,491
-7,510	518,075	-5,900	516,466	2,16	882+0,000			516,339	517,712	1,373	6,249	516,151	2,16	7,922	517,825
-7,117	518,079	-5,900	516,862	3,23	883+0,000			516,672	517,862	1,190	6,512	516,462	3,23	8,115	518,064
-7,097	518,454	-5,900	517,256	4,26	884+0,000			517,005	518,471	1,466	6,796	516,715	4,26	8,647	518,567
-7,155	518,906	-5,900	517,651	5,30	885+0,000			517,338	519,104	1,766	6,501	516,994	5,30	8,605	519,097
-7,155	518,907	-5,900	517,651	5,30	885+0,043	SC		517,339	519,106	1,767	6,500	516,994	5,30	8,604	519,098
-7,246	519,330	-5,900	517,984	5,30	886+0,000			517,671	520,322	2,651	6,500	517,327	5,30	9,155	519,982
-7,423	519,840	-5,900	518,317	5,30	887+0,000			518,004	520,353	2,349	6,500	517,660	5,30	9,135	520,295
-7,515	520,266	-5,900	518,650	5,30	888+0,000			518,337	520,910	2,573	6,500	517,993	5,30	9,436	520,929
-7,877	520,960	-5,900	518,983	5,30	889+0,000			518,671	521,168	2,497	6,500	518,326	5,30	9,916	521,743
-8,390	521,641	-5,900	519,151	5,30	889+10,081			518,839	521,639	2,800	6,500	518,494	5,30	10,449	522,443
-8,912	522,329	-5,900	519,317	5,30	890+0,000			519,004	522,189	3,185	6,500	518,659	5,30	10,848	523,007
-9,871	523,620	-5,900	519,650	5,30	891+0,000			519,337	524,261	4,924	6,500	518,992	5,30	11,415	523,907
-10,578	524,660	-5,900	519,983	5,30	892+0,000			519,670	524,103	4,433	6,500	519,326	5,30	11,976	524,801
-11,077	525,493	-5,900	520,316	5,30	893+0,000			520,003	525,357	5,354	6,500	519,659	5,30	12,366	525,525
-11,252	526,001	-5,900	520,649	5,30	894+0,000			520,336	525,776	5,440	6,496	519,992	5,30	12,660	526,156
-11,255	526,006	-5,900	520,651	5,30	894+0,119	CS		520,338	525,780	5,442	6,500	519,994	5,30	12,665	526,159
-11,823	526,856	-5,900	520,934	4,48	895+0,000			520,670	526,440	5,770	6,796	520,365	4,48	13,092	526,661
-12,315	527,633	-5,900	521,218	3,65	896+0,000			521,003	527,245	6,242	6,517	520,765	3,65	13,169	527,417
-12,800	528,402	-5,900	521,502	2,82	897+0,000			521,336	527,997	6,661	6,249	521,160	2,82	13,252	528,163
-13,077	528,963	-5,900	521,787	1,99	898+0,000			521,669	528,546	6,877	6,148	521,546	1,99	13,396	528,794
-13,196	529,367	-5,900	522,071	1,17	899+0,000			522,002	529,045	7,043	5,900	521,933	1,17	13,159	529,192
-13,197	529,369	-5,900	522,073	1,16	899+0,119	ST		522,004	529,047	7,043	5,900	521,936	1,16	13,158	529,194
-13,065	529,520	-5,900	522,355	0,34	900+0,000			522,335	529,397	7,062	5,900	522,315	0,34	13,180	529,595
-12,534	529,274	-5,900	522,640	-0,49	901+0,000			522,668	528,983	6,315	5,900	522,697	-0,49	12,481	529,278
-10,954	527,978	-5,900	522,924	-1,32	902+0,000			523,002	527,695	4,693	5,900	523,079	-1,32	10,865	528,045
-9,424	526,732	-5,900	523,208	-2,14	903+0,000			523,335	526,560	3,225	5,900	523,461	-2,14	9,367	526,928
-8,568	526,079	-5,900	523,412	-2,73	903+14,298	TS		523,573	526,211	2,638	5,900	523,734	-2,73	8,422	526,257
-8,186	525,626	-6,048	523,488	-2,97	904+0,000		PCV	523,668	525,787	2,119	5,898	523,843	-2,97	7,842	525,787
-6,857	524,124	-6,488	523,755	-3,80	905+0,000			524,002	524,226	0,224	5,900	524,226	-3,80	5,960	524,186
-8,122	523,044	-6,622	524,044	-4,63	906+0,000			524,350	523,145	-1,205	5,900	524,623	-4,63	7,905	523,286
-9,919	522,283	-6,822	524,347	-5,45	907+0,000			524,719	521,983	-2,736	5,901	525,041	-5,45	10,054	522,272
-12,608	521,391	-7,763	524,621	-6,28	908+0,000			525,108	521,241	-3,867	5,900	525,479	-6,28	12,157	521,308
-13,070	521,388	-7,695	524,971	-7,11	909+0,000			525,518	520,737	-4,781	5,899	525,937	-7,11	13,648	520,771
-13,582	520,837	-6,900	525,292	-7,70	909+14,298	SC		525,823	520,548	-5,275	5,900	526,278	-7,70	14,420	520,598
-14,136	520,593	-6,900	525,517	-7,70	910+0,000			525,948	520,477	-5,471	5,900	526,402	-7,70	14,905	520,399
-13,651	521,367	-6,900	525,867	-7,70	911+0,000			526,399	521,687	-4,712	5,900	526,853	-7,70	15,556	520,415
-14,794	521,075	-6,900	526,338	-7,70	912+0,000			526,869	521,544	-5,325	5,900	527,324	-7,70	15,916	520,647
-15,127	521,345	-6,900	526,829	-7,70	913+0,000			527,361	521,138	-6,223	5,900	527,815	-7,70	15,949	521,116
-15,061	521,525	-6,900	526,965	-7,70	913+5,382			527,496	521,440	-6,056	5,900	527,951	-7,70	15,978	521,232
-14,856	522,037	-6,900	527,341	-7,70	914+0,000			527,872	522,303	-5,569	5,900	528,327	-7,70	16,032	521,572
-14,352	522,905	-6,900	527,873	-7,70	915+0,000			528,405	522,756	-5,649	5,900	528,859	-7,70	16,219	521,980
-14,316	523,482	-6,900	528,426	-7,70	916+0,000			528,957	523,632	-5,325	5,900	529,411	-7,70	16,068	522,632
-13,808	524,290	-6,900	528,896	-7,70	916+16,467	CS		529,427	524,870	-4,557	5,900	529,882	-7,70	15,612	523,407
-14,095	524,371	-7,160	528,995	-7,48	917+0,000		PTV	529,530	525,148	-4,382	5,900	529,971	-7,48	15,543	523,543
-14,414	525,265	-7,866	529,630	-6,20	918+0,000										

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo					Lado Direito					
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-6.704	544,205	-5.900	544,740	-3.00	952+0.000		PTV	544,917	544,344	-0.573	5,900	544,740	-3.00	6.690	544,214
-6.653	544,091	-5.900	544,593	-3.00	953+0.000			544,770	544,195	-0.575	5,900	544,593	-3.00	6.686	544,069
-6.730	543,886	-5.900	544,439	-3.00	954+0.000			544,616	544,020	-0.596	5,900	544,439	-3.00	6.617	543,961
-6.838	543,660	-5.900	544,285	-3.00	955+0.000			544,462	543,880	-0.582	5,900	544,285	-3.00	6.575	543,836
-6.799	543,532	-5.900	544,131	-3.00	956+0.000			544,308	543,661	-0.647	5,900	544,131	-3.00	6.783	543,543
-6.942	543,283	-5.900	543,978	-3.00	957+0.000			544,155	543,440	-0.715	5,900	543,978	-3.00	6.907	543,306
-7.151	542,990	-5.900	543,824	-3.00	958+0.000			544,001	543,153	-0.848	5,900	543,824	-3.00	7.069	543,045
-7.207	542,799	-5.900	543,670	-3.00	959+0.000			543,847	542,877	-0.970	5,900	543,670	-3.00	7.230	542,783
-7.271	542,602	-5.900	543,516	-3.00	960+0.000			543,693	542,713	-0.980	5,900	543,516	-3.00	7.216	542,639
-7.161	542,522	-5.900	543,363	-3.00	961+0.000			543,540	542,655	-0.885	5,900	543,363	-3.00	7.031	542,609
-7.194	542,346	-5.900	543,209	-3.00	962+0.000			543,386	542,396	-0.990	5,900	543,209	-3.00	6.752	542,641
-7.369	542,076	-5.900	543,055	-3.00	963+0.000			543,232	542,185	-1.047	5,900	543,055	-3.00	7.326	542,104
-7.202	542,033	-5.900	542,901	-3.00	964+0.000			543,078	542,097	-0.981	5,900	542,901	-3.00	7.246	542,004
-6.941	542,054	-5.900	542,747	-3.00	965+0.000		PCV	542,924	542,025	-0.899	5,900	542,747	-3.00	7.055	541,977
-6.990	541,871	-5.900	542,597	-3.00	966+0.000			542,774	541,854	-0.920	5,900	542,597	-3.00	7.219	541,718
-6.925	541,787	-5.900	542,470	-3.00	967+0.000			542,647	541,864	-0.783	5,900	542,470	-3.00	7.163	541,628
-6.769	541,788	-5.900	542,367	-3.00	968+0.000			542,544	541,798	-0.746	5,900	542,367	-3.00	7.066	541,590
-7.107	541,485	-5.900	542,290	-3.00	969+0.000			542,467	541,746	-0.721	5,900	542,290	-3.00	7.151	541,455
-6.812	541,629	-5.900	542,237	-3.00	970+0.000			542,414	541,691	-0.723	5,900	542,237	-3.00	7.013	541,495
-6.891	541,549	-5.900	542,209	-3.00	971+0.000			542,386	541,629	-0.757	5,900	542,209	-3.00	7.125	541,392
-6.869	541,561	-5.900	542,207	-3.00	972+0.000			542,384	541,657	-0.727	5,900	542,207	-3.00	7.124	541,391
-6.981	541,508	-5.900	542,229	-3.00	973+0.000			542,406	541,605	-0.801	5,900	542,229	-3.00	7.301	541,295
-6.916	541,599	-5.900	542,276	-3.00	974+0.000			542,453	541,718	-0.735	5,900	542,276	-3.00	7.193	541,414
-6.936	541,658	-5.900	542,348	-3.00	975+0.000			542,525	541,766	-0.759	5,900	542,348	-3.00	7.165	541,505
-7.228	541,560	-5.900	542,446	-3.00	976+0.000			542,623	541,755	-0.868	5,900	542,446	-3.00	7.463	541,404
-7.354	541,598	-5.900	542,568	-3.00	977+0.000			542,745	541,809	-0.936	5,900	542,568	-3.00	7.495	541,504
-7.429	541,695	-5.900	542,715	-3.00	978+0.000			542,892	541,844	-1.048	5,900	542,715	-3.00	7.789	541,456
-7.577	541,769	-5.900	542,887	-3.00	979+0.000			543,064	541,955	-1.109	5,900	542,887	-3.00	7.690	541,694
-7.429	542,064	-5.900	543,084	-3.00	980+0.000			543,261	542,162	-1.099	5,900	543,084	-3.00	7.749	541,852
-7.445	542,276	-5.900	543,306	-3.00	981+0.000		PTV	543,483	542,428	-1.055	5,900	543,306	-3.00	7.778	542,054
-7.445	542,519	-5.900	543,549	-3.00	982+0.000			543,726	542,702	-1.024	5,900	543,549	-3.00	7.775	542,300
-8.094	542,332	-5.900	543,795	-3.00	983+0.000			543,972	542,715	-1.257	5,900	543,795	-3.00	7.882	542,474
-7.737	542,816	-5.900	544,041	-3.00	984+0.000			544,218	542,910	-1.308	5,900	544,041	-3.00	7.942	542,680
-7.746	543,056	-5.900	544,287	-3.00	985+0.000			544,464	543,058	-1.406	5,900	544,287	-3.00	8.182	542,765
-7.802	543,265	-5.900	544,532	-3.00	986+0.000			544,709	543,327	-1.382	5,900	544,532	-3.00	8.026	543,115
-7.782	543,524	-5.900	544,778	-3.00	987+0.000			544,955	543,582	-1.373	5,900	544,778	-3.00	8.145	543,282
-7.781	543,770	-5.900	545,024	-3.00	988+0.000			545,201	543,876	-1.325	5,900	545,024	-3.00	7.914	543,681
-7.680	544,083	-5.900	545,270	-3.00	989+0.000			545,447	544,147	-1.300	5,900	545,270	-3.00	8.018	543,858
-7.601	544,381	-5.900	545,516	-3.00	990+0.000			545,693	544,410	-1.283	5,900	545,516	-3.00	7.931	544,162
-7.580	544,641	-5.900	545,761	-3.00	991+0.000			545,938	544,709	-1.229	5,900	545,761	-3.00	7.846	544,464
-7.337	545,049	-5.900	546,007	-3.00	992+0.000		PCV	546,184	545,133	-1.051	5,900	546,007	-3.00	7.710	544,800
-7.283	545,315	-5.900	546,237	-3.00	993+0.000			546,414	545,306	-1.108	5,900	546,237	-3.00	7.732	545,015
-7.481	545,380	-5.900	546,434	-3.00	994+0.000			546,611	545,455	-1.156	5,900	546,434	-3.00	7.655	545,265
-7.327	545,649	-5.900	546,600	-3.00	995+0.000			546,777	545,652	-1.125	5,900	546,600	-3.00	7.675	545,417
-7.371	545,753	-5.900	546,733	-3.00	996+0.000			546,910	545,832	-1.078	5,900	546,733	-3.00	7.611	545,593
-7.177	545,983	-5.900	546,835	-3.00	997+0.000			547,012	546,018	-0.994	5,900	546,835	-3.00	7.508	545,763
-7.072	546,123	-5.900	546,904	-3.00	998+0.000			547,081	546,201	-0.880	5,900	546,904	-3.00	7.319	545,958
-7.005	546,212	-5.900	546,949	-2.87	999+0.000			547,118	546,232	-0.886	5,900	546,941	-2.87	7.318	545,996
-7.082	546,225	-5.900	547,013	-1.87	1000+0.000			547,123	546,302	-0.821	5,900	546,946	-1.87	7.250	546,046
-7.091	546,251	-5.900	547,045	-0.87	1001+0.000			547,096	546,398	-0.698	5,900	546,919	-0.87	7.170	546,072
-7.036	546,289	-5.900	547,047	0.00	1001+17.339	TS		547,047	546,461	-0.586	5,900	546,870	0.00	6.929	546,183
-7.031	546,291	-5.900	547,045	0.13	1002+0.000			547,037	546,441	-0.596	5,931	546,859	0.13	6.919	546,200
-7.222	546,131	-5.900	547,012	1.13	1003+0.000			546,946	546,324	-0.622	6,134	546,762	1.13	7.081	546,130
-6.866	546,304	-5.900	546,948	2.13	1004+0.000			546,822	546,259	-0.563	6,262	546,634	2.13	7.240	545,982
-7.186	545,993	-5.900	546,851	3.12	1005+0.000			546,667	545,949	-0.718	6,556	546,462	3.12	7.593	545,771
-6.859	546,097	-5.900	546,736	3.90	1005+17.339	SC		546,506	545,760	-0.746	6,500	546,252	3.90	7.467	545,608
-6.649	546,210	-5.900	546,709	3.90	1006+0.000			546,479	545,753	-0.726	6,500	546,5			

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo						Lado Direito				
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-5.966	528.616	-5.900	528.550	-3.00	1038+0.000			528.727	528.550	-0.177	5.900	528.550	-3.00	6.142	528.389
-5.920	527.917	-5.900	527.897	-3.00	1039+0.000			528.074	527.843	-0.231	5.900	527.897	-3.00	6.332	527.609
-6.124	527.095	-5.900	527.244	-3.00	1040+0.000			527.421	526.963	-0.458	5.900	527.244	-3.00	6.605	526.774
-6.301	526.324	-5.900	526.591	-3.00	1041+0.000			526.768	526.201	-0.567	5.900	526.591	-3.00	6.814	525.982
-6.691	525.411	-5.900	525.938	-3.00	1042+0.000			526.115	525.268	-0.847	5.900	525.938	-3.00	7.272	525.023
-7.078	524.499	-5.900	525.285	-3.00	1043+0.000			525.462	524.355	-1.107	5.900	525.285	-3.00	7.677	524.100
-7.464	523.589	-5.900	524.632	-3.00	1044+0.000			524.809	523.335	-1.474	5.900	524.632	-3.00	8.209	523.092
-7.918	522.633	-5.900	523.979	-3.00	1045+0.000			524.156	522.404	-1.752	5.900	523.979	-3.00	8.793	522.050
-8.611	521.518	-5.900	523.326	-3.00	1046+0.000		PCV	523.503	521.437	-2.066	5.900	523.326	-3.00	9.239	521.099
-9.125	520.564	-5.900	522.714	-3.00	1047+0.000			522.891	520.303	-2.588	5.900	522.714	-3.00	9.957	520.009
-9.919	519.506	-5.900	522.185	-3.00	1048+0.000			522.362	519.316	-3.046	5.900	522.185	-3.00	10.897	518.854
-10.883	518.417	-5.900	521.740	-3.00	1049+0.000			521.917	517.997	-3.920	5.900	521.740	-3.00	11.888	517.747
-12.066	517.266	-5.900	521.377	-3.00	1050+0.000			521.554	516.973	-4.581	5.900	521.377	-3.00	13.176	516.526
-13.328	516.145	-5.900	521.097	-3.00	1051+0.000			521.274	515.812	-5.462	5.900	521.097	-3.00	14.573	515.315
-14.715	515.023	-5.900	520.900	-3.00	1052+0.000			521.077	514.519	-6.558	5.900	520.900	-3.00	16.371	513.919
-16.227	513.901	-5.900	520.786	-3.00	1053+0.000			520.963	513.500	-7.463	5.900	520.786	-3.00	17.804	512.850
-17.719	512.875	-5.900	520.755	-3.00	1054+0.000			520.932	512.499	-8.433	5.900	520.755	-3.00	23.122	511.183
-22.885	511.393	-5.900	520.806	-3.00	1055+0.000			520.983	511.372	-9.611	5.900	520.806	-3.00	21.454	512.347
-21.673	512.336	-5.900	520.941	-3.00	1056+0.000			521.118	512.862	-8.256	5.900	520.941	-3.00	17.457	513.236
-17.020	513.745	-5.900	521.159	-3.00	1057+0.000			521.336	513.926	-7.410	5.900	521.159	-3.00	15.974	514.443
-15.622	514.978	-5.900	521.459	-3.00	1058+0.000			521.636	515.551	-6.085	5.900	521.459	-3.00	14.005	516.056
-14.086	516.386	-5.900	521.843	-3.00	1059+0.000			522.020	516.893	-5.127	5.900	521.843	-3.00	12.846	517.212
-12.891	517.649	-5.900	522.309	-3.00	1060+0.000			522.486	518.241	-4.245	5.900	522.309	-3.00	11.486	518.585
-11.467	519.147	-5.900	522.859	-3.00	1061+0.000			523.036	519.560	-3.476	5.900	522.859	-3.00	10.248	519.960
-10.307	520.553	-5.900	523.491	-3.00	1062+0.000			523.668	520.973	-2.695	5.900	523.491	-3.00	9.257	521.253
-8.740	522.313	-5.900	524.206	-3.00	1063+0.000			524.383	522.597	-1.786	5.900	524.206	-3.00	8.069	522.760
-7.595	523.874	-5.900	525.004	-3.00	1064+0.000		PTV	525.181	524.231	-0.950	5.900	525.004	-3.00	6.798	524.406
-6.458	525.472	-5.900	525.844	-3.00	1065+0.000			526.021	525.745	-0.276	5.900	525.844	-3.00	5.926	525.870
-6.177	526.960	-5.900	526.683	-3.00	1066+0.000			526.860	527.206	0.346	5.900	526.683	-3.00	6.589	527.372
-6.712	528.335	-5.900	527.523	-3.00	1067+0.000			527.700	528.634	0.934	5.900	527.523	-3.00	7.092	528.715
-7.161	529.623	-5.900	528.363	-3.00	1068+0.000			528.540	529.916	1.376	5.900	528.363	-3.00	7.447	529.910
-7.530	530.832	-5.900	529.202	-3.00	1069+0.000			529.379	530.987	1.608	5.900	529.202	-3.00	7.767	531.070
-7.760	531.902	-5.900	530.042	-3.00	1070+0.000			530.219	532.016	1.797	5.900	530.042	-3.00	7.960	532.102
-7.831	532.812	-5.900	530.881	-3.00	1071+0.000			531.058	532.990	1.932	5.900	530.881	-3.00	8.017	532.999
-7.788	533.609	-5.900	531.721	-3.00	1072+0.000			531.898	533.832	1.934	5.900	531.721	-3.00	8.022	533.843
-7.875	534.536	-5.900	532.560	-3.00	1073+0.000			532.738	534.669	1.931	5.900	532.560	-3.00	8.009	534.669
-7.759	535.260	-5.900	533.400	-3.00	1074+0.000			533.577	535.416	1.839	5.900	533.400	-3.00	7.896	535.396
-7.713	536.052	-5.900	534.240	-3.00	1075+0.000			534.417	536.155	1.738	5.900	534.240	-3.00	7.792	536.131
-7.562	536.742	-5.900	535.079	-3.00	1076+0.000			535.256	536.848	1.592	5.900	535.079	-3.00	7.729	536.909
-7.417	537.436	-5.900	535.919	-3.00	1077+0.000			536.096	537.538	1.442	5.900	535.919	-3.00	7.564	537.583
-7.253	538.111	-5.900	536.758	-3.00	1078+0.000			536.935	538.177	1.242	5.900	536.758	-3.00	7.382	538.240
-7.037	538.735	-5.900	537.598	-3.00	1079+0.000			537.775	538.801	1.026	5.900	537.598	-3.00	7.161	538.859
-6.873	539.410	-5.900	538.438	-3.00	1080+0.000			538.615	539.490	0.875	5.900	538.438	-3.00	7.008	539.546
-6.678	540.055	-5.900	539.277	-3.00	1081+0.000			539.454	540.160	0.706	5.900	539.277	-3.00	6.829	540.206
-6.516	540.732	-5.900	540.117	-3.00	1082+0.000			540.294	540.842	0.548	5.900	540.117	-3.00	6.674	540.891
-6.332	541.389	-5.900	540.956	-3.00	1083+0.000			541.133	541.436	0.303	5.900	540.956	-3.00	6.438	541.494
-6.168	542.064	-5.900	541.796	-3.00	1084+0.000			541.973	542.144	0.171	5.900	541.796	-3.00	6.323	542.219
-6.015	542.751	-5.900	542.635	-3.00	1085+0.000			542.813	542.807	-0.006	5.900	542.635	-3.00	6.119	542.855
-6.089	543.349	-5.900	543.475	-3.00	1086+0.000			543.652	543.523	-0.129	5.900	543.475	-3.00	5.950	543.525
-6.311	544.041	-5.900	544.315	-3.00	1087+0.000			544.492	544.150	-0.342	5.900	544.315	-3.00	6.112	544.173
-6.550	544.721	-5.900	545.154	-3.00	1088+0.000			545.331	544.824	-0.507	5.900	545.154	-3.00	6.315	544.878
-6.832	545.372	-5.900	545.994	-3.00	1089+0.000			546.171	545.516	-0.655	5.900	545.994	-3.00	6.656	545.490
-6.901	546.166	-5.900	546.833	-3.00	1090+0.000			547.010	546.117	-0.893	5.900	546.833	-3.00	6.682	546.312
-7.193	546.811	-5.900	547.673	-3.00	1091+0.000			547.850	546.822	-1.028	5.900	547.673	-3.00	6.925	546.989
-7.399	547.513	-5.900	548.513	-3.00	1092+0.000			548.690	547.530	-1.160	5.900	548.513	-3.00	7.092	547.718
-7.633	548.197	-5.900	549.352	-3.00	1093+0.000			549.529	548.211	-1.318	5.900	549.352	-3.00	7.332	548.398
-7.817	548.914	-5.900	550.192	-3.00											

NOTA DE SERVIÇO DE TERRAPLENAGEM - GO 221

Lado Esquerdo					Eixo						Lado Direito				
OFFSET		BORDO TERRAPLENAGEM			Estaca	P.N Horizontal	P. N. Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO TERRAPLENAGEM			OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-7,719	560,146	-5,900	561,359	4.70	1127+0.000			561,082	560,017	-1,065	6,500	560,776	4.70	7,525	560,093
-7,806	559,883	-5,900	561,153	4.70	1128+0.000			560,876	559,821	-1,055	6,500	560,570	4.70	7,485	559,914
-7,937	559,558	-5,900	560,916	4.70	1129+0.000			560,639	559,472	-1,167	6,500	560,333	4.70	7,540	559,640
-7,941	559,382	-5,900	560,742	4.70	1129+13.198			560,465	559,280	-1,185	6,500	560,159	4.70	7,665	559,382
-7,941	559,287	-5,900	560,647	4.70	1130+0.000			560,370	559,179	-1,191	6,500	560,065	4.70	7,713	559,256
-7,994	558,952	-5,900	560,348	4.70	1131+0.000			560,071	558,787	-1,284	6,500	559,765	4.70	7,758	558,926
-7,562	558,909	-5,900	560,017	4.70	1132+0.000			559,740	558,615	-1,125	6,500	559,434	4.70	7,721	558,620
-8,466	557,945	-5,900	559,655	4.70	1133+0.000			559,378	558,265	-1,113	6,500	559,072	4.70	7,649	558,306
-8,546	557,498	-5,900	559,262	4.70	1134+0.000			558,985	557,979	-1,006	6,500	558,679	4.70	7,586	557,955
-8,738	556,945	-5,900	558,838	4.70	1135+0.000			558,560	557,349	-1,211	6,500	558,255	4.70	7,352	557,687
-8,669	556,828	-5,900	558,674	4.70	1135+7.354	CS		558,396	556,928	-1,468	6,500	558,091	4.70	7,968	557,112
-8,469	556,626	-5,900	558,338	3.96	1136+0.000		PTV	558,105	556,622	-1,483	6,612	557,843	3.96	7,576	557,200
-8,184	556,275	-5,900	557,798	2.78	1137+0.000			557,633	556,161	-1,472	6,384	557,442	2.78	7,478	556,712
-7,712	556,049	-5,900	557,257	1.61	1138+0.000			557,162	555,735	-1,427	6,180	556,977	1.61	7,234	556,274
-7,389	555,723	-5,899	556,717	0.43	1139+0.000			556,691	555,485	-1,206	5,992	556,511	0.43	6,858	555,934
-7,396	555,521	-5,900	556,518	0.00	1139+7.354	ST		556,518	555,236	-1,282	5,900	556,341	0.00	6,725	555,791
-7,581	555,055	-5,900	556,176	-0.74	1140+0.000			556,220	554,744	-1,476	5,900	556,043	-0.74	6,402	555,708
-7,533	554,547	-5,900	555,636	-1.92	1141+0.000			555,749	554,164	-1,585	5,900	555,572	-1.92	6,930	554,885
-7,510	554,027	-5,900	555,100	-3.00	1142+0.000			555,277	553,658	-1,619	5,900	555,100	-3.00	6,674	554,584
-7,653	553,461	-5,900	554,629	-3.00	1143+0.000			554,806	553,151	-1,655	5,900	554,629	-3.00	6,642	554,134
-7,607	553,020	-5,900	554,158	-3.00	1144+0.000			554,335	552,692	-1,643	5,900	554,158	-3.00	6,850	553,524
-7,742	552,459	-5,900	553,687	-3.00	1145+0.000			553,864	552,276	-1,588	5,900	553,687	-3.00	6,663	553,178
-7,636	552,058	-5,900	553,216	-3.00	1146+0.000			553,393	551,891	-1,502	5,900	553,216	-3.00	7,057	552,445
-7,365	551,768	-5,900	552,744	-3.00	1147+0.000			552,921	551,633	-1,288	5,900	552,744	-3.00	6,897	552,080
-7,313	551,332	-5,900	552,273	-3.00	1148+0.000			552,450	550,960	-1,490	5,900	552,273	-3.00	6,940	551,580
-7,728	550,583	-5,900	551,802	-3.00	1149+0.000			551,979	550,321	-1,658	5,900	551,802	-3.00	6,913	551,127
-7,717	550,119	-5,900	551,331	-3.00	1150+0.000			551,508	549,828	-1,680	5,900	551,331	-3.00	6,910	550,657
-7,733	549,637	-5,900	550,860	-3.00	1151+0.000			551,037	549,335	-1,702	5,900	550,860	-3.00	6,929	550,174
-7,499	549,322	-5,900	550,388	-3.00	1152+0.000			550,565	549,002	-1,563	5,900	550,388	-3.00	7,371	549,408
-7,622	548,769	-5,900	549,917	-3.00	1153+0.000			550,094	548,439	-1,655	5,900	549,917	-3.00	6,796	549,320
-7,813	548,171	-5,900	549,446	-3.00	1154+0.000			549,623	547,928	-1,695	5,900	549,446	-3.00	6,285	549,189
-7,784	547,719	-5,900	548,975	-3.00	1155+0.000			549,152	547,529	-1,623	5,900	548,975	-3.00	7,085	548,185
VER INTERSEÇÃO 02															

3.2.NOTA DE SERVIÇO – PAVIMENTAÇÃO (LINHA TRONCO)

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo				Eixo				Lado Direito				
BORDO ACOSTAMENTO				BORDO PISTA DE ROLAMENTO				BORDO PISTA DE ROLAMENTO				
Offset	Asf. (m)	Cota (m)	Incl. (%)	Asf. (m)	Cota (m)	Incl. (%)	Asf. (m)	Cota (m)	Incl. (%)	Asf. (m)	Cota (m)	
-6.481	480.027	-4.800	-3.00	-3.500	480.027	-3.00	480.027	-4.800	-3.00	480.027	-4.800	
-6.373	480.027	-4.800	-3.00	-3.500	480.027	-3.00	480.027	-4.800	-3.00	480.027	-4.800	
-6.199	479.894	-4.800	-3.00	-3.500	480.042	-3.00	480.042	-4.800	-3.00	480.042	-4.800	
-6.155	479.893	-4.800	-3.00	-3.500	480.084	-3.00	480.084	-4.800	-3.00	480.084	-4.800	
-6.157	479.946	-4.800	-3.00	-3.500	480.136	-3.00	480.136	-4.800	-3.00	480.136	-4.800	
-6.184	480.090	-4.800	-3.00	-3.500	480.254	-3.00	480.254	-4.800	-3.00	480.254	-4.800	
-6.284	480.344	-4.800	-3.00	-3.500	480.550	-3.00	480.550	-4.800	-3.00	480.550	-4.800	
-6.476	480.845	-4.800	-3.00	-3.500	480.716	-3.00	480.716	-4.800	-3.00	480.716	-4.800	
-6.966	481.680	-4.800	-3.00	-3.500	481.061	-3.00	481.061	-4.800	-3.00	481.061	-4.800	
-6.709	481.843	-4.800	-3.00	-3.500	481.881	-3.00	481.881	-4.800	-3.00	481.881	-4.800	
-6.946	482.577	-4.800	-3.00	-3.500	481.977	-3.00	481.977	-4.800	-3.00	481.977	-4.800	
-7.066	483.268	-4.800	-3.00	-3.500	482.549	-3.00	482.549	-4.800	-3.00	482.549	-4.800	
-7.225	484.074	-4.800	-3.00	-3.500	483.156	-3.00	483.156	-4.800	-3.00	483.156	-4.800	
-6.979	484.551	-4.800	-3.00	-3.500	483.819	-3.00	483.819	-4.800	-3.00	483.819	-4.800	
-6.783	485.154	-4.800	-3.00	-3.500	484.718	-3.00	484.718	-4.800	-3.00	484.718	-4.800	
-6.853	486.098	-4.800	-3.00	-3.500	485.554	-3.00	485.554	-4.800	-3.00	485.554	-4.800	
-6.397	486.593	-4.800	-3.00	-3.500	486.504	-3.00	486.504	-4.800	-3.00	486.504	-4.800	
-6.243	487.455	-4.800	-3.00	-3.500	487.520	-3.00	487.520	-4.800	-3.00	487.520	-4.800	
-6.193	488.431	-4.800	-3.00	-3.500	488.586	-3.00	488.586	-4.800	-3.00	488.586	-4.800	
-6.109	489.373	-4.800	-3.00	-3.500	489.611	-3.00	489.611	-4.800	-3.00	489.611	-4.800	
-6.322	490.611	-4.800	-3.00	-3.500	490.636	-3.00	490.636	-4.800	-3.00	490.636	-4.800	
-6.056	491.371	-4.800	-3.00	-3.500	491.662	-3.00	491.662	-4.800	-3.00	491.662	-4.800	
-6.397	492.738	-4.800	-3.00	-3.500	492.688	-3.00	492.688	-4.800	-3.00	492.688	-4.800	
-6.273	493.639	-4.800	-3.00	-3.500	493.714	-3.00	493.714	-4.800	-3.00	493.714	-4.800	
-6.313	494.705	-4.800	-3.00	-3.500	494.739	-3.00	494.739	-4.800	-3.00	494.739	-4.800	
-6.331	495.749	-4.800	-3.00	-3.500	495.765	-3.00	495.765	-4.800	-3.00	495.765	-4.800	
-6.265	496.709	-4.800	-3.00	-3.500	496.791	-3.00	496.791	-4.800	-3.00	496.791	-4.800	
-6.046	497.516	-4.800	-3.00	-3.500	497.778	-3.00	497.778	-4.800	-3.00	497.778	-4.800	
-6.175	498.670	-4.800	-3.00	-3.500	499.842	-3.00	499.842	-4.800	-3.00	499.842	-4.800	
-6.222	499.743	-4.800	-3.00	-3.500	499.868	-3.00	499.868	-4.800	-3.00	499.868	-4.800	
-6.370	500.917	-4.800	-3.00	-3.500	500.984	-3.00	500.984	-4.800	-3.00	500.984	-4.800	
-6.094	501.708	-4.800	-3.00	-3.500	501.944	-3.00	501.944	-4.800	-3.00	501.944	-4.800	
-6.184	502.889	-4.800	-3.00	-3.500	503.089	-1.18	503.089	-1.18	503.089	-1.18	503.089	-1.18
-9.305	507.103	-4.800	-3.00	-3.500	504.074	-0.05	504.074	-0.05	504.074	-0.05	504.074	-0.05
-9.147	506.996	-4.800	-3.00	-3.500	504.125	0.00	504.125	0.00	504.125	0.00	504.125	0.00
-7.848	506.712	-4.800	-3.00	-3.500	505.112	1.07	505.112	1.07	505.112	1.07	505.112	1.07
-6.151	505.964	-4.800	-3.00	-3.500	506.036	2.20	506.036	2.20	506.036	2.20	506.036	2.20
-6.155	506.795	-4.800	-3.00	-3.500	506.836	3.30	506.836	3.30	506.836	3.30	506.836	3.30
-6.047	507.590	-4.800	-3.00	-3.500	507.513	4.35	507.513	4.35	507.513	4.35	507.513	4.35
-6.042	507.415	-4.800	-3.00	-3.500	507.599	4.40	507.599	4.40	507.599	4.40	507.599	4.40
-6.081	507.944	-4.800	-3.00	-3.500	508.033	4.40	508.033	4.40	508.033	4.40	508.033	4.40
-6.332	508.592	-4.800	-3.00	-3.500	508.427	4.40	508.427	4.40	508.427	4.40	508.427	4.40
-6.597	509.132	-4.800	-3.00	-3.500	508.761	4.40	508.761	4.40	508.761	4.40	508.761	4.40
-6.579	509.266	-4.800	-3.00	-3.500	508.914	4.40	508.914	4.40	508.914	4.40	508.914	4.40
-6.401	509.119	-4.800	-3.00	-3.500	508.987	4.40	508.987	4.40	508.987	4.40	508.987	4.40
-6.372	508.999	-4.800	-3.00	-3.500	508.796	4.40	508.796	4.40	508.796	4.40	508.796	4.40
-6.126	508.540	-4.800	-3.00	-3.500	508.640	4.40	508.640	4.40	508.640	4.40	508.640	4.40
-6.087	508.166	-4.800	-3.00	-3.500	508.248	4.40	508.248	4.40	508.248	4.40	508.248	4.40
-6.160	507.782	-4.800	-3.00	-3.500	507.792	4.40	507.792	4.40	507.792	4.40	507.792	4.40
-6.108	507.194	-4.800	-3.00	-3.500	507.266	4.40	507.266	4.40	507.266	4.40	507.266	4.40
-6.004	506.553	-4.800	-3.00	-3.500	506.718	4.40	506.718	4.40	506.718	4.40	506.718	4.40
-5.990	506.385	-4.800	-3.00	-3.500	506.565	4.40	506.565	4.40	506.565	4.40	506.565	4.40
-5.975	506.002	-4.800	-3.00	-3.500	506.196	4.40	506.196	4.40	506.196	4.40	506.196	4.40
-5.961	505.578	-4.800	-3.00	-3.500	505.786	4.40	505.786	4.40	505.786	4.40	505.786	4.40
-5.946	505.204	-4.800	-3.00	-3.500	505.504	4.40	505.504	4.40	505.504	4.40	505.504	4.40
-5.943	505.052	-4.800	-3.00	-3.500	505.240	4.40	505.240	4.40	505.240	4.40	505.240	4.40
-5.996	505.149	-4.800	-3.00	-3.500	505.380	4.40	505.380	4.40	505.380	4.40	505.380	4.40
-6.062	505.316	-4.800	-3.00	-3.500	505.423	4.40	505.423	4.40	505.423	4.40	505.423	4.40
-6.146	505.629	-4.800	-3.00	-3.500	505.652	4.40	505.652	4.40	505.652	4.40	505.652	4.40
-6.155	505.994	-4.800	-3.00	-3.500	506.008	4.40	506.008	4.40	506.008	4.40	506.008	4.40
-6.098	506.421	-4.800	-3.00	-3.500	506.492	4.40	506.492	4.40	506.492	4.40	506.492	4.40
-6.056	506.274	-4.800	-3.00	-3.500	507.083	4.40	507.083	4.40	507.083	4.40	507.083	4.40
-6.092	507.622	-4.800	-3.00	-3.500	507.699	4.40	507.699	4.40	507.699	4.40	507.699	4.40
-6.104	507.953	-4.800	-3.00	-3.500	508.076	4.40	508.076	4.40	508.076	4.40	508.076	4.40
-6.178	508.290	-4.800	-3.00	-3.500	508.293	3.90	508.293	3.90	508.293	3.90	508.293	3.90
-6.248	508.908	-4.800	-3.00	-3.500	508.868	2.84	508.868	2.84	508.868	2.84	508.868	2.84
-6.184	509.389	-4.800	-3.00	-3.500	509.440	1.71	509.440	1.71	509.440	1.71	509.440	1.71
-6.228	509.968	-4.799	-3.00	-3.499	510.001	0.59	510.001	0.59	510.001	0.59	510.001	0.59
-6.255	510.265	-4.800	-3.00	-3.500	510.285	0.00	510.285	0.00	510.285	0.00	510.285	0.00
-6.309	510.562	-4.800	-3.00	-3.500	510.580	-0.54	510.580	-0.54	510.580	-0.54	510.580	-0.54
-6.385	511.127	-4.800	-3.00	-3.500	511.057	-1.66	511.057	-1.66	511.057	-1.66	511.057	-1.66
-6.590	511.761	-4.800	-3.00	-3.500	511.536	-2.79	511.536	-2.79	511.536	-2.79	511.536	-2.79
-6.505	512.215	-4.800	-3.00	-3.500	512.045	-3.10	512.045	-3.10	512.045	-3.10	512.045	-3.10
-6.604	512.805	-4.800	-3.00	-3.500	512.589	-3.00	512.589	-3.00	512.589	-3.00	512.589	-3.00
-6.468	513.138	-4.800	-3.00	-3.500	513.017	-3.00	513.017	-3.00	513.017	-3.00	513.017	-3.00
-6.359	513.476	-4.800	-3.00	-3.500	513.464	-3.00	513.464	-3.00	513.464	-3.00	513.464	-3.00
-6.314	513.855	-4.800	-3.00	-3.500	513.889	-3.00	513.889	-3.00	513.889	-3.00	513.889	-3.00
-6.267	514.210	-4.800	-3.00	-3.500	514.261	-3.00	514.261	-3.00	514.261	-3.00	514.261	-3.00
-6.354	514.679	-4.800	-3.00	-3.500	514.671	-3.00	514.671	-3.00	514.671	-3.00	514.671	-3.00
-6.385	515.068	-4.800	-3.00	-3.500	515.030	-3.00	515.030	-3.00	515.030	-3.00	515.030	-3.00
-6.368	515.387	-4.800	-3.00	-3.500	515.367	-3.00	515.367	-3.00	515.367	-3.00	515.367	-3.00
-6.256	515.590	-4.800	-3.00	-3.500	515.681	-3.00	515.681	-3.00	515.681	-3.00	515.681	-3.00
-6.411	515.768	-4.800	-3.00	-3.500	515.973	-3.00	515.973	-3.00	515.973	-3.00	515.973	-3.00
-6.216	516.114	-4.800	-3.00	-3.500	516.254	-3.00	516.254	-3.00	516.254	-3.00	516.254	-3.00
-6.258	516.404	-4.800	-3.00	-3.500	516.493	-3.00	516.493	-3.00	516.493	-3.00	516.493	-3.00
-6.066	516.439	-4.800	-3.00	-3.500	516.681	-3.00	516.681	-3.00	516.681	-3.00	516.681	-3.00
-6.031	516.608	-4.800	-3.00	-3.500	516.885	-3.00	516.885	-3.00	516.885			

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo				Eixo				Lado Direito				
OFFSET		BORDO ACOSTAMENTO		BORDO PISTA DE ROLAMENTO				BORDO PISTA DE ROLAMENTO		BORDO ACOSTAMENTO	OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)
-11.238	538.691	-4.800	533.672	3.30	-3.500	533.629	3.30	533.514	533.258	3.30	533.258	537.157
-7.851	535.834	-4.800	534.221	3.30	-3.500	534.178	3.30	132+0.00	534.063	534.070	3.300	533.891
-7.891	536.309	-4.800	534.657	3.30	-3.500	534.614	3.30	133+0.00	534.496	534.525	3.300	534.327
-7.386	536.126	-4.800	534.979	3.30	-3.500	534.936	3.30	134+0.00	534.821	534.900	3.300	534.649
-6.288	535.238	-4.800	535.188	3.30	-3.500	535.145	3.30	135+0.00	535.030	535.135	3.300	534.858
-7.213	536.258	-4.800	535.284	3.30	-3.500	535.241	3.30	136+0.00	535.125	535.247	3.300	534.954
-6.494	535.526	-4.800	535.526	3.30	-3.500	535.526	3.30	136+19.171	535.111	535.267	3.300	534.909
-6.499	535.526	-4.800	535.266	3.30	-3.500	535.223	3.30	137+0.00	535.108	535.268	3.300	534.936
-6.808	535.705	-4.800	535.135	3.30	-3.500	535.092	3.30	138+0.00	534.977	535.149	3.300	534.805
-7.904	536.557	-4.800	534.891	3.30	-3.500	534.848	3.30	139+0.00	534.733	534.865	3.300	534.561
-8.475	536.770	-4.800	534.534	3.30	-3.500	534.491	3.30	140+0.00	534.475	534.526	3.300	534.204
-8.579	536.994	-4.800	534.963	3.30	-3.500	534.920	3.30	141+0.00	534.904	534.966	3.300	533.723
-8.250	535.522	-4.800	533.510	3.30	-3.500	533.468	3.30	142+0.00	533.352	533.571	3.300	533.180
-8.191	534.907	-4.800	532.955	3.30	-3.500	532.912	3.30	143+0.00	532.796	532.972	3.300	532.625
-9.428	535.649	-4.800	532.460	3.30	-3.500	532.417	3.30	143+17.796	532.302	532.582	3.300	532.130
-9.592	535.748	-4.800	532.396	3.24	-3.500	532.354	3.24	144+0.00	532.240	532.521	3.300	532.071
-9.468	535.034	-4.800	531.812	2.65	-3.500	531.777	2.65	145+0.00	531.665	531.963	3.300	531.524
-9.065	534.025	-4.800	531.223	1.97	-3.500	531.188	1.97	146+0.00	531.129	531.266	3.300	531.074
-9.334	533.708	-4.800	530.635	1.29	-3.500	530.618	1.29	147+0.00	530.573	530.671	3.300	530.422
-11.882	535.660	-4.800	530.046	0.61	-3.500	530.038	0.61	148+0.00	530.017	530.102	3.300	529.869
-8.933	532.181	-4.800	529.523	0.00	-3.500	529.523	0.00	148+17.796	529.523	529.613	3.300	529.739
-8.763	531.945	-4.800	529.458	-0.07	-3.500	529.459	-0.07	149+0.00	529.461	529.560	3.300	529.317
-11.727	534.313	-4.800	529.860	-0.75	-3.500	529.879	-0.75	150+0.00	529.905	529.936	3.300	529.036
-11.944	533.590	-4.800	528.297	-1.43	-3.500	528.316	-1.43	151+0.00	528.366	528.505	3.300	528.222
-10.104	531.587	-4.800	527.780	-2.11	-3.500	527.808	-2.11	152+0.00	527.882	528.035	3.300	527.738
-12.038	533.054	-4.800	527.322	-2.79	-3.500	527.358	-2.79	153+0.00	527.456	527.606	3.300	527.312
-8.988	529.623	-4.800	526.943	-3.00	-3.500	526.982	-3.00	154+0.00	527.087	527.225	3.300	526.943
-9.612	529.936	-4.800	526.632	-3.00	-3.500	526.671	-3.00	155+0.00	526.776	526.992	3.300	526.632
-6.481	526.552	-4.800	526.379	-3.00	-3.500	526.418	-3.00	156+0.00	526.523	526.650	3.300	526.379
-6.470	526.346	-4.800	526.184	-3.00	-3.500	526.223	-3.00	157+0.00	526.328	526.545	3.300	526.184
-6.377	526.114	-4.800	526.046	-3.00	-3.500	526.085	-3.00	158+0.00	526.190	526.386	3.300	526.046
-6.315	525.972	-4.800	525.965	-3.00	-3.500	526.004	-3.00	159+0.00	526.109	526.381	3.300	525.965
-6.207	525.842	-4.800	525.943	-3.00	-3.500	525.982	-3.00	160+0.00	526.027	526.391	3.300	525.943
-6.285	525.954	-4.800	526.001	-3.00	-3.500	526.041	-3.00	161+0.00	526.122	526.486	3.300	525.978
-6.360	526.122	-4.800	526.070	-3.00	-3.500	526.109	-3.00	162+0.00	526.214	526.592	3.300	526.070
-6.395	526.307	-4.800	526.220	-3.00	-3.500	526.259	-3.00	163+0.00	526.364	526.789	3.300	526.220
-6.527	526.647	-4.800	526.428	-3.00	-3.500	526.467	-3.00	164+0.00	526.572	526.996	3.300	526.428
-7.809	528.195	-4.800	526.694	-3.00	-3.500	526.733	-3.00	165+0.00	526.838	527.297	3.300	526.694
-8.164	528.873	-4.800	527.017	-3.00	-3.500	527.056	-3.00	166+0.00	527.161	527.594	3.300	527.017
-8.214	529.303	-4.800	527.307	-3.00	-3.500	527.434	-3.00	167+0.00	527.541	527.955	3.300	527.307
-8.201	529.729	-4.800	527.836	-3.00	-3.500	527.875	-3.00	168+0.00	527.980	528.389	3.300	527.836
-7.904	529.926	-4.800	528.330	-3.00	-3.500	528.369	-3.00	169+0.00	528.474	528.912	3.300	528.330
-7.555	530.088	-4.800	528.840	-3.00	-3.500	528.879	-3.00	170+0.00	528.984	529.428	3.300	528.840
-6.813	529.856	-4.800	529.351	-3.00	-3.500	529.390	-3.00	171+0.00	529.495	529.951	3.300	529.351
-6.718	530.272	-4.800	529.860	-3.00	-3.500	529.900	-3.00	172+0.00	530.004	530.486	3.300	529.860
-6.585	530.649	-4.800	530.372	-3.00	-3.500	530.411	-3.00	173+0.00	530.516	531.059	3.300	530.372
-6.517	531.091	-4.800	530.882	-3.00	-3.500	530.921	-3.00	174+0.00	531.026	531.624	3.300	530.882
-6.521	531.606	-4.800	531.392	-3.00	-3.500	531.431	-3.00	175+0.00	531.536	532.105	3.300	531.392
-6.478	532.072	-4.800	531.903	-3.00	-3.500	531.942	-3.00	176+0.00	532.047	532.635	3.300	531.903
-6.455	532.560	-4.800	532.413	-3.00	-3.500	532.462	-3.00	177+0.00	532.552	533.126	3.300	532.413
-6.495	533.511	-4.800	533.322	-3.00	-3.500	533.368	-3.00	178+0.00	533.463	534.037	3.300	533.322
-7.066	534.192	-4.800	533.434	-3.00	-3.500	533.473	-3.00	179+0.00	533.578	534.138	3.300	533.434
-7.699	535.336	-4.800	533.944	-3.00	-3.500	533.983	-3.00	180+0.00	534.088	534.612	3.300	533.944
VER INTERSEÇÃO 01												
-6.478	547.247	-4.800	547.077	-3.00	-3.500	547.116	-3.00	207+0.00	547.221	547.516	3.295	547.077
-6.537	547.762	-4.800	547.534	-3.00	-3.500	547.573	-3.00	208+0.00	547.678	547.984	3.306	547.534
-6.527	548.209	-4.800	547.990	-3.00	-3.500	548.020	-3.00	209+0.00	548.133	548.444	3.308	547.990
-6.599	548.738	-4.800	548.446	-3.00	-3.500	548.485	-3.00	210+0.00	548.590	548.824	3.304	548.446
-6.510	549.105	-4.800	548.903	-3.00	-3.500	548.942	-3.00	211+0.00	549.047	549.290	3.304	548.903
-6.491	549.542	-4.800	549.359	-3.00	-3.500	549.398	-3.00	212+0.00	549.503	549.775	3.272	549.359
-6.526	550.033	-4.800	549.816	-3.00	-3.500	549.855	-3.00	213+0.00	549.960	550.244	3.284	549.816
-6.564	550.527	-4.800	550.272	-3.00	-3.500	550.311	-3.00	214+0.00	550.416	550.662	3.246	550.272
-6.504	550.925	-4.800	550.728	-3.00	-3.500	550.767	-3.00	215+0.00	550.872	551.126	3.204	550.728
-6.516	551.393	-4.800	551.185	-3.00	-3.500	551.224	-3.00	216+0.00	551.329	551.541	3.212	551.185
-6.442	551.776	-4.800	551.641	-3.00	-3.500	551.680	-3.00	217+0.00	551.785	551.994	3.209	551.641
-6.445	552.234	-4.800	552.097	-3.00	-3.500	552.136	-3.00	218+0.00	552.241	552.437	3.196	552.097
-6.404	552.649	-4.800	552.554	-3.00	-3.500	552.593	-3.00	219+0.00	552.698	552.844	3.146	552.554
-6.406	553.100	-4.800	553.010	-3.00	-3.500	553.049	-3.00	220+0.00	553.154	553.310	3.106	553.010
-6.411	553.570	-4.800	553.467	-3.00	-3.500	553.466	-3.00	221+0.00	553.571	553.745	3.044	553.467
-6.400	554.015	-4.800	553.923	-3.00	-3.500	553.962	-3.00	222+0.00	554.067	554.185	3.118	553.923
-6.431	554.502	-4.800	554.379	-3.00	-3.500	554.418	-3.00	223+0.00	554.523	554.659	3.136	554.379
-6.423	554.951	-4.800	554.836	-3.00	-3.500	554.875	-3.00	224+0.00	554.980	555.123	3.143	554.836
-6.458	555.442	-4.800	555.292	-3.00	-3.500	555.331	-3.00	225+0.00	555.436	555.596	3.160	555.292
-6.459	555.900	-4.800	555.749	-3.00	-3.500	555.788	-3.00	226+0.00	555.893	556.058	3.123	555.749
-6.425	556.322	-4.800	556.205	-3.00	-3.500	556.244	-3.00	227+0.00	556.349	556.448	3.099	556.205
-6.458	556.811	-4.800	556.661	-3.00	-3.500	556.700	-3.00	228+0.00	556.805	556.918	3.113	556.661
-6.472	557.282	-4.800	557.118	-3.00	-3.500	557.157	-3.00	229+0.00	557.262	557.358	3.096	557.118
-6.452	557.718	-4.800	557.574	-3.00	-3.500	557.633	-3.00	230+0.00	557.718	557.822	3.104	557.574
-6.440	558.260	-4.800	558.080	-3.00	-3.500	558.160	-3.00	231+0.00	558.264	558.368	3.126	558.080
-6.491	559.770	-4.800	558.487	-3.00	-3.500	558.526	-3.00	232+0.00	558.637	558.783	3.152	558.487
-7.002	559.637	-4.800	558.943	-3.00	-3.500							

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo										Eixo										Lado Direito									
OFFSET		BORDO ACOSTAMENTO				BORDO PISTA DE ROLAMENTO				Estaca		P. N. Horizontal	P. N. Vertical	Cota Projeto		Cota Terreno		Cota Vermelha		BORDO PISTA DE ROLAMENTO				BORDO ACOSTAMENTO				OFFSET	
Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)													Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	
-7.277	573.237	-4.800	574.520	0.87	-3.500	574.509	0.87	288+00.00						574.478	573.837	-0.641	3.678	574.329	-3.00	4.978	574.329	-3.00	6.986	573.316	-3.00	6.986	573.316	-3.00	
-6.626	573.328	-4.800	574.165	1.99	-3.500	574.140	1.99	289+00.00						574.070	573.373	-0.697	3.802	573.917	-3.00	5.102	573.917	-3.00	7.186	572.833	-3.00	7.186	572.833	-3.00	
-6.710	572.930	-4.800	573.811	3.11	-3.500	573.770	3.11	290+00.00						573.662	572.864	-0.798	4.112	573.493	-3.11	5.412	573.493	-3.11	8.148	571.994	-3.11	8.148	571.994	-3.11	
-7.218	572.245	-4.800	573.453	4.16	-3.500	573.399	4.16	291+00.00						573.253	572.341	-0.912	4.160	573.026	-4.16	5.460	573.026	-4.16	8.239	571.486	-4.16	8.239	571.486	-4.16	
-7.272	572.129	-4.800	573.370	4.40	-3.500	573.313	4.40	291+618	SC					573.159	572.118	-0.921	4.100	572.921	-4.40	5.400	572.921	-4.40	8.239	571.014	-4.40	8.239	571.014	-4.40	
-7.302	571.795	-4.800	573.056	4.40	-3.500	572.999	4.40	292+00.00						572.845	571.854	-0.991	4.100	572.607	-4.40	5.400	572.607	-4.40	8.255	570.104	-4.40	8.255	570.104	-4.40	
-7.557	571.216	-4.800	572.648	4.40	-3.500	572.590	4.40	293+00.00						572.436	571.395	-1.041	4.100	572.199	-4.40	5.400	572.199	-4.40	8.398	570.510	-4.40	8.398	570.510	-4.40	
-7.613	570.771	-4.800	572.239	4.40	-3.500	572.182	4.40	294+00.00						572.028	570.942	-1.086	4.100	571.790	-4.40	5.400	571.790	-4.40	8.378	570.115	-4.40	8.378	570.115	-4.40	
-7.778	570.252	-4.800	571.831	4.40	-3.500	571.774	4.40	295+00.00						571.620	570.542	-1.158	4.100	571.382	-4.40	5.400	571.382	-4.40	8.745	569.642	-4.40	8.745	569.642	-4.40	
-7.880	569.776	-4.800	571.423	4.40	-3.500	571.365	4.40	296+00.00						571.211	569.991	-1.220	4.100	570.974	-4.40	5.400	570.974	-4.40	9.020	568.742	-4.40	9.020	568.742	-4.40	
-8.016	569.277	-4.800	571.014	4.40	-3.500	570.957	4.40	297+00.00						570.803	569.539	-1.264	4.100	570.565	-4.40	5.400	570.565	-4.40	9.250	568.402	-4.40	9.250	568.402	-4.40	
-7.988	568.900	-4.800	570.618	4.40	-3.500	570.561	4.40	298+00.00						570.407	569.125	-1.282	4.100	570.169	-4.40	5.400	570.169	-4.40	9.141	567.985	-4.40	9.141	567.985	-4.40	
-7.993	568.544	-4.800	570.265	4.40	-3.500	570.208	4.40	299+00.00						570.054	568.764	-1.290	4.100	569.916	-4.40	5.400	569.916	-4.40	9.140	567.633	-4.40	9.140	567.633	-4.40	
-8.291	568.036	-4.800	569.957	4.40	-3.500	569.899	4.40	300+00.00						569.745	568.451	-1.330	4.100	569.508	-4.40	5.400	569.508	-4.40	9.206	567.280	-4.40	9.206	567.280	-4.40	
-8.581	567.578	-4.800	569.692	4.40	-3.500	569.635	4.40	301+00.00						569.481	568.095	-1.386	4.100	569.243	-4.40	5.400	569.243	-4.40	9.489	566.827	-4.40	9.489	566.827	-4.40	
-8.750	567.245	-4.800	569.472	4.40	-3.500	569.415	4.40	302+00.00						569.261	567.813	-1.448	4.100	569.023	-4.40	5.400	569.023	-4.40	9.643	566.343	-4.40	9.643	566.343	-4.40	
-8.819	567.023	-4.800	569.296	4.40	-3.500	569.239	4.40	303+00.00						569.085	567.582	-1.503	4.100	568.847	-4.40	5.400	568.847	-4.40	9.766	566.247	-4.40	9.766	566.247	-4.40	
-9.246	566.607	-4.800	568.879	4.40	-3.500	568.822	4.40	304+00.00						568.953	567.373	-1.580	4.100	568.716	-4.40	5.400	568.716	-4.40	9.957	566.121	-4.40	9.957	566.121	-4.40	
-8.926	566.733	-4.800	569.077	4.40	-3.500	569.020	4.40	305+00.00						568.866	567.290	-1.576	4.100	568.628	-4.40	5.400	568.628	-4.40	9.670	566.092	-4.40	9.670	566.092	-4.40	
-8.496	566.976	-4.800	569.034	4.40	-3.500	568.977	4.40	306+00.00						568.823	567.288	-1.535	4.100	568.585	-4.40	5.400	568.585	-4.40	9.589	566.103	-4.40	9.589	566.103	-4.40	
-8.552	566.941	-4.800	569.035	4.40	-3.500	568.978	4.40	307+00.00						568.824	567.283	-1.541	4.100	568.586	-4.40	5.400	568.586	-4.40	9.419	566.271	-4.40	9.419	566.271	-4.40	
-8.579	566.968	-4.800	569.081	4.40	-3.500	569.023	4.40	308+00.00						568.869	567.345	-1.524	4.100	568.632	-4.40	5.400	568.632	-4.40	9.536	566.101	-4.40	9.536	566.101	-4.40	
-9.305	566.372	-4.800	569.169	4.40	-3.500	569.112	4.40	309+00.00						568.958	567.434	-1.524	4.100	568.720	-4.40	5.400	568.720	-4.40	9.446	566.131	-4.40	9.446	566.131	-4.40	
-8.897	566.946	-4.800	569.270	4.40	-3.500	569.213	4.40	310+00.00						569.059	567.473	-1.586	4.100	568.821	-4.40	5.400	568.821	-4.40	9.396	566.467	-4.40	9.396	566.467	-4.40	
-8.822	567.096	-4.800	569.371	4.40	-3.500	569.314	4.40	311+00.00						569.160	567.575	-1.585	4.100	568.922	-4.40	5.400	568.922	-4.40	9.396	566.566	-4.40	9.396	566.566	-4.40	
-8.802	567.158	-4.800	569.472	4.40	-3.500	569.414	4.40	312+00.00						569.260	567.645	-1.615	4.100	569.023	-4.40	5.400	569.023	-4.40	9.272	566.565	-4.40	9.272	566.565	-4.40	
-8.900	567.189	-4.800	569.517	4.40	-3.500	569.460	4.40	312+962						569.306	567.710	-1.596	4.100	569.069	-4.40	5.400	569.069	-4.40	9.142	566.624	-4.40	9.142	566.624	-4.40	
-8.910	567.239	-4.800	569.572	4.40	-3.500	569.515	4.40	313+00.00						569.361	567.781	-1.580	4.100	569.124	-4.40	5.400	569.124	-4.40	9.472	566.124	-4.40	9.472	566.124	-4.40	
-8.935	567.350	-4.800	569.617	4.40	-3.500	569.612	4.40	314+00.00						569.466	567.841	-1.519	4.100	569.225	-4.40	5.400	569.225	-4.40	9.337	566.910	-4.40	9.337	566.910	-4.40	
-8.886	567.457	-4.800	569.774	4.40	-3.500	569.717	4.40	315+00.00						569.563	568.129	-1.434	4.100	569.325	-4.40	5.400	569.325	-4.40	9.653	566.800	-4.40	9.653	566.800	-4.40	
-8.606	567.745	-4.800	569.875	4.40	-3.500	569.818	4.40	316+00.00						569.664	568.303	-1.361	4.100	569.426	-4.40	5.400	569.426	-4.40	9.516	566.692	-4.40	9.516	566.692	-4.40	
-8.493	567.920	-4.800	569.976	4.40	-3.500	569.919	4.40	317+00.00						569.765	568.474	-1.291	4.100	569.527	-4.40	5.400	569.527	-4.40	9.823	566.580	-4.40	9.823	566.580	-4.40	
-8.369	568.104	-4.800	570.077	4.40	-3.500	570.020	4.40	318+00.00						569.866	568.689	-1.177	4.100	569.628	-4.40	5.400	569.628	-4.40	9.012	567.530	-4.40	9.012	567.530	-4.40	
-8.438	568.159	-4.800	570.178	4.40	-3.500	570.121	4.40	319+00.00						569.966	568.866	-1.100	4.100	569.729	-4.40	5.400	569.729	-4.40	9.906	566.998	-4.40	9.906	566.998	-4.40	
-8.311	568.345	-4.800	570.278	4.40	-3.500	570.221	4.40	320+00.00						570.067	568.969	-1.071	4.100	569.830	-4.40	5.400	569.830	-4.40	10.120	566.993	-4.40	10.120	566.993	-4.40	
-8.332	568.431																												

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo				Eixo				Lado Direito			
BORDO ACOSTAMENTO				BORDO PISTA DE ROLAMENTO				BORDO PISTA DE ROLAMENTO			
Offset	Cota (m)	Afast. (m)	Incl. (%)	Offset	Cota (m)	Incl. (%)	Offset	Cota (m)	Incl. (%)	Offset	Cota (m)
-7.025	525.310	-3.00	-3.00	423+0.00			526.366	526.366	-1.78	4799	534.776
-6.766	524.468	-3.00	-3.00	424+0.00			525.467	524.488	-0.979	4.797	525.495
-6.210	524.249	-4.800	524.863	-3.00	-3.500	524.902	-3.00	424+10.001	ST	3.500	525.007
-6.566	523.552	-4.800	524.404	-3.00	-3.500	524.443	-3.00	425+0.00		3.500	524.519
-6.457	522.705	-4.800	523.484	-3.00	-3.500	523.523	-3.00	426+0.00		3.500	523.543
-7.396	521.160	-4.800	522.265	-3.00	-3.500	522.604	-3.00	427+0.00		3.500	522.567
-5.945	521.646	-3.00	-3.00	428+0.00			521.646	521.646	-1.770	4.800	521.646
-6.911	519.645	-4.800	520.726	-3.00	-3.500	520.765	-3.00	429+0.00		3.500	520.726
-6.344	519.103	-4.800	519.807	-3.00	-3.500	519.846	-3.00	430+0.00		4.800	519.807
-6.972	517.765	-4.800	518.888	-3.00	-3.500	518.927	-3.00	431+0.00		4.800	518.888
-7.170	516.714	-4.800	517.968	-3.00	-3.500	518.007	-3.00	432+0.00		4.800	517.968
-6.771	516.060	-4.800	517.249	-3.00	-3.500	517.083	-3.00	433+0.00		4.800	517.049
-7.968	514.343	-4.800	516.130	-3.00	-3.500	516.169	-3.00	434+0.00	PCV	3.500	516.130
-7.681	513.738	-4.800	515.322	-1.98	-3.500	515.348	-1.98	435+0.00		4.800	515.273
-9.073	512.143	-4.800	514.644	-0.90	-3.500	514.655	-0.90	436+0.00		4.800	514.543
-9.413	511.455	-4.800	514.172	0.00	-3.500	514.172	0.00	436+16.748	TS	4.800	514.028
-9.618	511.239	-4.800	514.091	0.18	-3.500	514.089	0.18	437+0.00		4.844	513.937
-11.582	509.515	-4.800	513.664	1.36	-3.500	513.664	1.36	438+0.00		5.077	513.451
-13.022	508.266	-4.800	513.363	2.34	-3.500	513.333	2.34	439+0.00		5.142	513.097
-14.192	507.321	-4.800	513.187	3.40	-3.500	513.143	3.40	440+0.00		5.493	512.838
-16.486	505.753	-4.800	513.136	4.43	-3.500	513.078	4.43	441+0.00		5.691	512.671
-21.144	504.620	-4.800	513.190	5.30	-3.500	513.121	5.30	441+16.748	SC	5.400	512.649
-21.628	504.310	-4.800	513.203	5.30	-3.500	513.134	5.30	442+0.00		5.400	512.662
-24.995	502.216	-4.800	513.353	5.30	-3.500	513.285	5.30	443+0.00		5.400	512.813
-22.634	504.067	-4.800	513.630	5.30	-3.500	513.561	5.30	444+0.00		5.400	513.090
-16.291	506.789	-4.800	514.033	5.30	-3.500	513.964	5.30	445+0.00		5.400	513.492
-14.009	508.839	-4.800	514.561	5.30	-3.500	514.493	5.30	446+0.00		5.400	514.021
-10.318	511.954	-4.800	515.216	5.30	-3.500	515.147	5.30	447+0.00		5.400	514.675
-6.736	515.122	-4.800	515.996	5.30	-3.500	515.927	5.30	448+0.00		5.400	514.556
-6.389	517.075	-4.800	516.903	5.30	-3.500	516.834	5.30	449+0.00		5.400	516.362
-6.308	518.027	-4.800	517.935	5.30	-3.500	517.866	5.30	450+0.00		5.400	517.394
-6.905	519.781	-4.800	519.093	5.30	-3.500	519.024	5.30	451+0.00		5.400	518.552
-7.196	521.556	-4.800	520.377	5.30	-3.500	520.308	5.30	452+0.00	PTV	5.400	519.836
-6.291	521.798	-4.800	521.724	5.30	-3.500	521.645	5.30	453+0.00		5.400	521.183
-6.186	522.632	-4.800	522.663	5.30	-3.500	522.594	5.30	453+13.945		5.400	522.122
-6.070	522.924	-4.800	523.071	5.30	-3.500	523.002	5.30	454+0.00		5.400	522.530
-6.058	523.995	-4.800	524.418	5.30	-3.500	524.349	5.30	455+0.00		5.400	523.877
-5.945	525.418	-4.800	525.765	5.30	-3.500	525.696	5.30	456+0.00		5.400	525.224
-6.587	526.337	-4.800	527.112	5.30	-3.500	527.043	5.30	457+0.00		5.400	526.571
-5.920	528.162	-4.800	528.458	5.30	-3.500	528.389	5.30	458+0.00		5.400	527.918
-6.915	528.812	-4.800	529.805	5.30	-3.500	529.737	5.30	459+0.00		5.400	529.265
-7.060	530.062	-4.800	531.152	5.30	-3.500	531.083	5.30	460+0.00	PCV	5.400	530.612
-8.022	530.380	-4.800	532.458	5.30	-3.500	532.389	5.30	461+0.00		5.400	531.917
-9.223	531.148	-4.800	533.680	5.30	-3.500	533.611	5.30	462+0.00		5.400	533.140
-9.116	532.539	-4.800	534.820	5.30	-3.500	534.751	5.30	463+0.00		5.400	534.279
-9.136	533.402	-4.800	535.876	5.30	-3.500	535.808	5.30	464+0.00		5.400	535.336
-9.394	534.204	-4.800	536.850	5.30	-3.500	536.781	5.30	465+0.00		5.400	536.309
-8.606	535.236	-4.800	537.356	5.30	-3.500	537.288	5.30	466+11.141	CS	5.400	536.816
-9.298	535.132	-4.800	537.719	4.84	-3.500	537.656	4.84	465+0.00		5.612	537.215
-8.725	536.240	-4.800	538.479	5.30	-3.500	538.410	5.30	467+0.00		5.634	538.080
-9.033	536.718	-4.800	539.157	2.76	-3.500	539.115	2.76	468+0.00		5.141	538.865
-7.832	538.096	-4.800	539.741	1.68	-3.500	539.719	1.68	469+0.00		5.131	539.507
-8.412	538.204	-4.799	540.248	0.60	-3.499	540.240	0.60	470+0.00		4.947	540.071
-8.449	538.421	-4.800	540.495	0.00	-3.500	540.495	0.00	470+11.141	ST	4.800	540.351
-8.455	538.589	-4.800	540.672	-0.48	-3.500	540.679	-0.48	471+0.00		4.800	540.551
-8.180	539.102	-4.800	541.013	-1.56	-3.500	541.013	-1.56	472+0.00		4.800	540.844
-7.636	539.710	-4.800	541.272	-2.64	-3.500	541.306	-2.64	473+0.00		4.800	541.254
-8.160	539.567	-4.800	541.481	-3.00	-3.500	541.520	-3.00	474+0.00		4.800	541.481
-7.340	540.257	-4.800	541.625	-3.00	-3.500	541.664	-3.00	475+0.00	PTV	4.800	541.625
-7.172	540.472	-4.800	541.728	-3.00	-3.500	541.767	-3.00	476+0.00		4.800	541.728
-6.703	540.887	-4.800	541.930	-3.00	-3.500	541.969	-3.00	477+0.00		4.800	541.930
-6.749	540.959	-4.800	541.933	-3.00	-3.500	541.977	-3.00	478+0.00		4.800	541.933
-6.499	541.238	-4.800	542.035	-3.00	-3.500	542.074	-3.00	479+0.00		4.800	542.035
-6.568	541.285	-4.800	542.138	-3.00	-3.500	542.177	-3.00	480+0.00		4.800	542.138
-5.905	541.829	-4.800	542.241	-3.00	-3.500	542.280	-3.00	481+0.00		4.800	542.241
-6.599	541.469	-4.800	542.343	-3.00	-3.500	542.382	-3.00	482+0.00		4.800	542.343
-6.608	541.566	-4.800	542.446	-3.00	-3.500	542.485	-3.00	483+0.00		4.800	542.446
-6.451	541.773	-4.800	542.548	-3.00	-3.500	542.587	-3.00	484+0.00		4.800	542.548
-6.352	541.942	-4.800	542.651	-3.00	-3.500	542.690	-3.00	485+0.00		4.800	542.651
-6.423	541.997	-4.800	542.753	-3.00	-3.500	542.792	-3.00	486+0.00		4.800	542.753
-6.329	542.162	-4.800	542.856	-3.00	-3.500	542.895	-3.00	487+0.00		4.800	542.856
-6.290	542.291	-4.800	542.959	-3.00	-3.500	542.998	-3.00	488+0.00		4.800	542.959
-6.533	542.231	-4.800	543.061	-3.00	-3.500	543.100	-3.00	489+0.00		4.800	543.061
-6.706	542.421	-4.800	543.164	-3.00	-3.500	543.203	-3.00	490+0.00		4.800	543.164
-6.058	542.753	-4.800	543.266	-3.00	-3.500	543.305	-3.00	491+0.00		4.800	543.266
-6.112	542.820	-4.800	543.369	-3.00	-3.500	543.408	-3.00	492+0.00		4.800	543.369
-6.648	542.565	-4.800	543.471	-3.00	-3.500	543.510	-3.00	493+0.00		4.800	543.471
-6.715	542.623	-4.800	543.574	-3.00	-3.500	543.613	-3.00	494+0.00		4.800	543.574
-6.663	542.760	-4.800	543.677	-3.00	-3.500	543.716	-3.00	495+0.00		4.800	543.677
-6.704	542.835	-4.800	543.779	-3.00	-3.500	543.818	-3.00	496+0.00		4.800	543.779
-6.612	542.999	-4.800	543.882	-3.00	-3.500	543.921	-3.00	497+0.00		4.800	543.882
-6.600	543.110	-4.800	543.984	-3.00	-3.500	544.023	-3.00	498+0.00		4.800	543.984
-6.546	543.248	-4.800	544.087	-3.00	-3.500	544.126	-3.00	499+0.00		4.800	544.087
-6.596	543.318	-4.800	544.189	-3.00	-3.500	544.238	-3.00	500+0.00	PCV	4.800	544.189
-6.561	543.448	-4.800	544.296	-3.00	-3.500	544.335	-3.00	501+0.00		4.800	544.296
-6.423	543.678	-4.800	544.435	-3.00	-3.500	544.474	-3.00	502+0.00		4.800	544.435
-6.330	543.915	-4.800	544.610	-3.00	-3.500	544.649	-3.00	503+0.00		4.800	544.610
-6.225	544.196	-4.800	544.821	-3.00	-3.500	544.860	-3.00	504+0.00		4.800	544.821
-6.297	544.196	-4.800	545.068	-3.00	-3.500	545.107	-3.00	505+0.00		4.800	545.068
-6.325	544.660	-4.800	545.351	-3.00	-3.500	545.390	-3.00	506+0.00		4.800	545.351
-6.269	545.017	-4.800	545.670	-3.00	-3.500	545.709	-3.00	507+0.00		4.800	545.670
-6.488	545.226	-4.800	546.026	-3.00	-3.500	546.065	-3.00	508+0.00		4.800	546.026
-6.475	545.626	-4.80									

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo										Lado Direito									
BORDO ACOSTAMENTO					BORDO PISTA DE ROLAMENTO					BORDO PISTA DE ROLAMENTO					BORDO ACOSTAMENTO				
OFFSET	Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Inc. (%)	Afast. (m)	Cota (m)	Inc. (%)		Afast. (m)	Cota (m)	Inc. (%)	Afast. (m)	Cota (m)	Inc. (%)	Afast. (m)	Cota (m)	Inc. (%)	OFFSET
									Estaca										
									P.N. Horizontal										
									P.N. Vertical										
									Cota Projeto										
									Cota Terraço										
									Cota Vermelha										
-7.465	565.811	-4.800	566.908	-3.00	-3.500	566.947	-3.00	556+0.00	567.061	567.061	-4.798	567.099	567.099	0.00	4.798	567.099	0.00	7.465	565.811
-7.548	565.401	-4.800	566.908	-3.00	-3.500	566.947	-3.00	556+6.359	567.052	566.558	-1.494	3.500	567.052	0.00	4.800	567.052	0.00	7.548	565.401
-7.668	565.289	-4.800	566.876	-3.00	-3.500	566.915	-3.00	557+0.000	567.020	566.490	-1.530	3.500	566.981	-0.81	4.800	566.981	-0.81	7.572	565.616
-7.629	565.239	-4.800	566.800	-3.00	-3.500	566.839	-3.00	558+0.000	566.944	565.418	-1.526	3.500	566.849	-1.99	4.800	566.849	-1.99	7.422	565.343
-7.500	565.214	-4.800	566.689	-3.00	-3.500	566.728	-3.00	559+0.000	566.833	565.312	-1.521	3.500	566.689	-3.00	4.800	566.689	-3.00	7.366	565.407
-7.474	565.087	-4.800	566.584	-3.00	-3.500	566.583	-3.00	560+0.000	566.688	565.198	-1.490	3.500	566.544	-3.00	4.800	566.544	-3.00	7.086	565.345
-7.567	564.844	-4.800	566.363	-3.00	-3.500	566.460	-3.00	561+0.000	566.577	565.011	-1.486	3.500	566.363	-3.00	4.800	566.363	-3.00	7.392	564.860
-7.717	564.528	-4.800	566.147	-3.00	-3.500	566.186	-3.00	562+0.000	566.291	564.998	-1.493	3.500	566.147	-3.00	4.800	566.147	-3.00	7.638	564.581
-7.729	564.269	-4.800	565.897	-3.00	-3.500	565.936	-3.00	563+0.000	566.041	564.182	-1.859	3.500	565.897	-3.00	4.800	565.897	-3.00	7.835	564.199
-7.875	563.887	-4.800	565.611	-3.00	-3.500	565.650	-3.00	564+0.000	565.755	563.822	-1.933	3.500	565.611	-3.00	4.800	565.611	-3.00	7.914	563.861
-6.920	564.203	-4.800	565.291	-3.00	-3.500	565.330	-3.00	565+0.000	565.435	563.526	-1.909	3.500	565.291	-3.00	4.800	565.291	-3.00	7.851	563.582
-7.037	563.130	-4.800	564.925	-3.00	-3.500	564.975	-3.00	566+0.000	566.079	563.187	-1.921	3.500	564.925	-3.00	4.800	564.925	-3.00	7.681	563.230
-7.926	562.786	-4.800	564.545	-3.00	-3.500	564.584	-3.00	567+0.000	564.689	562.791	-1.898	3.500	564.545	-3.00	4.800	564.545	-3.00	7.839	562.844
-7.882	562.390	-4.800	564.119	-3.00	-3.500	564.158	-3.00	568+0.000	564.263	562.394	-1.869	3.500	564.119	-3.00	4.800	564.119	-3.00	7.536	562.621
-7.642	562.090	-4.800	563.659	-3.00	-3.500	563.698	-3.00	569+0.000	563.803	562.123	-1.860	3.500	563.659	-3.00	4.800	563.659	-3.00	7.464	562.075
-7.407	561.751	-4.800	563.164	-3.00	-3.500	563.203	-3.00	570+0.000	563.308	561.888	-1.420	3.500	563.164	-3.00	4.800	563.164	-3.00	7.341	561.795
-7.339	561.283	-4.800	562.651	-3.00	-3.500	562.690	-3.00	571+0.000	562.795	561.186	-1.469	3.500	562.651	-3.00	4.800	562.651	-3.00	7.321	561.297
-7.630	560.577	-4.800	562.138	-3.00	-3.500	562.177	-3.00	572+0.000	562.282	560.500	-1.782	3.500	562.138	-3.00	4.800	562.138	-3.00	6.795	561.134
-7.643	560.055	-4.800	561.625	-3.00	-3.500	561.664	-3.00	573+0.000	561.769	559.975	-1.794	3.500	561.625	-3.00	4.800	561.625	-3.00	7.092	560.423
-7.640	559.544	-4.800	561.112	-3.00	-3.500	561.151	-3.00	574+0.000	561.256	559.518	-1.738	3.500	561.112	-3.00	4.800	561.112	-3.00	6.928	560.019
-7.524	559.109	-4.800	560.600	-3.00	-3.500	560.639	-3.00	575+0.000	560.744	559.115	-1.629	3.500	560.600	-3.00	4.800	560.600	-3.00	7.349	559.126
-7.561	558.572	-4.800	560.087	-3.00	-3.500	560.126	-3.00	576+0.000	560.231	558.770	-1.461	3.500	560.087	-3.00	4.800	560.087	-3.00	7.049	558.912
-7.932	557.811	-4.800	559.591	-3.00	-3.500	559.631	-3.00	577+0.000	559.718	558.061	-1.451	3.500	559.591	-3.00	4.800	559.591	-3.00	6.971	558.452
-8.209	557.114	-4.800	559.061	-3.00	-3.500	559.100	-3.00	578+0.000	559.205	557.189	-2.016	3.500	559.061	-3.00	4.800	559.061	-3.00	6.979	557.934
-8.296	556.543	-4.800	558.548	-3.00	-3.500	558.587	-3.00	579+0.000	558.692	556.644	-2.048	3.500	558.548	-3.00	4.800	558.548	-3.00	6.601	557.673
-8.307	556.023	-4.800	558.035	-3.00	-3.500	558.074	-3.00	580+0.000	558.179	555.988	-2.191	3.500	558.035	-3.00	4.800	558.035	-3.00	6.886	556.970
-8.500	555.382	-4.800	557.523	-3.00	-3.500	557.562	-3.00	581+0.000	557.667	555.405	-2.262	3.500	557.523	-3.00	4.800	557.523	-3.00	7.377	556.130
-8.648	554.770	-4.800	557.010	-3.00	-3.500	557.049	-3.00	582+0.000	557.154	554.753	-2.401	3.500	557.010	-3.00	4.800	557.010	-3.00	7.586	555.478
-8.793	554.149	-4.800	556.259	-3.00	-3.500	556.318	-3.00	583+0.000	556.441	554.278	-2.362	3.500	556.259	-3.00	4.800	556.259	-3.00	8.029	554.070
-9.099	553.444	-4.800	555.984	-3.00	-3.500	556.023	-3.00	584+0.000	556.128	553.288	-2.840	3.500	555.984	-3.00	4.800	555.984	-3.00	8.254	554.007
-9.112	552.922	-4.800	555.471	-3.00	-3.500	555.510	-3.00	585+0.000	555.615	552.870	-2.745	3.500	555.471	-3.00	4.800	555.471	-3.00	9.086	552.940
-9.101	552.416	-4.800	554.959	-3.00	-3.500	554.998	-3.00	586+0.000	555.103	552.459	-2.644	3.500	554.959	-3.00	4.800	554.959	-3.00	8.665	552.707
-9.176	551.854	-4.800	554.446	-3.00	-3.500	554.485	-3.00	587+0.000	554.590	551.769	-2.821	3.500	554.446	-3.00	4.800	554.446	-3.00	9.597	551.737
-9.709	550.086	-4.800	553.933	-3.00	-3.500	553.972	-3.00	588+0.000	554.077	551.288	-2.992	3.500	553.933	-3.00	4.800	553.933	-3.00	8.230	552.838
-9.823	550.597	-4.800	553.420	-3.00	-3.500	553.459	-3.00	589+0.000	553.564	550.350	-3.214	3.500	553.420	-3.00	4.800	553.420	-3.00	8.444	551.316
-9.398	550.167	-4.800	552.907	-3.00	-3.500	552.946	-3.00	590+0.000	553.051	549.741	-3.310	3.500	552.907	-3.00	4.800	552.907	-3.00	9.137	550.341
-9.590	549.526	-4.800	552.394	-3.00	-3.500	552.433	-3.00	591+0.000	552.538	549.270	-3.268	3.500	552.394	-3.00	4.800	552.394	-3.00	9.107	549.848
-9.809	548.868	-4.800	551.882	-3.00	-3.500	551.921	-3.00	592+0.000	552.026	548.672	-3.354	3.500	551.882	-3.00	4.800	551.882	-3.00	9.056	549.370
-9.945	548.264	-4.800	551.369	-3.00	-3.500	551.408	-3.00	593+0.000	552.131	548.086	-3.427	3.500	551.369	-3.00	4.800	551.369	-3.00	9.466	548.863
-9.953	547.746	-4.800	550.856	-3.00	-3.500	550.895	-3.00	594+0.000	552.235	547.540	-3.496	3.500	550.856	-3.00	4.800	550.856	-3.00	9.974	547.732
-9.725	547.385	-4.800	550.343	-3.00	-3.500	550.382	-3.00	595+0.000	550.487	546.914	-3.573	3.500	550.343	-3.00	4.800	550.343	-3.00	9.645	547.439
-10.208	546.550	-4.800	549.830	-3.00	-3.500	549.869	-3.00	596+0.000	549.974	546.655	-3.319	3.500	549.830	-3.00	4.800	549.830	-3.00	9.863	546.781
-10.329	545.957	-4.800	549.318	-3.00	-3.500	549.357	-3.00	597+0.000	549.462	545.892	-3.570	3.500	549.318	-3.00	4.800	549.318	-3.00	9.697	546.378
-10.154	545.561	-4.800	548.805	-3.00	-3.500	548.844	-3.00	598+0.000	549.469	545.376	-3.573	3.500	548.805	-3.00	4.800	548.805	-3.00	9.836	545.773
-9.866	545.240	-4.800	548.292	-3.00	-3.500	548.331	-3.00	599+0.000	549.436	544.981	-3.485	3.500	548.292	-3.00	4.800	548.292	-3.00	9.480	545.364
-10.189	544.512	-4.800	547.779	-3.00	-3.500	547.818	-3.00	600+0.000	547.923	544.128	-3.795	3.500	547.779	-3.00	4.800	547.779	-3.00	9.797	544.773
-9.847	544.227	-4.800	547.266	-3.00	-3.500	547.305	-3.00	601+0.000	547.410	543.529	-3.881	3.500	547.266	-3.00	4.800	547.266	-3.00	9.967	544.147
-10.230	543.459	-4.800	546.753	-3.00	-3.500	546.792	-3.00	602+0.000	546.897	543.093	-3.804	3.500	546.753	-3.00	4.800	546.753	-3.00	10.010	543.605
-9.705	543.296	-4.800	546.241	-3.00	-3.500	546.280	-3.00	603+0.000	546.385	542.821	-3.564	3.500	546.241	-3.00	4.800	546.241	-3.00	9.575	543.383
-10.357	542.149	-4.800	545.428	-3.00	-3.500	545.467	-3.00	604+0.000	546.487	542.048	-3.578	3.500	545.428	-3.00	4.800	545.428	-3.00	10.277	54

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo							Eixo							Lado Direito						
BORDO ACOSTAMENTO				BORDO PISTA DE ROLAMENTO				Cota Projeto				BORDO PISTA DE ROLAMENTO				BORDO ACOSTAMENTO				
Afast. (m)	Cota (m)	Afast. (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Estaca	P.N. Horizontal	P.N. Vertical	Cota Terreno	Cota Vermecha	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Offset		
-8.259	512.720	-4.799	514.647	1.85	-3.499	514.623	1.85	694+0.00		514.559	512.722	-2.287	3.934	514.402	-3.00	5.234	514.402	-3.00	7.264	
-7.964	512.189	-4.798	513.924	0.43	-3.498	513.918	0.43	695+0.00		513.903	511.689	-2.214	3.619	513.756	-3.00	4.919	513.756	-3.00	7.530	
-7.946	511.951	-4.800	513.702	0.00	-3.500	513.702	0.00	695+0.00	ST	513.702	511.485	-2.217	3.500	513.558	-3.00	4.800	513.558	-3.00	7.435	
-7.800	511.528	-4.800	513.181	-0.99	-3.500	513.181	-0.99	696+0.00		513.228	510.985	-2.243	3.500	513.085	-3.00	4.680	513.085	-3.00	7.300	
-8.051	510.582	-4.800	512.418	-2.41	-3.500	512.450	-2.41	697+0.00		512.534	510.244	-2.290	3.500	512.190	-3.00	4.800	512.190	-3.00	7.304	
-7.956	509.898	-4.800	511.676	-3.00	-3.500	511.715	-3.00	698+0.00		511.820	509.467	-2.353	3.500	511.676	-3.00	4.800	511.676	-3.00	7.252	
-8.213	508.995	-4.800	510.943	-3.00	-3.500	510.982	-3.00	699+0.00		511.087	508.725	-2.362	3.500	510.943	-3.00	4.800	510.943	-3.00	7.292	
-8.035	508.358	-4.800	510.190	-3.00	-3.500	510.229	-3.00	700+0.00		510.334	507.895	-2.439	3.500	510.190	-3.00	4.800	510.190	-3.00	7.386	
-8.381	507.355	-4.800	509.417	-3.00	-3.500	509.456	-3.00	701+0.00		509.561	507.152	-2.409	3.500	509.417	-3.00	4.800	509.417	-3.00	7.471	
-7.825	506.934	-4.800	508.646	-3.00	-3.500	508.664	-3.00	702+0.00		508.769	506.739	-2.479	3.500	508.625	-3.00	4.800	508.625	-3.00	7.565	
-8.158	505.900	-4.800	507.814	-3.00	-3.500	507.833	-3.00	703+0.00		507.958	505.721	-2.237	3.500	507.814	-3.00	4.800	507.814	-3.00	7.837	
-7.937	505.577	-4.800	506.983	-3.00	-3.500	507.022	-3.00	704+0.00		507.127	505.058	-2.069	3.500	506.983	-3.00	4.800	506.983	-3.00	8.055	
-7.888	504.399	-4.800	506.133	-3.00	-3.500	506.172	-3.00	705+0.00		506.277	503.999	-2.278	3.500	506.133	-3.00	4.800	506.133	-3.00	8.267	
-8.471	503.140	-4.800	505.263	-3.00	-3.500	505.302	-3.00	706+0.00		505.407	502.963	-2.444	3.500	505.263	-3.00	4.800	505.263	-3.00	8.283	
-7.802	502.697	-4.800	504.412	-3.00	-3.500	504.412	-3.00	707+0.00		504.517	502.117	-2.403	3.500	504.373	-3.00	4.800	504.373	-3.00	8.403	
-8.405	501.386	-4.800	503.464	-3.00	-3.500	503.503	-3.00	708+0.00		503.608	500.820	-2.788	3.500	503.464	-3.00	4.800	503.464	-3.00	8.963	
-8.398	500.462	-4.800	502.536	-3.00	-3.500	502.575	-3.00	709+0.00		502.680	500.368	-2.312	3.500	502.536	-3.00	4.800	502.536	-3.00	9.098	
-8.941	499.152	-4.800	501.587	-3.00	-3.500	501.626	-3.00	710+0.00		501.731	499.130	-2.601	3.500	501.587	-3.00	4.800	501.587	-3.00	9.478	
-8.876	498.228	-4.800	500.620	-3.00	-3.500	500.659	-3.00	711+0.00		500.764	498.154	-2.610	3.500	500.620	-3.00	4.800	500.620	-3.00	9.710	
-8.788	497.300	-4.800	499.633	-3.00	-3.500	499.672	-3.00	712+0.00		499.777	497.170	-2.607	3.500	499.633	-3.00	4.800	499.633	-3.00	9.866	
-8.216	496.675	-4.800	498.626	-3.00	-3.500	498.665	-3.00	713+0.00		498.770	496.078	-2.697	3.500	498.626	-3.00	4.800	498.626	-3.00	10.06	
-8.540	495.432	-4.800	497.600	-3.00	-3.500	497.639	-3.00	714+0.00		497.744	495.022	-2.722	3.500	497.600	-3.00	4.800	497.600	-3.00	10.280	
-8.679	494.294	-4.800	496.555	-3.00	-3.500	496.594	-3.00	715+0.00		496.699	494.078	-2.621	3.500	496.555	-3.00	4.800	496.555	-3.00	10.793	
-7.843	493.787	-4.800	495.490	-3.00	-3.500	495.529	-3.00	716+0.00		495.634	493.322	-2.312	3.500	495.490	-3.00	4.800	495.490	-3.00	11.457	
-7.745	492.767	-4.800	494.405	-3.00	-3.500	494.444	-3.00	717+0.00		494.549	492.714	-1.835	3.500	494.405	-3.00	4.800	494.405	-3.00	11.766	
-7.234	492.004	-4.800	493.301	-3.00	-3.500	493.340	-3.00	718+0.00		493.455	492.149	-1.296	3.500	493.301	-3.00	4.800	493.301	-3.00	12.061	
-6.306	491.498	-4.800	492.177	-3.00	-3.500	492.216	-3.00	719+0.00		492.331	491.192	-1.138	3.500	492.177	-3.00	4.800	492.177	-3.00	12.328	
-6.272	490.998	-4.800	491.034	-3.00	-3.500	491.073	-3.00	720+0.00	PTV	491.178	491.304	0.126	3.500	491.034	-3.00	4.800	491.034	-3.00	12.687	
-7.039	490.612	-4.800	489.881	-3.00	-3.500	489.920	-3.00	721+0.00		490.025	490.905	0.880	3.500	489.881	-3.00	4.800	489.881	-3.00	13.035	
-7.865	490.285	-4.800	488.728	-3.00	-3.500	488.767	-3.00	722+0.00		488.872	490.511	1.639	3.500	488.728	-3.00	4.800	488.728	-3.00	13.403	
-8.778	490.046	-4.800	487.576	-3.00	-3.500	487.615	-3.00	723+0.00		487.720	491.171	2.451	3.500	487.576	-3.00	4.800	487.576	-3.00	13.824	
-9.719	489.834	-4.800	486.462	-3.00	-3.500	486.462	-3.00	724+0.00		486.567	490.322	3.755	3.500	486.462	-3.00	4.800	486.462	-3.00	14.303	
-10.678	489.640	-4.800	485.309	-3.00	-3.500	485.309	-3.00	725+0.00		485.414	490.880	4.166	3.500	485.309	-3.00	4.800	485.309	-3.00	14.991	
-11.665	489.474	-4.800	484.117	-3.00	-3.500	484.156	-3.00	726+0.00		484.261	489.295	5.034	3.500	484.182	-1.64	4.800	484.182	-1.64	15.827	
-12.543	489.199	-4.800	483.064	-3.00	-3.500	483.063	-3.00	727+0.00		483.108	488.967	5.859	3.500	483.093	-0.31	4.800	483.093	-0.31	16.578	
-12.727	489.115	-4.800	482.066	-3.00	-3.500	482.175	-3.00	727+0.652	TS	482.840	488.855	6.015	3.500	482.840	0.00	4.800	482.840	0.00	16.802	
-13.709	488.786	-5.214	-81.799	-3.00	-3.914	481.838	-3.00	728+0.00		481.955	488.540	6.585	3.497	482.004	1.02	4.797	482.004	1.02	17.517	
-17.949	488.432	-5.554	-480.636	-3.00	-4.254	480.675	-3.00	729+0.00		480.805	487.440	3.365	3.500	480.805	-2.36	4.800	480.805	-2.36	18.282	
-18.684	488.103	-5.425	-479.450	-3.68	-4.125	479.498	-3.68	730+0.00		479.649	487.550	3.791	3.498	479.826	3.68	4.798	479.826	3.68	17.802	
-20.176	487.144	-6.390	-478.178	-4.38	-5.090	478.243	-4.38	731+0.00		478.497	486.825	8.328	3.499	478.736	4.98	4.799	478.736	4.98	17.939	
-21.004	486.370	-6.909	-476.909	-6.29	-5.609	476.991	-6.29	732+0.00		477.344	486.020	8.676	3.500	477.646	6.29	4.800	477.646	6.29	18.077	
-20.247	485.142	-6.178	-475.722	-7.60	-4.878	475.820	-7.60	733+0.00		476.191	486.149	9.958	3.501	476.556	7.60	4.801	476.556	7.60	18.839	
-19.821	484.833	-5.800	-475.465	-7.90	-4.500	475.567	-7.90	733+0.652	SC	475.923	482.952	10.029	3.500	476.302	7.90	4.800	476.302	7.90	18.862	
-19.780	483.908	-5.800	-474.580	-7.90	-4.500	474.683	-7.90	734+0.00		475.038	482.920	9.932	3.500	475.417	7.90	4.800	475.417	7.90	19.242	
-19.610	482.285	-5.800	-473.427	-7.90	-4.500	473.530	-7.90	735+0.00		473.885	484.041	10.156	3.500	474.264	7.90	4.800	474.264	7.90	19.073	
-19.433	481.255	-5.800	-472.274	-7.90	-4.500	472.377	-7.90	736+0.00		472.732	482.939	10.207	3.500	473.111	7.90	4.800	473.111	7.90	19	

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo				Eixo				Lado Direito			
BORDO ACOSTAMENTO				BORDO PISTA DE ROLAMENTO				BORDO PISTA DE ROLAMENTO			
OFFSET	Cota (m)	Afast. (m)	Incl. (%)	Off. (m)	Cota (m)	Incl. (%)	Off. (m)	Off. (m)	Cota (m)	Incl. (%)	Off. (m)
-11.805	443.185	-4.800	438.705	3.00	-3.500	438.665	3.00	823+00.00	437.465	-5.200	437.465
-12.985	445.449	-4.800	438.705	3.00	-3.500	438.665	3.00	824+00.00	438.561	-4.451	438.561
-17.748	448.320	-4.800	439.904	3.00	-3.500	439.865	3.00	825+00.00	439.604	-3.000	439.604
-20.246	452.216	-4.800	441.302	3.00	-3.500	441.263	3.00	826+00.00	441.158	-4.500	441.158
-20.697	453.420	-4.800	442.056	3.00	-3.500	442.017	3.00	826+97.42	441.928	-3.900	441.928
-20.853	454.722	-4.800	442.900	3.00	-3.500	442.861	3.00	827+00.00	442.756	-4.524	442.756
-20.555	455.897	-4.800	443.673	3.00	-3.500	443.634	3.00	828+00.00	443.529	-4.007	443.529
-20.611	457.120	-4.800	444.671	3.00	-3.500	444.632	3.00	829+00.00	444.527	-4.951	444.527
-20.657	459.506	-4.800	448.198	1.51	-3.500	448.178	1.51	830+00.00	448.125	-4.990	448.125
-20.662	459.680	-4.800	448.370	1.20	-3.500	448.350	1.20	830+02.82	448.293	-4.111	448.293
-20.579	461.058	-4.800	449.859	-1.34	-3.500	449.876	-1.34	831+00.00	449.923	-4.610	449.923
-20.803	462.564	-4.800	451.577	-3.00	-3.500	451.601	-3.00	832+00.00	451.721	-4.623	451.721
-19.846	463.827	-4.800	453.735	-3.00	-3.500	453.754	-3.00	833+00.00	453.759	-4.689	453.759
-19.432	465.206	-4.800	455.172	-3.00	-3.500	455.211	-3.00	834+00.00	455.316	-4.667	455.316
-19.034	466.606	-4.800	456.970	-3.00	-3.500	457.009	-3.00	835+00.00	457.114	-4.677	457.114
-18.809	468.180	-4.800	458.768	-3.00	-3.500	458.807	-3.00	836+00.00	458.912	-4.683	458.912
-19.256	470.424	-4.800	460.566	-3.00	-3.500	460.605	-3.00	837+00.00	460.710	-4.675	460.710
-20.936	473.902	-4.800	462.364	-3.00	-3.500	462.403	-3.00	838+00.00	462.508	-4.726	462.508
-20.683	475.446	-4.800	464.162	-3.00	-3.500	464.201	-3.00	839+00.00	464.306	-4.726	464.306
-19.748	476.309	-4.800	465.960	-3.00	-3.500	465.999	-3.00	840+00.00	466.104	-4.775	466.104
-18.752	477.112	-4.800	467.757	-3.00	-3.500	467.796	-3.00	841+00.00	467.901	-4.770	467.901
-17.781	477.938	-4.800	469.555	-3.00	-3.500	469.594	-3.00	842+00.00	469.699	-4.749	469.699
-16.998	478.953	-4.800	471.353	-3.00	-3.500	471.392	-3.00	843+00.00	471.497	-4.799	471.497
-13.260	480.103	-4.800	473.151	-3.00	-3.500	473.190	-3.00	844+00.00	473.295	-4.800	473.295
-13.255	480.117	-4.800	473.170	-3.00	-3.500	473.209	-3.00	844+21.10	473.314	-4.803	473.314
-12.912	481.348	-4.999	474.943	-3.00	-3.699	474.982	-3.00	845+00.00	475.093	-4.814	475.093
-12.649	482.677	-5.199	476.735	-3.00	-3.899	476.774	-3.00	846+00.00	476.881	-4.825	476.881
-12.432	484.256	-5.200	478.533	-3.00	-3.900	478.572	-3.00	847+00.00	478.689	-4.837	478.689
-12.381	486.003	-5.200	480.330	-3.00	-3.900	480.369	-3.00	848+00.00	480.486	-4.851	480.486
-12.331	487.751	-5.200	482.128	-3.00	-3.900	482.167	-3.00	849+00.00	482.284	-4.877	482.284
-11.829	488.958	-5.200	483.837	-3.00	-3.900	483.876	-3.00	849+19.03	483.993	-4.889	483.993
-11.793	489.011	-5.200	483.926	-3.00	-3.900	483.965	-3.00	850+00.00	484.082	-4.884	484.082
-12.206	491.222	-5.200	485.724	-3.00	-3.900	485.763	-3.00	851+00.00	485.880	-4.898	485.880
-12.085	492.479	-5.200	487.522	-3.00	-3.900	487.561	-3.00	852+00.00	487.678	-4.919	487.678
-12.089	494.701	-5.200	489.320	-3.00	-3.900	489.359	-3.00	853+00.00	489.476	-4.936	489.476
-12.576	496.986	-5.200	491.118	-3.00	-3.900	491.157	-3.00	854+00.00	491.274	-4.961	491.274
-11.564	497.772	-5.200	492.915	-3.00	-3.900	492.954	-3.00	855+00.00	493.071	-4.972	493.071
-11.258	499.066	-5.200	494.515	-3.00	-3.900	494.554	-3.00	855+17.796	494.671	-4.983	494.671
-11.250	499.258	-5.178	494.714	-3.00	-3.878	494.753	-3.00	856+00.00	494.869	-4.986	494.869
-10.746	500.758	-4.978	496.518	-3.00	-3.878	496.557	-3.00	857+00.00	496.674	-4.997	496.674
-9.979	501.992	-4.800	498.321	-3.00	-3.500	498.360	-3.00	858+00.00	498.465	-5.012	498.465
-10.088	503.885	-4.800	500.105	-3.00	-3.500	500.144	-3.00	859+00.00	500.249	-5.034	500.249
-9.300	504.782	-4.800	501.790	-3.00	-3.500	501.829	-3.00	860+00.00	501.934	-5.061	501.934
-9.530	506.584	-4.800	503.362	-3.00	-3.500	503.401	-3.00	861+00.00	503.506	-5.095	503.506
-9.250	507.765	-4.800	504.822	-3.00	-3.500	504.861	-3.00	862+00.00	504.966	-5.074	504.966
-8.972	508.834	-4.800	506.170	-3.00	-3.500	506.209	-3.00	863+00.00	506.314	-5.064	506.314
-9.052	510.148	-4.800	507.404	-3.00	-3.500	507.443	-3.00	864+00.00	507.548	-5.095	507.548
-8.834	511.052	-4.800	508.526	-3.00	-3.500	508.565	-3.00	865+00.00	508.670	-5.105	508.670
-8.882	512.109	-4.800	509.535	-3.00	-3.500	509.574	-3.00	866+00.00	509.679	-5.117	509.679
-9.080	513.263	-4.800	510.532	-3.00	-3.500	510.571	-3.00	867+00.00	510.676	-5.128	510.676
-9.325	514.232	-4.800	511.215	-3.00	-3.500	511.254	-3.00	868+00.00	511.359	-5.149	511.359
-9.167	514.745	-4.800	511.887	-3.00	-3.500	511.926	-3.00	869+00.00	512.031	-5.148	512.031
-9.261	515.398	-4.800	512.445	-3.00	-3.500	512.484	-3.00	870+00.00	512.589	-5.145	512.589
-9.271	515.853	-4.800	512.891	-3.00	-3.500	512.930	-3.00	871+00.00	513.035	-5.149	513.035
-9.330	516.260	-4.800	513.238	-3.00	-3.500	513.277	-3.00	872+00.00	513.382	-5.152	513.382
-9.474	516.737	-4.800	513.682	-3.00	-3.500	513.721	-3.00	873+00.00	513.826	-5.156	513.826
-9.379	516.975	-4.800	513.904	-3.00	-3.500	513.943	-3.00	874+00.00	514.048	-5.160	514.048
-9.061	516.990	-4.800	514.238	-3.00	-3.500	514.277	-3.00	875+00.00	514.382	-5.160	514.382
-8.919	517.181	-4.800	514.571	-3.00	-3.500	514.610	-3.00	876+00.00	514.715	-5.170	514.715
-8.691	517.286	-4.800	514.904	-3.00	-3.500	514.943	-3.00	877+00.00	515.048	-5.175	515.048
-8.429	517.408	-4.800	515.277	-2.16	-3.500	515.305	-2.16	878+00.00	515.381	-5.178	515.381
-7.077	517.552	-4.800	515.662	-1.08	-3.500	515.676	-1.08	879+00.00	515.717	-5.178	515.717
-7.702	517.474	-4.800	516.047	0.00	-3.500	516.047	0.00	880+00.00	516.047	-5.178	516.047
-7.701	517.474	-4.800	516.048	0.00	-3.500	516.048	0.00	880+04.3	516.048	-5.173	516.048
-7.500	517.669	-4.800	516.432	1.08	-3.500	516.418	1.08	881+00.00	516.380	-5.185	516.380
-7.510	518.075	-4.800	516.817	2.16	-3.500	516.809	2.16	882+00.00	516.714	-5.172	516.714
-7.117	518.079	-4.800	517.140	3.22	-3.500	517.140	3.22	883+00.00	517.048	-5.184	517.048
-7.097	518.454	-4.800	517.585	4.26	-3.500	517.529	4.26	884+00.00	517.380	-5.184	517.380
-7.155	518.906	-4.800	517.967	5.30	-3.500	517.988	5.30	885+00.00	517.713	-5.194	517.713
-7.155	518.907	-4.800	517.968	5.30	-3.500	517.989	5.30	885+04.3	517.714	-5.196	517.714
-7.246	519.330	-4.800	518.301	5.30	-3.500	518.322	5.30	886+00.00	518.046	-5.202	518.046
-7.423	519.940	-4.800	518.634	5.30	-3.500	518.655	5.30	887+00.00	518.379	-5.205	518.379
-7.515	520.266	-4.800	518.967	5.30	-3.500	518.987	5.30	888+00.00	518.712	-5.209	518.712
-7.877	520.960	-4.800	519.300	5.30	-3.500	519.321	5.30	889+00.00	519.046	-5.218	519.046
-8.390	521.641	-4.800	519.648	5.30	-3.500	519.669	5.30	889+10.81	519.214	-5.219	519.214
-8.912	522.329	-4.800	519.633	5.30	-3.500	519.564	5.30	890+00.00	519.379	-5.222	519.379
-9.871	523.620	-4.800	519.966	5.30	-3.500	519.897	5.30	891+00.00	519.712	-5.241	519.712
-10.578	524.640	-4.800	520.300	5.30	-3.500	520.321	5.30	892+00.00	520.046	-5.246	520.046
-11.077	525.493	-4.800	520.633	5.30	-3.500	520.564	5.30	893+00.00	520.378	-5.257	520.378
-11.252	526.001	-4.800	520.966	5.30	-3.500	520.897	5.30	894+00.00	520.711	-5.276	520.711
-11.255	526.006	-4.800	520.968	5.30	-3.500	520.899	5.30	894+01.19	520.713	-5.276	520.713
-11.823	526.856	-4.800	521.259	4.48	-3.500	521.201	4.48	895+00.00	521.045	-5.260	521.045
-12.315	527.833	-4.800	521.583	3.65	-3.500	521.583	3.65	896+00.00	521.378	-5.240	521.378
-12.800	528.402	-4.800	521.846	2.82	-3.500	521.810	2.82	897+00.00	521.711	-5.227	521.711
-13.077	528.963	-4.800	522.140	1.99	-3.500	522.114	1.99	898+00.00	522.044	-5.246	522.044
-13.196	529.367	-4.800	522.433	1.17	-3.500	522.418	1.17	899+00.00	522.377	-5.245	522.377

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo				Eixo				Lado Direito			
BORDO ACOSTAMENTO				BORDO PISTA DE ROLAMENTO				BORDO ACOSTAMENTO			
Offset	Cota (m)	Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Offset	Cota (m)	Afast. (m)	Cota (m)
Offset	Cota (m)	Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Afast. (m)	Cota (m)	Offset	Cota (m)	Afast. (m)	Cota (m)
-6.446	544.508	-4.800	545.148	-3.000	545.148	-3.000	545.148	-4.800	544.508	-3.000	545.148
-6.704	544.205	-4.800	545.148	-3.000	545.148	-3.000	545.148	-4.800	544.205	-3.000	545.148
-6.653	544.091	-4.800	545.001	-3.000	545.001	-3.000	545.001	-4.800	544.091	-3.000	545.001
-6.730	543.886	-4.800	544.847	-3.000	544.847	-3.000	544.847	-4.800	543.886	-3.000	544.847
-6.838	543.660	-4.800	544.693	-3.000	544.693	-3.000	544.693	-4.800	543.660	-3.000	544.693
-6.799	543.532	-4.800	544.539	-3.000	544.539	-3.000	544.539	-4.800	543.532	-3.000	544.539
-6.942	543.336	-4.800	544.336	-3.000	544.336	-3.000	544.336	-4.800	543.336	-3.000	544.336
-7.151	542.990	-4.800	544.232	-3.000	544.232	-3.000	544.232	-4.800	542.990	-3.000	544.232
-7.207	542.799	-4.800	544.078	-3.000	544.078	-3.000	544.078	-4.800	542.799	-3.000	544.078
-7.271	542.602	-4.800	543.924	-3.000	543.924	-3.000	543.924	-4.800	542.602	-3.000	543.924
-7.161	542.522	-4.800	543.771	-3.000	543.771	-3.000	543.771	-4.800	542.522	-3.000	543.771
-7.194	542.346	-4.800	543.617	-3.000	543.617	-3.000	543.617	-4.800	542.346	-3.000	543.617
-7.369	542.076	-4.800	543.463	-3.000	543.463	-3.000	543.463	-4.800	542.076	-3.000	543.463
-7.202	542.033	-4.800	543.309	-3.000	543.309	-3.000	543.309	-4.800	542.033	-3.000	543.309
-6.941	542.054	-4.800	543.155	-3.000	543.155	-3.000	543.155	-4.800	542.054	-3.000	543.155
-6.990	541.871	-4.800	543.005	-3.000	543.005	-3.000	543.005	-4.800	541.871	-3.000	543.005
-6.925	541.787	-4.800	542.878	-3.000	542.878	-3.000	542.878	-4.800	541.787	-3.000	542.878
-6.769	541.788	-4.800	542.775	-3.000	542.775	-3.000	542.775	-4.800	541.788	-3.000	542.775
-7.107	541.485	-4.800	542.698	-3.000	542.698	-3.000	542.698	-4.800	541.485	-3.000	542.698
-6.812	541.629	-4.800	542.645	-3.000	542.645	-3.000	542.645	-4.800	541.629	-3.000	542.645
-6.891	541.549	-4.800	542.617	-3.000	542.617	-3.000	542.617	-4.800	541.549	-3.000	542.617
-6.869	541.561	-4.800	542.615	-3.000	542.615	-3.000	542.615	-4.800	541.561	-3.000	542.615
-6.981	541.508	-4.800	542.637	-3.000	542.637	-3.000	542.637	-4.800	541.508	-3.000	542.637
-6.916	541.599	-4.800	542.684	-3.000	542.684	-3.000	542.684	-4.800	541.599	-3.000	542.684
-6.936	541.658	-4.800	542.756	-3.000	542.756	-3.000	542.756	-4.800	541.658	-3.000	542.756
-7.228	541.560	-4.800	542.854	-3.000	542.854	-3.000	542.854	-4.800	541.560	-3.000	542.854
-7.354	541.598	-4.800	542.976	-3.000	542.976	-3.000	542.976	-4.800	541.598	-3.000	542.976
-7.429	541.695	-4.800	543.123	-3.000	543.123	-3.000	543.123	-4.800	541.695	-3.000	543.123
-7.572	541.769	-4.800	543.295	-3.000	543.295	-3.000	543.295	-4.800	541.769	-3.000	543.295
-7.429	542.064	-4.800	543.492	-3.000	543.492	-3.000	543.492	-4.800	542.064	-3.000	543.492
-7.445	542.276	-4.800	543.714	-3.000	543.714	-3.000	543.714	-4.800	542.276	-3.000	543.714
-7.445	542.519	-4.800	543.957	-3.000	543.957	-3.000	543.957	-4.800	542.519	-3.000	543.957
-8.094	544.332	-4.800	544.203	-3.000	544.203	-3.000	544.203	-4.800	544.332	-3.000	544.203
-7.737	542.016	-4.800	544.449	-3.000	544.449	-3.000	544.449	-4.800	542.016	-3.000	544.449
-7.746	543.056	-4.800	544.695	-3.000	544.695	-3.000	544.695	-4.800	543.056	-3.000	544.695
-7.802	543.265	-4.800	544.940	-3.000	544.940	-3.000	544.940	-4.800	543.265	-3.000	544.940
-7.782	543.524	-4.800	545.186	-3.000	545.186	-3.000	545.186	-4.800	543.524	-3.000	545.186
-7.781	543.770	-4.800	545.432	-3.000	545.432	-3.000	545.432	-4.800	543.770	-3.000	545.432
-7.680	544.083	-4.800	545.678	-3.000	545.678	-3.000	545.678	-4.800	544.083	-3.000	545.678
-7.601	544.381	-4.800	545.924	-3.000	545.924	-3.000	545.924	-4.800	544.381	-3.000	545.924
-7.580	544.641	-4.800	546.169	-3.000	546.169	-3.000	546.169	-4.800	544.641	-3.000	546.169
-7.337	545.049	-4.800	546.415	-3.000	546.415	-3.000	546.415	-4.800	545.049	-3.000	546.415
-7.283	545.315	-4.800	546.665	-3.000	546.665	-3.000	546.665	-4.800	545.315	-3.000	546.665
-7.481	545.580	-4.800	546.842	-3.000	546.842	-3.000	546.842	-4.800	545.580	-3.000	546.842
-7.327	545.649	-4.800	547.008	-3.000	547.008	-3.000	547.008	-4.800	545.649	-3.000	547.008
-7.371	545.753	-4.800	547.141	-3.000	547.141	-3.000	547.141	-4.800	545.753	-3.000	547.141
-7.177	545.983	-4.800	547.243	-3.000	547.243	-3.000	547.243	-4.800	545.983	-3.000	547.243
-7.072	546.123	-4.800	547.312	-3.000	547.312	-3.000	547.312	-4.800	546.123	-3.000	547.312
-7.005	546.212	-4.800	547.355	-2.87	547.355	-2.87	547.355	-4.800	546.212	-3.000	547.355
-7.082	546.236	-4.800	547.408	-2.87	547.408	-2.87	547.408	-4.800	546.236	-3.000	547.408
-7.091	546.251	-4.800	547.429	-0.87	547.429	-0.87	547.429	-4.800	546.251	-3.000	547.429
-7.036	546.289	-4.800	547.422	-0.00	547.422	-0.00	547.422	-4.800	546.289	-3.000	547.422
-7.031	546.291	-4.800	547.418	0.13	547.418	0.13	547.418	-4.800	546.291	-3.000	547.418
-7.222	546.131	-4.800	547.375	1.13	547.375	1.13	547.375	-4.800	546.131	-3.000	547.375
-6.866	546.304	-4.800	547.300	2.13	547.300	2.13	547.300	-4.800	546.304	-3.000	547.300
-7.186	545.993	-4.800	547.312	3.12	547.312	3.12	547.312	-4.800	545.993	-3.000	547.312
-6.859	546.097	-4.800	547.068	3.90	547.068	3.90	547.068	-4.800	546.097	-3.000	547.068
-6.649	546.210	-4.800	547.041	3.90	547.041	3.90	547.041	-4.800	546.210	-3.000	547.041
-7.604	545.353	-4.800	546.822	3.90	546.822	3.90	546.822	-4.800	545.353	-3.000	546.822
-7.681	545.080	-4.800	546.599	3.90	546.599	3.90	546.599	-4.800	545.080	-3.000	546.599
-7.687	545.046	-4.800	546.570	3.90	546.570	3.90	546.570	-4.800	545.046	-3.000	546.570
-7.781	544.790	-4.800	546.329	3.90	546.329	3.90	546.329	-4.800	544.790	-3.000	546.329
-7.909	544.328	-4.800	545.999	3.90	545.999	3.90	545.999	-4.800	544.328	-3.000	545.999
-7.911	544.292	-4.800	545.966	3.82	545.966	3.82	545.966	-4.800	544.292	-3.000	545.966
-7.839	543.939	-4.800	545.574	2.91	545.574	2.91	545.574	-4.800	543.939	-3.000	545.574
-7.945	543.429	-4.800	545.146	1.91	545.146	1.91	545.146	-4.800	543.429	-3.000	545.146
-7.987	542.929	-4.800	544.680	0.91	544.680	0.91	544.680	-4.800	542.929	-3.000	544.680
-7.811	542.590	-4.800	544.239	0.00	544.239	0.00	544.239	-4.800	542.590	-3.000	544.239
-7.803	542.540	-4.800	544.193	-0.09	544.193	-0.09	544.193	-4.800	542.540	-3.000	544.193
-7.771	542.035	-4.800	543.669	-1.09	543.669	-1.09	543.669	-4.800	542.035	-3.000	543.669
-7.672	541.533	-4.800	543.112	-2.09	543.112	-2.09	543.112	-4.800	541.533	-3.000	543.112
-7.557	541.028	-4.800	542.558	-3.00	542.558	-3.00	542.558	-4.800	541.028	-3.000	542.558
-7.486	540.490	-4.800	541.955	-3.00	541.955	-3.00	541.955	-4.800	540.490	-3.000	541.955
-7.521	539.861	-4.800	541.350	-3.00	541.350	-3.00	541.350	-4.800	539.861	-3.000	541.350
-7.261	539.398	-4.800	540.713	-3.00	540.713	-3.00	540.713	-4.800	539.398	-3.000	540.713
-7.123	538.837	-4.800	540.060	-3.00	540.060	-3.00	540.060	-4.800	538.837	-3.000	540.060
-6.957	538.294	-4.800	539.407	-3.00	539.407	-3.00	539.407	-4.800	538.294	-3.000	539.407
-6.740	537.786	-4.800	538.754	-3.00	538.754	-3.00	538.754	-4.800	537.786	-3.000	538.754
-6.688	537.168	-4.800	538.101	-3.00	538.101	-3.00	538.101	-4.800	537.168	-3.000	538.101
-6.572	536.592	-4.800	537.448	-3.00	537.448	-3.00	537.448	-4.800	536.592	-3.000	537.448
-6.422	536.039	-4.800	536.795	-3.00	536.795	-3.00	536.795	-4.800	536.039	-3.000	536.795
-6.248	535.501	-4.800	536.142	-3.00	536.142	-3.00	536.142	-4.800	535.501	-3.000	536.142
-6.153	534.912	-4.800	535.489	-3.00	535.489	-3.00	535.489	-4.800	534.912	-3.000	535.489
-6.020	534.347	-4.800	534.836	-3.00	534.836	-3.00	534.836	-4.800	534.347	-3.000	534.836
-5.913	533.787	-4.800	534.183	-3.00	534.183	-3.00	534.183	-4.800	533.787	-3.000	534.183
-5.958	533.179	-4.800	533.529	-3.00	533.529	-3.00	533.529	-4.800	533.179	-3.000	533.529
-6.000	532.568	-4.									

NOTA DE SERVIÇO DE PAVIMENTAÇÃO - GO 221

Lado Esquerdo										Lado Direito									
OFFSET			BORDO ACOSTAMENTO			BORDO PISTA DE ROLAMENTO			Eixo	BORDO PISTA DE ROLAMENTO			BORDO ACOSTAMENTO			OFFSET			
Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)		Cota Projeto	Cota Terreno	Cota Vermelha	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	
-6.832	545.372	-4.800	546.402	-3.00	-3.500	546.441	-3.00	1089+0.000	PCV	546.546	545.516	-1.030	3.500	546.402	-3.00	4.800	546.402	-3.00	
-6.901	546.166	-4.800	547.241	-3.00	-3.500	547.280	-3.00	1090+0.000		547.385	546.117	-1.268	3.500	547.241	-3.00	4.800	547.241	-3.00	
-7.193	546.811	-4.800	548.081	-3.00	-3.500	548.120	-3.00	1091+0.000		548.225	546.822	-1.403	3.500	548.081	-3.00	4.800	548.081	-3.00	
-7.399	547.513	-4.800	548.921	-3.00	-3.500	548.960	-3.00	1092+0.000		549.065	547.530	-1.535	3.500	548.921	-3.00	4.800	548.921	-3.00	
-7.633	548.197	-4.800	549.760	-3.00	-3.500	549.799	-3.00	1093+0.000		549.904	548.211	-1.693	3.500	549.760	-3.00	4.800	549.760	-3.00	
-7.817	548.914	-4.800	550.600	-3.00	-3.500	550.639	-3.00	1094+0.000		550.744	548.915	-1.829	3.500	550.600	-3.00	4.800	550.600	-3.00	
-8.001	549.615	-4.800	551.424	-3.00	-3.500	551.463	-3.00	1095+0.000		551.568	549.627	-1.941	3.500	551.424	-3.00	4.800	551.424	-3.00	
-8.212	550.267	-4.800	552.216	-3.00	-3.500	552.255	-3.00	1096+0.000		552.360	550.304	-2.056	3.500	552.216	-3.00	4.800	552.216	-3.00	
-8.263	550.995	-4.800	552.978	-3.00	-3.500	553.017	-3.00	1097+0.000		553.122	551.009	-2.113	3.500	552.978	-3.00	4.800	552.978	-3.00	
-8.353	551.665	-4.800	553.708	-3.00	-3.500	553.747	-3.00	1098+0.000		553.852	551.721	-2.131	3.500	553.708	-3.00	4.800	553.708	-3.00	
-8.340	552.373	-4.800	554.408	-3.00	-3.500	554.447	-3.00	1099+0.000	554.552	552.428	-2.124	3.500	554.408	-3.00	4.800	554.408	-3.00		
-8.187	553.143	-4.800	555.075	-3.00	-3.500	555.114	-3.00	1100+0.000	555.219	553.127	-2.092	3.500	555.075	-3.00	4.800	555.075	-3.00		
-8.171	553.790	-4.800	555.712	-3.00	-3.500	555.751	-3.00	1101+0.000	555.856	553.842	-2.014	3.500	555.712	-3.00	4.800	555.712	-3.00		
-7.945	554.546	-4.800	556.318	-3.00	-3.500	556.357	-3.00	1102+0.000	556.462	554.546	-1.916	3.500	556.318	-3.00	4.800	556.318	-3.00		
-7.828	555.199	-4.800	556.892	-3.00	-3.500	556.931	-3.00	1103+0.000	557.036	555.249	-1.787	3.500	556.892	-3.00	4.800	556.892	-3.00		
-7.622	555.879	-4.800	557.435	-3.00	-3.500	557.474	-3.00	1104+0.000	557.579	555.894	-1.685	3.500	557.435	-3.00	4.800	557.435	-3.00		
-7.588	556.414	-4.800	557.947	-3.00	-3.500	557.986	-3.00	1105+0.000	558.091	556.515	-1.576	3.500	557.947	-3.00	4.800	557.947	-3.00		
-7.659	556.847	-4.800	558.428	-3.00	-3.500	558.467	-3.00	1106+0.000	558.572	556.899	-1.673	3.500	558.428	-3.00	4.800	558.428	-3.00		
-7.458	557.431	-4.800	558.877	-3.00	-3.500	558.916	-3.00	1107+0.000	559.021	557.528	-1.493	3.500	558.877	-3.00	4.800	558.877	-3.00		
-7.364	557.911	-4.800	559.295	-3.00	-3.500	559.334	-3.00	1108+0.000	559.439	558.037	-1.402	3.500	559.295	-3.00	4.800	559.295	-3.00		
-7.320	558.328	-4.800	559.682	-3.00	-3.500	559.721	-3.00	1109+0.000	559.826	558.398	-1.428	3.500	559.682	-3.00	4.800	559.682	-3.00		
-7.180	558.777	-4.800	560.038	-3.00	-3.500	560.077	-3.00	1110+0.000	560.182	558.792	-1.390	3.500	560.038	-3.00	4.800	560.038	-3.00		
-7.064	559.179	-4.800	560.363	-3.00	-3.500	560.402	-3.00	1111+0.000	560.507	559.247	-1.260	3.500	560.363	-3.00	4.800	560.363	-3.00		
-6.870	559.602	-4.800	560.656	-3.00	-3.500	560.695	-3.00	1112+0.000	560.800	559.672	-1.128	3.500	560.656	-3.00	4.800	560.656	-3.00		
-6.789	559.918	-4.800	560.919	-3.00	-3.500	560.958	-3.00	1113+0.000	561.063	559.975	-1.088	3.500	560.919	-3.00	4.800	560.919	-3.00		
-6.635	560.252	-4.800	561.150	-3.00	-3.500	561.189	-3.00	1114+0.000	561.294	560.343	-0.951	3.500	561.150	-3.00	4.800	561.150	-3.00		
-6.518	560.529	-4.800	561.349	-3.00	-3.500	561.388	-3.00	1115+0.000	561.493	560.615	-0.878	3.500	561.349	-3.00	4.800	561.349	-3.00		
-6.521	560.696	-4.800	561.518	-3.00	-3.500	561.557	-3.00	1116+0.000	561.662	560.777	-0.885	3.500	561.518	-3.00	4.800	561.518	-3.00		
-6.577	560.796	-4.800	561.655	-3.00	-3.500	561.694	-3.00	1117+0.000	561.799	560.825	-0.974	3.500	561.655	-3.00	4.800	561.655	-3.00		
-6.669	560.882	-4.800	561.795	-2.29	-3.500	561.825	-2.29	1118+0.000	561.905	560.904	-1.001	3.500	561.761	-3.00	4.800	561.761	-3.00		
-6.843	560.911	-4.800	561.927	-1.12	-3.500	561.941	-1.12	1119+0.000	561.980	560.895	-1.085	3.500	561.836	-3.00	4.800	561.836	-3.00		
-6.848	561.016	-4.800	562.023	0.00	-3.500	562.023	0.00	1119+19.043	TS	562.023	560.967	-1.056	3.500	561.879	-3.00	4.800	561.879	-3.00	
-6.837	561.028	-4.800	562.027	0.06	-3.500	562.026	0.06	1120+0.000	562.024	560.994	-1.030	3.512	561.880	-3.00	4.812	561.880	-3.00		
-7.085	560.944	-4.800	562.096	1.23	-3.500	562.080	1.23	1121+0.000	562.037	560.896	-1.141	3.735	561.886	-3.00	5.035	561.886	-3.00		
-7.189	560.926	-4.800	562.134	2.41	-3.500	562.102	2.41	1122+0.000	562.018	560.867	-1.151	3.826	561.864	-3.00	5.126	561.864	-3.00		
-7.328	560.852	-4.800	562.140	3.58	-3.500	562.094	3.58	1123+0.000	561.968	560.738	-1.230	4.188	561.772	-3.58	5.488	561.772	-3.58		
-7.457	560.756	-4.800	562.117	4.70	-3.500	562.056	4.70	1123+19.043	SC	561.892	560.628	-1.264	4.100	561.638	-4.70	5.400	561.638	-4.70	
-7.458	560.751	-4.800	562.113	4.70	-3.500	562.052	4.70	1124+0.000	561.887	560.589	-1.298	4.100	561.633	-4.70	5.400	561.633	-4.70		
-7.617	560.533	-4.800	562.000	4.70	-3.500	561.939	4.70	1125+0.000	561.775	560.510	-1.265	4.100	561.521	-4.70	5.400	561.521	-4.70		
-7.775	560.383	-4.800	561.857	4.70	-3.500	561.796	4.70	1126+0.000	561.631	560.265	-1.366	4.100	561.377	-4.70	5.400	561.377	-4.70		
-7.719	560.146	-4.800	561.682	4.70	-3.500	561.621	4.70	1127+0.000	561.457	560.017	-1.440	4.100	561.203	-4.70	5.400	561.203	-4.70		
-7.806	559.883	-4.800	561.476	4.70	-3.500	561.415	4.70	1128+0.000	561.251	559.821	-1.430	4.100	560.997	-4.70	5.400	560.997	-4.70		
-7.937	559.558	-4.800	561.239	4.70	-3.500	561.178	4.70	1129+0.000	561.014	559.472	-1.542	4.100	560.760	-4.70	5.400	560.760	-4.70		
-7.941	559.582	-4.800	561.066	4.70	-3.500	561.004	4.70	1129+13.198	560.840	559.280	-1.560	4.100	560.586	-4.70	5.400	560.586	-4.70		
-7.941	559.287	-4.800	560.971	4.70	-3.500	560.910	4.70	1130+0.000	560.745	559.179	-1.566	4.100	560.491	-4.70	5.400	560.491	-4.70		
-7.994	558.952	-4.800	560.671	4.70	-3.500	560.610	4.70	1131+0.000	560.446	558.787	-1.659	4.100	560.192	-4.70	5.400	560.192	-4.70		
-7.562	558.909	-4.800	560.340	4.70	-3.500	560.279	4.70	1132+0.000	560.115	558.615	-1.500	4.100	559.861	-4.70	5.400	559.861	-4.70		
-8.466	557.945	-4.800	559.978	4.70	-3.500	559.917	4.70	1133+0.000	559.753	558.265	-1.488	4.100	559.499	-4.70	5.400	559.499	-4.70		
-8.546	557.498	-4.800	559.585	4.70	-3.500	559.524	4.70	1134+0.000	559.560	557.979	-1.381	4.100	559.106	-4.70	5.400	559.106	-4.70		
-8.738	556.945	-4.800	559.161	4.70	-3.500	559.100	4.70	1135+0.000	558.935	557.349	-1.586	4.100	558.681	-4.70	5.400	558.681	-4.70		
-8.469	556.828	-4.800	558.997	4.70	-3.500	558.936	4.70	1135+7.354	CS	558.771	556.928	-1.843	4.100	558.518	-4.70	5.400	558.518	-4.70	
-8.669	556.626	-4.800	558.670	3.96	-3.500	558.618	3.96	1136+0.000	558.480	556.622	-1.858	4.212	558.262	-3.96	5.512	558.262	-3.96		
-7.533	556.275	-4.800	558.286	2.78	-3.500	558.230	2.78	1137+0.000	558.200	556.164	-1.960	3.500	555.980	-3.00	4.800	555.980	-3.00		
-7.712	556.049	-4.800	557.614	1.61	-3.500	557.594	1.61	1138+0.000	557.537	555.735	-1.802	3.780	557.385	-3.00	4.800	557.385	-3.00		
-7.889	555.723	-4.797	557.087	0.43	-3.499	557.081	0.43	1139+0.000	557.066	555.485	-1.581	3.592	556.919	-3.00	4.892	556.919	-3.00		
-7.386	555.521	-4.800	556.893	0.00	-3.500	556.893	0.00	1139+7.354	ST	556.893	555.236	-1.657	3.500	556.749	-3.00	4.800	556.749	-3.00	
-7.581	555.055	-4.800	556.559	0.74	-3.500	556.569	0.74	1140											

3.3. NOTAS DE SERVIÇO – INTERSEÇÃO 01

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 01 - RAMO 100											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONT	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-4,806	533,686	100+0,000	PP	PPV	533,542	534,793	1,251	1,100	533,509	2,840	535,249
-5,806	534,195	101+0,000			534,021	535,373	1,352	1,100	533,988	3,067	535,954
-6,806	534,703	102+0,000			534,499	536,232	1,733	1,100	534,466	3,384	536,750
-7,009	534,806	102+4,055	PI		534,596	536,533	1,937	1,100	534,563	3,435	536,898
-7,000	535,188	103+0,000			534,978	537,065	2,087	1,100	534,945	3,674	537,519
-7,000	535,666	104+0,000			535,456	537,767	2,311	1,100	535,423	4,299	538,623
-7,000	536,145	105+0,000			535,935	538,404	2,469	1,100	535,902	4,321	539,123
-7,000	536,624	106+0,000			536,414	538,676	2,262	1,100	536,381	4,533	539,814
-7,000	537,102	107+0,000			536,892	538,909	2,017	1,100	536,859	4,499	540,258
-7,000	537,199	107+4,055	TC		536,989	538,996	2,007	1,100	536,956	4,511	540,367
-7,660	537,601	108+0,000			537,371	539,899	2,528	1,100	537,338	4,574	540,812
-10,389	538,161	109+0,000			537,849	541,435	3,586	1,100	537,816	4,805	541,522
-15,371	538,789	110+0,000			538,328	541,969	3,641	1,100	538,295	4,742	541,937
-22,876	539,493	111+0,000			538,807	541,927	3,120	1,100	538,774	4,450	542,123
-8,978	539,554	112+0,000			539,285	542,257	2,972	1,100	539,252	4,179	542,332
-8,000	539,688	112+6,813	PCR		539,448	542,372	2,924	1,100	539,415	4,125	542,440
-8,000	540,004	113+0,000			539,764	542,574	2,810	1,100	539,731	4,031	542,661
-8,000	540,482	114+0,000			540,242	542,178	1,936	1,100	540,209	3,020	542,129
-8,000	540,623	114+5,861	PCR		540,383	541,993	1,610	1,100	540,350	2,728	541,978
-12,558	541,098	115+0,000			540,721	541,869	1,148	1,100	540,688	2,312	541,900
-19,811	541,794	116+0,000			541,199	541,700	0,501	1,100	541,166	1,581	541,648
-13,271	542,076	117+0,000			541,678	542,183	0,505	1,100	541,645	1,548	542,093
-9,138	542,431	118+0,000			542,157	542,746	0,589	1,100	542,124	1,608	542,631
-7,192	542,851	119+0,000			542,635	543,345	0,710	1,100	542,602	1,715	543,217
-7,000	543,052	119+8,619	PT		542,842	543,591	0,749	1,100	542,809	1,773	543,481
-7,000	543,324	120+0,000			543,114	543,458	0,344	1,100	543,081	1,430	543,411
-7,000	543,802	121+0,000			543,592	543,621	0,029	1,100	543,559	1,271	543,446
-7,000	544,281	122+0,000			544,071	544,169	0,098	1,100	544,038	1,174	543,989
-7,000	544,760	123+0,000			544,550	544,691	0,141	1,100	544,517	1,339	544,357
-7,000	545,238	124+0,000			545,028	544,947	-0,081	1,100	544,995	1,638	544,637
-7,000	545,444	124+8,619	PI		545,234	545,047	-0,187	1,100	545,201	1,718	544,790
-6,440	545,700	125+0,000			545,507	545,654	0,147	1,100	545,474	1,554	545,171
-5,442	546,149	126+0,000			545,985	546,497	0,512	1,100	545,952	1,293	546,146
-4,798	546,438	126+12,896	PF	PFV	546,294	546,967	0,673	1,100	546,261	1,454	546,615

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 01 - RAMO 200											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONT	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-4,806	546,438	200+0,000	PP	PPV	546,294	547,005	0,711	1,100	546,261	1,707	546,868
-5,803	545,879	201+0,000			545,705	546,285	0,581	1,100	545,672	1,242	545,814
-6,799	545,319	202+0,000			545,115	545,435	0,320	1,100	545,082	1,144	545,126
-7,009	545,202	202+4,206	PI		544,992	545,296	0,304	1,100	544,959	1,153	545,011
-7,000	544,736	203+0,000			544,526	544,866	0,340	1,100	544,493	1,214	544,607
-7,000	544,147	204+0,000			543,937	544,429	0,492	1,100	543,904	1,292	544,096
-7,000	543,558	205+0,000			543,348	544,385	1,037	1,100	543,315	2,011	544,226
-7,000	542,968	206+0,000			542,758	544,105	1,347	1,100	542,725	2,280	543,906
-7,000	542,379	207+0,000			542,169	543,579	1,410	1,100	542,136	2,340	543,376
-7,000	541,939	207+14,927	TC		541,729	543,328	1,598	1,100	541,696	2,526	543,123
-7,085	541,792	208+0,000			541,580	543,214	1,634	1,100	541,547	2,647	543,093
-9,098	541,264	209+0,000			540,991	542,766	1,775	1,100	540,958	2,830	542,687
-13,942	540,820	210+0,000			540,401	542,335	1,933	1,100	540,368	3,031	542,300
-22,040	540,473	211+0,000			539,812	542,137	2,325	1,100	539,779	3,442	542,122
-8,657	539,483	212+0,000			539,223	542,000	2,777	1,100	539,190	3,881	541,971
-13,179	539,029	213+0,000			538,634	541,835	3,201	1,100	538,601	4,285	541,786
-8,730	538,306	214+0,000			538,044	541,440	3,395	1,100	538,011	4,497	541,409
-5,909	537,632	215+0,000			537,455	541,133	3,678	1,100	537,422	4,750	541,072
-5,500	537,291	215+11,166	PT		537,126	540,794	3,668	1,100	537,093	4,766	540,759
-5,500	537,031	216+0,000			536,866	540,493	3,627	1,100	536,833	4,748	540,481
-5,500	536,442	217+0,000			536,277	539,855	3,578	1,100	536,244	4,644	539,788
-5,500	535,852	218+0,000			535,687	538,981	3,293	1,100	535,654	4,325	538,880
-5,500	535,263	219+0,000			535,098	538,029	2,931	1,100	535,065	3,878	537,843
-5,500	535,024	219+8,123	PI		534,859	537,664	2,805	1,100	534,826	3,714	537,440
-5,163	534,664	220+0,000			534,509	537,139	2,630	1,100	534,476	3,534	536,909
-4,591	534,057	221+0,000			533,920	535,940	2,021	1,100	533,887	2,950	535,737
-4,020	533,451	222+0,000			533,330	534,576	1,246	1,100	533,297	2,225	534,423
-3,501	532,901	222+18,151	PF	PFV	532,796	533,171	0,375	1,100	532,763	1,453	533,115

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 01 - RAMO 300											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONTAL	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-3,501	532,901	300+0,000	PP	PPV	532,796	533,424	0,628	1,100	532,763	1,892	533,555
-4,073	533,535	301+0,000			533,412	534,643	1,230	1,100	533,379	2,678	534,958
-4,644	534,168	302+0,000			534,029	536,068	2,039	1,100	533,996	3,336	536,232
-5,216	534,802	303+0,000			534,645	537,293	2,648	1,100	534,612	3,893	537,406
-5,502	535,120	303+10,029	PI		534,955	537,768	2,813	1,100	534,922	4,073	537,895
-5,500	535,427	304+0,000			535,262	538,230	2,968	1,100	535,229	4,238	538,367
-5,500	536,043	305+0,000		PCV	535,878	539,089	3,211	1,100	535,845	4,551	539,296
-5,500	536,606	306+0,000			536,441	539,820	3,379	1,100	536,408	4,614	539,922
-5,500	537,060	307+0,000			536,895	540,410	3,514	1,100	536,862	4,696	540,458
-5,500	537,061	307+0,029	TC		536,896	540,410	3,514	1,100	536,863	4,696	540,459
-7,901	537,479	308+0,000			537,242	540,916	3,674	1,100	537,209	4,934	541,043
-13,806	537,858	308+16,277	CC		537,444	541,245	3,801	1,100	537,411	4,946	541,257
-16,756	537,983	309+0,000			537,480	541,258	3,778	1,100	537,447	4,920	541,267
-8,062	537,852	310+0,000			537,611	541,334	3,723	1,100	537,578	5,228	541,705
-15,437	538,101	310+13,367	CC		537,637	541,649	4,012	1,100	537,604	5,084	541,589
-12,499	538,008	311+0,000			537,633	541,580	3,947	1,100	537,600	5,040	541,540
-7,556	537,774	312+0,000			537,547	540,958	3,411	1,100	537,514	4,922	541,336
-7,000	537,678	312+9,615	PT		537,468	540,325	2,857	1,100	537,435	4,803	541,137
-7,000	537,564	313+0,000			537,354	540,011	2,658	1,100	537,321	4,701	540,921
-7,000	537,262	314+0,000			537,052	539,328	2,276	1,100	537,019	4,582	540,501
-7,000	536,852	315+0,000		PTV	536,642	538,877	2,235	1,100	536,609	4,704	540,214
-7,000	536,388	316+0,000			536,178	538,742	2,564	1,100	536,145	4,444	539,489
-7,000	535,925	317+0,000			535,715	538,254	2,540	1,100	535,682	4,231	538,813
-7,000	535,461	318+0,000			535,251	537,539	2,289	1,100	535,218	4,052	538,169
-7,000	534,997	319+0,000			534,787	536,859	2,072	1,100	534,754	3,542	537,196
-7,000	534,774	319+9,635	PI		534,564	536,706	2,142	1,100	534,531	3,423	536,853
-6,491	534,518	320+0,000			534,323	536,039	1,716	1,100	534,290	3,312	536,502
-5,491	534,024	321+0,000			533,859	535,051	1,192	1,100	533,826	3,128	535,855
-4,806	533,686	321+13,690	PF	PFV	533,542	534,736	1,194	1,100	533,509	2,980	535,389

3.4. NOTAS DE SERVIÇO – INTERSEÇÃO 02

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 02 - RAMO 400											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONT	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-4,813	549,640	399+20,000	PP	PPV	549,496	548,000	-1,496	1,100	549,463	3,291	548,002
-6,685	549,168	401+0,000			548,968	547,570	-1,398	1,100	548,935	3,127	547,583
-6,000	548,619	402+0,000			548,439	547,133	-1,306	1,100	548,406	2,983	547,151
-6,000	548,173	402+16,895	PT		547,993	546,824	-1,169	1,100	547,960	2,802	546,826
-6,000	548,091	403+0,000			547,911	546,735	-1,176	1,100	547,878	2,794	546,748
-6,000	547,563	404+0,000			547,383	546,051	-1,331	1,100	547,350	2,920	546,136
-6,000	547,034	405+0,000			546,854	545,734	-1,120	1,100	546,821	2,640	545,794
-6,000	546,588	405+16,895	TC		546,408	545,401	-1,007	1,100	546,375	2,468	545,463
-6,000	546,506	406+0,000			546,326	545,371	-0,955	1,100	546,293	2,443	545,398
-6,000	545,977	407+0,000			545,797	544,934	-0,864	1,100	545,764	2,323	544,949
-6,000	545,449	408+0,000			545,269	544,462	-0,807	1,100	545,236	2,223	544,487
-6,163	544,926	409+0,000			544,741	544,004	-0,736	1,100	544,708	2,126	544,024
-7,888	544,449	410+0,000			544,212	543,518	-0,694	1,100	544,179	2,046	543,549
-8,012	544,131	410+12,191	PCR		543,890	543,233	-0,658	1,100	543,857	1,988	543,265
-8,000	543,924	411+0,000			543,684	542,990	-0,694	1,100	543,651	2,042	543,023
-8,000	543,396	412+0,000			543,156	542,454	-0,701	1,100	543,123	2,035	542,500
-8,000	542,867	413+0,000		PCV	542,627	542,083	-0,544	1,100	542,594	1,792	542,133
-8,000	542,628	413+9,321	PT		542,388	541,878	-0,511	1,100	542,355	1,771	541,908
-8,000	542,373	414+0,000			542,133	541,691	-0,442	1,100	542,100	1,674	541,717
-8,000	541,945	415+0,000			541,705	541,640	-0,066	1,100	541,672	1,160	541,633
-8,000	541,903	415+2,187	TC		541,663	541,545	-0,118	1,100	541,630	1,135	541,606
-11,886	541,702	416+0,000			541,346	541,334	-0,011	1,100	541,313	1,152	541,278
-20,787	541,677	417+0,000			541,053	540,581	-0,472	1,100	541,020	1,746	540,589
-7,895	541,065	418+0,000			540,828	540,358	-0,471	1,100	540,795	1,705	540,392
-5,963	540,897	418+12,964	PT		540,719	540,376	-0,342	1,100	540,686	1,539	540,393
-5,965	540,850	419+0,000			540,671	540,370	-0,301	1,100	540,638	1,478	540,386
-5,970	540,760	420+0,000			540,581	540,491	-0,090	1,100	540,548	1,140	540,521
-5,975	540,737	421+0,000			540,558	540,635	0,077	1,100	540,525	1,261	540,686
-5,980	540,782	422+0,000			540,603	540,700	0,097	1,100	540,570	1,271	540,741
-5,981	540,795	422+2,964	PI		540,615	540,732	0,117	1,100	540,582	1,291	540,773
-5,382	540,877	423+0,000		PTV	540,715	540,930	0,215	1,100	540,682	1,394	540,976
-4,674	541,001	424+0,000			540,861	541,157	0,296	1,100	540,828	1,473	541,201
-3,966	541,126	425+0,000			541,007	541,342	0,334	1,100	540,974	1,510	541,384
-3,501	541,208	425+13,151	PI		541,103	541,462	0,359	1,100	541,070	1,536	541,506
-3,500	541,248	425+18,582	PF	PFV	541,143	541,518	0,375	1,100	541,070	1,536	541,506

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 02 - RAMO 500											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONT	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-3,500	541,248	500+0,000	PP	PPV	541,143	541,368	0,225	0,000	0,000	0,000	0,000
-3,501	541,207	500+5,573	PI		541,102	541,448	0,346	1,100	541,069	1,435	541,404
-4,023	541,116	501+0,000			540,995	541,248	0,253	1,100	540,962	1,346	541,208
-4,742	540,990	502+0,000			540,847	541,024	0,176	1,100	540,814	1,271	540,985
-5,461	540,863	503+0,000			540,699	540,737	0,037	1,100	540,666	1,134	540,700
-6,023	540,765	503+15,618	PI		540,584	540,510	-0,074	1,100	540,551	1,214	540,475
-6,020	540,732	504+0,000			540,552	540,453	-0,099	1,100	540,519	1,254	540,416
-6,025	540,585	505+0,000		PCV	540,404	540,347	-0,057	1,100	540,371	1,230	540,284
-6,030	540,429	506+0,000			540,248	540,322	0,074	1,100	540,215	1,194	540,309
-6,035	540,258	507+0,000			540,077	540,154	0,077	1,100	540,044	1,162	540,106
-6,038	540,152	507+11,462	TC		539,971	540,138	0,167	1,100	539,938	1,259	540,097
-7,552	540,116	508+0,000			539,889	540,067	0,178	1,100	539,856	1,291	540,048
-23,178	540,382	509+0,000			539,686	539,629	-0,057	1,100	539,653	1,157	539,615
-8,223	539,714	510+0,000			539,467	539,231	-0,237	1,100	539,434	1,386	539,244
-8,000	539,670	510+3,243	PT		539,430	539,106	-0,324	1,100	539,397	1,510	539,124
-8,143	539,477	511+0,000			539,233	538,953	-0,280	1,100	539,200	1,489	538,940
-8,313	539,232	512+0,000			538,982	538,540	-0,442	1,100	538,949	1,745	538,519
-8,014	538,959	512+19,854	TC		538,718	538,135	-0,583	1,100	538,685	1,953	538,116
-8,000	538,956	513+0,000			538,716	538,132	-0,584	1,100	538,683	1,951	538,116
-8,000	538,674	514+0,000			538,434	537,877	-0,557	1,100	538,401	1,978	537,816
-8,000	538,376	515+0,000		PTV	538,136	537,516	-0,621	1,100	538,103	2,049	537,471
-8,019	538,332	515+2,918	PCR		538,092	537,431	-0,660	1,100	538,059	2,099	537,393
-7,826	538,066	516+0,000			537,831	536,955	-0,876	1,100	537,798	2,438	536,906
-6,000	537,705	517+0,000			537,525	536,544	-0,981	1,100	537,492	2,609	536,486
-6,000	537,399	518+0,000			537,219	536,194	-1,026	1,100	537,186	2,689	536,127
-6,000	537,094	519+0,000			536,914	535,744	-1,169	1,100	536,881	2,868	535,702
-6,000	536,815	519+18,215	PT		536,635	535,521	-1,114	1,100	536,602	2,790	535,476
-6,000	536,788	520+0,000			536,608	535,501	-1,107	1,100	536,575	2,778	535,456
-6,000	536,482	521+0,000			536,302	535,311	-0,991	1,100	536,269	2,602	535,268
-6,000	536,177	522+0,000			535,997	535,022	-0,975	1,100	535,964	2,563	534,989
-6,000	535,898	522+18,214	TC		535,718	534,782	-0,937	1,100	535,685	2,504	534,750
-5,999	535,871	523+0,000			535,691	534,758	-0,933	1,100	535,658	2,498	534,726
-5,916	535,563	524+0,000			535,386	534,451	-0,934	1,100	535,353	2,484	534,430
-4,911	535,227	525+0,000			535,080	534,208	-0,872	1,100	535,047	2,395	534,184
-3,729	534,886	526+0,000			534,774	534,079	-0,696	1,100	534,741	2,092	534,080
-3,358	534,569	527+0,000			534,469	534,363	-0,106	1,100	534,436	1,201	534,368
-5,500	534,464	527+11,127	PF	PFV	534,299	534,674	0,375	1,100	534,266	1,514	534,679

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 02 - RAMO 600											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONT	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-5,500	534,183	600+0,000	PP	PPV	534,018	534,647	0,629	1,100	533,985	1,755	534,640
-4,386	534,568	601+0,000			534,436	534,223	-0,214	1,100	534,403	1,360	534,230
-6,090	535,037	602+0,000			534,855	534,161	-0,694	1,100	534,822	2,065	534,178
-8,625	535,532	603+0,000			535,273	534,448	-0,825	1,100	535,240	2,264	534,464
-6,000	535,871	604+0,000			535,691	534,743	-0,948	1,100	535,658	2,394	534,796
-6,000	536,141	604+12,913	PT		535,961	535,022	-0,939	1,100	535,928	2,382	535,074
-6,000	536,290	605+0,000			536,110	535,158	-0,952	1,100	536,077	2,401	535,209
-6,000	536,708	606+0,000			536,528	535,573	-0,954	1,100	536,495	2,421	535,614
-6,000	537,126	607+0,000			536,946	535,871	-1,075	1,100	536,913	2,606	535,909
-6,000	537,396	607+12,912	TC		537,216	536,055	-1,161	1,100	537,183	2,747	536,085
-6,000	537,544	608+0,000			537,364	536,150	-1,215	1,100	537,331	2,831	536,177
-6,000	537,963	609+0,000			537,783	536,492	-1,290	1,100	537,750	2,927	536,532
-6,000	538,381	610+0,000			538,201	536,814	-1,387	1,100	538,168	3,053	536,866
-6,660	538,819	611+0,000			538,619	537,115	-1,505	1,100	538,586	3,239	537,160
-8,005	539,278	612+0,000			539,038	537,433	-1,604	1,100	539,005	3,379	537,485
-8,012	539,450	612+8,208	PCR		539,209	537,549	-1,660	1,100	539,176	3,464	537,600
-8,000	539,696	613+0,000			539,456	537,682	-1,774	1,100	539,423	3,627	537,738
-8,000	540,114	614+0,000			539,874	538,029	-1,845	1,100	539,841	3,750	538,075
-8,000	540,532	615+0,000			540,292	538,559	-1,733	1,100	540,259	3,637	538,568
-8,000	540,644	615+5,340	PT		540,404	538,686	-1,718	1,100	540,371	3,609	538,699
-8,000	540,951	616+0,000			540,711	539,083	-1,627	1,100	540,678	3,389	539,151
-8,000	541,369	617+0,000			541,129	539,243	-1,886	1,100	541,096	3,719	539,350
-8,000	541,787	618+0,000			541,547	539,690	-1,857	1,100	541,514	3,885	539,658
-8,000	542,205	619+0,000			541,965	540,009	-1,957	1,100	541,932	4,045	539,969
-8,000	542,478	619+13,049	PI		542,238	540,450	-1,789	1,100	542,205	3,798	540,407
-8,000	542,624	620+0,000			542,384	540,704	-1,680	1,100	542,351	3,557	540,712
-8,000	543,042	621+0,000			542,802	540,997	-1,805	1,100	542,769	3,688	541,044
-8,000	543,460	622+0,000			543,220	541,514	-1,706	1,100	543,187	3,656	541,484
-8,000	543,879	623+0,000			543,639	541,581	-2,058	1,100	543,606	3,993	541,677
-8,000	544,103	623+10,747	TC		543,863	541,804	-2,060	1,100	543,830	3,996	541,900
-8,000	544,297	624+0,000			544,057	542,024	-2,033	1,100	544,024	3,975	542,107
-8,000	544,715	625+0,000			544,475	542,440	-2,036	1,100	544,442	3,986	542,518
-8,000	545,133	626+0,000			544,893	542,997	-1,896	1,100	544,860	3,792	543,066
-8,019	545,299	626+7,878	PCR		545,058	543,222	-1,836	1,100	545,025	3,703	543,290
-8,023	545,552	627+0,000			545,312	543,539	-1,773	1,100	545,279	3,600	543,612
-6,516	545,925	628+0,000			545,730	544,054	-1,676	1,100	545,697	3,557	544,059
-6,000	546,328	629+0,000			546,148	544,456	-1,692	1,100	546,115	3,559	544,476
-6,000	546,747	630+0,000			546,567	544,883	-1,684	1,100	546,534	3,530	544,913
-6,000	547,165	631+0,000			546,985	545,354	-1,631	1,100	546,952	3,558	545,313
-6,000	547,231	631+3,175	PT		547,051	545,427	-1,624	1,100	547,018	3,546	545,387
-6,000	547,583	632+0,000			547,403	545,815	-1,588	1,100	547,370	3,475	545,787
-6,000	548,001	633+0,000			547,821	546,031	-1,790	1,100	547,788	3,695	546,058
-6,000	548,420	634+0,000			548,240	546,577	-1,663	1,100	548,207	3,514	546,597
-6,000	548,486	634+3,174	TC		548,306	546,619	-1,687	1,100	548,273	3,511	546,666
-6,000	548,838	635+0,000			548,658	546,772	-1,886	1,100	548,625	3,783	546,837
-6,693	549,277	636+0,000			549,076	547,178	-1,898	1,100	549,043	3,808	547,238
-4,818	549,639	637+0,000			549,495	547,563	-1,931	1,100	549,462	3,834	547,639
-4,813	549,640	637+0,069	PF	PFV	549,496	547,564	-1,932	1,100	549,463	3,835	547,640

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 02 - RAMO 700											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONT	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-2,106	543,049	0+0,000	PP	PPV	543,753	543,084	-0,669	1,100	543,720	2,106	543,049
-4,343	544,168	1+0,000			544,038	543,599	-0,439	1,100	543,905	1,624	543,556
-5,602	544,240	1+2,384	CC		544,072	543,720	-0,352	1,100	543,939	1,494	543,676
-9,167	544,598	2+0,000			544,323	543,364	-0,959	1,100	544,190	2,393	543,328
-5,313	544,696	2+15,010	CC		544,537	543,537	-1,000	1,100	544,404	2,513	543,462
-2,975	544,697	3+0,000			544,608	543,448	-1,160	1,100	544,475	2,755	543,372
0,000	0,000	3+17,393	PF	PFV	544,856	543,060	-1,796	1,100	544,723	3,696	542,992

NOTA DE SERVIÇO DE TERRAPLENAGEM - IN 02 - RAMO 800											
LADO ESQUERDO		EIXO						LADO DIREITO			
BORDO		ESTACA	P.N HORIZONTAL	P.N VERTICAL	COTA PROJETO	COTA TERRENO	COTA VERMELHA	BORDO		OFFSET	
Afast.(m)	Cota (m)							Afast.(m)	Cota (m)	Afast.(m)	Cota (m)
-3,471	537,389	800+0,000	PP	PPV	539,103	537,440	-1,663	1,100	538,970	3,471	537,389
-4,343	538,477	801+0,000			538,822	537,079	-1,743	1,100	538,689	3,561	537,049
-5,602	538,482	801+2,384	CC		538,789	537,031	-1,758	1,100	538,656	3,578	537,004
-9,126	538,340	802+0,000			538,541	536,773	-1,768	1,100	538,408	3,474	536,825
-5,313	538,015	802+15,010	CC		538,330	536,946	-1,385	1,100	538,197	2,921	536,983
-2,975	537,875	803+0,000			538,260	537,046	-1,214	1,100	538,127	2,661	537,087
-1,770	537,883	803+17,393	PF	PFV	538,016	537,442	-0,574	1,100	537,883	1,770	537,437

4. CÁLCULO DE VOLUMES

4. CÁLCULO DE VOLUMES

4.1. FICHA DE CUBAÇÃO – LINHA TRONCO GO 221

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221													
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68										LOTE: ÚNICO		Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral		
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.				
0+0.000	7,21	7,21	2,64	2,64	10,00	122,08	122,08	35,96	35,96	2.000.086,12	35,96		
1+0.000	5,00	12,21	0,00	2,64	10,00	81,61	203,69	0,00	35,96	2.000.167,73			
2+0.000	3,16	15,37	0,00	2,64	10,00	65,66	269,35	0,00	35,96	2.000.233,39			
3+0.000	3,41	18,77	0,00	2,64	10,00	66,92	336,27	0,00	35,96	2.000.300,31			
4+0.000	3,28	22,06	0,00	2,64	10,00	58,24	394,51	0,00	35,96	2.000.358,55			
5+0.000	2,54	24,60	0,00	2,64	10,00	63,34	457,85	0,00	35,96	2.000.421,89			
6+0.000	3,79	28,39	0,00	2,64	10,00	98,28	556,13	0,00	35,96	2.000.520,17			
7+0.000	6,03	34,43	0,00	2,64	10,00	112,59	668,72	0,00	35,96	2.000.632,76			
8+0.000	5,23	39,65	0,00	2,64	10,00	108,04	776,76	0,00	35,96	2.000.740,80			
9+0.000	5,58	45,23	0,00	2,64	10,00	115,63	892,39	0,00	35,96	2.000.856,43			
10+0.000	5,98	51,21	0,00	2,64	10,00	110,90	1.003,29	0,00	35,96	2.000.967,33			
11+0.000	5,11	56,32	0,00	2,64	10,00	97,38	1.100,67	0,00	35,96	2.001.064,71			
12+0.000	4,63	60,95	0,00	2,64	10,00	95,65	1.196,32	0,00	35,96	2.001.160,36			
13+0.000	4,93	65,89	0,00	2,64	10,00	96,43	1.292,75	112,44	148,40	2.001.144,35	96,43		
14+0.000	4,71	70,60	8,27	10,91	10,00	108,54	1.401,29	112,44	260,85	2.001.140,44	108,54		
15+0.000	6,14	76,74	0,00	10,91	10,00	126,36	1.527,65	0,00	260,85	2.001.266,80			
16+0.000	6,49	83,23	0,00	10,91	10,00	123,19	1.650,84	0,00	260,85	2.001.389,99			
17+0.000	5,83	89,06	0,00	10,91	10,00	114,82	1.765,66	0,00	260,85	2.001.504,81			
18+0.000	5,66	94,71	0,00	10,91	10,00	109,99	1.875,65	0,00	260,85	2.001.614,80			
19+0.000	5,34	100,06	0,00	10,91	10,00	106,81	1.982,46	0,00	260,85	2.001.721,61			
20+0.000	5,34	105,39	0,00	10,91	10,00	107,87	2.090,33	0,00	260,85	2.001.829,48			
21+0.000	5,45	110,84	0,00	10,91	10,00	110,70	2.201,03	0,00	260,85	2.001.940,18			
22+0.000	5,62	116,46	0,00	10,91	10,00	104,26	2.305,29	0,00	260,85	2.002.044,44			
23+0.000	4,81	121,27	0,00	10,91	10,00	94,62	2.399,91	0,00	260,85	2.002.139,06			
24+0.000	4,66	125,93	0,00	10,91	10,00	93,30	2.493,21	0,00	260,85	2.002.232,36			
25+0.000	4,67	130,60	0,00	10,91	10,00	91,31	2.584,52	0,00	260,85	2.002.323,67			
26+0.000	4,46	135,06	0,00	10,91	10,00	81,68	2.666,20	0,00	260,85	2.002.405,35			
27+0.000	3,71	138,77	0,00	10,91	10,00	70,82	2.737,02	0,00	260,85	2.002.476,17			
28+0.000	3,37	142,14	0,00	10,91	10,00	79,26	2.816,28	0,00	260,85	2.002.555,43			
29+0.000	4,56	146,69	0,00	10,91	10,00	90,90	2.907,18	0,00	260,85	2.002.646,33			
30+0.000	4,54	151,23	0,00	10,91	10,00	82,46	2.989,64	0,00	260,85	2.002.728,79			
31+0.000	3,71	154,94	0,00	10,91	10,00	77,33	3.066,97	0,00	260,85	2.002.806,12			
32+0.000	4,02	158,96	0,00	10,91	10,00	196,21	3.263,18	0,00	260,85	2.003.002,33			
33+0.000	15,60	174,56	0,00	10,91	10,00	192,65	3.455,83	0,00	260,85	2.003.194,98			
34+0.000	3,67	178,23	0,00	10,91	10,00	76,60	3.532,43	0,00	260,85	2.003.271,58			
35+0.000	3,99	182,22	0,00	10,91	10,00	87,42	3.619,85	0,00	260,85	2.003.359,00			
36+0.000	4,75	186,97	0,00	10,91	10,00	93,63	3.713,48	0,00	260,85	2.003.452,63			
37+0.000	4,62	191,58	0,00	10,91	10,00	101,42	3.814,90	0,00	260,85	2.003.554,05			
38+0.000	5,53	197,11	0,00	10,91	10,00	114,14	3.929,04	0,34	261,19	2.003.667,85	0,34		
39+0.000	5,89	203,00	0,03	10,94	10,00	134,72	4.063,76	0,34	261,53	2.003.802,23	0,34		
40+0.000	7,59	210,58	0,00	10,94	10,00	160,79	4.224,55	0,00	261,53	2.003.963,02			
41+0.000	8,49	219,08	0,00	10,94	10,00	165,93	4.390,48	5,59	267,12	2.004.123,36	5,59		
42+0.000	8,10	227,18	0,41	11,35	10,00	184,79	4.575,27	5,59	272,71	2.004.302,56	5,59		
43+0.000	10,38	237,56	0,00	11,35	10,00	199,57	4.774,84	0,00	272,71	2.004.502,13			
44+0.000	9,58	247,13	0,00	11,35	10,00	167,12	4.941,96	0,00	272,71	2.004.669,25			
45+0.000	7,14	254,27	0,00	11,35	10,00	133,71	5.075,67	0,00	272,71	2.004.802,96			
46+0.000	6,24	260,50	0,00	11,35	10,00	115,24	5.190,91	0,00	272,71	2.004.918,20			
47+0.000	5,29	265,79	0,00	11,35	10,00	98,25	5.289,16	0,00	272,71	2.005.016,45			
48+0.000	4,54	270,33	0,00	11,35	10,00	89,30	5.378,46	0,35	273,06	2.005.105,40	0,35		
49+0.000	4,39	274,72	0,03	11,37	10,00	89,89	5.468,35	0,35	273,41	2.005.194,94	0,35		
50+0.000	4,60	279,32	0,00	11,37	10,00	86,57	5.554,92	0,03	273,44	2.005.281,48	0,03		
51+0.000	4,06	283,38	0,00	11,38	10,00	83,57	5.638,49	0,04	273,48	2.005.365,01	0,04		
52+0.000	4,30	287,68	0,00	11,38	10,00	88,79	5.727,28	0,01	273,50	2.005.453,78	0,01		

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
53+0.000	4,58	292,26	0,00	11,38	10,00	97,35	5.824,63	0,00	273,50	2.005.551,13	
54+0.000	5,15	297,41	0,00	11,38	10,00	108,04	5.932,67	0,00	273,50	2.005.659,17	
55+0.000	5,65	303,06	0,00	11,38	10,00	108,37	6.041,04	0,00	273,50	2.005.767,54	
56+0.000	5,19	308,25	0,00	11,38	10,00	95,94	6.136,98	0,00	273,50	2.005.863,48	
57+0.000	4,41	312,66	0,00	11,38	10,00	87,57	6.224,55	0,00	273,50	2.005.951,05	
58+0.000	4,35	317,00	0,00	11,38	10,00	98,12	6.322,67	0,00	273,50	2.006.049,17	
59+0.000	5,46	322,47	0,00	11,38	10,00	118,87	6.441,54	0,00	273,50	2.006.168,04	
60+0.000	6,42	328,89	0,00	11,38	10,00	121,11	6.562,65	0,00	273,50	2.006.289,15	
61+0.000	5,69	334,58	0,00	11,38	10	124,73	6.687,38	0,00	273,50	2.006.413,88	
62+0.000	6,79	341,36	0,00	11,38	10	121,94	6.809,32	0,00	273,50	2.006.535,82	
63+0.000	5,41	346,77	0,00	11,38	10	115,29	6.924,61	0,00	273,50	2.006.651,11	
64+0.000	6,12	352,89	0,00	11,38	10	128,86	7.053,47	0,00	273,50	2.006.779,97	
65+0.000	6,77	359,66	0,00	11,38	10	143,60	7.197,07	0,00	273,50	2.006.923,57	
66+0.000	7,59	367,25	0,00	11,38	10	160,36	7.357,43	0,00	273,50	2.007.083,93	
67+0.000	8,44	375,70	0,00	11,38	10	174,31	7.531,74	0,00	273,50	2.007.258,24	
68+0.000	8,99	384,68	0,00	11,38	10	177,29	7.709,03	0,00	273,50	2.007.435,53	
69+0.000	8,74	393,42	0,00	11,38	10	175,30	7.884,33	0,00	273,50	2.007.610,83	
70+0.000	8,79	402,21	0,00	11,38	10	181,46	8.065,79	0,00	273,50	2.007.792,29	
71+0.000	9,36	411,57	0,00	11,38	10	188,10	8.253,89	0,00	273,50	2.007.980,39	
72+0.000	9,45	421,02	0,00	11,38	10	186,44	8.440,33	0,00	273,50	2.008.166,83	
73+0.000	9,19	430,21	0,00	11,38	10	177,95	8.618,28	0,00	273,50	2.008.344,78	
74+0.000	8,61	438,82	0,00	11,38	10	168,04	8.786,32	0,00	273,50	2.008.512,82	
75+0.000	8,20	447,02	0,00	11,38	10	156,88	8.943,20	0,00	273,50	2.008.669,70	
76+0.000	7,49	454,51	0,00	11,38	10	142,73	9.085,93	0,00	273,50	2.008.812,43	
77+0.000	6,78	461,29	0,00	11,38	10	130,22	9.216,15	0,00	273,50	2.008.942,65	
78+0.000	6,24	467,53	0,00	11,38	10	118,96	9.335,11	0,00	273,50	2.009.061,61	
79+0.000	5,66	473,19	0,00	11,38	10	108,47	9.443,58	0,00	273,50	2.009.170,08	
80+0.000	5,19	478,38	0,00	11,38	10	104,94	9.548,52	0,00	273,50	2.009.275,02	
81+0.000	5,31	483,68	0,00	11,38	10	101,63	9.650,15	0,00	273,50	2.009.376,65	
82+0.000	4,86	488,54	0,00	11,38	10	94,38	9.744,53	0,00	273,50	2.009.471,03	
83+0.000	4,58	493,12	0,00	11,38	10	93,23	9.837,76	0,00	273,50	2.009.564,26	
84+0.000	4,74	497,86	0,00	11,38	10	105,56	9.943,32	0,00	273,50	2.009.669,82	
85+0.000	5,81	503,68	0,00	11,38	10	119,16	10.062,48	0,00	273,50	2.009.788,98	
86+0.000	6,10	509,78	0,00	11,38	10	131,01	10.193,49	0,00	273,50	2.009.919,99	
87+0.000	7,00	516,78	0,00	11,38	10	141,69	10.335,18	0,00	273,50	2.010.061,68	
88+0.000	7,17	523,95	0,00	11,38	10	145,38	10.480,56	0,00	273,50	2.010.207,06	
89+0.000	7,37	531,31	0,00	11,38	10	150,28	10.630,84	0,00	273,50	2.010.357,34	
90+0.000	7,66	538,98	0,00	11,38	10	152,36	10.783,20	0,00	273,50	2.010.509,70	
91+0.000	7,58	546,55	0,00	11,38	10	149,82	10.933,02	0,00	273,50	2.010.659,52	
92+0.000	7,41	553,96	0,00	11,38	10	147,07	11.080,09	0,00	273,50	2.010.806,59	
93+0.000	7,30	561,26	0,00	11,38	10	149,35	11.229,44	0,00	273,50	2.010.955,94	
94+0.000	7,64	568,89	0,00	11,38	10	148,05	11.377,49	0,00	273,50	2.011.103,99	
95+0.000	7,17	576,06	0,00	11,38	10	134,90	11.512,39	0,00	273,50	2.011.238,89	
96+0.000	6,32	582,38	0,00	11,38	10	128,53	11.640,92	0,00	273,50	2.011.367,42	
97+0.000	6,53	588,92	0,00	11,38	10	127,85	11.768,77	0,00	273,50	2.011.495,27	
98+0.000	6,25	595,17	0,00	11,38	10	115,44	11.884,21	0,00	273,50	2.011.610,71	
99+0.000	5,29	600,46	0,00	11,38	10	104,86	11.989,07	2,16	275,66	2.011.713,41	2,16
100+0.000	5,19	605,65	0,16	11,54	10	100,31	12.089,38	7,43	283,08	2.011.806,30	7,43
101+0.000	4,84	610,49	0,39	11,92	10	96,30	12.185,68	10,24	293,32	2.011.892,36	10,24
102+0.000	4,79	615,28	0,37	12,29	10	95,59	12.281,27	7,66	300,98	2.011.980,29	7,66
103+0.000	4,77	620,05	0,20	12,49	10	94,71	12.375,98	3,32	304,30	2.012.071,68	3,32
104+0.000	4,71	624,75	0,05	12,53	10	93,04	12.469,02	3,54	307,84	2.012.161,18	3,54
105+0.000	4,60	629,35	0,21	12,75	10	86,34	12.555,36	7,11	314,95	2.012.240,41	7,11

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221													
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68										LOTE: ÚNICO		Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de	Comp.		
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner	Lateral		
106+0.000	4,04	633,39	0,31	13,06	10	78,47	12.633,83	8,02	322,97	2.012.310,86	8,02		
107+0.000	3,81	637,20	0,28	13,34	10	84,05	12.717,88	5,26	328,24	2.012.389,64	5,26		
108+0.000	4,59	641,79	0,11	13,44	10	94,26	12.812,14	2,60	330,83	2.012.481,31	2,60		
109+0.000	4,83	646,63	0,08	13,53	10	95,09	12.907,23	3,47	334,30	2.012.572,93	3,47		
110+0.000	4,68	651,30	0,17	13,70	10	93,33	13.000,56	12,81	347,11	2.012.653,45	12,81		
111+0.000	4,66	655,96	0,77	14,47	10	104,09	13.104,65	22,62	369,73	2.012.734,92	22,62		
112+0.000	5,75	661,71	0,89	15,36	10	126,74	13.231,39	22,54	392,26	2.012.839,13	22,54		
113+0.000	6,92	668,63	0,77	16,13	10	140,13	13.371,52	10,40	402,67	2.012.968,85	10,40		
114+0.000	7,09	675,72	0,00	16,13	10	115,11	13.486,63	0,00	402,67	2.013.083,96			
115+0.000	4,42	680,14	0,00	16,13	10	74,01	13.560,64	73,94	476,61	2.013.084,03	73,94		
116+0.000	2,98	683,13	5,44	21,56	10	62,39	13.623,03	73,94	550,56	2.013.072,47	62,39		
117+0.000	3,26	686,38	0,00	21,56	10	70,84	13.693,87	0,00	550,56	2.013.143,31			
118+0.000	3,83	690,21	0,00	21,56	10	88,97	13.782,84	0,00	550,56	2.013.232,28			
119+0.000	5,07	695,28	0,00	21,56	10	117,45	13.900,29	0,00	550,56	2.013.349,73			
120+0.000	6,67	701,95	0,00	21,56	10	123,52	14.023,81	0,00	550,56	2.013.473,25			
121+0.000	5,68	707,63	0,00	21,56	10	98,72	14.122,53	0,00	550,56	2.013.571,97			
122+0.000	4,19	711,83	0,00	21,56	10	82,85	14.205,38	0,00	550,56	2.013.654,82			
123+0.000	4,09	715,92	0,00	21,56	10	90,79	14.296,17	0,00	550,56	2.013.745,61			
124+0.000	4,99	720,91	0,00	21,56	10	91,09	14.387,26	0,00	550,56	2.013.836,70			
125+0.000	4,12	725,03	0,00	21,56	10	61,85	14.449,11	0,00	550,56	2.013.898,55			
126+0.000	2,06	727,09	0,00	21,56	10	55,55	14.504,66	0,45	551,00	2.013.953,66	0,45		
127+0.000	3,49	730,58	0,03	21,60	10	81,82	14.586,48	0,45	551,45	2.014.035,03	0,45		
128+0.000	4,69	735,27	0,00	21,60	10	127,94	14.714,42	0,00	551,45	2.014.162,97			
129+0.000	8,10	743,38	0,00	21,60	10	163,72	14.878,14	0,00	551,45	2.014.326,69			
130+0.000	8,27	751,64	0,00	21,60	10	196,05	15.074,19	0,00	551,45	2.014.522,74			
131+0.000	11,34	762,98	0,00	21,60	10	195,76	15.269,95	0,00	551,45	2.014.718,50			
132+0.000	8,24	771,22	0,00	21,60	10	179,21	15.449,16	0,00	551,45	2.014.897,71			
133+0.000	9,68	780,90	0,00	21,60	10	213,04	15.662,20	0,00	551,45	2.015.110,75			
134+0.000	11,62	792,52	0,00	21,60	10	207,07	15.869,27	0,00	551,45	2.015.317,82			
135+0.000	9,08	801,61	0,00	21,60	10	182,85	16.052,12	0,00	551,45	2.015.500,67			
136+0.000	9,20	810,81	0,00	21,60	10	196,35	16.248,47	0,00	551,45	2.015.697,02			
137+0.000	10,43	821,24	0,00	21,60	10	208,59	16.457,06	0,00	551,45	2.015.905,61			
138+0.000	10,43	831,67	0,00	21,60	10	229,31	16.686,37	0,00	551,45	2.016.134,92			
139+0.000	12,51	844,17	0,00	21,60	10	223,64	16.910,01	0,00	551,45	2.016.358,56			
140+0.000	9,86	854,03	0,00	21,60	10	207,50	17.117,51	0,00	551,45	2.016.566,06			
141+0.000	10,89	864,92	0,00	21,60	10	223,73	17.341,24	0,00	551,45	2.016.789,79			
142+0.000	11,48	876,41	0,00	21,60	10	243,86	17.585,10	0,00	551,45	2.017.033,65			
143+0.000	12,91	889,31	0,00	21,60	10	266,03	17.851,13	0,00	551,45	2.017.299,68			
144+0.000	13,70	903,01	0,00	21,60	10	258,95	18.110,08	0,00	551,45	2.017.558,63			
145+0.000	12,20	915,21	0,00	21,60	10	242,37	18.352,45	0,00	551,45	2.017.801,00			
146+0.000	12,04	927,25	0,00	21,60	10	236,42	18.588,87	0,00	551,45	2.018.037,42			
147+0.000	11,60	938,85	0,00	21,60	10	284,30	18.873,17	0,00	551,45	2.018.321,72			
148+0.000	16,83	955,68	0,00	21,60	10	297,28	19.170,45	0,00	551,45	2.018.619,00			
149+0.000	12,90	968,58	0,00	21,60	10	305,07	19.475,52	0,00	551,45	2.018.924,07			
150+0.000	17,61	986,18	0,00	21,60	10	332,78	19.808,30	0,00	551,45	2.019.256,85			
151+0.000	15,67	1.001,85	0,00	21,60	10	304,02	20.112,32	0,00	551,45	2.019.560,87			
152+0.000	14,73	1.016,58	0,00	21,60	10	305,80	20.418,12	0,00	551,45	2.019.866,67			
153+0.000	15,85	1.032,43	0,00	21,60	10	253,16	20.671,28	0,00	551,45	2.020.119,83			
154+0.000	9,47	1.041,90	0,00	21,60	10	210,67	20.881,95	0,00	551,45	2.020.330,50			
155+0.000	11,60	1.053,50	0,00	21,60	10	175,38	21.057,33	0,00	551,45	2.020.505,88			
156+0.000	5,94	1.059,44	0,00	21,60	10	132,96	21.190,29	0,00	551,45	2.020.638,84			
157+0.000	7,36	1.066,80	0,00	21,60	10	159,30	21.349,59	0,00	551,45	2.020.798,14			
158+0.000	8,57	1.075,37	0,00	21,60	10	162,26	21.511,85	0,00	551,45	2.020.960,40			

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
159+0.000	7,65	1.083,02	0,00	21,60	10	154,37	21.666,22	0,00	551,45	2.021.114,77	
160+0.000	7,78	1.090,81	0,00	21,60	10	161,71	21.827,93	0,00	551,45	2.021.276,48	
161+0.000	8,39	1.099,19	0,00	21,60	10	173,63	22.001,56	0,00	551,45	2.021.450,11	
162+0.000	8,98	1.108,17	0,00	21,60	10	186,62	22.188,18	0,00	551,45	2.021.636,73	
163+0.000	9,69	1.117,86	0,00	21,60	10	192,68	22.380,86	0,00	551,45	2.021.829,41	
164+0.000	9,58	1.127,44	0,00	21,60	10	205,93	22.586,79	0,00	551,45	2.022.035,34	
165+0.000	11,01	1.138,45	0,00	21,60	10	226,46	22.813,25	0,00	551,45	2.022.261,80	
166+0.000	11,63	1.150,08	0,00	21,60	10	231,61	23.044,86	0,00	551,45	2.022.493,41	
167+0.000	11,53	1.161,61	0,00	21,60	10	231,14	23.276,00	0,00	551,45	2.022.724,55	
168+0.000	11,59	1.173,20	0,00	21,60	10	229,26	23.505,26	0,00	551,45	2.022.953,81	
169+0.000	11,34	1.184,54	0,00	21,60	10	231,53	23.736,79	0,00	551,45	2.023.185,34	
170+0.000	11,81	1.196,35	0,00	21,60	10	230,16	23.966,95	0,00	551,45	2.023.415,50	
171+0.000	11,20	1.207,55	0,00	21,60	10	225,29	24.192,24	0,00	551,45	2.023.640,79	
172+0.000	11,33	1.218,88	0,00	21,60	10	233,69	24.425,93	0,00	551,45	2.023.874,48	
173+0.000	12,04	1.230,92	0,00	21,60	10	246,68	24.672,61	0,00	551,45	2.024.121,16	
174+0.000	12,63	1.243,55	0,00	21,60	10	252,00	24.924,61	0,00	551,45	2.024.373,16	
175+0.000	12,57	1.256,12	0,00	21,60	10	252,21	25.176,82	0,00	551,45	2.024.625,37	
176+0.000	12,65	1.268,77	0,00	21,60	10	258,33	25.435,15	0,00	551,45	2.024.883,70	
177+0.000	13,19	1.281,95	0,00	21,60	10	273,17	25.708,32	0,00	551,45	2.025.156,87	
178+0.000	14,13	1.296,08	0,00	21,60	10	291,64	25.999,96	0,00	551,45	2.025.448,51	
179+0.000	15,03	1.311,12	0,00	21,60	10	315,21	26.315,17	0,00	551,45	2.025.763,72	
180+0.000	16,49	1.327,61	0,00	21,60	10	164,88	26.480,05	0,00	551,45	2.025.928,60	
181+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
182+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
183+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
184+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
185+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
186+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
187+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
188+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
189+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
190+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
191+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
192+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
193+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
194+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
195+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
196+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
197+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
198+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
199+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
200+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
201+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
202+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
203+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
204+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
205+0.000	0,00	1.327,61	0,00	21,60	10	0,00	26.480,05	0,00	551,45	2.025.928,60	
206+0.000	0,00	1.327,61	0,00	21,60	10	81,55	26.561,60	0,00	551,45	2.026.010,15	
207+0.000	8,16	1.335,76	0,00	21,60	10	165,20	26.726,80	0,00	551,45	2.026.175,35	
208+0.000	8,37	1.344,13	0,00	21,60	10	167,13	26.893,93	0,00	551,45	2.026.342,48	
209+0.000	8,35	1.352,47	0,00	21,60	10	166,27	27.060,20	0,00	551,45	2.026.508,75	
210+0.000	8,28	1.360,75	0,00	21,60	10	161,50	27.221,70	0,00	551,45	2.026.670,25	
211+0.000	7,87	1.368,62	0,00	21,60	10	157,78	27.379,48	0,00	551,45	2.026.828,03	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68									LOTE: ÚNICO		Empolamento: 36%
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
212+0.000	7,91	1.376,53	0,00	21,60	10	162,58	27.542,06	0,00	551,45	2.026.990,61	
213+0.000	8,35	1.384,88	0,00	21,60	10	166,62	27.708,68	0,00	551,45	2.027.157,23	
214+0.000	8,31	1.393,19	0,00	21,60	10	158,83	27.867,51	0,00	551,45	2.027.316,06	
215+0.000	7,57	1.400,76	0,00	21,60	10	153,25	28.020,76	0,00	551,45	2.027.469,31	
216+0.000	7,75	1.408,52	0,00	21,60	10	151,69	28.172,45	0,00	551,45	2.027.621,00	
217+0.000	7,42	1.415,93	0,00	21,60	10	149,09	28.321,54	0,00	551,45	2.027.770,09	
218+0.000	7,49	1.423,43	0,00	21,60	10	144,34	28.465,88	0,00	551,45	2.027.914,43	
219+0.000	6,94	1.430,37	0,00	21,60	10	140,77	28.606,65	0,00	551,45	2.028.055,20	
220+0.000	7,14	1.437,50	0,00	21,60	10	141,07	28.747,72	0,00	551,45	2.028.196,27	
221+0.000	6,97	1.444,47	0,00	21,60	10	137,92	28.885,64	0,00	551,45	2.028.334,19	
222+0.000	6,82	1.451,30	0,00	21,60	10	137,71	29.023,35	0,00	551,45	2.028.471,90	
223+0.000	6,95	1.458,25	0,00	21,60	10	139,28	29.162,63	0,00	551,45	2.028.611,18	
224+0.000	6,98	1.465,22	0,00	21,60	10	141,53	29.304,16	0,00	551,45	2.028.752,71	
225+0.000	7,18	1.472,40	0,00	21,60	10	140,14	29.444,30	0,00	551,45	2.028.892,85	
226+0.000	6,84	1.479,24	0,00	21,60	10	133,39	29.577,69	0,00	551,45	2.029.026,24	
227+0.000	6,50	1.485,74	0,00	21,60	10	132,90	29.710,59	0,00	551,45	2.029.159,14	
228+0.000	6,79	1.492,53	0,00	21,60	10	134,24	29.844,83	0,00	551,45	2.029.293,38	
229+0.000	6,63	1.499,16	0,00	21,60	10	130,02	29.974,85	0,00	551,45	2.029.423,40	
230+0.000	6,37	1.505,53	0,00	21,60	10	129,63	30.104,48	0,00	551,45	2.029.553,03	
231+0.000	6,60	1.512,12	0,00	21,60	10	137,10	30.241,58	0,00	551,45	2.029.690,13	
232+0.000	7,12	1.519,24	0,00	21,60	10	145,87	30.387,45	0,00	551,45	2.029.836,00	
233+0.000	7,47	1.526,71	0,00	21,60	10	148,94	30.536,39	0,00	551,45	2.029.984,94	
234+0.000	7,42	1.534,13	0,00	21,60	10	152,54	30.688,93	0,00	551,45	2.030.137,48	
235+0.000	7,83	1.541,97	0,00	21,60	10	146,32	30.835,25	0,00	551,45	2.030.283,80	
236+0.000	6,80	1.548,77	0,00	21,60	10	125,15	30.960,40	0,00	551,45	2.030.408,95	
237+0.000	5,72	1.554,48	0,00	21,60	10	109,08	31.069,48	0,00	551,45	2.030.518,03	
238+0.000	5,19	1.559,67	0,00	21,60	10	105,14	31.174,62	0,00	551,45	2.030.623,17	
239+0.000	5,32	1.564,99	0,00	21,60	10	107,28	31.281,90	0,00	551,45	2.030.730,45	
240+0.000	5,41	1.570,40	0,00	21,60	10	105,40	31.387,30	0,00	551,45	2.030.835,85	
241+0.000	5,13	1.575,53	0,00	21,60	10	102,94	31.490,24	0,00	551,45	2.030.938,79	
242+0.000	5,16	1.580,70	0,00	21,60	10	98,86	31.589,10	0,00	551,45	2.031.037,65	
243+0.000	4,73	1.585,42	0,00	21,60	10	91,93	31.681,03	0,00	551,45	2.031.129,58	
244+0.000	4,47	1.589,89	0,00	21,60	10	89,90	31.770,93	0,00	551,45	2.031.219,48	
245+0.000	4,52	1.594,41	0,00	21,60	10	87,01	31.857,94	0,00	551,45	2.031.306,49	
246+0.000	4,18	1.598,59	0,00	21,60	10	80,17	31.938,11	0,00	551,45	2.031.386,66	
247+0.000	3,84	1.602,43	0,00	21,60	10	74,18	32.012,29	0,00	551,45	2.031.460,84	
248+0.000	3,58	1.606,01	0,00	21,60	10	74,15	32.086,44	0,00	551,45	2.031.534,99	
249+0.000	3,84	1.609,84	0,00	21,60	10	70,31	32.156,75	0,00	551,45	2.031.605,30	
250+0.000	3,20	1.613,04	0,00	21,60	10	63,34	32.220,09	0,00	551,45	2.031.668,64	
251+0.000	3,14	1.616,18	0,00	21,60	10	64,15	32.284,24	0,42	551,87	2.031.732,37	0,42
252+0.000	3,28	1.619,45	0,03	21,63	10	62,45	32.346,69	1,01	552,88	2.031.793,81	1,01
253+0.000	2,97	1.622,42	0,04	21,67	10	55,35	32.402,04	0,58	553,47	2.031.848,57	0,58
254+0.000	2,57	1.624,99	0,00	21,67	10	53,47	32.455,51	0,00	553,47	2.031.902,04	
255+0.000	2,78	1.627,77	0,00	21,67	10	53,98	32.509,49	0,00	553,47	2.031.956,02	
256+0.000	2,62	1.630,39	0,00	21,67	10	59,17	32.568,66	0,00	553,47	2.032.015,19	
257+0.000	3,30	1.633,69	0,00	21,67	10	61,23	32.629,89	0,00	553,47	2.032.076,42	
258+0.000	2,82	1.636,51	0,00	21,67	10	55,45	32.685,34	0,19	553,66	2.032.131,68	0,19
259+0.000	2,72	1.639,23	0,01	21,68	10	52,77	32.738,11	0,19	553,85	2.032.184,26	0,19
260+0.000	2,56	1.641,79	0,00	21,68	10	57,32	32.795,43	0,00	553,85	2.032.241,58	
261+0.000	3,18	1.644,96	0,00	21,68	10	64,33	32.859,76	0,00	553,85	2.032.305,91	
262+0.000	3,26	1.648,22	0,00	21,68	10	54,87	32.914,63	0,00	553,85	2.032.360,78	
263+0.000	2,23	1.650,45	0,00	21,68	10	56,01	32.970,64	0,00	553,85	2.032.416,79	
264+0.000	3,37	1.653,82	0,00	21,68	10	56,79	33.027,43	0,00	553,85	2.032.473,58	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68									LOTE: ÚNICO		Empolamento: 36%
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
265+0.000	2,31	1.656,13	0,00	21,68	10	50,47	33.077,90	0,00	553,85	2.032.524,05	
266+0.000	2,74	1.658,87	0,00	21,68	10	65,18	33.143,08	0,00	553,85	2.032.589,23	
267+0.000	3,78	1.662,65	0,00	21,68	10	72,75	33.215,83	0,00	553,85	2.032.661,98	
268+0.000	3,50	1.666,14	0,00	21,68	10	82,22	33.298,05	0,00	553,85	2.032.744,20	
269+0.000	4,73	1.670,87	0,00	21,68	10	98,48	33.396,53	0,00	553,85	2.032.842,68	
270+0.000	5,12	1.675,99	0,00	21,68	10	99,66	33.496,19	0,00	553,85	2.032.942,34	
271+0.000	4,84	1.680,83	0,00	21,68	10	100,89	33.597,08	0,00	553,85	2.033.043,23	
272+0.000	5,25	1.686,08	0,00	21,68	10	111,31	33.708,39	0,00	553,85	2.033.154,54	
273+0.000	5,89	1.691,97	0,00	21,68	10	116,40	33.824,79	0,00	553,85	2.033.270,94	
274+0.000	5,75	1.697,72	0,00	21,68	10	114,43	33.939,22	0,00	553,85	2.033.385,37	
275+0.000	5,69	1.703,41	0,00	21,68	10	98,08	34.037,30	0,00	553,85	2.033.483,45	
276+0.000	4,12	1.707,53	0,00	21,68	10	71,69	34.108,99	0,00	553,85	2.033.555,14	
277+0.000	3,05	1.710,58	0,00	21,68	10	51,18	34.160,17	2,56	556,40	2.033.603,77	2,56
278+0.000	2,07	1.712,65	0,19	21,87	10	41,24	34.201,41	2,56	558,96	2.033.642,45	2,56
279+0.000	2,06	1.714,70	0,00	21,87	10	35,48	34.236,89	0,14	559,10	2.033.677,79	0,14
280+0.000	1,49	1.716,19	0,01	21,88	10	25,86	34.262,75	0,46	559,56	2.033.703,19	0,46
281+0.000	1,09	1.717,29	0,02	21,91	10	20,48	34.283,23	1,90	561,46	2.033.721,77	1,90
282+0.000	0,95	1.718,24	0,12	22,02	10	15,96	34.299,19	1,86	563,33	2.033.735,86	1,86
283+0.000	0,64	1.718,88	0,02	22,04	10	7,76	34.306,95	3,86	567,19	2.033.739,76	3,86
284+0.000	0,13	1.719,02	0,26	22,31	10	1,34	34.308,29	16,08	583,26	2.033.725,03	1,34
285+0.000	0,00	1.719,02	0,92	23,23	10	0,00	34.308,29	38,90	622,16	2.033.686,13	
286+0.000	0,00	1.719,02	1,94	25,17	10	0,00	34.308,29	64,84	687,00	2.033.621,29	
287+0.000	0,00	1.719,02	2,83	27,99	10	0,00	34.308,29	92,25	779,25	2.033.529,04	
288+0.000	0,00	1.719,02	3,96	31,95	10	0,00	34.308,29	110,51	889,77	2.033.418,52	
289+0.000	0,00	1.719,02	4,17	36,12	10	0,00	34.308,29	142,20	1.031,97	2.033.276,32	
290+0.000	0,00	1.719,02	6,29	42,41	10	0,00	34.308,29	193,08	1.225,05	2.033.083,24	
291+0.000	0,00	1.719,02	7,91	50,32	10	0,00	34.308,29	227,94	1.452,98	2.032.855,31	
292+0.000	0,00	1.719,02	8,85	59,17	10	0,00	34.308,29	255,71	1.708,69	2.032.599,60	
293+0.000	0,00	1.719,02	9,95	69,12	10	0,00	34.308,29	272,64	1.981,33	2.032.326,96	
294+0.000	0,00	1.719,02	10,09	79,21	10	0,00	34.308,29	296,74	2.278,07	2.032.030,22	
295+0.000	0,00	1.719,02	11,73	90,94	10	0,00	34.308,29	330,85	2.608,92	2.031.699,37	
296+0.000	0,00	1.719,02	12,60	103,54	10	0,00	34.308,29	356,37	2.965,29	2.031.343,00	
297+0.000	0,00	1.719,02	13,60	117,14	10	0,00	34.308,29	372,46	3.337,75	2.030.970,54	
298+0.000	0,00	1.719,02	13,79	130,93	10	0,00	34.308,29	378,54	3.716,30	2.030.591,99	
299+0.000	0,00	1.719,02	14,05	144,98	10	0,00	34.308,29	398,29	4.114,58	2.030.193,71	
300+0.000	0,00	1.719,02	15,24	160,21	10	0,00	34.308,29	433,50	4.548,08	2.029.760,21	
301+0.000	0,00	1.719,02	16,64	176,85	10	0,00	34.308,29	470,66	5.018,74	2.029.289,55	
302+0.000	0,00	1.719,02	17,97	194,82	10	0,00	34.308,29	490,48	5.509,22	2.028.799,07	
303+0.000	0,00	1.719,02	18,10	212,92	10	0,00	34.308,29	504,74	6.013,96	2.028.294,33	
304+0.000	0,00	1.719,02	19,02	231,93	10	0,00	34.308,29	529,00	6.542,96	2.027.765,33	
305+0.000	0,00	1.719,02	19,88	251,81	10	0,00	34.308,29	518,34	7.061,30	2.027.246,99	
306+0.000	0,00	1.719,02	18,23	270,05	10	0,00	34.308,29	498,67	7.559,97	2.026.748,32	
307+0.000	0,00	1.719,02	18,43	288,48	10	0,00	34.308,29	505,70	8.065,67	2.026.242,62	
308+0.000	0,00	1.719,02	18,75	307,23	10	0,00	34.308,29	506,70	8.572,37	2.025.735,92	
309+0.000	0,00	1.719,02	18,51	325,74	10	0,00	34.308,29	514,09	9.086,46	2.025.221,83	
310+0.000	0,00	1.719,02	19,29	345,03	10	0,00	34.308,29	528,41	9.614,87	2.024.693,42	
311+0.000	0,00	1.719,02	19,56	364,59	10	0,00	34.308,29	545,56	10.160,44	2.024.147,85	
312+0.000	0,00	1.719,02	20,56	385,15	10	0,00	34.308,29	555,46	10.715,90	2.023.592,39	
313+0.000	0,00	1.719,02	20,29	405,43	10	0,00	34.308,29	533,51	11.249,42	2.023.058,87	
314+0.000	0,00	1.719,02	18,94	424,37	10	0,00	34.308,29	503,06	11.752,48	2.022.555,81	
315+0.000	0,00	1.719,02	18,05	442,42	10	0,00	34.308,29	464,73	12.217,21	2.022.091,08	
316+0.000	0,00	1.719,02	16,12	458,55	10	0,00	34.308,29	417,87	12.635,08	2.021.673,21	
317+0.000	0,00	1.719,02	14,60	473,15	10	0,00	34.308,29	371,82	13.006,90	2.021.301,39	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221													
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68										LOTE: ÚNICO		Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral		
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.				
318+0.000	0,00	1.719,02	12,74	485,89	10	0,00	34.308,29	334,66	13.341,56	2.020.966,73			
319+0.000	0,00	1.719,02	11,87	497,76	10	0,00	34.308,29	321,46	13.663,02	2.020.645,27			
320+0.000	0,00	1.719,02	11,77	509,52	10	0,00	34.308,29	343,25	14.006,27	2.020.302,02			
321+0.000	0,00	1.719,02	13,47	523,00	10	0,00	34.308,29	371,25	14.377,53	2.019.930,76			
322+0.000	0,00	1.719,02	13,83	536,82	10	0,00	34.308,29	361,35	14.738,88	2.019.569,41			
323+0.000	0,00	1.719,02	12,75	549,57	10	0,00	34.308,29	344,35	15.083,23	2.019.225,06			
324+0.000	0,00	1.719,02	12,58	562,14	10	0,00	34.308,29	343,67	15.426,90	2.018.881,39			
325+0.000	0,00	1.719,02	12,70	574,84	10	0,00	34.308,29	347,24	15.774,14	2.018.534,15			
326+0.000	0,00	1.719,02	12,84	587,67	10	0,00	34.308,29	339,77	16.113,91	2.018.194,38			
327+0.000	0,00	1.719,02	12,15	599,82	10	0,00	34.308,29	336,16	16.450,07	2.017.858,22			
328+0.000	0,00	1.719,02	12,57	612,39	10	0,00	34.308,29	343,47	16.793,54	2.017.514,75			
329+0.000	0,00	1.719,02	12,68	625,07	10	0,00	34.308,29	369,31	17.162,85	2.017.145,44			
330+0.000	0,00	1.719,02	14,47	639,55	10	0,00	34.308,29	394,52	17.557,37	2.016.750,92			
331+0.000	0,00	1.719,02	14,54	654,08	10	0,00	34.308,29	406,88	17.964,25	2.016.344,04			
332+0.000	0,00	1.719,02	15,38	669,46	10	0,00	34.308,29	453,80	18.418,06	2.015.890,23			
333+0.000	0,00	1.719,02	17,99	687,45	10	0,00	34.308,29	498,98	18.917,04	2.015.391,25			
334+0.000	0,00	1.719,02	18,70	706,15	10	0,00	34.308,29	537,40	19.454,45	2.014.853,84			
335+0.000	0,00	1.719,02	20,81	726,97	10	0,00	34.308,29	566,28	20.020,72	2.014.287,57			
336+0.000	0,00	1.719,02	20,83	747,79	10	0,00	34.308,29	604,91	20.625,64	2.013.682,65			
337+0.000	0,00	1.719,02	23,65	771,44	10	0,00	34.308,29	677,16	21.302,80	2.013.005,49			
338+0.000	0,00	1.719,02	26,14	797,58	10	0,00	34.308,29	729,14	22.031,93	2.012.276,36			
339+0.000	0,00	1.719,02	27,48	825,06	10	0,00	34.308,29	763,94	22.795,87	2.011.512,42			
340+0.000	0,00	1.719,02	28,70	853,75	10	0,00	34.308,29	812,37	23.608,24	2.010.700,05			
341+0.000	0,00	1.719,02	31,04	884,79	10	0,00	34.308,29	843,64	24.451,88	2.009.856,41			
342+0.000	0,00	1.719,02	31,00	915,79	10	0,00	34.308,29	886,75	25.338,62	2.008.969,67			
343+0.000	0,00	1.719,02	34,21	949,99	10	0,00	34.308,29	950,50	26.289,13	2.008.019,16			
344+0.000	0,00	1.719,02	35,68	985,68	10	0,00	34.308,29	935,05	27.224,18	2.007.084,11			
345+0.000	0,00	1.719,02	33,07	1.018,75	10	0,00	34.308,29	957,55	28.181,73	2.006.126,56			
346+0.000	0,00	1.719,02	37,34	1.056,08	10	0,00	34.308,29	1.048,66	29.230,38	2.005.077,91			
347+0.000	0,00	1.719,02	39,77	1.095,85	10	0,00	34.308,29	1.072,13	30.302,51	2.004.005,78			
348+0.000	0,00	1.719,02	39,06	1.134,92	10	0,00	34.308,29	1.076,29	31.378,80	2.002.929,49			
349+0.000	0,00	1.719,02	40,08	1.174,99	10	0,00	34.308,29	1.103,52	32.482,32	2.001.825,97			
350+0.000	0,00	1.719,02	41,07	1.216,06	10	0,00	34.308,29	1.125,16	33.607,48	2.000.700,81			
351+0.000	0,00	1.719,02	41,67	1.257,72	10	0,00	34.308,29	1.106,03	34.713,51	1.999.594,78			
352+0.000	0,00	1.719,02	39,66	1.297,38	10	0,00	34.308,29	1.044,38	35.757,90	1.998.550,39			
353+0.000	0,00	1.719,02	37,13	1.334,52	10	0,00	34.308,29	1.049,88	36.807,77	1.997.500,52			
354+0.000	0,00	1.719,02	40,06	1.374,58	10	0,00	34.308,29	1.055,28	37.863,05	1.996.445,24			
355+0.000	0,00	1.719,02	37,53	1.412,11	10	0,00	34.308,29	979,72	38.842,77	1.995.465,52			
356+0.000	0,00	1.719,02	34,51	1.446,62	10	0,00	34.308,29	927,60	39.770,37	1.994.537,92			
357+0.000	0,00	1.719,02	33,70	1.480,32	10	0,00	34.308,29	927,37	40.697,74	1.993.610,55			
358+0.000	0,00	1.719,02	34,49	1.514,81	10	0,00	34.308,29	917,14	41.614,88	1.992.693,41			
359+0.000	0,00	1.719,02	32,95	1.547,75	10	0,00	34.308,29	890,13	42.505,02	1.991.803,27			
360+0.000	0,00	1.719,02	32,51	1.580,26	10	0,00	34.308,29	863,63	43.368,65	1.990.939,64			
361+0.000	0,00	1.719,02	31,00	1.611,26	10	0,00	34.308,29	833,84	44.202,49	1.990.105,80			
362+0.000	0,00	1.719,02	30,32	1.641,57	10	0,00	34.308,29	805,27	45.007,76	1.989.300,53			
363+0.000	0,00	1.719,02	28,90	1.670,47	10	0,00	34.308,29	778,50	45.786,26	1.988.522,03			
364+0.000	0,00	1.719,02	28,35	1.698,81	10	0,00	34.308,29	747,56	46.533,83	1.987.774,46			
365+0.000	0,00	1.719,02	26,62	1.725,44	10	0,00	34.308,29	699,90	47.233,72	1.987.074,57			
366+0.000	0,00	1.719,02	24,84	1.750,28	10	0,00	34.308,29	653,45	47.887,18	1.986.421,11			
367+0.000	0,00	1.719,02	23,21	1.773,48	10	0,00	34.308,29	605,70	48.492,88	1.985.815,41			
368+0.000	0,00	1.719,02	21,33	1.794,81	10	0,00	34.308,29	617,82	49.110,70	1.985.197,59			
369+0.000	0,00	1.719,02	24,10	1.818,91	10	0,00	34.308,29	817,28	49.927,98	1.984.380,31			
370+0.000	0,00	1.719,02	36,00	1.854,91	10	0,00	34.308,29	1.105,98	51.033,96	1.983.274,33			

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO			Empolamento: 36%		
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
371+0.000	0,00	1.719,02	45,33	1.900,23	10	0,00	34.308,29	1.357,91	52.391,86	1.981.916,43	
372+0.000	0,00	1.719,02	54,52	1.954,75	10	0,00	34.308,29	1.511,99	53.903,86	1.980.404,43	
373+0.000	0,00	1.719,02	56,66	2.011,41	10	0,00	34.308,29	1.551,68	55.455,54	1.978.852,75	
374+0.000	0,00	1.719,02	57,44	2.068,85	10	0,00	34.308,29	1.585,03	57.040,56	1.977.267,73	
375+0.000	0,00	1.719,02	59,11	2.127,96	10	0,00	34.308,29	1.629,31	58.669,87	1.975.638,42	
376+0.000	0,00	1.719,02	60,70	2.188,65	10	0,00	34.308,29	1.632,35	60.302,22	1.974.006,07	
377+0.000	0,00	1.719,02	59,33	2.247,98	10	0,00	34.308,29	1.584,89	61.887,11	1.972.421,18	
378+0.000	0,00	1.719,02	57,21	2.305,19	10	0,00	34.308,29	1.570,35	63.457,46	1.970.850,83	
379+0.000	0,00	1.719,02	58,26	2.363,45	10	0,00	34.308,29	1.590,23	65.047,70	1.969.260,59	
380+0.000	0,00	1.719,02	58,67	2.422,12	10	0,00	34.308,29	1.568,35	66.616,05	1.967.692,24	
381+0.000	0,00	1.719,02	56,65	2.478,77	10	0,00	34.308,29	1.480,85	68.096,90	1.966.211,39	
382+0.000	0,00	1.719,02	52,23	2.531,00	10	0,00	34.308,29	1.489,35	69.586,25	1.964.722,04	
383+0.000	0,00	1.719,02	57,28	2.588,28	10	0,00	34.308,29	1.605,00	71.191,25	1.963.117,04	
384+0.000	0,00	1.719,02	60,74	2.649,02	10	0,00	34.308,29	1.771,11	72.962,37	1.961.345,92	
385+0.000	0,00	1.719,02	69,49	2.718,51	10	0,00	34.308,29	1.949,94	74.912,31	1.959.395,98	
386+0.000	0,00	1.719,02	73,89	2.792,39	10	0,00	34.308,29	2.103,85	77.016,16	1.957.292,13	
387+0.000	0,00	1.719,02	80,81	2.873,20	10	0,00	34.308,29	2.111,79	79.127,96	1.955.180,33	
388+0.000	0,00	1.719,02	74,47	2.947,67	10	0,00	34.308,29	1.974,76	81.102,72	1.953.205,57	
389+0.000	0,00	1.719,02	70,73	3.018,41	10	0,00	34.308,29	2.083,18	83.185,90	1.951.122,39	
390+0.000	0,00	1.719,02	82,44	3.100,85	10	0,00	34.308,29	2.166,14	85.352,04	1.948.956,25	
391+0.000	0,00	1.719,02	76,83	3.177,68	10	0,00	34.308,29	2.053,27	87.405,31	1.946.902,98	
392+0.000	0,00	1.719,02	74,14	3.251,82	10	0,00	34.308,29	1.976,08	89.381,39	1.944.926,90	
393+0.000	0,00	1.719,02	71,16	3.322,98	10	0,00	34.308,29	1.828,10	91.209,49	1.943.098,80	
394+0.000	0,00	1.719,02	63,26	3.386,24	10	0,00	34.308,29	1.698,52	92.908,01	1.941.400,28	
395+0.000	0,00	1.719,02	61,63	3.447,87	10	0,00	34.308,29	1.625,70	94.533,71	1.939.774,58	
396+0.000	0,00	1.719,02	57,91	3.505,78	10	0,00	34.308,29	1.609,85	96.143,55	1.938.164,74	
397+0.000	0,00	1.719,02	60,46	3.566,24	10	0,00	34.308,29	1.584,82	97.728,38	1.936.579,91	
398+0.000	0,00	1.719,02	56,07	3.622,31	10	0,00	34.308,29	1.491,43	99.219,81	1.935.088,48	
399+0.000	0,00	1.719,02	53,60	3.675,91	10	0,00	34.308,29	1.472,00	100.691,80	1.933.616,49	
400+0.000	0,00	1.719,02	54,64	3.730,55	10	0,00	34.308,29	1.498,50	102.190,30	1.932.117,99	
401+0.000	0,00	1.719,02	55,55	3.786,09	10	0,00	34.308,29	1.486,66	103.676,96	1.930.631,33	
402+0.000	0,00	1.719,02	53,77	3.839,86	10	0,00	34.308,29	1.461,33	105.138,30	1.929.169,99	
403+0.000	0,00	1.719,02	53,68	3.893,54	10	0,00	34.308,29	1.444,22	106.582,52	1.927.725,77	
404+0.000	0,00	1.719,02	52,51	3.946,05	10	0,00	34.308,29	1.448,64	108.031,16	1.926.277,13	
405+0.000	0,00	1.719,02	54,01	4.000,06	10	0,00	34.308,29	1.398,11	109.429,27	1.924.879,02	
406+0.000	0,00	1.719,02	48,79	4.048,85	10	0,00	34.308,29	1.284,90	110.714,17	1.923.594,12	
407+0.000	0,00	1.719,02	45,68	4.094,54	10	0,00	34.308,29	1.181,61	111.895,78	1.922.412,51	
408+0.000	0,00	1.719,02	41,20	4.135,74	10	0,00	34.308,29	1.098,05	112.993,83	1.921.314,46	
409+0.000	0,00	1.719,02	39,54	4.175,28	10	0,00	34.308,29	1.029,70	114.023,53	1.920.284,76	
410+0.000	0,00	1.719,02	36,17	4.211,45	10	0,00	34.308,29	945,24	114.968,77	1.919.339,52	
411+0.000	0,00	1.719,02	33,33	4.244,78	10	0,00	34.308,29	863,11	115.831,88	1.918.476,41	
412+0.000	0,00	1.719,02	30,13	4.274,91	10	0,00	34.308,29	789,32	116.621,20	1.917.687,09	
413+0.000	0,00	1.719,02	27,90	4.302,82	10	0,00	34.308,29	693,76	117.314,96	1.916.993,33	
414+0.000	0,00	1.719,02	23,11	4.325,93	10	0,00	34.308,29	687,44	118.002,40	1.916.305,89	
415+0.000	0,00	1.719,02	27,44	4.353,37	10	0,00	34.308,29	696,71	118.699,11	1.915.609,18	
416+0.000	0,00	1.719,02	23,79	4.377,16	10	0,00	34.308,29	595,78	119.294,89	1.915.013,40	
417+0.000	0,00	1.719,02	20,02	4.397,17	10	0,00	34.308,29	559,91	119.854,80	1.914.453,49	
418+0.000	0,00	1.719,02	21,15	4.418,33	10	1,40	34.309,69	451,44	120.306,24	1.914.003,45	1,40
419+0.000	0,14	1.719,16	12,04	4.430,37	10	1,40	34.311,09	369,01	120.675,25	1.913.635,84	1,40
420+0.000	0,00	1.719,16	15,09	4.445,46	10	0,00	34.311,09	381,67	121.056,92	1.913.254,17	
421+0.000	0,00	1.719,16	12,97	4.458,43	10	0,00	34.311,09	328,37	121.385,29	1.912.925,80	
422+0.000	0,00	1.719,16	11,17	4.469,60	10	0,00	34.311,09	294,86	121.680,15	1.912.630,94	
423+0.000	0,00	1.719,16	10,51	4.480,11	10	0,00	34.311,09	276,19	121.956,34	1.912.354,75	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68									LOTE: ÚNICO		Empolamento: 36%
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
424+0.000	0,00	1.719,16	9,80	4.489,91	10	0,00	34.311,09	268,25	122.224,59	1.912.086,50	
425+0.000	0,00	1.719,16	9,92	4.499,84	10	0,00	34.311,09	282,70	122.507,29	1.911.803,80	
426+0.000	0,00	1.719,16	10,86	4.510,70	10	0,00	34.311,09	332,55	122.839,84	1.911.471,25	
427+0.000	0,00	1.719,16	13,59	4.524,29	10	0,00	34.311,09	301,16	123.141,00	1.911.170,09	
428+0.000	0,00	1.719,16	8,56	4.532,84	10	0,00	34.311,09	287,23	123.428,23	1.910.882,86	
429+0.000	0,00	1.719,16	12,57	4.545,41	10	0,00	34.311,09	347,53	123.775,76	1.910.535,33	
430+0.000	0,00	1.719,16	12,99	4.558,40	10	0,00	34.311,09	372,80	124.148,57	1.910.162,52	
431+0.000	0,00	1.719,16	14,42	4.572,82	10	0,00	34.311,09	418,53	124.567,09	1.909.744,00	
432+0.000	0,00	1.719,16	16,35	4.589,17	10	0,00	34.311,09	458,20	125.025,29	1.909.285,80	
433+0.000	0,00	1.719,16	17,34	4.606,51	10	0,00	34.311,09	554,66	125.579,95	1.908.731,14	
434+0.000	0,00	1.719,16	23,44	4.629,95	10	0,00	34.311,09	630,56	126.210,52	1.908.100,57	
435+0.000	0,00	1.719,16	22,92	4.652,88	10	0,00	34.311,09	782,79	126.993,30	1.907.317,79	
436+0.000	0,00	1.719,16	34,64	4.687,51	10	0,00	34.311,09	1.117,65	128.110,95	1.906.200,14	
437+0.000	0,00	1.719,16	47,54	4.735,06	10	0,00	34.311,09	1.609,36	129.720,31	1.904.590,78	
438+0.000	0,00	1.719,16	70,79	4.805,85	10	0,00	34.311,09	2.303,45	132.023,75	1.902.287,34	
439+0.000	0,00	1.719,16	98,58	4.904,43	10	0,00	34.311,09	3.004,21	135.027,97	1.899.283,12	
440+0.000	0,00	1.719,16	122,32	5.026,75	10	0,00	34.311,09	3.821,61	138.849,58	1.895.461,51	
441+0.000	0,00	1.719,16	158,68	5.185,43	10	0,00	34.311,09	5.389,84	144.239,42	1.890.071,67	
442+0.000	0,00	1.719,16	237,63	5.423,06	10	0,00	34.311,09	7.521,43	151.760,85	1.882.550,24	
443+0.000	0,00	1.719,16	315,42	5.738,47	10	0,00	34.311,09	6.790,90	158.551,75	1.875.759,34	
444+0.000	0,00	1.719,16	183,92	5.922,39	10	0,00	34.311,09	4.205,15	162.756,90	1.871.554,19	
445+0.000	0,00	1.719,16	125,29	6.047,68	10	0,00	34.311,09	2.801,02	165.557,91	1.868.753,18	
446+0.000	0,00	1.719,16	80,67	6.128,35	10	0,00	34.311,09	1.529,25	167.087,17	1.867.223,92	
447+0.000	0,00	1.719,16	31,78	6.160,12	10	4,44	34.315,53	453,48	167.540,64	1.866.774,89	4,44
448+0.000	0,44	1.719,60	1,57	6.161,69	10	116,25	34.431,78	21,34	167.561,98	1.866.869,80	21,34
449+0.000	11,18	1.730,78	0,00	6.161,69	10	220,41	34.652,19	0,00	167.561,98	1.867.090,21	
450+0.000	10,86	1.741,64	0,00	6.161,69	10	270,22	34.922,41	0,00	167.561,98	1.867.360,43	
451+0.000	16,16	1.757,80	0,00	6.161,69	10	316,89	35.239,30	0,00	167.561,98	1.867.677,32	
452+0.000	15,53	1.773,33	0,00	6.161,69	10	292,77	35.532,07	0,00	167.561,98	1.867.970,09	
453+0.000	13,75	1.787,08	0,00	6.161,69	10	239,72	35.771,79	0,00	167.561,98	1.868.209,81	
454+0.000	10,22	1.797,30	0,00	6.161,69	10	265,84	36.037,63	1,74	167.563,72	1.868.473,91	1,74
455+0.000	16,36	1.813,67	0,13	6.161,82	10	274,01	36.311,64	1,78	167.565,50	1.868.746,14	1,78
456+0.000	11,04	1.824,70	0,00	6.161,82	10	185,71	36.497,35	7,25	167.572,75	1.868.924,60	7,25
457+0.000	7,53	1.832,24	0,53	6.162,35	10	192,26	36.689,61	7,21	167.579,96	1.869.109,65	7,21
458+0.000	11,69	1.843,93	0,00	6.162,35	10	177,95	36.867,56	14,23	167.594,19	1.869.273,37	14,23
459+0.000	6,10	1.850,03	1,05	6.163,40	10	88,46	36.956,02	40,38	167.634,57	1.869.321,45	40,38
460+0.000	2,75	1.852,78	1,92	6.165,32	10	34,13	36.990,15	98,59	167.733,15	1.869.257,00	34,13
461+0.000	0,67	1.853,44	5,33	6.170,65	10	6,68	36.996,83	228,37	167.961,52	1.869.035,31	6,68
462+0.000	0,00	1.853,44	11,47	6.182,11	10	0,00	36.996,83	369,97	168.331,50	1.868.665,33	
463+0.000	0,00	1.853,44	15,74	6.197,85	10	0,00	36.996,83	649,55	168.981,05	1.868.015,78	
464+0.000	0,00	1.853,44	32,02	6.229,87	10	0,00	36.996,83	900,13	169.881,18	1.867.115,65	
465+0.000	0,00	1.853,44	34,16	6.264,04	10	0,00	36.996,83	835,88	170.717,06	1.866.279,77	
466+0.000	0,00	1.853,44	27,30	6.291,33	10	0,00	36.996,83	796,96	171.514,02	1.865.482,81	
467+0.000	0,00	1.853,44	31,30	6.322,64	10	0,00	36.996,83	799,08	172.313,10	1.864.683,73	
468+0.000	0,00	1.853,44	27,46	6.350,09	10	0,00	36.996,83	689,52	173.002,62	1.863.994,21	
469+0.000	0,00	1.853,44	23,25	6.373,34	10	0,00	36.996,83	569,65	173.572,27	1.863.424,56	
470+0.000	0,00	1.853,44	18,64	6.391,98	10	0,00	36.996,83	534,63	174.106,90	1.862.889,93	
471+0.000	0,00	1.853,44	20,67	6.412,65	10	0,00	36.996,83	572,44	174.679,34	1.862.317,49	
472+0.000	0,00	1.853,44	21,42	6.434,07	10	0,00	36.996,83	544,97	175.224,30	1.861.772,53	
473+0.000	0,00	1.853,44	18,65	6.452,72	10	0,00	36.996,83	489,60	175.713,90	1.861.282,93	
474+0.000	0,00	1.853,44	17,35	6.470,07	10	0,00	36.996,83	421,16	176.135,07	1.860.861,76	
475+0.000	0,00	1.853,44	13,62	6.483,69	10	0,00	36.996,83	352,48	176.487,55	1.860.509,28	
476+0.000	0,00	1.853,44	12,30	6.495,99	10	0,21	36.997,04	309,43	176.796,98	1.860.200,06	0,21

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68									LOTE: ÚNICO		Empolamento: 36%
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
477+0.000	0,02	1.853,47	10,45	6.506,44	10	2,43	36.999,47	257,49	177.054,47	1.859.945,00	2,43
478+0.000	0,22	1.853,69	8,48	6.514,92	10	3,35	37.002,82	212,12	177.266,59	1.859.736,23	3,35
479+0.000	0,11	1.853,80	7,12	6.522,03	10	1,13	37.003,95	211,70	177.478,29	1.859.525,66	1,13
480+0.000	0,00	1.853,80	8,45	6.530,48	10	0,00	37.003,95	196,48	177.674,77	1.859.329,18	
481+0.000	0,00	1.853,80	6,00	6.536,48	10	1,07	37.005,02	162,62	177.837,38	1.859.167,64	1,07
482+0.000	0,11	1.853,91	5,96	6.542,44	10	2,69	37.007,71	157,66	177.995,05	1.859.012,66	2,69
483+0.000	0,16	1.854,07	5,63	6.548,07	10	4,01	37.011,72	151,59	178.146,63	1.858.865,09	4,01
484+0.000	0,24	1.854,31	5,51	6.553,59	10	2,43	37.014,15	147,55	178.294,18	1.858.719,97	2,43
485+0.000	0,00	1.854,31	5,34	6.558,92	10	0,04	37.014,19	150,21	178.444,39	1.858.569,80	0,04
486+0.000	0,00	1.854,31	5,71	6.564,63	10	0,61	37.014,80	147,10	178.591,49	1.858.423,31	0,61
487+0.000	0,06	1.854,37	5,11	6.569,74	10	2,04	37.016,84	130,22	178.721,71	1.858.295,13	2,04
488+0.000	0,14	1.854,52	4,47	6.574,21	10	1,43	37.018,27	142,65	178.864,36	1.858.153,91	1,43
489+0.000	0,00	1.854,52	6,02	6.580,23	10	0,00	37.018,27	168,84	179.033,20	1.857.985,07	
490+0.000	0,00	1.854,52	6,39	6.586,62	10	0,00	37.018,27	149,97	179.183,17	1.857.835,10	
491+0.000	0,00	1.854,52	4,63	6.591,26	10	0,00	37.018,27	131,24	179.314,41	1.857.703,86	
492+0.000	0,00	1.854,52	5,02	6.596,27	10	0,00	37.018,27	156,30	179.470,71	1.857.547,56	
493+0.000	0,00	1.854,52	6,48	6.602,75	10	0,00	37.018,27	186,05	179.656,76	1.857.361,51	
494+0.000	0,00	1.854,52	7,20	6.609,95	10	0,00	37.018,27	196,25	179.853,01	1.857.165,26	
495+0.000	0,00	1.854,52	7,23	6.617,18	10	0,00	37.018,27	191,34	180.044,35	1.856.973,92	
496+0.000	0,00	1.854,52	6,84	6.624,02	10	0,00	37.018,27	142,43	180.186,78	1.856.831,49	
497+0.000	0,00	1.854,52	3,63	6.627,65	10	0,00	37.018,27	114,02	180.300,80	1.856.717,47	
498+0.000	0,00	1.854,52	4,75	6.632,41	10	0,00	37.018,27	133,06	180.433,87	1.856.584,40	
499+0.000	0,00	1.854,52	5,03	6.637,44	10	0,00	37.018,27	141,14	180.575,01	1.856.443,26	
500+0.000	0,00	1.854,52	5,35	6.642,78	10	0,00	37.018,27	146,50	180.721,51	1.856.296,76	
501+0.000	0,00	1.854,52	5,42	6.648,21	10	0,00	37.018,27	142,16	180.863,67	1.856.154,60	
502+0.000	0,00	1.854,52	5,03	6.653,24	10	0,00	37.018,27	130,89	180.994,55	1.856.023,72	
503+0.000	0,00	1.854,52	4,60	6.657,83	10	0,00	37.018,27	118,63	181.113,19	1.855.905,08	
504+0.000	0,00	1.854,52	4,13	6.661,96	10	0,00	37.018,27	117,41	181.230,59	1.855.787,68	
505+0.000	0,00	1.854,52	4,51	6.666,46	10	0,00	37.018,27	121,73	181.352,33	1.855.665,94	
506+0.000	0,00	1.854,52	4,45	6.670,91	10	0,00	37.018,27	126,25	181.478,58	1.855.539,69	
507+0.000	0,00	1.854,52	4,84	6.675,75	10	0,00	37.018,27	140,57	181.619,15	1.855.399,12	
508+0.000	0,00	1.854,52	5,50	6.681,25	10	0,00	37.018,27	163,74	181.782,89	1.855.235,38	
509+0.000	0,00	1.854,52	6,54	6.687,79	10	0,00	37.018,27	199,58	181.982,47	1.855.035,80	
510+0.000	0,00	1.854,52	8,13	6.695,92	10	0,00	37.018,27	235,62	182.218,09	1.854.800,18	
511+0.000	0,00	1.854,52	9,19	6.705,11	10	0,00	37.018,27	259,99	182.478,08	1.854.540,19	
512+0.000	0,00	1.854,52	9,93	6.715,04	10	0,00	37.018,27	290,96	182.769,04	1.854.249,23	
513+0.000	0,00	1.854,52	11,47	6.726,51	10	0,00	37.018,27	334,10	183.103,14	1.853.915,13	
514+0.000	0,00	1.854,52	13,10	6.739,60	10	0,00	37.018,27	367,89	183.471,03	1.853.547,24	
515+0.000	0,00	1.854,52	13,95	6.753,56	10	0,00	37.018,27	389,01	183.860,05	1.853.158,22	
516+0.000	0,00	1.854,52	14,65	6.768,21	10	0,00	37.018,27	392,99	184.253,03	1.852.765,24	
517+0.000	0,00	1.854,52	14,25	6.782,45	10	0,00	37.018,27	397,68	184.650,71	1.852.367,56	
518+0.000	0,00	1.854,52	15,00	6.797,45	10	0,00	37.018,27	421,80	185.072,51	1.851.945,76	
519+0.000	0,00	1.854,52	16,02	6.813,47	10	0,00	37.018,27	439,57	185.512,08	1.851.506,19	
520+0.000	0,00	1.854,52	16,30	6.829,77	10	0,00	37.018,27	438,74	185.950,81	1.851.067,46	
521+0.000	0,00	1.854,52	15,96	6.845,73	10	0,00	37.018,27	435,31	186.386,12	1.850.632,15	
522+0.000	0,00	1.854,52	16,05	6.861,78	10	0,00	37.018,27	425,10	186.811,22	1.850.207,05	
523+0.000	0,00	1.854,52	15,21	6.876,99	10	0,00	37.018,27	416,13	187.227,35	1.849.790,92	
524+0.000	0,00	1.854,52	15,39	6.892,38	10	0,00	37.018,27	422,76	187.650,11	1.849.368,16	
525+0.000	0,00	1.854,52	15,69	6.908,07	10	0,00	37.018,27	420,04	188.070,14	1.848.948,13	
526+0.000	0,00	1.854,52	15,19	6.923,26	10	0,00	37.018,27	415,14	188.485,28	1.848.532,99	
527+0.000	0,00	1.854,52	15,33	6.938,60	10	0,00	37.018,27	413,92	188.899,20	1.848.119,07	
528+0.000	0,00	1.854,52	15,10	6.953,70	10	0,00	37.018,27	444,23	189.343,43	1.847.674,84	
529+0.000	0,00	1.854,52	17,56	6.971,26	10	0,00	37.018,27	419,40	189.762,83	1.847.255,44	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68									LOTE: ÚNICO		Empolamento: 36%
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
530+0.000	0,00	1.854,52	13,28	6.984,53	10	0,00	37.018,27	341,84	190.104,66	1.846.913,61	
531+0.000	0,00	1.854,52	11,86	6.996,39	10	0,00	37.018,27	296,90	190.401,56	1.846.616,71	
532+0.000	0,00	1.854,52	9,97	7.006,37	10	0,00	37.018,27	240,05	190.641,62	1.846.376,65	
533+0.000	0,00	1.854,52	7,68	7.014,05	10	0,00	37.018,27	243,00	190.884,62	1.846.133,65	
534+0.000	0,00	1.854,52	10,19	7.024,23	10	0,00	37.018,27	269,44	191.154,07	1.845.864,20	
535+0.000	0,00	1.854,52	9,62	7.033,86	10	0,00	37.018,27	276,86	191.430,92	1.845.587,35	
536+0.000	0,00	1.854,52	10,73	7.044,59	10	0,00	37.018,27	300,91	191.731,83	1.845.286,44	
537+0.000	0,00	1.854,52	11,39	7.055,98	10	0,00	37.018,27	336,18	192.068,01	1.844.950,26	
538+0.000	0,00	1.854,52	13,33	7.069,31	10	0,00	37.018,27	390,48	192.458,50	1.844.559,77	
539+0.000	0,00	1.854,52	15,39	7.084,70	10	0,00	37.018,27	426,40	192.884,90	1.844.133,37	
540+0.000	0,00	1.854,52	15,97	7.100,66	10	0,00	37.018,27	464,21	193.349,11	1.843.669,16	
541+0.000	0,00	1.854,52	18,17	7.118,83	10	0,00	37.018,27	474,40	193.823,50	1.843.194,77	
542+0.000	0,00	1.854,52	16,72	7.135,54	10	0,00	37.018,27	534,68	194.358,18	1.842.660,09	
543+0.000	0,00	1.854,52	22,60	7.158,14	10	0,00	37.018,27	640,80	194.998,99	1.842.019,28	
544+0.000	0,00	1.854,52	24,52	7.182,66	10	0,00	37.018,27	630,73	195.629,72	1.841.388,55	
545+0.000	0,00	1.854,52	21,86	7.204,52	10	0,00	37.018,27	553,07	196.182,79	1.840.835,48	
546+0.000	0,00	1.854,52	18,81	7.223,33	10	0,00	37.018,27	486,84	196.669,63	1.840.348,64	
547+0.000	0,00	1.854,52	16,99	7.240,32	10	0,00	37.018,27	467,34	197.136,96	1.839.881,31	
548+0.000	0,00	1.854,52	17,38	7.257,69	10	0,00	37.018,27	474,04	197.611,01	1.839.407,26	
549+0.000	0,00	1.854,52	17,48	7.275,17	10	0,00	37.018,27	439,23	198.050,23	1.838.968,04	
550+0.000	0,00	1.854,52	14,82	7.289,99	10	0,00	37.018,27	427,65	198.477,88	1.838.540,39	
551+0.000	0,00	1.854,52	16,63	7.306,62	10	0,00	37.018,27	465,26	198.943,14	1.838.075,13	
552+0.000	0,00	1.854,52	17,58	7.324,20	10	0,00	37.018,27	465,58	199.408,72	1.837.609,55	
553+0.000	0,00	1.854,52	16,65	7.340,85	10	0,00	37.018,27	452,47	199.861,19	1.837.157,08	
554+0.000	0,00	1.854,52	16,62	7.357,47	10	0,00	37.018,27	448,87	200.310,06	1.836.708,21	
555+0.000	0,00	1.854,52	16,39	7.373,86	10	0,00	37.018,27	424,76	200.734,82	1.836.283,45	
556+0.000	0,00	1.854,52	14,84	7.388,70	10	0,00	37.018,27	410,41	201.145,22	1.835.873,05	
557+0.000	0,00	1.854,52	15,33	7.404,03	10	0,00	37.018,27	415,89	201.561,11	1.835.457,16	
558+0.000	0,00	1.854,52	15,25	7.419,28	10	0,00	37.018,27	406,82	201.967,93	1.835.050,34	
559+0.000	0,00	1.854,52	14,67	7.433,95	10	0,00	37.018,27	380,45	202.348,38	1.834.669,89	
560+0.000	0,00	1.854,52	13,31	7.447,25	10	0,00	37.018,27	381,78	202.730,15	1.834.288,12	
561+0.000	0,00	1.854,52	14,77	7.462,02	10	0,00	37.018,27	439,52	203.169,68	1.833.848,59	
562+0.000	0,00	1.854,52	17,55	7.479,57	10	0,00	37.018,27	504,46	203.674,14	1.833.344,13	
563+0.000	0,00	1.854,52	19,54	7.499,11	10	0,00	37.018,27	546,58	204.220,73	1.832.797,54	
564+0.000	0,00	1.854,52	20,65	7.519,76	10	0,00	37.018,27	532,75	204.753,48	1.832.264,79	
565+0.000	0,00	1.854,52	18,52	7.538,29	10	0,00	37.018,27	535,31	205.288,79	1.831.729,48	
566+0.000	0,00	1.854,52	20,84	7.559,12	10	0,00	37.018,27	566,06	205.854,85	1.831.163,42	
567+0.000	0,00	1.854,52	20,78	7.579,91	10	0,00	37.018,27	547,64	206.402,49	1.830.615,78	
568+0.000	0,00	1.854,52	19,48	7.599,39	10	0,00	37.018,27	510,69	206.913,19	1.830.105,08	
569+0.000	0,00	1.854,52	18,07	7.617,46	10	0,00	37.018,27	441,86	207.355,05	1.829.663,22	
570+0.000	0,00	1.854,52	14,42	7.631,88	10	0,00	37.018,27	402,53	207.757,58	1.829.260,69	
571+0.000	0,00	1.854,52	15,18	7.647,06	10	0,00	37.018,27	424,97	208.182,56	1.828.835,71	
572+0.000	0,00	1.854,52	16,07	7.663,13	10	0,00	37.018,27	450,65	208.633,21	1.828.385,06	
573+0.000	0,00	1.854,52	17,06	7.680,19	10	0,00	37.018,27	456,80	209.090,00	1.827.928,27	
574+0.000	0,00	1.854,52	16,53	7.696,72	10	0,00	37.018,27	441,21	209.531,22	1.827.487,05	
575+0.000	0,00	1.854,52	15,92	7.712,63	10	0,00	37.018,27	408,79	209.940,00	1.827.078,27	
576+0.000	0,00	1.854,52	14,14	7.726,78	10	0,00	37.018,27	423,22	210.363,22	1.826.655,05	
577+0.000	0,00	1.854,52	16,98	7.743,75	10	0,00	37.018,27	519,62	210.882,84	1.826.135,43	
578+0.000	0,00	1.854,52	21,23	7.764,98	10	0,00	37.018,27	580,45	211.463,29	1.825.554,98	
579+0.000	0,00	1.854,52	21,45	7.786,43	10	0,00	37.018,27	572,30	212.035,59	1.824.982,68	
580+0.000	0,00	1.854,52	20,63	7.807,06	10	0,00	37.018,27	605,12	212.640,71	1.824.377,56	
581+0.000	0,00	1.854,52	23,86	7.830,93	10	0,00	37.018,27	685,90	213.326,61	1.823.691,66	
582+0.000	0,00	1.854,52	26,57	7.857,50	10	0,00	37.018,27	829,07	214.155,68	1.822.862,59	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221													
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68										LOTE: ÚNICO		Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral		
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.				
583+0.000	0,00	1.854,52	34,39	7.891,89	10	0,00	37.018,27	919,44	215.075,12	1.821.943,15			
584+0.000	0,00	1.854,52	33,22	7.925,10	10	0,00	37.018,27	911,89	215.987,01	1.821.031,26			
585+0.000	0,00	1.854,52	33,84	7.958,94	10	0,00	37.018,27	897,08	216.884,10	1.820.134,17			
586+0.000	0,00	1.854,52	32,13	7.991,07	10	0,00	37.018,27	944,68	217.828,78	1.819.189,49			
587+0.000	0,00	1.854,52	37,34	8.028,40	10	0,00	37.018,27	963,45	218.792,23	1.818.226,04			
588+0.000	0,00	1.854,52	33,51	8.061,91	10	0,00	37.018,27	985,32	219.777,55	1.817.240,72			
589+0.000	0,00	1.854,52	38,94	8.100,85	10	0,00	37.018,27	1.074,07	220.851,62	1.816.166,65			
590+0.000	0,00	1.854,52	40,03	8.140,88	10	0,00	37.018,27	1.089,56	221.941,19	1.815.077,08			
591+0.000	0,00	1.854,52	40,08	8.180,97	10	0,00	37.018,27	1.103,63	223.044,81	1.813.973,46			
592+0.000	0,00	1.854,52	41,07	8.222,03	10	0,00	37.018,27	1.151,42	224.196,23	1.812.822,04			
593+0.000	0,00	1.854,52	43,60	8.265,63	10	0,00	37.018,27	1.243,57	225.439,80	1.811.578,47			
594+0.000	0,00	1.854,52	47,84	8.313,47	10	0,00	37.018,27	1.271,00	226.710,80	1.810.307,47			
595+0.000	0,00	1.854,52	45,61	8.359,09	10	0,00	37.018,27	1.244,17	227.954,97	1.809.063,30			
596+0.000	0,00	1.854,52	45,87	8.404,95	10	0,00	37.018,27	1.244,24	229.199,21	1.807.819,06			
597+0.000	0,00	1.854,52	45,62	8.450,57	10	0,00	37.018,27	1.244,35	230.443,55	1.806.574,72			
598+0.000	0,00	1.854,52	45,88	8.496,45	10	0,00	37.018,27	1.227,70	231.671,25	1.805.347,02			
599+0.000	0,00	1.854,52	44,40	8.540,85	10	0,00	37.018,27	1.244,92	232.916,17	1.804.102,10			
600+0.000	0,00	1.854,52	47,14	8.587,99	10	0,00	37.018,27	1.307,48	234.223,65	1.802.794,62			
601+0.000	0,00	1.854,52	49,00	8.636,98	10	0,00	37.018,27	1.339,46	235.563,11	1.801.455,16			
602+0.000	0,00	1.854,52	49,50	8.686,48	10	0,00	37.018,27	1.266,55	236.829,67	1.800.188,60			
603+0.000	0,00	1.854,52	43,63	8.730,11	10	0,00	37.018,27	1.266,49	238.096,15	1.798.922,12			
604+0.000	0,00	1.854,52	49,49	8.779,60	10	0,00	37.018,27	1.305,41	239.401,56	1.797.616,71			
605+0.000	0,00	1.854,52	46,50	8.826,10	10	0,00	37.018,27	1.325,93	240.727,49	1.796.290,78			
606+0.000	0,00	1.854,52	51,00	8.877,10	10	0,00	37.018,27	1.383,56	242.111,05	1.794.907,22			
607+0.000	0,00	1.854,52	50,73	8.927,83	10	0,00	37.018,27	1.406,66	243.517,71	1.793.500,56			
608+0.000	0,00	1.854,52	52,70	8.980,53	10	0,00	37.018,27	1.485,15	245.002,86	1.792.015,41			
609+0.000	0,00	1.854,52	56,50	9.037,03	10	0,00	37.018,27	1.534,28	246.537,14	1.790.481,13			
610+0.000	0,00	1.854,52	56,31	9.093,34	10	0,00	37.018,27	1.530,07	248.067,21	1.788.951,06			
611+0.000	0,00	1.854,52	56,19	9.149,54	10	0,00	37.018,27	1.524,60	249.591,81	1.787.426,46			
612+0.000	0,00	1.854,52	55,91	9.205,45	10	0,00	37.018,27	1.559,08	251.150,89	1.785.867,38			
613+0.000	0,00	1.854,52	58,73	9.264,18	10	0,00	37.018,27	1.574,44	252.725,33	1.784.292,94			
614+0.000	0,00	1.854,52	57,04	9.321,21	10	0,00	37.018,27	1.530,72	254.256,05	1.782.762,22			
615+0.000	0,00	1.854,52	55,51	9.376,73	10	0,00	37.018,27	1.531,62	255.787,67	1.781.230,60			
616+0.000	0,00	1.854,52	57,11	9.433,83	10	0,00	37.018,27	1.489,70	257.277,37	1.779.740,90			
617+0.000	0,00	1.854,52	52,43	9.486,27	10	0,00	37.018,27	1.465,18	258.742,56	1.778.275,71			
618+0.000	0,00	1.854,52	55,30	9.541,57	10	0,00	37.018,27	1.506,36	260.248,92	1.776.769,35			
619+0.000	0,00	1.854,52	55,46	9.597,03	10	0,00	37.018,27	1.463,31	261.712,23	1.775.306,04			
620+0.000	0,00	1.854,52	52,14	9.649,16	10	0,00	37.018,27	1.473,21	263.185,43	1.773.832,84			
621+0.000	0,00	1.854,52	56,19	9.705,35	10	0,00	37.018,27	1.505,62	264.691,05	1.772.327,22			
622+0.000	0,00	1.854,52	54,52	9.759,87	10	0,00	37.018,27	1.469,82	266.160,87	1.770.857,40			
623+0.000	0,00	1.854,52	53,56	9.813,43	10	0,00	37.018,27	1.434,68	267.595,54	1.769.422,73			
624+0.000	0,00	1.854,52	51,94	9.865,36	10	0,00	37.018,27	1.404,53	269.000,07	1.768.018,20			
625+0.000	0,00	1.854,52	51,34	9.916,70	10	0,00	37.018,27	1.408,10	270.408,17	1.766.610,10			
626+0.000	0,00	1.854,52	52,20	9.968,90	10	0,00	37.018,27	1.433,81	271.841,98	1.765.176,29			
627+0.000	0,00	1.854,52	53,23	10.022,13	10	0,00	37.018,27	1.347,56	273.189,54	1.763.828,73			
628+0.000	0,00	1.854,52	45,86	10.067,98	10	0,00	37.018,27	1.266,13	274.455,67	1.762.562,60			
629+0.000	0,00	1.854,52	47,24	10.115,23	10	0,00	37.018,27	1.274,70	275.730,37	1.761.287,90			
630+0.000	0,00	1.854,52	46,49	10.161,71	10	0,00	37.018,27	1.236,88	276.967,25	1.760.051,02			
631+0.000	0,00	1.854,52	44,46	10.206,17	10	0,00	37.018,27	1.201,17	278.168,42	1.758.849,85			
632+0.000	0,00	1.854,52	43,86	10.250,03	10	0,00	37.018,27	1.173,46	279.341,88	1.757.676,39			
633+0.000	0,00	1.854,52	42,42	10.292,46	10	0,00	37.018,27	1.153,42	280.495,29	1.756.522,98			
634+0.000	0,00	1.854,52	42,39	10.334,84	10	0,00	37.018,27	1.150,32	281.645,61	1.755.372,66			
635+0.000	0,00	1.854,52	42,20	10.377,04	10	0,00	37.018,27	1.132,70	282.778,31	1.754.239,96			

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de	Comp.
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner	Lateral
636+0.000	0,00	1.854,52	41,09	10.418,13	10	0,00	37.018,27	1.077,19	283.855,50	1.753.162,77	
637+0.000	0,00	1.854,52	38,11	10.456,24	10	0,00	37.018,27	1.041,49	284.896,99	1.752.121,28	
638+0.000	0,00	1.854,52	38,47	10.494,71	10	0,00	37.018,27	1.030,93	285.927,92	1.751.090,35	
639+0.000	0,00	1.854,52	37,34	10.532,05	10	0,00	37.018,27	1.076,92	287.004,84	1.750.013,43	
640+0.000	0,00	1.854,52	41,85	10.573,89	10	0,00	37.018,27	1.329,89	288.334,73	1.748.683,54	
641+0.000	0,00	1.854,52	55,94	10.629,83	10	0,00	37.018,27	1.248,22	289.582,95	1.747.435,32	
642+0.000	0,00	1.854,52	35,84	10.665,68	10	0,00	37.018,27	1.035,04	290.617,99	1.746.400,28	
643+0.000	0,00	1.854,52	40,26	10.705,94	10	0,00	37.018,27	1.024,26	291.642,25	1.745.376,02	
644+0.000	0,00	1.854,52	35,05	10.740,99	10	0,00	37.018,27	913,55	292.555,80	1.744.462,47	
645+0.000	0,00	1.854,52	32,12	10.773,11	10	0,00	37.018,27	852,15	293.407,95	1.743.610,32	
646+0.000	0,00	1.854,52	30,53	10.803,65	10	0,00	37.018,27	837,53	294.245,48	1.742.772,79	
647+0.000	0,00	1.854,52	31,05	10.834,70	10	0,00	37.018,27	819,30	295.064,78	1.741.953,49	
648+0.000	0,00	1.854,52	29,19	10.863,89	10	0,00	37.018,27	768,41	295.833,20	1.741.185,07	
649+0.000	0,00	1.854,52	27,31	10.891,20	10	0,00	37.018,27	722,64	296.555,83	1.740.462,44	
650+0.000	0,00	1.854,52	25,83	10.917,02	10	0,00	37.018,27	675,97	297.231,81	1.739.786,46	
651+0.000	0,00	1.854,52	23,88	10.940,90	10	0,00	37.018,27	610,23	297.842,04	1.739.176,23	
652+0.000	0,00	1.854,52	20,99	10.961,89	10	0,00	37.018,27	545,29	298.387,33	1.738.630,94	
653+0.000	0,00	1.854,52	19,10	10.981,00	10	0,00	37.018,27	495,94	298.883,27	1.738.135,00	
654+0.000	0,00	1.854,52	17,37	10.998,36	10	0,00	37.018,27	444,33	299.327,60	1.737.690,67	
655+0.000	0,00	1.854,52	15,31	11.013,67	10	0,00	37.018,27	402,93	299.730,52	1.737.287,75	
656+0.000	0,00	1.854,52	14,32	11.027,99	10	0,00	37.018,27	360,84	300.091,36	1.736.926,91	
657+0.000	0,00	1.854,52	12,21	11.040,20	10	0,00	37.018,27	310,07	300.401,42	1.736.616,85	
658+0.000	0,00	1.854,52	10,59	11.050,79	10	0,00	37.018,27	273,63	300.675,06	1.736.343,21	
659+0.000	0,00	1.854,52	9,53	11.060,32	10	0,00	37.018,27	252,01	300.927,06	1.736.091,21	
660+0.000	0,00	1.854,52	9,00	11.069,32	10	0,00	37.018,27	236,22	301.163,28	1.735.854,99	
661+0.000	0,00	1.854,52	8,37	11.077,69	10	0,00	37.018,27	206,52	301.369,80	1.735.648,47	
662+0.000	0,00	1.854,52	6,81	11.084,50	10	0,00	37.018,27	176,79	301.546,58	1.735.471,69	
663+0.000	0,00	1.854,52	6,19	11.090,69	10	0,00	37.018,27	173,86	301.720,45	1.735.297,82	
664+0.000	0,00	1.854,52	6,60	11.097,29	10	0,00	37.018,27	180,19	301.900,63	1.735.117,64	
665+0.000	0,00	1.854,52	6,65	11.103,94	10	0,00	37.018,27	187,95	302.088,59	1.734.929,68	
666+0.000	0,00	1.854,52	7,17	11.111,11	10	0,00	37.018,27	195,53	302.284,11	1.734.734,16	
667+0.000	0,00	1.854,52	7,21	11.118,31	10	0,00	37.018,27	177,21	302.461,32	1.734.556,95	
668+0.000	0,00	1.854,52	5,82	11.124,14	10	0,00	37.018,27	194,04	302.655,37	1.734.362,90	
669+0.000	0,00	1.854,52	8,45	11.132,58	10	0,00	37.018,27	214,25	302.869,62	1.734.148,65	
670+0.000	0,00	1.854,52	7,31	11.139,89	10	0,00	37.018,27	209,32	303.078,94	1.733.939,33	
671+0.000	0,00	1.854,52	8,08	11.147,97	10	0,00	37.018,27	233,29	303.312,23	1.733.706,04	
672+0.000	0,00	1.854,52	9,07	11.157,04	10	0,00	37.018,27	258,30	303.570,54	1.733.447,73	
673+0.000	0,00	1.854,52	9,92	11.166,96	10	0,00	37.018,27	280,09	303.850,63	1.733.167,64	
674+0.000	0,00	1.854,52	10,67	11.177,64	10	0,00	37.018,27	280,87	304.131,50	1.732.886,77	
675+0.000	0,00	1.854,52	9,98	11.187,62	10	0,00	37.018,27	318,32	304.449,82	1.732.568,45	
676+0.000	0,00	1.854,52	13,43	11.201,04	10	0,00	37.018,27	339,66	304.789,48	1.732.228,79	
677+0.000	0,00	1.854,52	11,55	11.212,59	10	0,00	37.018,27	346,50	305.135,98	1.731.882,29	
678+0.000	0,00	1.854,52	13,93	11.226,52	10	0,00	37.018,27	351,72	305.487,70	1.731.530,57	
679+0.000	0,00	1.854,52	11,93	11.238,45	10	0,00	37.018,27	320,92	305.808,62	1.731.209,65	
680+0.000	0,00	1.854,52	11,67	11.250,12	10	0,00	37.018,27	314,30	306.122,92	1.730.895,35	
681+0.000	0,00	1.854,52	11,44	11.261,56	10	0,00	37.018,27	316,04	306.438,95	1.730.579,32	
682+0.000	0,00	1.854,52	11,79	11.273,36	10	4,62	37.022,89	252,62	306.691,57	1.730.331,32	4,62
683+0.000	0,46	1.854,98	6,78	11.280,14	10	14,03	37.036,92	130,36	306.821,93	1.730.214,99	14,03
684+0.000	0,94	1.855,92	2,80	11.282,94	10	9,96	37.046,88	96,51	306.918,44	1.730.128,44	9,96
685+0.000	0,06	1.855,97	4,29	11.287,23	10	0,55	37.047,43	142,46	307.060,90	1.729.986,53	0,55
686+0.000	0,00	1.855,97	6,18	11.293,42	10	0,00	37.047,43	193,88	307.254,78	1.729.792,65	
687+0.000	0,00	1.855,97	8,07	11.301,49	10	0,00	37.047,43	228,78	307.483,56	1.729.563,87	
688+0.000	0,00	1.855,97	8,75	11.310,24	10	0,07	37.047,50	262,53	307.746,09	1.729.301,41	0,07

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68									LOTE: ÚNICO		Empolamento: 36%
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
689+0.000	0,01	1.855,98	10,56	11.320,79	10	0,07	37.047,57	468,17	308.214,26	1.728.833,31	0,07
690+0.000	0,00	1.855,98	23,87	11.344,66	10	0,00	37.047,57	657,75	308.872,01	1.728.175,56	
691+0.000	0,00	1.855,98	24,50	11.369,16	10	0,00	37.047,57	683,01	309.555,01	1.727.492,56	
692+0.000	0,00	1.855,98	25,73	11.394,88	10	0,00	37.047,57	658,84	310.213,85	1.726.833,72	
693+0.000	0,00	1.855,98	22,72	11.417,60	10	0,00	37.047,57	639,99	310.853,84	1.726.193,73	
694+0.000	0,00	1.855,98	24,34	11.441,94	10	0,00	37.047,57	632,78	311.486,62	1.725.560,95	
695+0.000	0,00	1.855,98	22,19	11.464,13	10	0,00	37.047,57	578,23	312.064,85	1.724.982,72	
696+0.000	0,00	1.855,98	20,33	11.484,46	10	0,00	37.047,57	586,92	312.651,77	1.724.395,80	
697+0.000	0,00	1.855,98	22,83	11.507,29	10	0,00	37.047,57	650,11	313.301,88	1.723.745,69	
698+0.000	0,00	1.855,98	24,98	11.532,26	10	0,00	37.047,57	643,72	313.945,60	1.723.101,97	
699+0.000	0,00	1.855,98	22,36	11.554,62	10	0,00	37.047,57	626,36	314.571,96	1.722.475,61	
700+0.000	0,00	1.855,98	23,70	11.578,32	10	0,00	37.047,57	662,66	315.234,62	1.721.812,95	
701+0.000	0,00	1.855,98	25,03	11.603,34	10	0,00	37.047,57	659,36	315.893,97	1.721.153,60	
702+0.000	0,00	1.855,98	23,46	11.626,80	10	0,00	37.047,57	643,55	316.537,52	1.720.510,05	
703+0.000	0,00	1.855,98	23,86	11.650,66	10	0,00	37.047,57	591,61	317.129,14	1.719.918,43	
704+0.000	0,00	1.855,98	19,64	11.670,30	10	0,00	37.047,57	585,86	317.715,00	1.719.332,57	
705+0.000	0,00	1.855,98	23,44	11.693,74	10	0,00	37.047,57	678,19	318.393,19	1.718.654,38	
706+0.000	0,00	1.855,98	26,43	11.720,17	10	0,00	37.047,57	738,63	319.131,82	1.717.915,75	
707+0.000	0,00	1.855,98	27,89	11.748,05	10	0,00	37.047,57	783,75	319.915,57	1.717.132,00	
708+0.000	0,00	1.855,98	29,74	11.777,80	10	0,00	37.047,57	730,24	320.645,81	1.716.401,76	
709+0.000	0,00	1.855,98	23,95	11.801,75	10	0,00	37.047,57	734,20	321.380,01	1.715.667,56	
710+0.000	0,00	1.855,98	30,04	11.831,78	10	0,00	37.047,57	803,83	322.183,84	1.714.863,73	
711+0.000	0,00	1.855,98	29,07	11.860,85	10	0,00	37.047,57	800,02	322.983,86	1.714.063,71	
712+0.000	0,00	1.855,98	29,76	11.890,61	10	0,00	37.047,57	837,91	323.821,77	1.713.225,80	
713+0.000	0,00	1.855,98	31,86	11.922,46	10	0,00	37.047,57	832,78	324.654,55	1.712.393,02	
714+0.000	0,00	1.855,98	29,38	11.951,84	10	0,00	37.047,57	798,08	325.452,62	1.711.594,95	
715+0.000	0,00	1.855,98	29,30	11.981,14	10	0,00	37.047,57	716,65	326.169,28	1.710.878,29	
716+0.000	0,00	1.855,98	23,39	12.004,54	10	0,00	37.047,57	574,80	326.744,08	1.710.303,49	
717+0.000	0,00	1.855,98	18,87	12.023,41	10	0,00	37.047,57	414,31	327.158,39	1.709.889,18	
718+0.000	0,00	1.855,98	11,59	12.035,00	10	0,00	37.047,57	193,56	327.351,95	1.709.695,62	
719+0.000	0,00	1.855,98	2,64	12.037,64	10	58,93	37.106,50	35,93	327.387,88	1.709.718,62	35,93
720+0.000	5,89	1.861,87	0,00	12.037,64	10	229,21	37.335,71	0,00	327.387,88	1.709.947,83	
721+0.000	17,03	1.878,90	0,00	12.037,64	10	462,01	37.797,72	0,00	327.387,88	1.710.409,84	
722+0.000	29,17	1.908,08	0,00	12.037,64	10	729,48	38.527,20	0,00	327.387,88	1.711.139,32	
723+0.000	43,78	1.951,85	0,00	12.037,64	10	1.029,95	39.557,15	0,00	327.387,88	1.712.169,27	
724+0.000	59,22	2.011,07	0,00	12.037,64	10	1.383,41	40.940,56	0,00	327.387,88	1.713.552,68	
725+0.000	79,12	2.090,19	0,00	12.037,64	10	1.779,31	42.719,87	0,00	327.387,88	1.715.331,99	
726+0.000	98,81	2.189,00	0,00	12.037,64	10	2.175,91	44.895,78	0,00	327.387,88	1.717.507,90	
727+0.000	118,78	2.307,78	0,00	12.037,64	10	2.603,40	47.499,18	0,00	327.387,88	1.720.111,30	
728+0.000	141,56	2.449,34	0,00	12.037,64	10	3.045,67	50.544,85	0,00	327.387,88	1.723.156,97	
729+0.000	163,01	2.612,35	0,00	12.037,64	10	3.449,34	53.994,19	0,00	327.387,88	1.726.606,31	
730+0.000	181,93	2.794,28	0,00	12.037,64	10	3.870,02	57.864,21	0,00	327.387,88	1.730.476,33	
731+0.000	205,08	2.999,35	0,00	12.037,64	10	4.322,04	62.186,25	0,00	327.387,88	1.734.798,37	
732+0.000	227,13	3.226,48	0,00	12.037,64	10	4.701,13	66.887,38	0,00	327.387,88	1.739.499,50	
733+0.000	242,99	3.469,46	0,00	12.037,64	10	4.789,02	71.676,40	0,00	327.387,88	1.744.288,52	
734+0.000	235,92	3.705,38	0,00	12.037,64	10	4.857,46	76.533,86	0,00	327.387,88	1.749.145,98	
735+0.000	249,83	3.955,21	0,00	12.037,64	10	5.033,03	81.566,89	0,00	327.387,88	1.754.179,01	
736+0.000	253,47	4.208,68	0,00	12.037,64	10	5.240,06	86.806,95	0,00	327.387,88	1.759.419,07	
737+0.000	270,53	4.479,22	0,00	12.037,64	10	5.872,41	92.679,36	0,00	327.387,88	1.765.291,48	
738+0.000	316,71	4.795,93	0,00	12.037,64	10	6.684,22	99.363,58	0,00	327.387,88	1.771.975,70	
739+0.000	351,71	5.147,64	0,00	12.037,64	10	7.411,23	106.774,81	0,00	327.387,88	1.779.386,93	
740+0.000	389,41	5.537,05	0,00	12.037,64	10	8.122,76	114.897,57	0,00	327.387,88	1.787.509,69	
741+0.000	422,87	5.959,91	0,00	12.037,64	10	8.761,85	123.659,42	0,00	327.387,88	1.796.271,54	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de	Comp.
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner	Lateral
742+0.000	453,32	6.413,23	0,00	12.037,64	10	9.202,40	132.861,82	0,00	327.387,88	1.805.473,94	
743+0.000	466,92	6.880,15	0,00	12.037,64	10	9.614,67	142.476,49	0,00	327.387,88	1.815.088,61	
744+0.000	494,55	7.374,70	0,00	12.037,64	10	9.983,63	152.460,12	0,00	327.387,88	1.825.072,24	
745+0.000	503,82	7.878,52	0,00	12.037,64	10	9.863,74	162.323,86	0,00	327.387,88	1.834.935,98	
746+0.000	482,56	8.361,07	0,00	12.037,64	10	9.779,07	172.102,93	0,00	327.387,88	1.844.715,05	
747+0.000	495,35	8.856,42	0,00	12.037,64	10	9.881,49	181.984,42	0,00	327.387,88	1.854.596,54	
748+0.000	492,80	9.349,22	0,00	12.037,64	10	9.946,45	191.930,87	0,00	327.387,88	1.864.542,99	
749+0.000	501,85	9.851,07	0,00	12.037,64	10	10.411,21	202.342,08	0,00	327.387,88	1.874.954,20	
750+0.000	539,28	10.390,34	0,00	12.037,64	10	10.789,90	213.131,98	0,00	327.387,88	1.885.744,10	
751+0.000	539,72	10.930,06	0,00	12.037,64	10	10.797,67	223.929,65	0,00	327.387,88	1.896.541,77	
752+0.000	540,05	11.470,11	0,00	12.037,64	10	10.421,73	234.351,38	0,00	327.387,88	1.906.963,50	
753+0.000	502,12	11.972,23	0,00	12.037,64	10	9.493,70	243.845,08	0,00	327.387,88	1.916.457,20	
754+0.000	447,25	12.419,48	0,00	12.037,64	10	8.509,94	252.355,02	0,00	327.387,88	1.924.967,14	
755+0.000	403,75	12.823,23	0,00	12.037,64	10	7.742,85	260.097,87	0,00	327.387,88	1.932.709,99	
756+0.000	370,54	13.193,77	0,00	12.037,64	10	7.236,36	267.334,23	0,00	327.387,88	1.939.946,35	
757+0.000	353,10	13.546,86	0,00	12.037,64	10	6.793,26	274.127,49	0,00	327.387,88	1.946.739,61	
758+0.000	326,23	13.873,09	0,00	12.037,64	10	5.400,72	279.528,21	0,00	327.387,88	1.952.140,33	
759+0.000	213,84	14.086,93	0,00	12.037,64	10	3.361,38	282.889,59	0,00	327.387,88	1.955.501,71	
760+0.000	122,30	14.209,23	0,00	12.037,64	10	1.731,25	284.620,84	0,00	327.387,88	1.957.232,96	
761+0.000	50,83	14.260,06	0,00	12.037,64	10	775,07	285.395,91	0,00	327.387,88	1.958.008,03	
762+0.000	26,68	14.286,74	0,00	12.037,64	10	340,82	285.736,73	0,00	327.387,88	1.958.348,85	
763+0.000	7,40	14.294,14	0,00	12.037,64	10	74,04	285.810,77	130,30	327.518,18	1.958.292,59	74,04
764+0.000	0,00	14.294,14	9,58	12.047,22	10	0,00	285.810,77	521,44	328.039,62	1.957.771,15	
765+0.000	0,00	14.294,14	28,76	12.075,98	10	0,00	285.810,77	1.489,62	329.529,24	1.956.281,53	
766+0.000	0,00	14.294,14	80,77	12.156,75	10	0,00	285.810,77	1.098,49	330.627,72	1.955.183,05	
767+0.000	0,00	14.294,14		12.156,75	10	0,00	285.810,77	0,00	330.627,72	1.955.183,05	
768+0.000	0,00	14.294,14		12.156,75	10	0,00	285.810,77	1.012,90	331.640,62	1.954.170,15	
769+0.000	0,00	14.294,14	74,48	12.231,23	10	0,00	285.810,77	1.887,45	333.528,07	1.952.282,70	
770+0.000	0,00	14.294,14	64,31	12.295,54	10	0,00	285.810,77	1.296,04	334.824,11	1.950.986,66	
771+0.000	0,00	14.294,14	30,99	12.326,53	10	1,72	285.812,49	449,40	335.273,51	1.950.538,98	1,72
772+0.000	0,17	14.294,31	2,05	12.328,58	10	391,02	286.203,51	27,91	335.301,42	1.950.902,09	27,91
773+0.000	38,93	14.333,24	0,00	12.328,58	10	1.188,55	287.392,06	0,00	335.301,42	1.952.090,64	
774+0.000	79,93	14.413,17	0,00	12.328,58	10	1.800,23	289.192,29	0,00	335.301,42	1.953.890,87	
775+0.000	100,10	14.513,27	0,00	12.328,58	10	2.149,08	291.341,37	0,00	335.301,42	1.956.039,95	
776+0.000	114,81	14.628,08	0,00	12.328,58	10	2.595,07	293.936,44	0,00	335.301,42	1.958.635,02	
777+0.000	144,70	14.772,77	0,00	12.328,58	10	2.936,17	296.872,61	0,00	335.301,42	1.961.571,19	
778+0.000	148,92	14.921,69	0,00	12.328,58	10	2.961,91	299.834,52	0,00	335.301,42	1.964.533,10	
779+0.000	147,27	15.068,96	0,00	12.328,58	10	2.896,09	302.730,61	0,00	335.301,42	1.967.429,19	
780+0.000	142,34	15.211,30	0,00	12.328,58	10	2.823,42	305.554,03	0,00	335.301,42	1.970.252,61	
781+0.000	140,00	15.351,31	0,00	12.328,58	10	2.635,70	308.189,73	0,00	335.301,42	1.972.888,31	
782+0.000	123,57	15.474,87	0,00	12.328,58	10	2.256,40	310.446,13	0,00	335.301,42	1.975.144,71	
783+0.000	102,07	15.576,95	0,00	12.328,58	10	1.843,73	312.289,86	0,00	335.301,42	1.976.988,44	
784+0.000	82,30	15.659,25	0,00	12.328,58	10	1.565,28	313.855,14	0,00	335.301,42	1.978.553,72	
785+0.000	74,23	15.733,47	0,00	12.328,58	10	1.364,98	315.220,12	0,00	335.301,42	1.979.918,70	
786+0.000	62,27	15.795,74	0,00	12.328,58	10	1.170,78	316.390,90	0,00	335.301,42	1.981.089,48	
787+0.000	54,81	15.850,55	0,00	12.328,58	10	1.073,49	317.464,39	0,00	335.301,42	1.982.162,97	
788+0.000	52,54	15.903,09	0,00	12.328,58	10	965,19	318.429,58	0,00	335.301,42	1.983.128,16	
789+0.000	43,98	15.947,07	0,00	12.328,58	10	853,84	319.283,42	0,00	335.301,42	1.983.982,00	
790+0.000	41,41	15.988,48	0,00	12.328,58	10	803,80	320.087,22	0,00	335.301,42	1.984.785,80	
791+0.000	38,98	16.027,45	0,00	12.328,58	10	798,10	320.885,32	0,00	335.301,42	1.985.583,90	
792+0.000	40,84	16.068,29	0,00	12.328,58	10	943,58	321.828,90	0,00	335.301,42	1.986.527,48	
793+0.000	53,52	16.121,81	0,00	12.328,58	10	1.192,44	323.021,34	0,00	335.301,42	1.987.719,92	
794+0.000	65,72	16.187,53	0,00	12.328,58	10	1.407,62	324.428,96	0,00	335.301,42	1.989.127,54	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumen de Corte (m³)		Volumen de Aterro (m³)		Ordenada de	Comp.
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner	Lateral
795+0.000	75,04	16.262,57	0,00	12.328,58	10	1.508,13	325.937,09	0,00	335.301,42	1.990.635,67	
796+0.000	75,77	16.338,34	0,00	12.328,58	10	1.304,97	327.242,06	0,00	335.301,42	1.991.940,64	
797+0.000	54,73	16.393,07	0,00	12.328,58	10	947,28	328.189,34	0,00	335.301,42	1.992.887,92	
798+0.000	40,00	16.433,07	0,00	12.328,58	10	665,76	328.855,10	0,00	335.301,42	1.993.553,68	
799+0.000	26,57	16.459,64	0,00	12.328,58	10	471,26	329.326,36	0,00	335.301,42	1.994.024,94	
800+0.000	20,55	16.480,20	0,00	12.328,58	10	464,71	329.791,07	0,00	335.301,42	1.994.489,65	
801+0.000	25,92	16.506,12	0,00	12.328,58	10	414,20	330.205,27	0,00	335.301,42	1.994.903,85	
802+0.000	15,50	16.521,62	0,00	12.328,58	10	251,79	330.457,06	0,00	335.301,42	1.995.155,64	
803+0.000	9,68	16.531,29	0,00	12.328,58	10	135,84	330.592,90	0,00	335.301,42	1.995.291,48	
804+0.000	3,91	16.535,20	0,00	12.328,58	10	39,14	330.632,04	40,13	335.341,55	1.995.290,49	39,14
805+0.000	0,01	16.535,21	2,95	12.331,53	10	0,07	330.632,11	153,83	335.495,38	1.995.136,73	0,07
806+0.000	0,00	16.535,21	8,36	12.339,89	10	0,00	330.632,11	352,93	335.848,31	1.994.783,80	
807+0.000	0,00	16.535,21	17,59	12.357,48	10	0,00	330.632,11	483,10	336.331,41	1.994.300,70	
808+0.000	0,00	16.535,21	17,93	12.375,41	10	0,00	330.632,11	476,90	336.808,31	1.993.823,80	
809+0.000	0,00	16.535,21	17,14	12.392,55	10	0,00	330.632,11	438,44	337.246,75	1.993.385,36	
810+0.000	0,00	16.535,21	15,10	12.407,65	10	0,00	330.632,11	994,11	338.240,85	1.992.391,26	
811+0.000	0,00	16.535,21	57,99	12.465,64	10	0,00	330.632,11	1.693,61	339.934,46	1.990.697,65	
812+0.000	0,00	16.535,21	66,54	12.532,18	10	0,00	330.632,11	1.850,61	341.785,07	1.988.847,04	
813+0.000	0,00	16.535,21	69,54	12.601,72	10	0,00	330.632,11	1.995,84	343.780,91	1.986.851,20	
814+0.000	0,00	16.535,21	77,22	12.678,93	10	0,43	330.632,54	1.874,50	345.655,41	1.984.977,13	0,43
815+0.000	0,04	16.535,25	60,62	12.739,55	10	7,24	330.639,78	1.095,55	346.750,96	1.983.888,82	7,24
816+0.000	0,68	16.535,93	19,94	12.759,49	10	6,81	330.646,59	271,18	347.022,14	1.983.624,45	6,81
817+0.000	0,00	16.535,93	0,00	12.759,49	10	32,19	330.678,78	28,34	347.050,48	1.983.628,30	28,34
818+0.000	3,22	16.539,15	2,08	12.761,57	10	113,93	330.792,71	28,34	347.078,83	1.983.713,88	28,34
819+0.000	8,17	16.547,33	0,00	12.761,57	10	292,46	331.085,17	0,00	347.078,83	1.984.006,34	
820+0.000	21,07	16.568,40	0,00	12.761,57	10	629,14	331.714,31	0,00	347.078,83	1.984.635,48	
821+0.000	41,84	16.610,24	0,00	12.761,57	10	1.106,91	332.821,22	0,00	347.078,83	1.985.742,39	
822+0.000	68,85	16.679,09	0,00	12.761,57	10	1.770,60	334.591,82	0,00	347.078,83	1.987.512,99	
823+0.000	108,21	16.787,30	0,00	12.761,57	10	2.613,13	337.204,95	0,00	347.078,83	1.990.126,12	
824+0.000	153,10	16.940,40	0,00	12.761,57	10	3.752,89	340.957,84	0,00	347.078,83	1.993.879,01	
825+0.000	222,19	17.162,59	0,00	12.761,57	10	5.057,09	346.014,93	0,00	347.078,83	1.998.936,10	
826+0.000	283,52	17.446,11	0,00	12.761,57	10	5.944,74	351.959,67	0,00	347.078,83	2.004.880,84	
827+0.000	310,95	17.757,06	0,00	12.761,57	10	6.243,89	358.203,56	0,00	347.078,83	2.011.124,73	
828+0.000	313,44	18.070,50	0,00	12.761,57	10	6.249,38	364.452,94	0,00	347.078,83	2.017.374,11	
829+0.000	311,50	18.382,00	0,00	12.761,57	10	6.246,71	370.699,65	0,00	347.078,83	2.023.620,82	
830+0.000	313,17	18.695,17	0,00	12.761,57	10	6.221,79	376.921,44	0,00	347.078,83	2.029.842,61	
831+0.000	309,01	19.004,18	0,00	12.761,57	10	6.132,75	383.054,19	0,00	347.078,83	2.035.975,36	
832+0.000	304,27	19.308,45	0,00	12.761,57	10	5.948,88	389.003,07	0,00	347.078,83	2.041.924,24	
833+0.000	290,62	19.599,07	0,00	12.761,57	10	5.543,71	394.546,78	0,00	347.078,83	2.047.467,95	
834+0.000	263,75	19.862,82	0,00	12.761,57	10	5.114,70	399.661,48	0,00	347.078,83	2.052.582,65	
835+0.000	247,72	20.110,54	0,00	12.761,57	10	4.840,47	404.501,95	0,00	347.078,83	2.057.423,12	
836+0.000	236,33	20.346,86	0,00	12.761,57	10	4.888,18	409.390,13	0,00	347.078,83	2.062.311,30	
837+0.000	252,49	20.599,36	0,00	12.761,57	10	5.605,33	414.995,46	0,00	347.078,83	2.067.916,63	
838+0.000	308,04	20.907,40	0,00	12.761,57	10	6.071,59	421.067,05	0,00	347.078,83	2.073.988,22	
839+0.000	299,12	21.206,51	0,00	12.761,57	10	5.684,41	426.751,46	0,00	347.078,83	2.079.672,63	
840+0.000	269,32	21.475,84	0,00	12.761,57	10	5.024,63	431.776,09	0,00	347.078,83	2.084.697,26	
841+0.000	233,14	21.708,98	0,00	12.761,57	10	4.229,30	436.005,39	0,00	347.078,83	2.088.926,56	
842+0.000	189,79	21.898,77	0,00	12.761,57	10	3.510,16	439.515,55	0,00	347.078,83	2.092.436,72	
843+0.000	161,23	22.059,99	0,00	12.761,57	10	2.941,87	442.457,42	0,00	347.078,83	2.095.378,59	
844+0.000	132,96	22.192,95	0,00	12.761,57	10	2.536,52	444.993,94	0,00	347.078,83	2.097.915,11	
845+0.000	120,69	22.313,65	0,00	12.761,57	10	2.268,29	447.262,23	0,00	347.078,83	2.100.183,40	
846+0.000	106,14	22.419,78	0,00	12.761,57	10	2.007,56	449.269,79	0,00	347.078,83	2.102.190,96	
847+0.000	94,62	22.514,40	0,00	12.761,57	10	1.859,49	451.129,28	0,00	347.078,83	2.104.050,45	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de	Comp.
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner	Lateral
848+0.000	91,33	22.605,73	0,00	12.761,57	10	1.910,67	453.039,95	0,00	347.078,83	2.105.961,12	
849+0.000	99,74	22.705,47	0,00	12.761,57	10	1.885,04	454.924,99	0,00	347.078,83	2.107.846,16	
850+0.000	88,77	22.794,24	0,00	12.761,57	10	1.772,25	456.697,24	0,00	347.078,83	2.109.618,41	
851+0.000	88,46	22.882,69	0,00	12.761,57	10	1.723,99	458.421,23	0,00	347.078,83	2.111.342,40	
852+0.000	83,94	22.966,64	0,00	12.761,57	10	1.756,84	460.178,07	0,00	347.078,83	2.113.099,24	
853+0.000	91,74	23.058,38	0,00	12.761,57	10	1.890,25	462.068,32	0,00	347.078,83	2.114.989,49	
854+0.000	97,28	23.155,66	0,00	12.761,57	10	1.840,50	463.908,82	0,00	347.078,83	2.116.829,99	
855+0.000	86,77	23.242,43	0,00	12.761,57	10	1.589,64	465.498,46	0,00	347.078,83	2.118.419,63	
856+0.000	72,20	23.314,62	0,00	12.761,57	10	1.365,92	466.864,38	0,00	347.078,83	2.119.785,55	
857+0.000	64,40	23.379,02	0,00	12.761,57	10	1.241,41	468.105,79	0,00	347.078,83	2.121.026,96	
858+0.000	59,75	23.438,77	0,00	12.761,57	10	1.210,96	469.316,75	0,00	347.078,83	2.122.237,92	
859+0.000	61,35	23.500,12	0,00	12.761,57	10	1.089,77	470.406,52	0,00	347.078,83	2.123.327,69	
860+0.000	47,63	23.547,74	0,00	12.761,57	10	995,67	471.402,19	0,00	347.078,83	2.124.323,36	
861+0.000	51,94	23.599,68	0,00	12.761,57	10	979,85	472.382,04	0,00	347.078,83	2.125.303,21	
862+0.000	46,05	23.645,73	0,00	12.761,57	10	908,77	473.290,81	0,00	347.078,83	2.126.211,98	
863+0.000	44,83	23.690,56	0,00	12.761,57	10	859,32	474.150,13	0,00	347.078,83	2.127.071,30	
864+0.000	41,10	23.731,66	0,00	12.761,57	10	807,39	474.957,52	0,00	347.078,83	2.127.878,69	
865+0.000	39,64	23.771,30	0,00	12.761,57	10	843,73	475.801,25	0,00	347.078,83	2.128.722,42	
866+0.000	44,73	23.816,03	0,00	12.761,57	10	916,99	476.718,24	0,00	347.078,83	2.129.639,41	
867+0.000	46,97	23.863,00	0,00	12.761,57	10	973,01	477.691,25	0,00	347.078,83	2.130.612,42	
868+0.000	50,34	23.913,33	0,00	12.761,57	10	938,56	478.629,81	0,00	347.078,83	2.131.550,98	
869+0.000	43,52	23.956,85	0,00	12.761,57	10	867,84	479.497,65	0,00	347.078,83	2.132.418,82	
870+0.000	43,26	24.000,12	0,00	12.761,57	10	889,87	480.387,52	0,00	347.078,83	2.133.308,69	
871+0.000	45,72	24.045,84	0,00	12.761,57	10	928,63	481.316,15	0,00	347.078,83	2.134.237,32	
872+0.000	47,14	24.092,98	0,00	12.761,57	10	948,21	482.264,36	0,00	347.078,83	2.135.185,53	
873+0.000	47,68	24.140,66	0,00	12.761,57	10	940,79	483.205,15	0,00	347.078,83	2.136.126,32	
874+0.000	46,40	24.187,06	0,00	12.761,57	10	908,57	484.113,72	0,00	347.078,83	2.137.034,89	
875+0.000	44,46	24.231,52	0,00	12.761,57	10	848,70	484.962,42	0,00	347.078,83	2.137.883,59	
876+0.000	40,41	24.271,93	0,00	12.761,57	10	768,79	485.731,21	0,00	347.078,83	2.138.652,38	
877+0.000	36,47	24.308,40	0,00	12.761,57	10	687,29	486.418,50	0,00	347.078,83	2.139.339,67	
878+0.000	32,26	24.340,66	0,00	12.761,57	10	600,64	487.019,14	0,00	347.078,83	2.139.940,31	
879+0.000	27,80	24.368,46	0,00	12.761,57	10	514,63	487.533,77	0,00	347.078,83	2.140.454,94	
880+0.000	23,66	24.392,12	0,00	12.761,57	10	452,73	487.986,50	0,00	347.078,83	2.140.907,67	
881+0.000	21,61	24.413,73	0,00	12.761,57	10	426,76	488.413,26	0,00	347.078,83	2.141.334,43	
882+0.000	21,06	24.434,80	0,00	12.761,57	10	397,31	488.810,57	0,00	347.078,83	2.141.731,74	
883+0.000	18,67	24.453,47	0,00	12.761,57	10	398,23	489.208,80	0,00	347.078,83	2.142.129,97	
884+0.000	21,16	24.474,62	0,00	12.761,57	10	448,46	489.657,26	0,00	347.078,83	2.142.578,43	
885+0.000	23,69	24.498,31	0,00	12.761,57	10	563,35	490.220,61	0,00	347.078,83	2.143.141,78	
886+0.000	32,64	24.530,96	0,00	12.761,57	10	646,15	490.866,76	0,00	347.078,83	2.143.787,93	
887+0.000	31,97	24.562,93	0,00	12.761,57	10	682,27	491.549,03	0,00	347.078,83	2.144.470,20	
888+0.000	36,26	24.599,18	0,00	12.761,57	10	751,36	492.300,39	0,00	347.078,83	2.145.221,56	
889+0.000	38,88	24.638,06	0,00	12.761,57	10	928,85	493.229,24	0,00	347.078,83	2.146.150,41	
890+0.000	54,01	24.692,07	0,00	12.761,57	10	1.321,95	494.551,19	0,00	347.078,83	2.147.472,36	
891+0.000	78,19	24.770,26	0,00	12.761,57	10	1.609,55	496.160,74	0,00	347.078,83	2.149.081,91	
892+0.000	82,77	24.853,02	0,00	12.761,57	10	1.799,40	497.960,14	0,00	347.078,83	2.150.881,31	
893+0.000	97,18	24.950,20	0,00	12.761,57	10	1.976,03	499.936,17	0,00	347.078,83	2.152.857,34	
894+0.000	100,43	25.050,63	0,00	12.761,57	10	2.101,66	502.037,83	0,00	347.078,83	2.154.959,00	
895+0.000	109,74	25.160,36	0,00	12.761,57	10	2.292,89	504.330,72	0,00	347.078,83	2.157.251,89	
896+0.000	119,55	25.279,91	0,00	12.761,57	10	2.480,80	506.811,52	0,00	347.078,83	2.159.732,69	
897+0.000	128,53	25.408,44	0,00	12.761,57	10	2.617,63	509.429,15	0,00	347.078,83	2.162.350,32	
898+0.000	133,23	25.541,68	0,00	12.761,57	10	2.685,68	512.114,83	0,00	347.078,83	2.165.036,00	
899+0.000	135,33	25.677,01	0,00	12.761,57	10	2.683,94	514.798,77	0,00	347.078,83	2.167.719,94	
900+0.000	133,06	25.810,07	0,00	12.761,57	10	2.483,54	517.282,31	0,00	347.078,83	2.170.203,48	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de	Comp.
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner	Lateral
901+0.000	115,29	25.925,37	0,00	12.761,57	10	1.940,63	519.222,94	0,00	347.078,83	2.172.144,11	
902+0.000	78,77	26.004,13	0,00	12.761,57	10	1.280,26	520.503,20	0,00	347.078,83	2.173.424,37	
903+0.000	49,26	26.053,39	0,00	12.761,57	10	778,53	521.281,73	0,00	347.078,83	2.174.202,90	
904+0.000	28,60	26.081,99	0,00	12.761,57	10	305,97	521.587,70	1,63	347.080,46	2.174.507,24	1,63
905+0.000	2,00	26.083,99	0,12	12.761,69	10	20,01	521.607,71	253,26	347.333,72	2.174.273,99	20,01
906+0.000	0,00	26.083,99	18,50	12.780,20	10	0,00	521.607,71	846,06	348.179,77	2.173.427,94	
907+0.000	0,00	26.083,99	43,71	12.823,90	10	0,00	521.607,71	1.610,57	349.790,34	2.171.817,37	
908+0.000	0,00	26.083,99	74,72	12.898,62	10	0,00	521.607,71	2.286,05	352.076,39	2.169.531,32	
909+0.000	0,00	26.083,99	93,38	12.992,00	10	0,00	521.607,71	2.798,12	354.874,51	2.166.733,20	
910+0.000	0,00	26.083,99	112,37	13.104,36	10	0,00	521.607,71	3.007,87	357.882,38	2.163.725,33	
911+0.000	0,00	26.083,99	108,80	13.213,16	10	0,00	521.607,71	3.155,73	361.038,11	2.160.569,60	
912+0.000	0,00	26.083,99	123,24	13.336,40	10	0,00	521.607,71	3.531,69	364.569,80	2.157.037,91	
913+0.000	0,00	26.083,99	136,44	13.472,85	10	0,00	521.607,71	3.604,71	368.174,51	2.153.433,20	
914+0.000	0,00	26.083,99	128,61	13.601,45	10	0,00	521.607,71	3.492,47	371.666,97	2.149.940,74	
915+0.000	0,00	26.083,99	128,19	13.729,64	10	0,00	521.607,71	3.411,78	375.078,75	2.146.528,96	
916+0.000	0,00	26.083,99	122,68	13.852,32	10	0,00	521.607,71	3.136,94	378.215,69	2.143.392,02	
917+0.000	0,00	26.083,99	107,98	13.960,30	10	0,00	521.607,71	2.998,51	381.214,20	2.140.393,51	
918+0.000	0,00	26.083,99	112,50	14.072,80	10	0,00	521.607,71	2.887,14	384.101,35	2.137.506,36	
919+0.000	0,00	26.083,99	99,79	14.172,59	10	0,00	521.607,71	2.543,49	386.644,83	2.134.962,88	
920+0.000	0,00	26.083,99	87,23	14.259,82	10	0,00	521.607,71	2.302,83	388.947,66	2.132.660,05	
921+0.000	0,00	26.083,99	82,10	14.341,92	10	0,00	521.607,71	2.262,31	391.209,97	2.130.397,74	
922+0.000	0,00	26.083,99	84,25	14.426,17	10	0,00	521.607,71	2.202,82	393.412,79	2.128.194,92	
923+0.000	0,00	26.083,99	77,72	14.503,89	10	0,00	521.607,71	2.004,06	395.416,84	2.126.190,87	
924+0.000	0,00	26.083,99	69,63	14.573,52	10	0,00	521.607,71	1.802,57	397.219,42	2.124.388,29	
925+0.000	0,00	26.083,99	62,91	14.636,43	10	0,00	521.607,71	1.620,03	398.839,45	2.122.768,26	
926+0.000	0,00	26.083,99	56,21	14.692,64	10	0,00	521.607,71	1.439,82	400.279,27	2.121.328,44	
927+0.000	0,00	26.083,99	49,66	14.742,30	10	0,00	521.607,71	1.235,11	401.514,38	2.120.093,33	
928+0.000	0,00	26.083,99	41,16	14.783,46	10	0,00	521.607,71	1.102,61	402.616,98	2.118.990,73	
929+0.000	0,00	26.083,99	39,91	14.823,37	10	0,00	521.607,71	1.067,87	403.684,86	2.117.922,85	
930+0.000	0,00	26.083,99	38,61	14.861,98	10	0,00	521.607,71	996,44	404.681,30	2.116.926,41	
931+0.000	0,00	26.083,99	34,66	14.896,64	10	0,00	521.607,71	910,18	405.591,48	2.116.016,23	
932+0.000	0,00	26.083,99	32,26	14.928,91	10	0,00	521.607,71	776,82	406.368,30	2.115.239,41	
933+0.000	0,00	26.083,99	24,86	14.953,76	10	0,00	521.607,71	677,36	407.045,66	2.114.562,05	
934+0.000	0,00	26.083,99	24,95	14.978,71	10	0,00	521.607,71	647,96	407.693,62	2.113.914,09	
935+0.000	0,00	26.083,99	22,69	15.001,41	10	0,00	521.607,71	580,52	408.274,14	2.113.333,57	
936+0.000	0,00	26.083,99	19,99	15.021,40	10	0,00	521.607,71	528,43	408.802,56	2.112.805,15	
937+0.000	0,00	26.083,99	18,86	15.040,26	10	0,00	521.607,71	537,34	409.339,90	2.112.267,81	
938+0.000	0,00	26.083,99	20,65	15.060,91	10	0,00	521.607,71	544,63	409.884,52	2.111.723,19	
939+0.000	0,00	26.083,99	19,40	15.080,31	10	0,00	521.607,71	503,78	410.388,31	2.111.219,40	
940+0.000	0,00	26.083,99	17,64	15.097,95	10	0,00	521.607,71	444,03	410.832,34	2.110.775,37	
941+0.000	0,00	26.083,99	15,01	15.112,96	10	0,00	521.607,71	390,59	411.222,93	2.110.384,78	
942+0.000	0,00	26.083,99	13,71	15.126,67	10	0,00	521.607,71	298,62	411.521,54	2.110.086,17	
943+0.000	0,00	26.083,99	8,24	15.134,91	10	0,00	521.607,71	229,42	411.750,96	2.109.856,75	
944+0.000	0,00	26.083,99	8,63	15.143,54	10	0,00	521.607,71	229,28	411.980,24	2.109.627,47	
945+0.000	0,00	26.083,99	8,23	15.151,77	10	0,00	521.607,71	198,22	412.178,46	2.109.429,25	
946+0.000	0,00	26.083,99	6,34	15.158,11	10	0,00	521.607,71	159,34	412.337,80	2.109.269,91	
947+0.000	0,00	26.083,99	5,37	15.163,49	10	0,00	521.607,71	141,90	412.479,70	2.109.128,01	
948+0.000	0,00	26.083,99	5,06	15.168,55	10	0,00	521.607,71	141,34	412.621,05	2.108.986,66	
949+0.000	0,00	26.083,99	5,33	15.173,88	10	0,00	521.607,71	142,23	412.763,28	2.108.844,43	
950+0.000	0,00	26.083,99	5,13	15.179,01	10	0,00	521.607,71	154,92	412.918,20	2.108.689,51	
951+0.000	0,00	26.083,99	6,27	15.185,27	10	0,00	521.607,71	187,19	413.105,39	2.108.502,32	
952+0.000	0,00	26.083,99	7,50	15.192,77	10	0,00	521.607,71	203,69	413.309,07	2.108.298,64	
953+0.000	0,00	26.083,99	7,48	15.200,25	10	0,00	521.607,71	201,92	413.510,99	2.108.096,72	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68									LOTE: ÚNICO		Empolamento: 36%
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
954+0.000	0,00	26.083,99	7,37	15.207,62	10	0,00	521.607,71	204,00	413.714,99	2.107.892,72	
955+0.000	0,00	26.083,99	7,63	15.215,25	10	0,00	521.607,71	217,59	413.932,58	2.107.675,13	
956+0.000	0,00	26.083,99	8,37	15.223,62	10	0,00	521.607,71	244,45	414.177,02	2.107.430,69	
957+0.000	0,00	26.083,99	9,61	15.233,22	10	0,00	521.607,71	286,63	414.463,66	2.107.144,05	
958+0.000	0,00	26.083,99	11,47	15.244,69	10	0,00	521.607,71	330,77	414.794,42	2.106.813,29	
959+0.000	0,00	26.083,99	12,85	15.257,54	10	0,00	521.607,71	351,64	415.146,07	2.106.461,64	
960+0.000	0,00	26.083,99	13,00	15.270,55	10	0,00	521.607,71	331,53	415.477,59	2.106.130,12	
961+0.000	0,00	26.083,99	11,37	15.281,92	10	0,00	521.607,71	313,07	415.790,66	2.105.817,05	
962+0.000	0,00	26.083,99	11,65	15.293,57	10	0,00	521.607,71	349,28	416.139,94	2.105.467,77	
963+0.000	0,00	26.083,99	14,04	15.307,60	10	0,00	521.607,71	363,08	416.503,02	2.105.104,69	
964+0.000	0,00	26.083,99	12,66	15.320,26	10	0,00	521.607,71	313,89	416.816,91	2.104.790,80	
965+0.000	0,00	26.083,99	10,42	15.330,68	10	0,00	521.607,71	292,14	417.109,05	2.104.498,66	
966+0.000	0,00	26.083,99	11,06	15.341,75	10	0,00	521.607,71	285,14	417.394,19	2.104.213,52	
967+0.000	0,00	26.083,99	9,90	15.351,65	10	0,00	521.607,71	254,81	417.649,00	2.103.958,71	
968+0.000	0,00	26.083,99	8,83	15.360,48	10	0,00	521.607,71	262,92	417.911,91	2.103.695,80	
969+0.000	0,00	26.083,99	10,50	15.370,98	10	0,00	521.607,71	262,51	418.174,42	2.103.433,29	
970+0.000	0,00	26.083,99	8,80	15.379,78	10	0,00	521.607,71	252,96	418.427,38	2.103.180,33	
971+0.000	0,00	26.083,99	9,80	15.389,58	10	0,00	521.607,71	263,98	418.691,35	2.102.916,36	
972+0.000	0,00	26.083,99	9,61	15.399,19	10	0,00	521.607,71	278,28	418.969,64	2.102.638,07	
973+0.000	0,00	26.083,99	10,85	15.410,04	10	0,00	521.607,71	283,00	419.252,64	2.102.355,07	
974+0.000	0,00	26.083,99	9,96	15.420,00	10	0,00	521.607,71	272,75	419.525,39	2.102.082,32	
975+0.000	0,00	26.083,99	10,10	15.430,10	10	0,00	521.607,71	312,53	419.837,92	2.101.769,79	
976+0.000	0,00	26.083,99	12,89	15.442,98	10	0,00	521.607,71	362,49	420.200,41	2.101.407,30	
977+0.000	0,00	26.083,99	13,77	15.456,75	10	0,00	521.607,71	402,82	420.603,23	2.101.004,48	
978+0.000	0,00	26.083,99	15,85	15.472,60	10	0,00	521.607,71	434,76	421.037,99	2.100.569,72	
979+0.000	0,00	26.083,99	16,12	15.488,72	10	0,00	521.607,71	437,57	421.475,56	2.100.132,15	
980+0.000	0,00	26.083,99	16,06	15.504,78	10	0,00	521.607,71	437,53	421.913,09	2.099.694,62	
981+0.000	0,00	26.083,99	16,12	15.520,89	10	0,00	521.607,71	426,16	422.339,24	2.099.268,47	
982+0.000	0,00	26.083,99	15,22	15.536,11	10	0,00	521.607,71	479,13	422.818,37	2.098.789,34	
983+0.000	0,00	26.083,99	20,01	15.556,12	10	0,00	521.607,71	527,33	423.345,70	2.098.262,01	
984+0.000	0,00	26.083,99	18,76	15.574,88	10	0,00	521.607,71	531,31	423.877,01	2.097.730,70	
985+0.000	0,00	26.083,99	20,30	15.595,19	10	0,00	521.607,71	544,15	424.421,16	2.097.186,55	
986+0.000	0,00	26.083,99	19,71	15.614,90	10	0,00	521.607,71	541,16	424.962,31	2.096.645,40	
987+0.000	0,00	26.083,99	20,08	15.634,98	10	0,00	521.607,71	528,51	425.490,82	2.096.116,89	
988+0.000	0,00	26.083,99	18,78	15.653,76	10	0,00	521.607,71	508,93	425.999,75	2.095.607,96	
989+0.000	0,00	26.083,99	18,64	15.672,40	10	0,00	521.607,71	496,77	426.496,52	2.095.111,19	
990+0.000	0,00	26.083,99	17,88	15.690,28	10	0,00	521.607,71	478,53	426.975,05	2.094.632,66	
991+0.000	0,00	26.083,99	17,30	15.707,59	10	0,00	521.607,71	439,84	427.414,88	2.094.192,83	
992+0.000	0,00	26.083,99	15,04	15.722,62	10	0,00	521.607,71	411,77	427.826,65	2.093.781,06	
993+0.000	0,00	26.083,99	15,24	15.737,86	10	0,00	521.607,71	425,88	428.252,54	2.093.355,17	
994+0.000	0,00	26.083,99	16,08	15.753,94	10	0,00	521.607,71	429,01	428.681,55	2.092.926,16	
995+0.000	0,00	26.083,99	15,47	15.769,41	10	0,00	521.607,71	416,77	429.098,32	2.092.509,39	
996+0.000	0,00	26.083,99	15,18	15.784,58	10	0,00	521.607,71	392,51	429.490,83	2.092.116,88	
997+0.000	0,00	26.083,99	13,68	15.798,27	10	0,00	521.607,71	354,46	429.845,29	2.091.762,42	
998+0.000	0,00	26.083,99	12,38	15.810,65	10	0,00	521.607,71	330,24	430.175,52	2.091.432,19	
999+0.000	0,00	26.083,99	11,90	15.822,55	10	0,00	521.607,71	319,38	430.494,90	2.091.112,81	
1000+0.000	0,00	26.083,99	11,58	15.834,13	10	0,00	521.607,71	302,31	430.797,22	2.090.810,49	
1001+0.000	0,00	26.083,99	10,65	15.844,78	10	0,00	521.607,71	267,54	431.064,76	2.090.542,95	
1002+0.000	0,00	26.083,99	9,02	15.853,80	10	0,00	521.607,71	256,35	431.321,10	2.090.286,61	
1003+0.000	0,00	26.083,99	9,83	15.863,63	10	0,00	521.607,71	243,75	431.564,86	2.090.042,85	
1004+0.000	0,00	26.083,99	8,10	15.871,73	10	0,00	521.607,71	236,91	431.801,77	2.089.805,94	
1005+0.000	0,00	26.083,99	9,32	15.881,05	10	0,00	521.607,71	226,45	432.028,22	2.089.579,49	
1006+0.000	0,00	26.083,99	7,33	15.888,38	10	0,00	521.607,71	290,67	432.318,89	2.089.288,82	

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221										
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68							LOTE: ÚNICO		Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner
1007+0.000	0,00	26.083,99	14,04	15.902,42	10	0,00	521.607,71	390,61	432.709,50	2.088.898,21
1008+0.000	0,00	26.083,99	14,68	15.917,10	10	0,00	521.607,71	404,03	433.113,53	2.088.494,18
1009+0.000	0,00	26.083,99	15,03	15.932,13	10	0,00	521.607,71	432,00	433.545,53	2.088.062,18
1010+0.000	0,00	26.083,99	16,73	15.948,86	10	0,00	521.607,71	468,34	434.013,88	2.087.593,83
1011+0.000	0,00	26.083,99	17,70	15.966,57	10	0,00	521.607,71	497,31	434.511,19	2.087.096,52
1012+0.000	0,00	26.083,99	18,86	15.985,43	10	0,00	521.607,71	523,29	435.034,47	2.086.573,24
1013+0.000	0,00	26.083,99	19,61	16.005,04	10	0,00	521.607,71	515,75	435.550,23	2.086.057,48
1014+0.000	0,00	26.083,99	18,31	16.023,35	10	0,00	521.607,71	496,89	436.047,12	2.085.560,59
1015+0.000	0,00	26.083,99	18,23	16.041,58	10	0,00	521.607,71	493,68	436.540,80	2.085.066,91
1016+0.000	0,00	26.083,99	18,07	16.059,65	10	0,00	521.607,71	487,27	437.028,07	2.084.579,64
1017+0.000	0,00	26.083,99	17,76	16.077,41	10	0,00	521.607,71	467,62	437.495,69	2.084.112,02
1018+0.000	0,00	26.083,99	16,63	16.094,04	10	0,00	521.607,71	456,62	437.952,31	2.083.655,40
1019+0.000	0,00	26.083,99	16,95	16.110,98	10	0,00	521.607,71	425,92	438.378,24	2.083.229,47
1020+0.000	0,00	26.083,99	14,37	16.125,36	10	0,00	521.607,71	373,63	438.751,87	2.082.855,84
1021+0.000	0,00	26.083,99	13,10	16.138,46	10	0,00	521.607,71	337,02	439.088,89	2.082.518,82
1022+0.000	0,00	26.083,99	11,68	16.150,14	10	0,00	521.607,71	300,23	439.389,13	2.082.218,58
1023+0.000	0,00	26.083,99	10,40	16.160,53	10	0,00	521.607,71	263,09	439.652,22	2.081.955,49
1024+0.000	0,00	26.083,99	8,95	16.169,48	10	0,00	521.607,71	223,28	439.875,50	2.081.732,21
1025+0.000	0,00	26.083,99	7,47	16.176,95	10	0,00	521.607,71	200,37	440.075,87	2.081.531,84
1026+0.000	0,00	26.083,99	7,26	16.184,21	10	0,00	521.607,71	169,46	440.245,33	2.081.362,38
1027+0.000	0,00	26.083,99	5,20	16.189,41	10	0,00	521.607,71	129,42	440.374,75	2.081.232,96
1028+0.000	0,00	26.083,99	4,32	16.193,73	10	0,00	521.607,71	104,72	440.479,47	2.081.128,24
1029+0.000	0,00	26.083,99	3,38	16.197,11	10	0,02	521.607,73	71,78	440.551,25	2.081.056,48
1030+0.000	0,00	26.083,99	1,90	16.199,01	10	0,40	521.608,13	47,40	440.598,64	2.081.009,49
1031+0.000	0,04	26.084,03	1,59	16.200,60	10	1,60	521.609,73	36,62	440.635,27	2.080.974,46
1032+0.000	0,12	26.084,15	1,11	16.201,70	10	5,53	521.615,26	21,11	440.656,37	2.080.958,89
1033+0.000	0,43	26.084,58	0,45	16.202,15	10	7,41	521.622,67	14,93	440.671,31	2.080.951,36
1034+0.000	0,31	26.084,89	0,65	16.202,80	10	4,84	521.627,51	15,44	440.686,74	2.080.940,77
1035+0.000	0,17	26.085,07	0,48	16.203,28	10	2,77	521.630,28	25,11	440.711,85	2.080.918,43
1036+0.000	0,10	26.085,17	1,36	16.204,65	10	2,94	521.633,22	30,94	440.742,79	2.080.890,43
1037+0.000	0,19	26.085,36	0,91	16.205,56	10	2,45	521.635,67	31,17	440.773,96	2.080.861,71
1038+0.000	0,05	26.085,41	1,38	16.206,94	10	0,59	521.636,26	48,28	440.822,24	2.080.814,02
1039+0.000	0,01	26.085,42	2,17	16.209,11	10	0,05	521.636,31	92,85	440.915,09	2.080.721,22
1040+0.000	0,00	26.085,42	4,66	16.213,76	10	0,00	521.636,31	147,46	441.062,55	2.080.573,76
1041+0.000	0,00	26.085,42	6,19	16.219,95	10	0,00	521.636,31	219,79	441.282,34	2.080.353,97
1042+0.000	0,00	26.085,42	9,98	16.229,93	10	0,00	521.636,31	322,17	441.604,51	2.080.031,80
1043+0.000	0,00	26.085,42	13,71	16.243,64	10	0,00	521.636,31	442,49	442.047,00	2.079.589,31
1044+0.000	0,00	26.085,42	18,82	16.262,46	10	0,00	521.636,31	580,46	442.627,46	2.079.008,85
1045+0.000	0,00	26.085,42	23,86	16.286,32	10	0,00	521.636,31	729,74	443.357,20	2.078.279,11
1046+0.000	0,00	26.085,42	29,80	16.316,12	10	0,00	521.636,31	926,68	444.283,88	2.077.352,43
1047+0.000	0,00	26.085,42	38,34	16.354,46	10	0,00	521.636,31	1.185,78	445.469,66	2.076.166,65
1048+0.000	0,00	26.085,42	48,85	16.403,31	10	0,00	521.636,31	1.551,53	447.021,19	2.074.615,12
1049+0.000	0,00	26.085,42	65,23	16.468,54	10	0,00	521.636,31	2.018,61	449.039,80	2.072.596,51
1050+0.000	0,00	26.085,42	83,19	16.551,74	10	0,00	521.636,31	2.582,01	451.621,81	2.070.014,50
1051+0.000	0,00	26.085,42	106,66	16.658,40	10	0,00	521.636,31	3.333,69	454.955,50	2.066.680,81
1052+0.000	0,00	26.085,42	138,46	16.796,86	10	0,00	521.636,31	4.182,19	459.137,69	2.062.498,62
1053+0.000	0,00	26.085,42	169,05	16.965,91	10	0,00	521.636,31	5.204,65	464.342,34	2.057.293,97
1054+0.000	0,00	26.085,42	213,65	17.179,55	10	0,00	521.636,31	6.127,70	470.470,04	2.051.166,27
1055+0.000	0,00	26.085,42	236,92	17.416,48	10	0,00	521.636,31	5.896,46	476.366,49	2.045.269,82
1056+0.000	0,00	26.085,42	196,64	17.613,12	10	0,00	521.636,31	4.838,80	481.205,29	2.040.431,02
1057+0.000	0,00	26.085,42	159,15	17.772,27	10	0,00	521.636,31	3.846,54	485.051,83	2.036.584,48
1058+0.000	0,00	26.085,42	123,68	17.895,95	10	0,00	521.636,31	3.006,74	488.058,58	2.033.577,73
1059+0.000	0,00	26.085,42	97,40	17.993,35	10	0,00	521.636,31	2.350,87	490.409,44	2.031.226,87

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221										
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68							LOTE: ÚNICO		Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner
1060+0.000	0,00	26.085,42	75,46	18.068,81	10	0,00	521.636,31	1.792,62	492.202,06	2.029.434,25
1061+0.000	0,00	26.085,42	56,35	18.125,16	10	0,00	521.636,31	1.323,28	493.525,34	2.028.110,97
1062+0.000	0,00	26.085,42	40,95	18.166,11	10	0,00	521.636,31	892,40	494.417,75	2.027.218,56
1063+0.000	0,00	26.085,42	24,67	18.190,78	10	0,00	521.636,31	495,34	494.913,08	2.026.723,23
1064+0.000	0,00	26.085,42	11,75	18.202,53	10	0,07	521.636,38	196,29	495.109,37	2.026.527,01
1065+0.000	0,01	26.085,43	2,68	18.205,21	10	51,46	521.687,84	36,49	495.145,86	2.026.541,98
1066+0.000	5,14	26.090,56	0,00	18.205,21	10	176,31	521.864,15	0,00	495.145,86	2.026.718,29
1067+0.000	12,49	26.103,06	0,00	18.205,21	10	310,28	522.174,43	0,00	495.145,86	2.027.028,57
1068+0.000	18,54	26.121,59	0,00	18.205,21	10	414,58	522.589,01	0,00	495.145,86	2.027.443,15
1069+0.000	22,92	26.144,51	0,00	18.205,21	10	489,78	523.078,79	0,00	495.145,86	2.027.932,93
1070+0.000	26,06	26.170,57	0,00	18.205,21	10	534,35	523.613,14	0,00	495.145,86	2.028.467,28
1071+0.000	27,38	26.197,95	0,00	18.205,21	10	547,49	524.160,63	0,00	495.145,86	2.029.014,77
1072+0.000	27,37	26.225,32	0,00	18.205,21	10	550,68	524.711,31	0,00	495.145,86	2.029.565,45
1073+0.000	27,70	26.253,02	0,00	18.205,21	10	538,09	525.249,40	0,00	495.145,86	2.030.103,54
1074+0.000	26,11	26.279,13	0,00	18.205,21	10	506,31	525.755,71	0,00	495.145,86	2.030.609,85
1075+0.000	24,52	26.303,65	0,00	18.205,21	10	472,77	526.228,48	0,00	495.145,86	2.031.082,62
1076+0.000	22,76	26.326,41	0,00	18.205,21	10	432,26	526.660,74	0,00	495.145,86	2.031.514,88
1077+0.000	20,47	26.346,87	0,00	18.205,21	10	381,68	527.042,42	0,00	495.145,86	2.031.896,56
1078+0.000	17,70	26.364,57	0,00	18.205,21	10	322,69	527.365,11	0,00	495.145,86	2.032.219,25
1079+0.000	14,57	26.379,14	0,00	18.205,21	10	269,68	527.634,79	0,00	495.145,86	2.032.488,93
1080+0.000	12,40	26.391,54	0,00	18.205,21	10	223,50	527.858,29	0,00	495.145,86	2.032.712,43
1081+0.000	9,95	26.401,49	0,00	18.205,21	10	177,44	528.035,73	0,00	495.145,86	2.032.889,87
1082+0.000	7,79	26.409,29	0,00	18.205,21	10	126,44	528.162,17	0,00	495.145,86	2.033.016,31
1083+0.000	4,85	26.414,14	0,00	18.205,21	10	80,20	528.242,37	0,00	495.145,86	2.033.096,51
1084+0.000	3,17	26.417,31	0,00	18.205,21	10	41,53	528.283,90	0,01	495.145,88	2.033.138,02
1085+0.000	0,99	26.418,29	0,00	18.205,22	10	10,27	528.294,17	17,99	495.163,87	2.033.130,30
1086+0.000	0,04	26.418,33	1,32	18.206,54	10	0,42	528.294,59	62,75	495.226,62	2.033.067,97
1087+0.000	0,00	26.418,33	3,29	18.209,83	10	0,00	528.294,59	116,36	495.342,98	2.032.951,61
1088+0.000	0,00	26.418,33	5,26	18.215,09	10	0,00	528.294,59	175,25	495.518,23	2.032.776,36
1089+0.000	0,00	26.418,33	7,62	18.222,72	10	0,00	528.294,59	231,72	495.749,95	2.032.544,64
1090+0.000	0,00	26.418,33	9,42	18.232,13	10	0,00	528.294,59	285,98	496.035,93	2.032.258,66
1091+0.000	0,00	26.418,33	11,61	18.243,74	10	0,00	528.294,59	340,94	496.376,87	2.031.917,72
1092+0.000	0,00	26.418,33	13,46	18.257,20	10	0,00	528.294,59	397,99	496.774,86	2.031.519,73
1093+0.000	0,00	26.418,33	15,81	18.273,01	10	0,00	528.294,59	459,00	497.233,86	2.031.060,73
1094+0.000	0,00	26.418,33	17,94	18.290,95	10	0,00	528.294,59	512,26	497.746,11	2.030.548,48
1095+0.000	0,00	26.418,33	19,72	18.310,67	10	0,00	528.294,59	561,82	498.307,93	2.029.986,66
1096+0.000	0,00	26.418,33	21,59	18.332,26	10	0,00	528.294,59	590,73	498.898,66	2.029.395,93
1097+0.000	0,00	26.418,33	21,85	18.354,11	10	0,00	528.294,59	606,87	499.505,53	2.028.789,06
1098+0.000	0,00	26.418,33	22,77	18.376,88	10	0,00	528.294,59	613,77	500.119,30	2.028.175,29
1099+0.000	0,00	26.418,33	22,36	18.399,24	10	0,00	528.294,59	600,74	500.720,04	2.027.574,55
1100+0.000	0,00	26.418,33	21,82	18.421,06	10	0,00	528.294,59	572,79	501.292,83	2.027.001,76
1101+0.000	0,00	26.418,33	20,30	18.441,36	10	0,00	528.294,59	530,86	501.823,69	2.026.470,90
1102+0.000	0,00	26.418,33	18,73	18.460,09	10	0,00	528.294,59	488,44	502.312,14	2.025.982,45
1103+0.000	0,00	26.418,33	17,18	18.477,27	10	0,00	528.294,59	446,30	502.758,44	2.025.536,15
1104+0.000	0,00	26.418,33	15,63	18.492,91	10	0,00	528.294,59	406,67	503.165,10	2.025.129,49
1105+0.000	0,00	26.418,33	14,27	18.507,17	10	0,00	528.294,59	401,73	503.566,83	2.024.727,76
1106+0.000	0,00	26.418,33	15,27	18.522,44	10	0,00	528.294,59	385,89	503.952,72	2.024.341,87
1107+0.000	0,00	26.418,33	13,10	18.535,55	10	0,00	528.294,59	340,07	504.292,79	2.024.001,80
1108+0.000	0,00	26.418,33	11,90	18.547,45	10	0,00	528.294,59	323,84	504.616,63	2.023.677,96
1109+0.000	0,00	26.418,33	11,91	18.559,36	10	0,00	528.294,59	314,16	504.930,79	2.023.363,80
1110+0.000	0,00	26.418,33	11,19	18.570,55	10	0,00	528.294,59	281,40	505.212,19	2.023.082,40
1111+0.000	0,00	26.418,33	9,50	18.580,05	10	0,00	528.294,59	236,54	505.448,73	2.022.845,86
1112+0.000	0,00	26.418,33	7,89	18.587,94	10	0,00	528.294,59	205,74	505.654,47	2.022.640,12

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221													
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68										LOTE: ÚNICO		Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral		
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.				
1113+0.000	0,00	26.418,33	7,24	18.595,18	10	0,00	528.294,59	177,83	505.832,31	2.022.462,28			
1114+0.000	0,00	26.418,33	5,84	18.601,02	10	0,00	528.294,59	144,27	505.976,58	2.022.318,01			
1115+0.000	0,00	26.418,33	4,77	18.605,79	10	0,00	528.294,59	130,44	506.107,01	2.022.187,58			
1116+0.000	0,00	26.418,33	4,82	18.610,61	10	0,00	528.294,59	145,18	506.252,19	2.022.042,40			
1117+0.000	0,00	26.418,33	5,85	18.616,46	10	0,00	528.294,59	165,87	506.418,06	2.021.876,53			
1118+0.000	0,00	26.418,33	6,34	18.622,81	10	0,00	528.294,59	189,27	506.607,33	2.021.687,26			
1119+0.000	0,00	26.418,33	7,57	18.630,38	10	0,00	528.294,59	201,55	506.808,88	2.021.485,71			
1120+0.000	0,00	26.418,33	7,25	18.637,63	10	0,00	528.294,59	223,48	507.032,36	2.021.262,23			
1121+0.000	0,00	26.418,33	9,19	18.646,81	10	0,00	528.294,59	256,86	507.289,22	2.021.005,37			
1122+0.000	0,00	26.418,33	9,70	18.656,51	10	0,00	528.294,59	270,84	507.560,06	2.020.734,53			
1123+0.000	0,00	26.418,33	10,21	18.666,73	10	0,00	528.294,59	283,36	507.843,42	2.020.451,17			
1124+0.000	0,00	26.418,33	10,62	18.677,35	10	0,00	528.294,59	308,98	508.152,40	2.020.142,19			
1125+0.000	0,00	26.418,33	12,10	18.689,44	10	0,00	528.294,59	344,87	508.497,27	2.019.797,32			
1126+0.000	0,00	26.418,33	13,26	18.702,71	10	0,00	528.294,59	367,70	508.864,97	2.019.429,62			
1127+0.000	0,00	26.418,33	13,78	18.716,48	10	0,00	528.294,59	377,39	509.242,36	2.019.052,23			
1128+0.000	0,00	26.418,33	13,97	18.730,45	10	0,00	528.294,59	394,01	509.636,36	2.018.658,23			
1129+0.000	0,00	26.418,33	15,00	18.745,45	10	0,00	528.294,59	421,67	510.058,03	2.018.236,56			
1130+0.000	0,00	26.418,33	16,01	18.761,46	10	0,00	528.294,59	449,62	510.507,65	2.017.786,94			
1131+0.000	0,00	26.418,33	17,05	18.778,51	10	0,00	528.294,59	429,86	510.937,50	2.017.357,09			
1132+0.000	0,00	26.418,33	14,55	18.793,07	10	0,00	528.294,59	396,70	511.334,20	2.016.960,39			
1133+0.000	0,00	26.418,33	14,62	18.807,68	10	0,00	528.294,59	415,03	511.749,23	2.016.545,36			
1134+0.000	0,00	26.418,33	15,90	18.823,58	10	0,00	528.294,59	436,08	512.185,32	2.016.109,27			
1135+0.000	0,00	26.418,33	16,16	18.839,75	10	0,00	528.294,59	463,62	512.648,94	2.015.645,65			
1136+0.000	0,00	26.418,33	17,93	18.857,67	10	0,00	528.294,59	483,78	513.132,72	2.015.161,87			
1137+0.000	0,00	26.418,33	17,65	18.875,32	10	0,00	528.294,59	449,53	513.582,25	2.014.712,34			
1138+0.000	0,00	26.418,33	15,41	18.890,73	10	0,00	528.294,59	374,41	513.956,66	2.014.337,93			
1139+0.000	0,00	26.418,33	12,12	18.902,85	10	0,00	528.294,59	330,28	514.286,94	2.014.007,65			
1140+0.000	0,00	26.418,33	12,16	18.915,01	10	0,00	528.294,59	369,43	514.656,37	2.013.638,22			
1141+0.000	0,00	26.418,33	15,00	18.930,01	10	0,00	528.294,59	405,57	515.061,93	2.013.232,66			
1142+0.000	0,00	26.418,33	14,82	18.944,83	10	0,00	528.294,59	411,26	515.473,20	2.012.821,39			
1143+0.000	0,00	26.418,33	15,42	18.960,25	10	0,00	528.294,59	417,38	515.890,58	2.012.404,01			
1144+0.000	0,00	26.418,33	15,27	18.975,52	10	0,00	528.294,59	418,28	516.308,86	2.011.985,73			
1145+0.000	0,00	26.418,33	15,49	18.991,01	10	0,00	528.294,59	419,91	516.728,78	2.011.565,81			
1146+0.000	0,00	26.418,33	15,39	19.006,40	10	0,00	528.294,59	385,79	517.114,57	2.011.180,02			
1147+0.000	0,00	26.418,33	12,98	19.019,38	10	0,00	528.294,59	368,00	517.482,57	2.010.812,02			
1148+0.000	0,00	26.418,33	14,08	19.033,46	10	0,00	528.294,59	411,37	517.893,94	2.010.400,65			
1149+0.000	0,00	26.418,33	16,17	19.049,62	10	0,00	528.294,59	453,61	518.347,56	2.009.947,03			
1150+0.000	0,00	26.418,33	17,19	19.066,81	10	0,00	528.294,59	461,88	518.809,44	2.009.485,15			
1151+0.000	0,00	26.418,33	16,77	19.083,59	10	0,00	528.294,59	453,87	519.263,31	2.009.031,28			
1152+0.000	0,00	26.418,33	16,60	19.100,19	10	0,00	528.294,59	419,38	519.682,70	2.008.611,89			
1153+0.000	0,00	26.418,33	14,24	19.114,42	10	0,00	528.294,59	398,07	520.080,77	2.008.213,82			
1154+0.000	0,00	26.418,33	15,03	19.129,46	10	0,00	528.294,59	437,80	520.518,57	2.007.776,02			
1155+0.000	0,00	26.418,33	17,16	19.146,61	10	0,00	528.294,59	233,35	520.751,92	2.007.542,67			
1156+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1157+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1158+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1159+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1160+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1161+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1162+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1163+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1164+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
1165+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			
					10	0,00	528.294,59	0,00	520.751,92	2.007.542,67			

FICHA DE CUBAÇÃO - LINHA TRONCO GO 221											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist.	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de	Comp.
	Parc.	Acum.	Parc.	Acum.	(m)	Parc.	Acum.	Parc.	Acum.	Bruckner	Lateral
1166+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1167+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1168+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1169+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1170+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1171+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1172+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1173+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1174+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1175+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1176+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1177+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1178+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1179+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1180+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1181+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1182+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1183+0.000	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1184+0.000	0,00	26.418,33	0,00	19.146,61	0,935	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
1184+1.871	0,00	26.418,33	0,00	19.146,61	10	0,00	528.294,59	0,00	520.751,92	2.007.542,67	
											1.077,24

4.2. FICHA DE CUBAÇÃO – INTERSEÇÃO 01

FICHA DE CUBAÇÃO - IN 01 RAMO 100											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumen de Corte (m³)		Volumen de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
100+0.000	8,50	8,50	0,00	0,00	10,00	193,04	193,04	0,00	0,00	2.000,193,04	
101+0.000	10,81	19,30	0,00	0,00	10,00	241,90	434,94	0,00	0,00	2.000,434,94	
102+0.000	13,39	32,69	0,00	0,00	10,00	283,61	718,55	0,00	0,00	2.000,718,55	
103+0.000	14,98	47,67	0,00	0,00	10,00	326,28	1044,83	0,00	0,00	2.001,044,83	
104+0.000	17,65	65,32	0,00	0,00	10,00	359,46	1404,29	0,00	0,00	2.001,404,29	
105+0.000	18,29	83,61	0,00	0,00	10,00	365,51	1769,80	0,00	0,00	2.001,769,80	
106+0.000	18,26	101,87	0,00	0,00	10,00	358,40	2.128,20	0,00	0,00	2.002,128,20	
107+0.000	17,58	119,45	0,00	0,00	10,00	376,10	2.504,30	0,00	0,00	2.002,504,30	
108+0.000	20,03	139,48	0,00	0,00	10,00	499,87	3.004,17	0,00	0,00	2.003,004,17	
109+0.000	29,96	169,44	0,00	0,00	10,00	773,92	3.778,09	0,00	0,00	2.003,778,09	
110+0.000	47,43	216,87	0,00	0,00	10,00	899,47	4.677,56	0,00	0,00	2.004,677,56	
111+0.000	42,52	259,39	0,00	0,00	10,00	749,69	5.427,25	0,00	0,00	2.005,427,25	
112+0.000	32,45	291,84	0,00	0,00	10,00	605,28	6.032,53	0,00	0,00	2.006,032,53	
113+0.000	28,07	319,91	0,00	0,00	10,00	461,04	6.493,57	0,00	0,00	2.006,493,57	
114+0.000	18,03	337,94	0,00	0,00	10,00	301,43	6.795,00	3,21	3,21	2.006,791,79	3,21
115+0.000	12,11	350,06	0,24	0,24	10,00	208,83	7.003,83	3,21	6,42	2.006,997,41	3,21
116+0.000	8,77	358,83	0,00	0,24	10,00	176,74	7.180,57	0,00	6,42	2.007,174,15	
117+0.000	8,90	367,73	0,00	0,24	10,00	163,56	7.344,13	0,00	6,42	2.007,337,71	
118+0.000	7,45	375,18	0,00	0,24	10,00	141,74	7.485,87	0,00	6,42	2.007,479,45	
119+0.000	6,72	381,90	0,00	0,24	10,00	122,51	7.608,38	0,00	6,42	2.007,601,96	
120+0.000	5,53	387,43	0,00	0,24	10,00	102,10	7.710,48	1,37	7,79	2.007,702,69	1,37
121+0.000	4,68	392,11	0,10	0,34	10,00	91,71	7.802,19	1,81	9,60	2.007,792,59	1,81
122+0.000	4,49	396,60	0,03	0,37	10,00	91,76	7.893,95	2,27	11,87	2.007,882,08	2,27
123+0.000	4,69	401,29	0,14	0,50	10,00	88,99	7.982,94	7,94	19,82	2.007,963,12	7,94
124+0.000	4,21	405,50	0,45	0,95	10,00	84,67	8.067,61	8,79	28,60	2.008,039,01	8,79
125+0.000	4,25	409,76	0,20	1,15	10,00	84,17	8.151,78	2,68	31,28	2.008,120,50	2,68
126+0.000	4,16	413,92	0,00	1,15							

FICHA DE CUBAÇÃO - IN 01 RAMO 200											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumen de Corte (m³)		Volumen de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
200+0.000	4,37	4,37	0,00	0,00	10,00	94,40	94,40	0,00	0,00	2.000.094,40	
201+0.000	5,07	9,44	0,00	0,00	10,00	108,40	202,80	0,00	0,00	2.000.202,80	
202+0.000	5,77	15,21	0,00	0,00	10,00	126,94	329,74	0,00	0,00	2.000.329,74	
203+0.000	6,93	22,13	0,00	0,00	10,00	150,14	479,88	0,00	0,00	2.000.479,88	
204+0.000	8,09	30,22	0,00	0,00	10,00	185,27	665,15	0,00	0,00	2.000.665,15	
205+0.000	10,44	40,66	0,00	0,00	10,00	227,68	892,83	0,00	0,00	2.000.892,83	
206+0.000	12,33	52,99	0,00	0,00	10,00	256,55	1.149,38	0,00	0,00	2.001.149,38	
207+0.000	13,33	66,32	0,00	0,00	10,00	285,32	1.434,70	0,00	0,00	2.001.434,70	
208+0.000	15,21	81,52	0,00	0,00	10,00	349,59	1.784,29	0,00	0,00	2.001.784,29	
209+0.000	19,75	101,28	0,00	0,00	10,00	490,40	2.274,69	0,00	0,00	2.002.274,69	
210+0.000	29,29	130,56	0,00	0,00	10,00	753,86	3.028,55	0,00	0,00	2.003.028,55	
211+0.000	46,10	176,66	0,00	0,00	10,00	763,49	3.792,04	0,00	0,00	2.003.792,04	
212+0.000	30,25	206,91	0,00	0,00	10,00	792,55	4.584,59	0,00	0,00	2.004.584,59	
213+0.000	49,01	255,92	0,00	0,00	10,00	877,73	5.462,32	0,00	0,00	2.005.462,32	
214+0.000	38,77	294,68	0,00	0,00	10,00	707,54	6.169,86	0,00	0,00	2.006.169,86	
215+0.000	31,99	326,67	0,00	0,00	10,00	619,65	6.789,51	0,00	0,00	2.006.789,51	
216+0.000	29,98	356,65	0,00	0,00	10,00	594,44	7.383,95	0,00	0,00	2.007.383,95	
217+0.000	29,47	386,11	0,00	0,00	10,00	561,36	7.945,31	0,00	0,00	2.007.945,31	
218+0.000	26,67	412,79	0,00	0,00	10,00	499,37	8.444,68	0,00	0,00	2.008.444,68	
219+0.000	23,27	436,05	0,00	0,00	10,00	428,27	8.872,95	0,00	0,00	2.008.872,95	
220+0.000	19,56	455,61	0,00	0,00	10,00	327,16	9.200,11	0,00	0,00	2.009.200,11	
221+0.000	13,16	468,77	0,00	0,00	10,00	199,33	9.399,44	0,00	0,00	2.009.399,44	
222+0.000	6,78	475,55	0,00	0,00		0,00	9.399,44	0,00	0,00	2.009.399,44	

FICHA DE CUBAÇÃO - IN 01 RAMO 300											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumen de Corte (m³)		Volumen de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
300+0.000	2,63	2,63	0,00	0,00	10,00	99,87	99,87	0,00	0,00	2.000.099,87	
301+0.000	7,35	9,99	0,00	0,00	10,00	211,81	311,68	0,00	0,00	2.000.311,68	
302+0.000	13,83	23,82	0,00	0,00	10,00	339,10	650,78	0,00	0,00	2.000.650,78	
303+0.000	20,08	43,90	0,00	0,00	10,00	438,34	1.089,12	0,00	0,00	2.001.089,12	
304+0.000	23,75	67,65	0,00	0,00	10,00	499,71	1.588,83	0,00	0,00	2.001.588,83	
305+0.000	26,22	93,87	0,00	0,00	10,00	541,51	2.130,34	0,00	0,00	2.002.130,34	
306+0.000	27,93	121,80	0,00	0,00	10,00	571,80	2.702,14	0,00	0,00	2.002.702,14	
307+0.000	29,25	151,05	0,00	0,00	10,00	691,98	3.394,12	0,00	0,00	2.003.394,12	
308+0.000	39,95	191,00	0,00	0,00	10,00	1.142,92	4.537,04	0,00	0,00	2.004.537,04	
309+0.000	74,34	265,34	0,00	0,00	10,00	1.144,02	5.681,06	0,00	0,00	2.005.681,06	
310+0.000	40,06	305,40	0,00	0,00	10,00	888,06	6.569,12	0,00	0,00	2.006.569,12	
311+0.000	48,75	354,15	0,00	0,00	10,00	762,19	7.331,31	0,00	0,00	2.007.331,31	
312+0.000	27,47	381,62	0,00	0,00	10,00	495,62	7.826,93	0,00	0,00	2.007.826,93	
313+0.000	22,09	403,71	0,00	0,00	10,00	417,55	8.244,48	0,00	0,00	2.008.244,48	
314+0.000	19,67	423,37	0,00	0,00	10,00	391,25	8.635,73	0,00	0,00	2.008.635,73	
315+0.000	19,46	442,83	0,00	0,00	10,00	389,77	9.025,50	0,00	0,00	2.009.025,50	
316+0.000	19,52	462,35	0,00	0,00	10,00	380,23	9.405,73	0,00	0,00	2.009.405,73	
317+0.000	18,51	480,86	0,00	0,00	10,00	355,44	9.761,17	0,00	0,00	2.009.761,17	
318+0.000	17,04	497,90	0,00	0,00	10,00	320,19	10.081,36	0,00	0,00	2.010.081,36	
319+0.000	14,98	512,88	0,00	0,00	10,00	280,43	10.361,79	0,00	0,00	2.010.361,79	
320+0.000	13,06	525,94	0,00	0,00	10,00	231,58	10.593,37	0,00	0,00	2.010.593,37	
321+0.000	10,10	536,03	0,00	0,00							

4.3. FICHA DE CUBAÇÃO – INTERSEÇÃO 02

FICHA DE CUBAÇÃO - IN 02 RAMO 400											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: ÚNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumen de Corte (m³)		Volumen de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
400+0.000	0,00	0,00	2,51	2,51	10,00	0,00	0,00	376,41	376,41	1999.623,59	
401+0.000	0,00	0,00	6,17	27,68	10,00	0,00	0,00	386,81	763,22	1999.236,78	
402+0.000	0,00	0,00	13,27	40,95	10,00	0,00	0,00	322,16	1085,38	1998.914,62	
403+0.000	0,00	0,00	10,42	51,37	10,00	0,00	0,00	299,54	1384,92	1998.615,08	
404+0.000	0,00	0,00	11,61	62,97	10,00	0,00	0,00	289,69	1674,61	1998.325,39	
405+0.000	0,00	0,00	9,69	72,67	10,00	0,00	0,00	247,11	1921,72	1998.078,28	
406+0.000	0,00	0,00	8,48	81,14	10,00	0,00	0,00	214,68	2.136,40	1997.863,60	
407+0.000	0,00	0,00	7,31	88,45	10,00	0,00	0,00	193,72	2.330,12	1997.669,88	
408+0.000	0,00	0,00	6,94	95,39	10,00	0,00	0,00	178,74	2.508,86	1997.491,14	
409+0.000	0,00	0,00	6,21	101,59	10,00	0,00	0,00	162,18	2.701,04	1997.298,96	
410+0.000	0,00	0,00	7,92	109,52	10,00	0,00	0,00	217,52	2.918,56	1997.081,44	
411+0.000	0,00	0,00	8,07	117,59	10,00	0,00	0,00	223,07	3.141,63	1996.858,37	
412+0.000	0,00	0,00	8,33	125,92	10,00	0,00	0,00	207,58	3.349,20	1996.650,80	
413+0.000	0,00	0,00	6,93	132,85	10,00	0,00	0,00	167,59	3.516,80	1996.483,20	
414+0.000	0,00	0,00	5,39	138,24	10,00	0,00	0,00	91,66	3.608,46	1996.391,54	
415+0.000	0,00	0,00	1,35	139,59	10,00	0,10	0,10	78,05	3.686,51	1996.313,59	0,10
416+0.000	0,01	0,01	4,39	143,98	10,00	0,10	0,20	343,30	4.029,82	1995.970,38	0,10
417+0.000	0,00	0,01	20,85	164,83	10,00	0,00	0,20	363,79	4.393,60	1995.606,60	
418+0.000	0,00	0,01	5,90	170,73	10,00	0,00	0,20	119,22	4.512,82	1995.487,38	
419+0.000	0,00	0,01	2,87	173,60	10,00	0,00	0,20	60,48	4.573,30	1995.426,90	
420+0.000	0,00	0,01	1,58	175,18	10,00	1,82	2,02	31,86	4.605,16	1995.396,86	1,82
421+0.000	0,18	0,19	0,77	175,94	10,00	4,17	6,19	17,54	4.622,71	1995.383,48	4,17
422+0.000	0,24	0,43	0,53	176,47	10,00	9,21	15,40	7,75	4.630,46	1995.384,94	7,75
423+0.000	0,69	1,11	0,05	176,51	10,00	19,35	34,75	0,61	4.631,07	1995.403,68	0,61
424+0.000	1,25	2,36	0,00	176,51	10,00	27,12	61,87	0,00	4.631,07	1995.430,80	
425+0.000	1,46	3,83	0,00	176,51							

FICHA DE CUBAÇÃO - IN 02 RAMO 500											
RODOVIA: GO-221						LOTE: UNICO				Empolamento: 36%	
TRECHO: DOVERLÂNDIA/TREVO GO-194											
EXTENSÃO: 23,68											
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumen de Corte (m³)		Volumen de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
500+0.000	0,94	0,94	0,00	0,00	10,00	21,19	21,19	0,00	0,00	2.000.021,19	
501+0.000	1,18	2,12	0,00	0,00	10,00	20,29	41,48	0,00	0,00	2.000.041,48	
502+0.000	0,85	2,97	0,00	0,00	10,00	9,78	51,26	109	109	2.000.050,17	109
503+0.000	0,12	3,10	0,08	0,08	10,00	124	52,50	12,81	13,90	2.000.038,60	124
504+0.000	0,00	3,10	0,86	0,94	10,00	0,00	52,50	20,26	34,16	2.000.013,34	
505+0.000	0,00	3,10	0,63	1,57	10,00	2,24	54,74	10,34	44,50	2.000.010,24	2,24
506+0.000	0,22	3,32	0,13	1,70	10,00	8,21	62,95	1,80	46,29	2.000.016,66	1,80
507+0.000	0,60	3,92	0,00	1,70	10,00	17,52	80,47	0,00	46,29	2.000.034,16	
508+0.000	1,16	5,07	0,00	1,70	10,00	1155	92,02	79,52	125,81	1999.966,21	1155
509+0.000	0,00	5,07	5,85	7,55	10,00	0,00	92,02	118,80	244,61	1999.847,41	
510+0.000	0,00	5,07	2,89	10,44	10,00	0,00	92,02	84,62	329,23	1999.762,79	
511+0.000	0,00	5,07	3,33	13,77	10,00	0,00	92,02	109,68	438,91	1999.653,11	
512+0.000	0,00	5,07	4,73	18,50	10,00	0,00	92,02	148,77	587,68	1999.504,34	
513+0.000	0,00	5,07	6,21	24,71	10,00	0,00	92,02	163,21	750,90	1999.341,12	
514+0.000	0,00	5,07	5,79	30,50	10,00	0,00	92,02	172,62	923,52	1999.168,50	
515+0.000	0,00	5,07	6,90	37,40	10,00	0,00	92,02	215,94	1139,46	1998.952,56	
516+0.000	0,00	5,07	8,98	46,38	10,00	0,00	92,02	228,40	1367,86	1998.724,16	
517+0.000	0,00	5,07	7,82	54,20	10,00	0,00	92,02	217,68	1585,54	1998.506,48	
518+0.000	0,00	5,07	8,19	62,39	10,00	0,00	92,02	240,37	1825,91	1998.266,11	
519+0.000	0,00	5,07	9,48	71,87	10,00	0,00	92,02	251,67	2.077,58	1998.014,44	
520+0.000	0,00	5,07	9,02	80,89	10,00	0,00	92,02	231,64	2.309,21	1997.782,81	
521+0.000	0,00	5,07	8,01	88,90	10,00	0,00	92,02	216,69	2.525,90	1997.566,12	
522+0.000	0,00	5,07	7,92	96,83	10,00	0,00	92,02	211,89	2.737,79	1997.354,23	
523+0.000	0,00	5,07	7,66	104,48	10,00	0,00	92,02	206,71	2.944,50	1997.147,52	
524+0.000	0,00	5,07	7,54	112,02	10,00	0,00	92,02	184,44	3.128,94	1996.963,08	
525+0.000	0,00	5,07	6,02	118,05	10,00	0,00	92,02	134,67	3.263,61	1996.828,41	
526+0.000	0,00	5,07	3,88	121,93	10,00	0,00	92,02	61,24	3.324,85	1996.767,17	
527+0.000	0,00	5,07	0,62	122,55		0,00	92,02	0,00	3.324,85	1996.767,17	

FICHA DE CUBAÇÃO - IN 02 RAMO 600											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: UNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
601+0.000	0,00	0,00	151	151	10,00	0,00	0,00	102,12	102,12	1999,897,88	
602+0.000	0,00	0,00	6,00	7,51	10,00	0,00	0,00	215,15	317,27	1999,682,73	
603+0.000	0,00	0,00	9,82	17,33	10,00	0,00	0,00	244,92	562,20	1999,437,80	
604+0.000	0,00	0,00	8,19	25,52	10,00	0,00	0,00	223,24	785,44	1999,214,56	
605+0.000	0,00	0,00	8,23	33,75	10,00	0,00	0,00	223,30	1008,74	1998,991,26	
606+0.000	0,00	0,00	8,19	41,94	10,00	0,00	0,00	236,25	1244,98	1998,755,02	
607+0.000	0,00	0,00	9,18	51,12	10,00	0,00	0,00	266,22	1511,20	1998,488,80	
608+0.000	0,00	0,00	10,39	61,51	10,00	0,00	0,00	291,67	1802,87	1998,197,13	
609+0.000	0,00	0,00	11,05	72,57	10,00	0,00	0,00	313,14	2.116,01	1997,883,99	
610+0.000	0,00	0,00	11,97	84,54	10,00	0,00	0,00	355,72	2.471,73	1997,528,27	
611+0.000	0,00	0,00	14,18	98,72	10,00	0,00	0,00	434,93	2.906,66	1997,093,34	
612+0.000	0,00	0,00	17,80	116,52	10,00	0,00	0,00	510,50	3.417,16	1996,582,84	
613+0.000	0,00	0,00	19,74	136,26	10,00	0,00	0,00	547,21	3.964,37	1996,035,63	
614+0.000	0,00	0,00	20,50	156,75	10,00	0,00	0,00	538,87	4.503,25	1995,496,75	
615+0.000	0,00	0,00	19,13	175,88	10,00	0,00	0,00	505,88	5.009,12	1994,990,88	
616+0.000	0,00	0,00	18,07	193,95	10,00	0,00	0,00	533,88	5.543,01	1994,456,99	
617+0.000	0,00	0,00	21,19	215,14	10,00	0,00	0,00	574,70	6.117,70	1993,882,30	
618+0.000	0,00	0,00	21,07	236,21	10,00	0,00	0,00	579,24	6.696,94	1993,303,06	
619+0.000	0,00	0,00	21,52	257,73	10,00	0,00	0,00	542,01	7.238,95	1992,761,05	
620+0.000	0,00	0,00	18,33	276,06	10,00	0,00	0,00	520,00	7.758,95	1992,241,05	
621+0.000	0,00	0,00	19,90	295,96	10,00	0,00	0,00	520,35	8.279,30	1991,720,70	
622+0.000	0,00	0,00	18,36	314,32	10,00	0,00	0,00	563,03	8.842,33	1991,157,67	
623+0.000	0,00	0,00	23,04	337,36	10,00	0,00	0,00	625,41	9.467,74	1990,532,26	
624+0.000	0,00	0,00	22,95	360,31	10,00	0,00	0,00	624,04	10.091,77	1989,908,23	
625+0.000	0,00	0,00	22,94	383,25	10,00	0,00	0,00	600,94	10.692,71	1989,307,29	
626+0.000	0,00	0,00	21,25	404,50	10,00	0,00	0,00	559,78	11.252,49	1988,747,51	
627+0.000	0,00	0,00	19,91	424,41	10,00	0,00	0,00	486,74	11.739,23	1988,260,77	
628+0.000	0,00	0,00	15,88	440,29	10,00	0,00	0,00	416,00	12.155,23	1987,844,77	
629+0.000	0,00	0,00	14,71	455,00	10,00	0,00	0,00	398,53	12.553,77	1987,446,23	
630+0.000	0,00	0,00	14,59	469,59	10,00	0,00	0,00	387,19	12.940,96	1987,059,04	
631+0.000	0,00	0,00	13,88	483,47	10,00	0,00	0,00	377,11	13.318,07	1986,681,93	
632+0.000	0,00	0,00	13,85	497,32	10,00	0,00	0,00	400,91	13.718,99	1986,281,01	
633+0.000	0,00	0,00	15,63	512,94	10,00	0,00	0,00	409,71	14.128,70	1985,871,30	
634+0.000	0,00	0,00	14,50	527,44	10,00	0,00	0,00	423,19	14.551,89	1985,448,11	
635+0.000	0,00	0,00	16,62	544,06	10,00	0,00	0,00	479,51	15.031,40	1984,968,60	
636+0.000	0,00	0,00	18,64	562,70	10,00	0,00	0,00	452,51	15.483,91	1984,516,09	
637+0.000	0,00	0,00	14,63	577,33							

FICHA DE CUBAÇÃO - IN 02 RAMO 700											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: UNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
701+0.000	0,00	0,00	9,08	9,08	10,00	0,00	0,00	271,06	271,06	1999,728,94	
702+0.000	0,00	0,00	10,86	19,93	10,00	0,00	0,00	257,65	528,71	1999,471,29	
703+0.000	0,00	0,00	8,09	28,02							

FICHA DE CUBAÇÃO - IN 02 RAMO 800											
RODOVIA: GO-221 TRECHO: DOVERLÂNDIA/TREVO GO-194 EXTENSÃO: 23,68						LOTE: UNICO				Empolamento: 36%	
Estacas	Áreas de Corte (m²)		Áreas de Aterro (m²)		Semi-Dist. (m)	Volumes de Corte (m³)		Volumes de Aterro (m³)		Ordenada de Bruckner	Comp. Lateral
	Parc.	Acum.	Parc.	Acum.		Parc.	Acum.	Parc.	Acum.		
801+0.000	0,00	0,00	16,90	16,90	10,00	0,00	0,00	530,29	530,29	1999,469,71	
802+0.000	0,00	0,00	22,10	38,99	10,00	0,00	0,00	490,99	1021,28	1998,978,72	
803+0.000	0,00	0,00	14,01	53,00		0,00	0,00	0,00	1021,28	1998,978,72	

5. TERMO DE ENCERRAMENTO

5. TERMO DE ENCERRAMENTO

Este volume encerra-se nesta página e contém 70 folhas, enumeradas de 01 até 70.