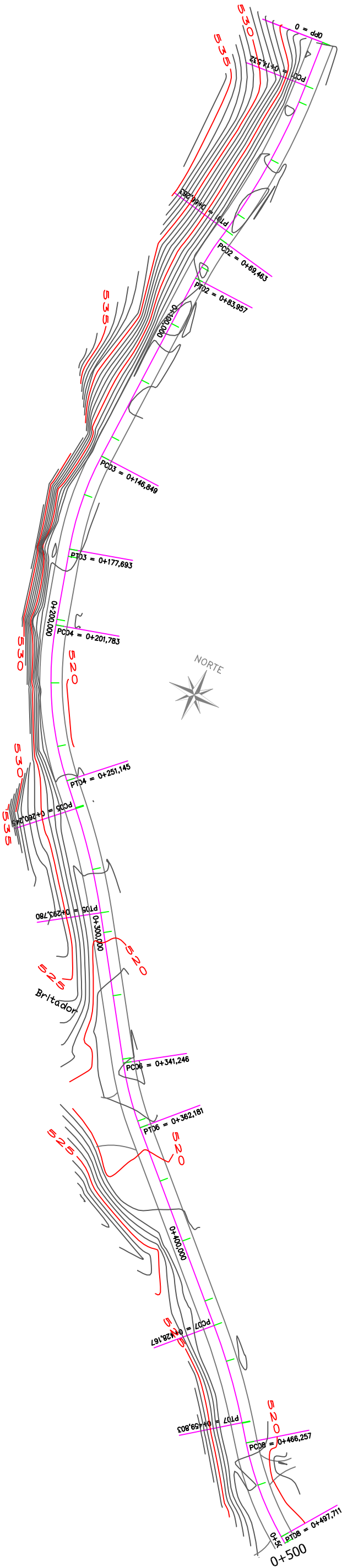
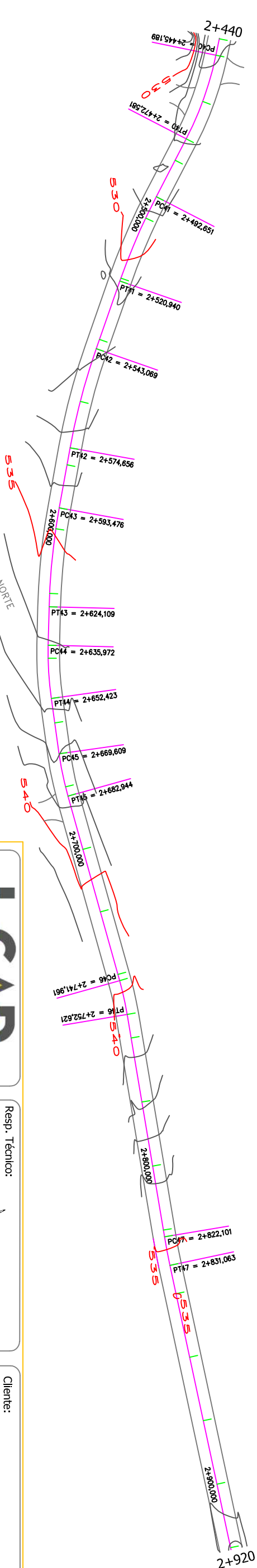
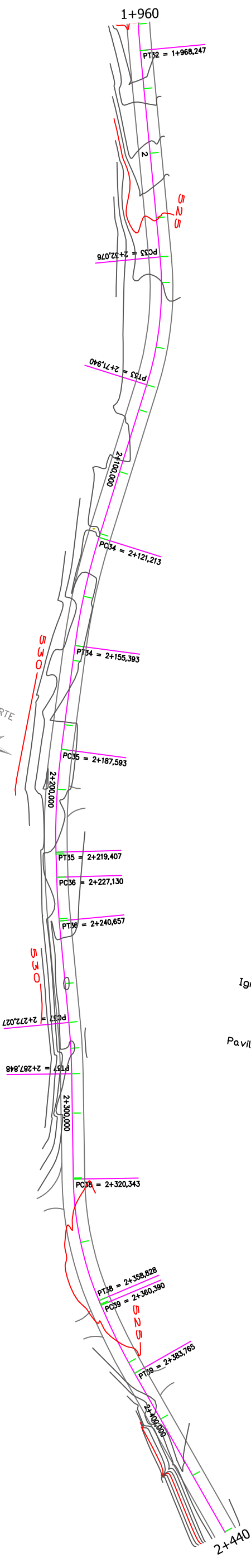
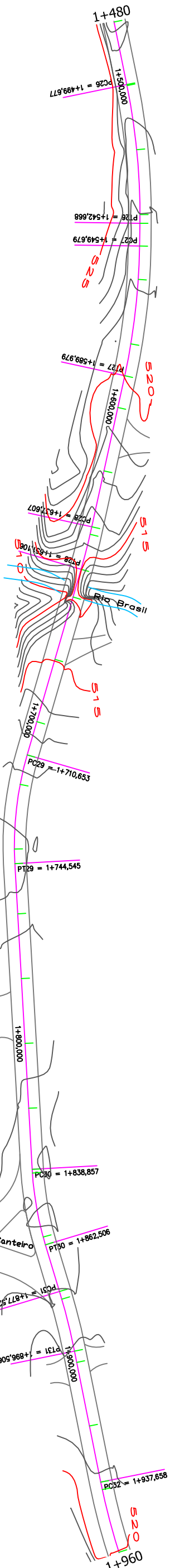
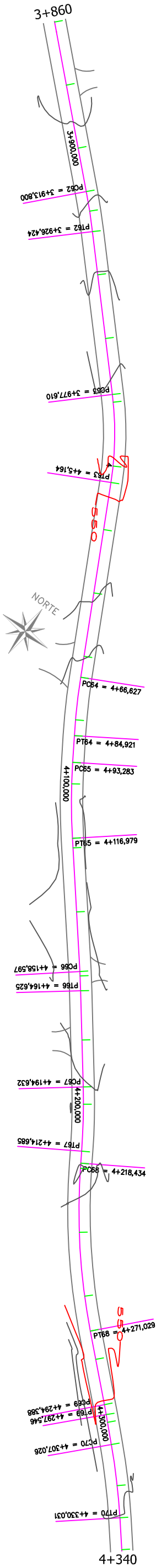
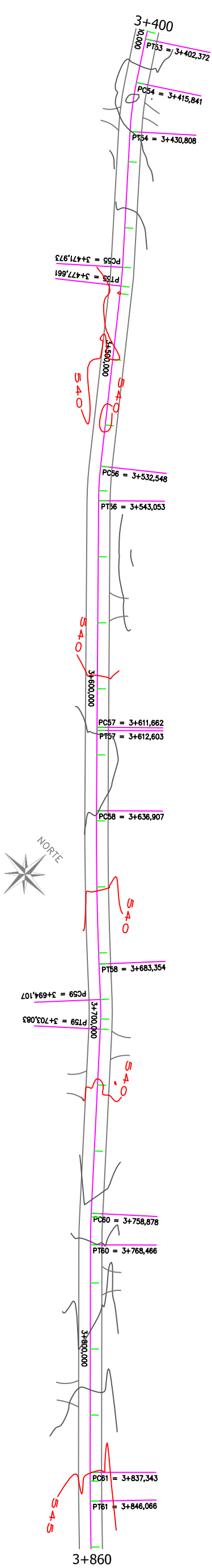
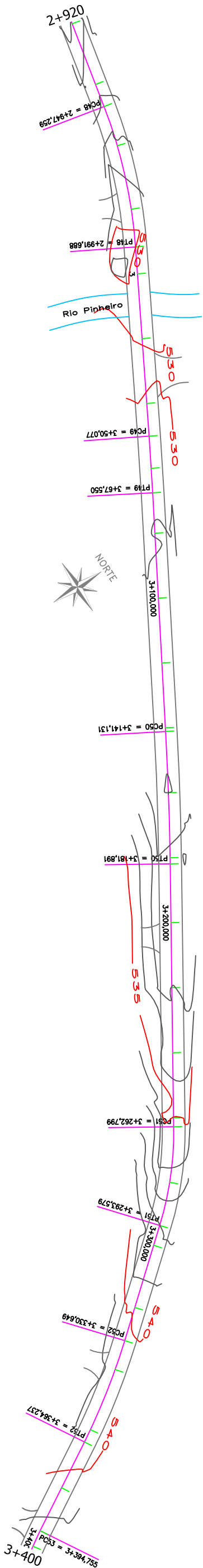


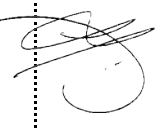
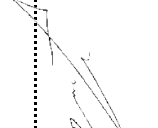
|                                                                                                                                                                  |                         |                                                                           |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------|----------|
| <b>L.C.A.D.</b><br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:                                                            | Cliente: |
| Projeto :<br>Lauson Serafini                                                                                                                                     | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D         |          |
| Desenho:<br>Adriano Jr.                                                                                                                                          | Escala :<br>1:1300      | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92 |          |
| Aprovação:                                                                                                                                                       | Revisão :<br>01         | Obra: Pavimentação Asfáltica                                              |          |
| -                                                                                                                                                                | Prancha :<br>01         | Local : Estrada de Acesso a Barra do Rio Azul                             |          |
|                                                                                                                                                                  |                         | Conteúdo: Curvas de Nível                                                 |          |

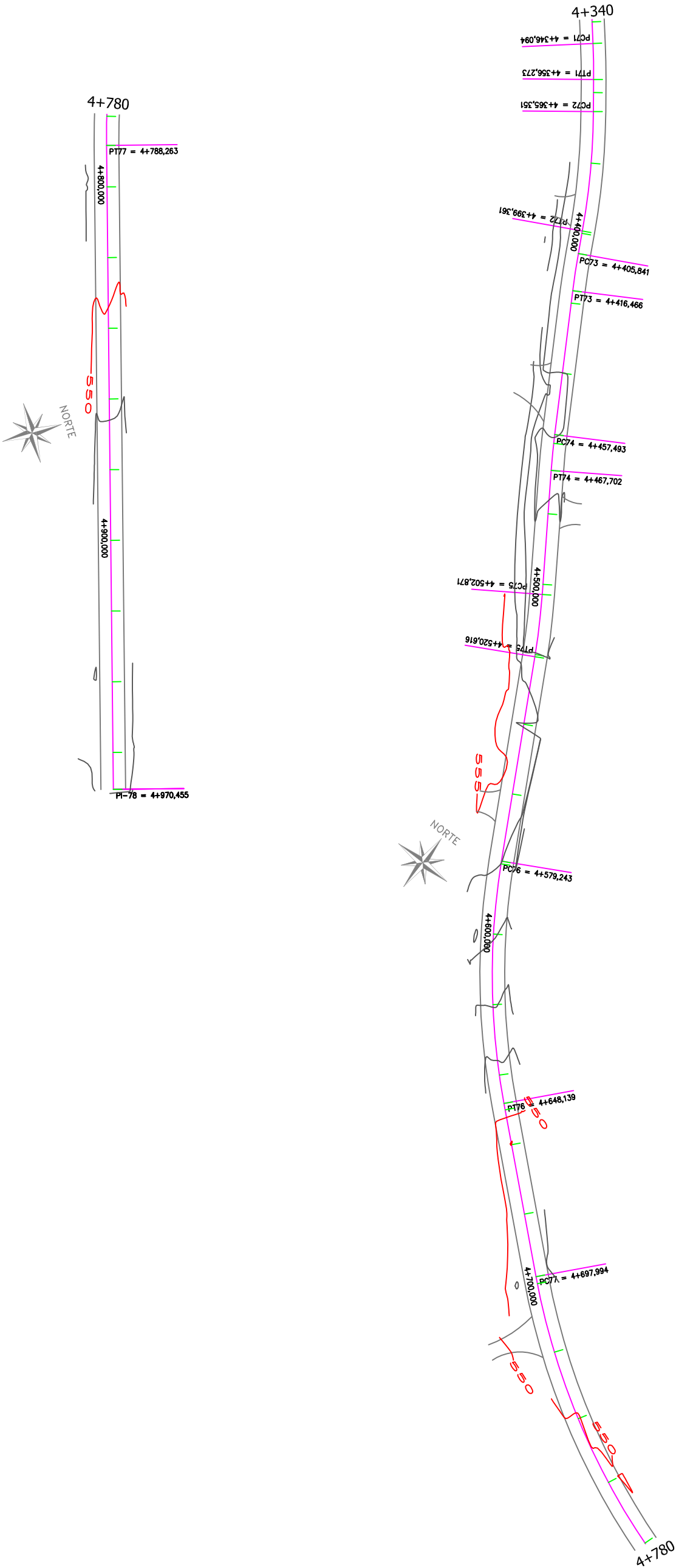


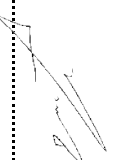
|                                                                                                                                                                                                                  |  |                         |  |                                                                        |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|------------------------------------------------------------------------|--|
|  <p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p> |  | Resp. Técnico:          |  | Cliente:                                                               |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                     |  | Data :<br>Dezenbro/2021 |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini                          |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                          |  | Escala :<br>1:1300      |  | Cliente: Pref. Municipal de Barra do Rio Azul CNPJ: 93.539.153/0001-92 |  |
| Aprovação:                                                                                                                                                                                                       |  | Revisão :<br>01         |  | Obra: Pavimentação Asfáltica                                           |  |
| -                                                                                                                                                                                                                |  | Prancha :<br>02         |  | Local : Estrada de Acesso a Barra do Rio Azul                          |  |
|                                                                                                                                                                                                                  |  |                         |  | Conteúdo: Curvas de Nivel                                              |  |

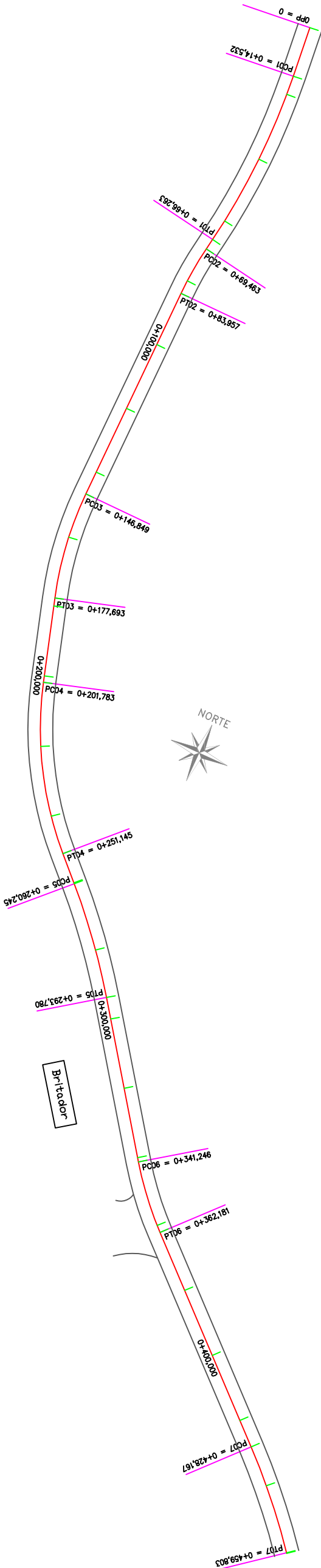




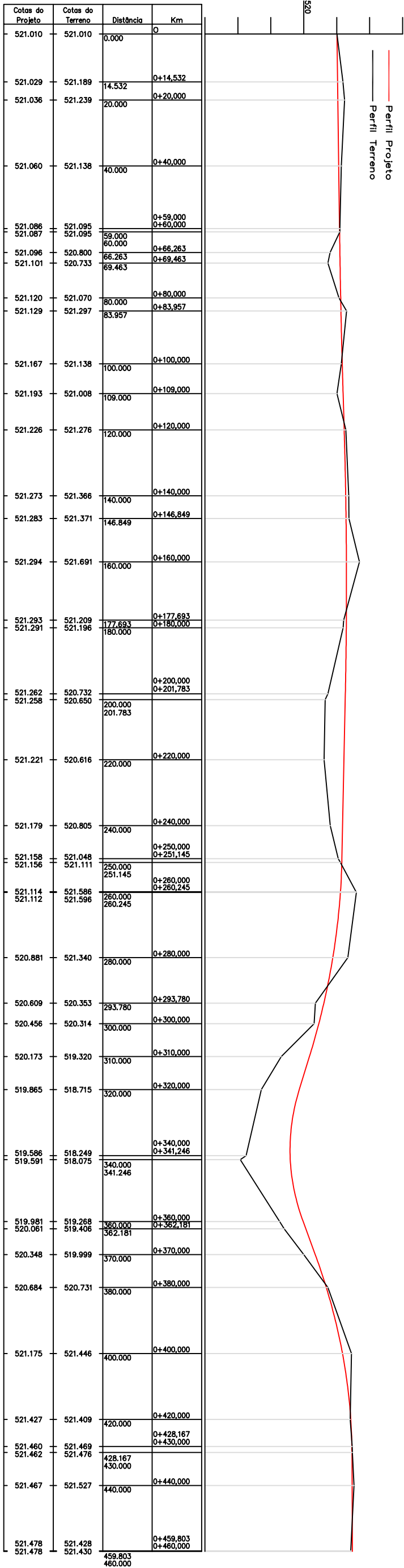
|                                                                                                                                                                                                            |                                    |                                                                                                       |                                                  |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                    | Resp. Técnico:<br> |                                                  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               | Data :<br>Dezembro/2021            | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D                                 |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    | Escala :<br>1:1300                 | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92                         |                                                                                                 |  |
| Aprovação:<br>-                                                                                                                                                                                            | Revisão :<br>01<br>Prancha :<br>03 | Obra:<br>Pavimentação Asfáltica                                                                       | Local :<br>Estrada de Acesso a Barra do Rio Azul |                                                                                                 |  |
|                                                                                                                                                                                                            |                                    | Conteúdo:<br>Curvas de Nivel                                                                          |                                                  |                                                                                                 |  |



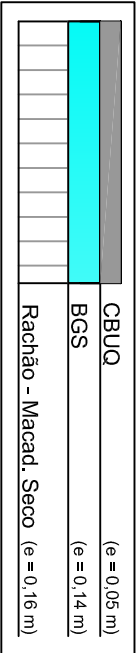
|                                                                                                                                                                                                            |                         |                                                                                                       |                          |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br> |                          | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D         |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    | Escala :<br>1:1300      | Cliente:<br>Pref. Municipal de Barra do Rio Azul                                                      | CNPJ: 93.539.153/0001-92 |                                                                                                 |  |
| Aprovação:                                                                                                                                                                                                 | Revisão :<br>01         | Obra:<br>Pavimentação Asfáltica                                                                       |                          |                                                                                                 |  |
| -                                                                                                                                                                                                          | Prancha :<br>04         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                          |                                                                                                 |  |
|                                                                                                                                                                                                            |                         | Conteúdo:<br>Curvas de Nível                                                                          |                          |                                                                                                 |  |



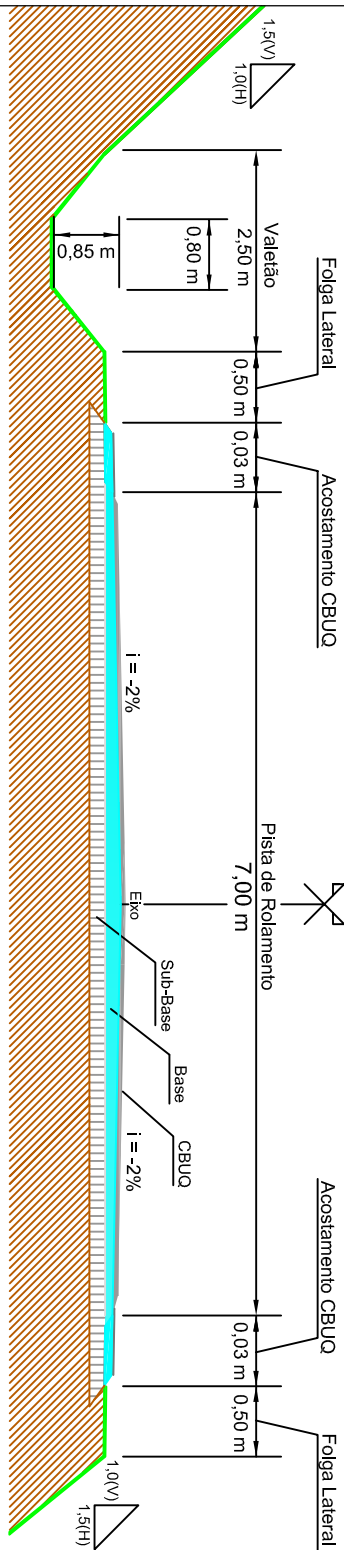
— Perfil Projeto  
— Perfil Terreno

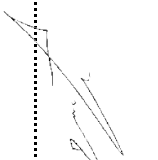


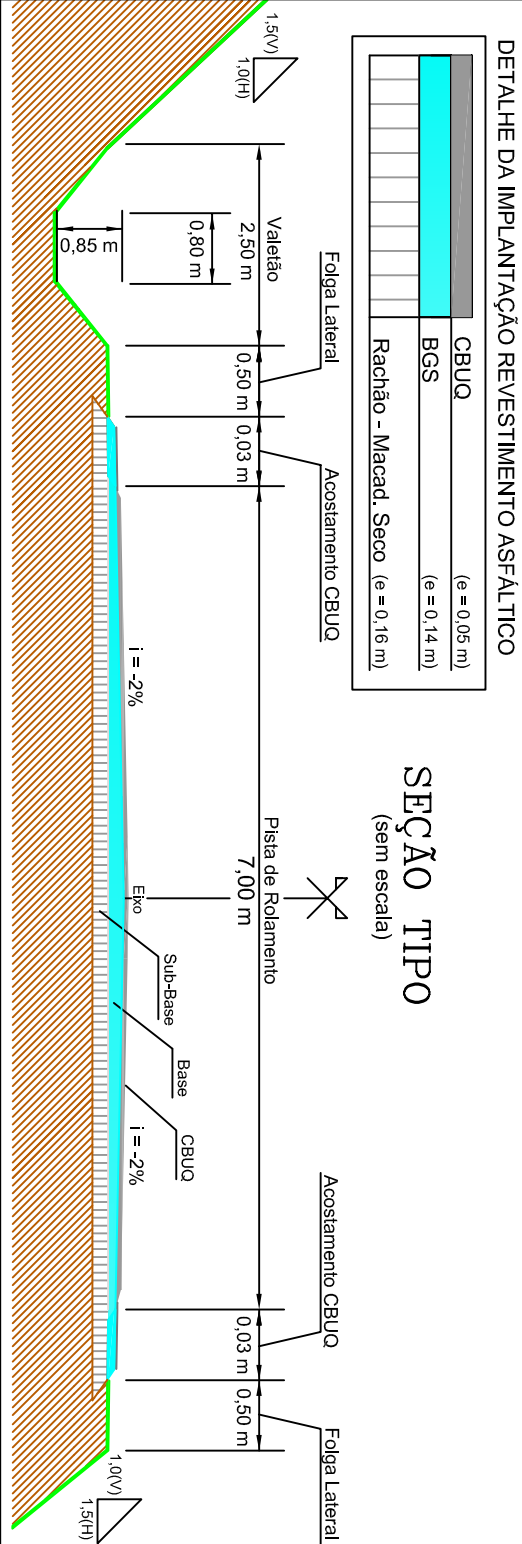
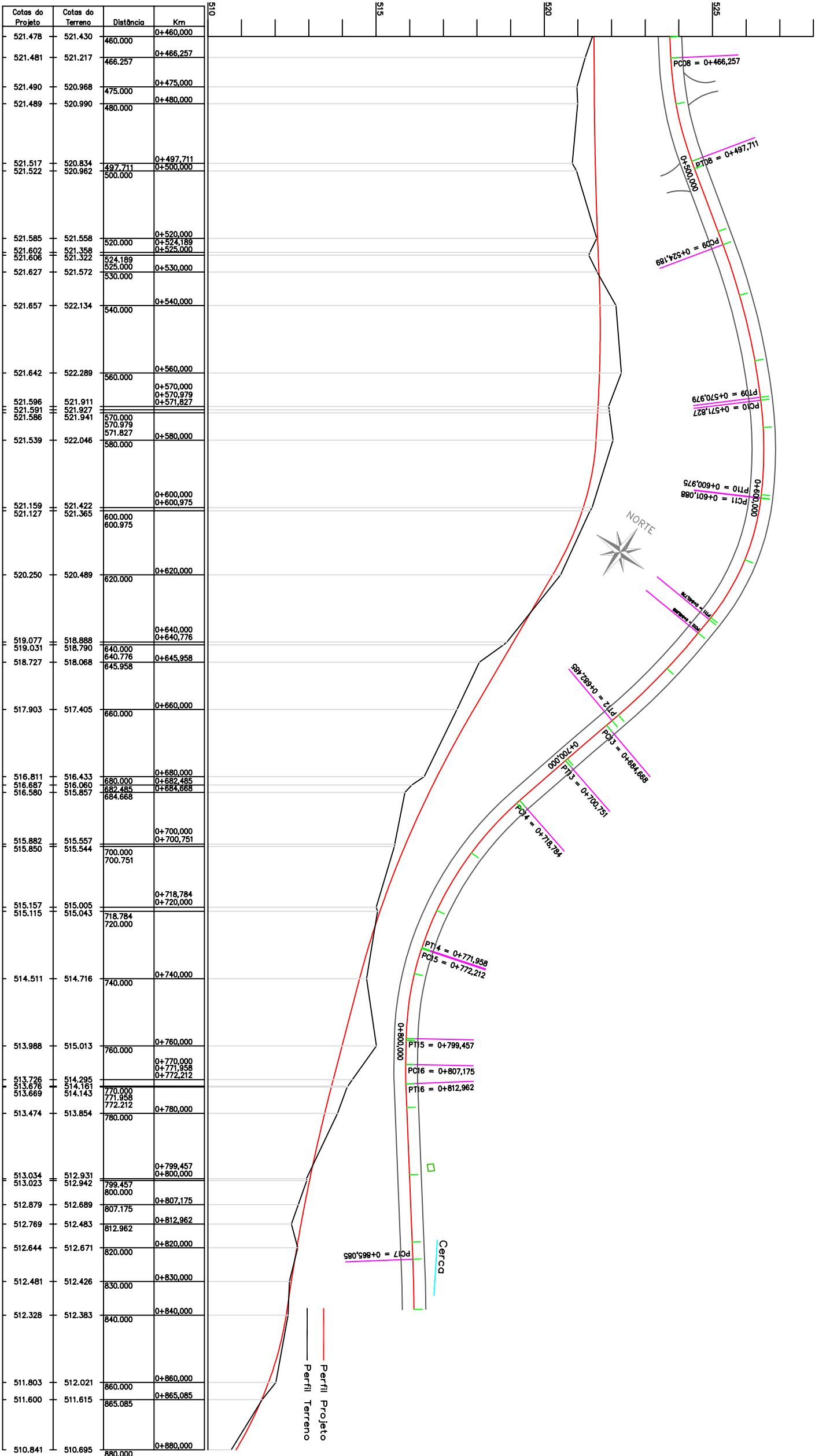
DETALHE DA IMPLANTAÇÃO REVESTIMENTO ASFALTICO



SEÇÃO TIPO  
(sem escala)



|                                                                                                                                                                                                            |                                     |                                                                                                       |                                |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                     | Resp. Técnico:<br> |                                | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               | Data :<br>Dezembro/2021             | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D               |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    | Escala :<br>H - 1:1300<br>V - 1:130 | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92       |                                                                                                 |  |
| Aprovação:<br>-                                                                                                                                                                                            | Revisão :<br>01                     | Obra: Pavimentação Asfáltica                                                                          |                                |                                                                                                 |  |
| Prancha :<br>05                                                                                                                                                                                            |                                     | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      | Conteúdo:<br>Planta Geométrica |                                                                                                 |  |



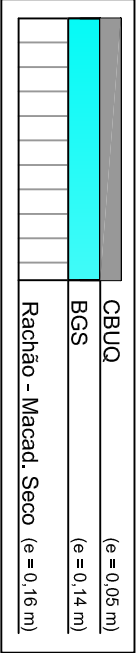
|                                                                                                                                                                  |                                     |                                                  |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------|--------------------------|
| <b>L.C.A.D.</b><br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                     | Resp. Técnico:<br>.....                          | Cliente:<br>.....        |
| Projeto :<br>Lauson Serafini                                                                                                                                     | Data :<br>Dezembro/2021             | Resp. Técnico :<br>Eng. Civil Lauson Serafini    | CREA/RS 123168-D         |
| Desenho:<br>Adriano Jr.                                                                                                                                          | Escala :<br>H - 1:1300<br>V - 1:130 | Cliente: Pref. Municipal de Barra do Rio Azul    | CNPJ: 93.539.153/0001-92 |
| Aprovação:<br>-                                                                                                                                                  | Revisão :<br>01                     | Obra: Pavimentação Asfáltica                     |                          |
|                                                                                                                                                                  | Prancha :<br>06                     | Local :<br>Estrada de Acesso a Barra do Rio Azul |                          |
|                                                                                                                                                                  |                                     | Conteúdo: Planta Geométrica                      |                          |



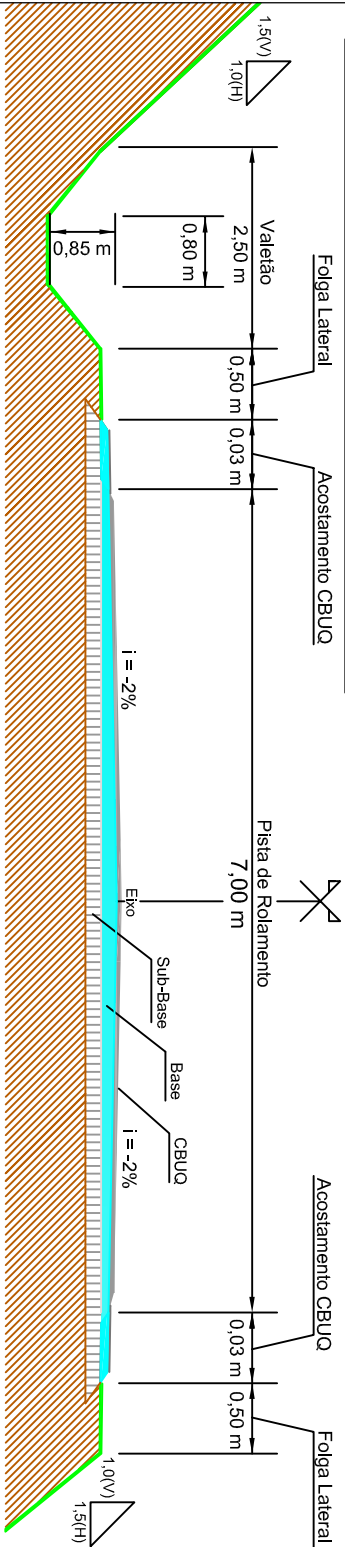


| Cotas do Projeto | Cotas do Terreno | Distância | Km        |
|------------------|------------------|-----------|-----------|
| 510.841          | 510.895          | 880.000   | 0+880,000 |
| 510.605          | 510.221          | 884.000   | 0+884,000 |
| 510.462          | 509.927          | 886.469   | 0+886,469 |
| 509.754          | 509.307          | 900.000   | 0+900,000 |
| 509.579          | 508.845          | 903.795   | 0+903,795 |
| 508.950          | 508.511          | 920.000   | 0+920,000 |
| 508.825          | 508.300          | 924.000   | 0+924,000 |
| 508.644          | 508.078          | 930.000   | 0+930,000 |
| 508.423          | 508.104          | 940.000   | 0+940,000 |
| 508.358          | 507.677          | 948.347   | 0+948,347 |
| 508.451          | 508.167          | 960.000   | 0+960,000 |
| 508.701          | 508.371          | 970.000   | 0+970,000 |
| 509.029          | 508.573          | 980.000   | 0+980,000 |
| 509.964          | 509.886          | 1000.000  | 1         |
| 511.455          | 511.843          | 1020.000  | 1+20,000  |
| 511.616          | 511.972          | 1021.819  | 1+21,819  |
| 513.223          | 513.226          | 1040.000  | 1+40,000  |
| 514.700          | 513.740          | 1056.704  | 1+56,704  |
| 514.992          | 514.510          | 1060.000  | 1+60,000  |
| 516.761          | 516.494          | 1080.000  | 1+80,000  |
| 517.866          | 517.761          | 1092.500  | 1+92,500  |
| 518.495          | 519.030          | 1100.000  | 1+100,000 |
| 518.991          | 519.230          | 1106.600  | 1+106,600 |
| 519.833          | 520.475          | 1120.000  | 1+120,000 |
| 519.881          | 520.479          | 1120.900  | 1+120,900 |
| 520.678          | 521.274          | 1140.000  | 1+140,000 |
| 520.957          | 521.060          | 1152.500  | 1+152,500 |
| 521.066          | 521.398          | 1160.000  | 1+160,000 |
| 521.212          | 521.021          | 1170.000  | 1+170,000 |
| 521.317          | 521.369          | 1177.691  | 1+177,691 |
| 521.345          | 521.486          | 1180.000  | 1+180,000 |
| 521.442          | 521.023          | 1189.000  | 1+189,000 |
| 521.531          | 521.650          | 1200.000  | 1+200,000 |
| 521.612          | 521.761          | 1220.000  | 1+220,000 |
| 521.613          | 521.357          | 1230.000  | 1+230,000 |
| 521.600          | 521.808          | 1240.000  | 1+240,000 |
| 521.583          | 521.363          | 1254.397  | 1+254,397 |
| 521.576          | 521.644          | 1260.000  | 1+260,000 |
| 521.572          | 521.131          | 1269.304  | 1+269,304 |
| 521.586          | 521.400          | 1280.000  | 1+280,000 |
| 521.667          | 521.526          | 1300.000  | 1+300,000 |
| 521.732          | 521.249          | 1309.775  | 1+309,775 |
| 521.819          | 521.617          | 1320.000  | 1+320,000 |

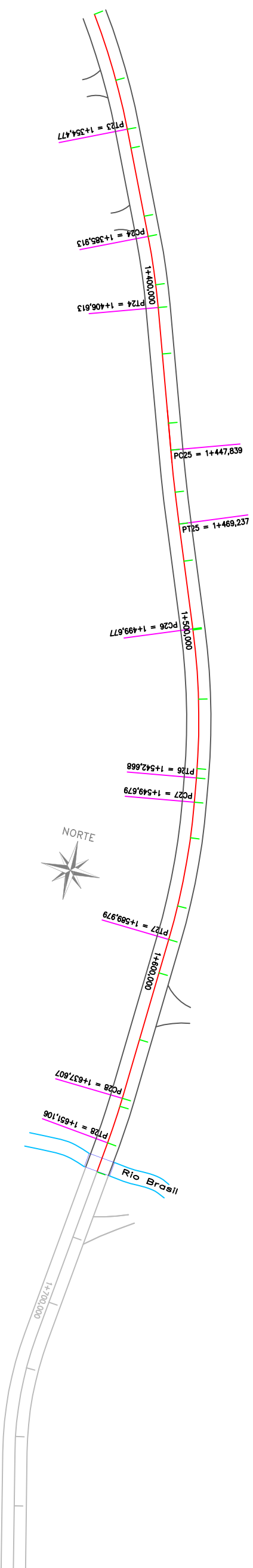
DETALHE DA IMPLANTAÇÃO REVESTIMENTO ASFALTICO



SEÇÃO TIPO  
(sem escala)

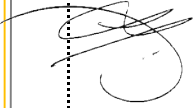
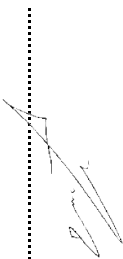


|                                                                                                                                                                  |                                     |                                               |                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------|--------------------------------------------------|
| <b>L.C.A.D.</b><br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                     | Resp. Técnico:<br>.....                       | Cliente:<br>.....                                |
| Projeto :<br>Lauson Serafini                                                                                                                                     | Data :<br>Dezembro/2021             | Resp. Técnico :<br>Eng. Civil Lauson Serafini | CREA/RS 123168-D                                 |
| Desenho:<br>Adriano Jr.                                                                                                                                          | Escala :<br>H - 1:1300<br>V - 1:130 | Cliente: Pref. Municipal de Barra do Rio Azul | CNPJ: 93.539.153/0001-92                         |
| Aprovação:<br>-                                                                                                                                                  | Revisão :<br>01<br>Prancha :<br>07  | Obra:<br>Pavimentação Asfáltica               | Local :<br>Estrada de Acesso a Barra do Rio Azul |
|                                                                                                                                                                  |                                     | Conteúdo:<br>Planta Geométrica                |                                                  |

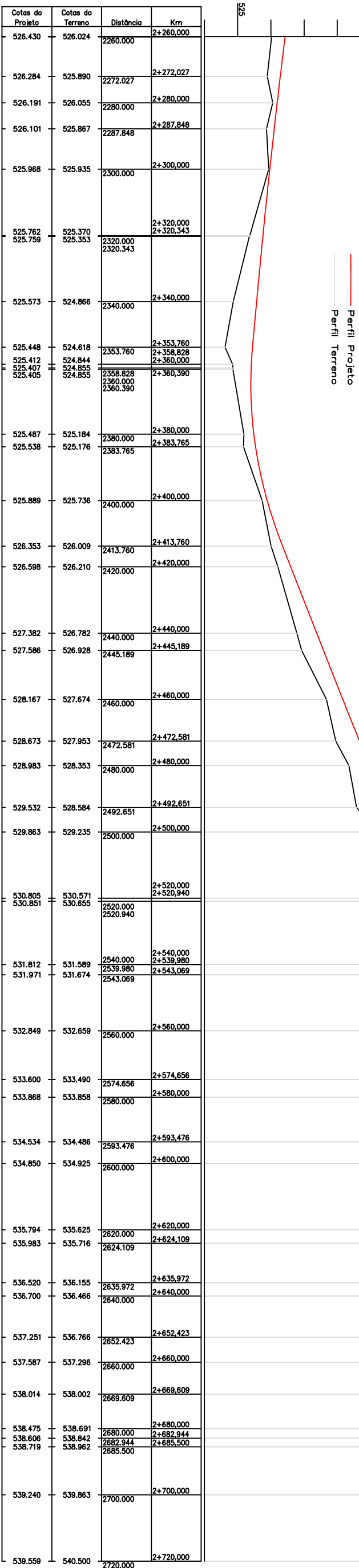


| Cotas do Projeto | Cotas do Terreno | Distância | Km        |
|------------------|------------------|-----------|-----------|
| 521.819          | 521.617          | 1320.000  | 1+320,000 |
| 522.041          | 521.808          | 1340.000  | 1+340,000 |
| 522.227          | 522.060          | 1354.477  | 1+354,477 |
| 522.298          | 522.410          | 1360.000  | 1+360,000 |
| 522.544          | 522.706          | 1380.000  | 1+380,000 |
| 522.612          | 522.560          | 1385.913  | 1+385,913 |
| 522.767          | 522.813          | 1400.000  | 1+400,000 |
| 522.836          | 522.387          | 1406.613  | 1+406,613 |
| 522.967          | 522.694          | 1420.000  | 1+420,000 |
| 523.143          | 522.674          | 1440.000  | 1+440,000 |
| 523.208          | 522.369          | 1447.839  | 1+447,839 |
| 523.309          | 522.843          | 1460.000  | 1+460,000 |
| 523.359          | 522.590          | 1469.237  | 1+469,237 |
| 523.354          | 523.214          | 1480.000  | 1+480,000 |
| 523.360          | 523.630          | 1488.000  | 1+488,000 |
| 522.728          | 522.974          | 1520.000  | 1+520,000 |
| 522.057          | 521.987          | 1540.000  | 1+540,000 |
| 521.951          | 521.807          | 1542.668  | 1+542,668 |
| 521.674          | 521.393          | 1549.679  | 1+549,679 |
| 521.266          | 521.185          | 1560.000  | 1+560,000 |
| 520.475          | 520.499          | 1580.000  | 1+580,000 |
| 520.042          | 520.031          | 1589.979  | 1+589,979 |
| 519.532          | 519.684          | 1600.000  | 1+600,000 |
| 518.285          | 518.083          | 1620.000  | 1+620,000 |
| 517.053          | 516.598          | 1637.607  | 1+637,607 |
| 516.886          | 516.401          | 1640.000  | 1+640,000 |
| 516.207          | 514.866          | 1649.700  | 1+649,700 |
| 516.112          | 514.918          | 1651.106  | 1+651,106 |
| 515.663          | 514.987          | 1660.000  | 1+660,000 |
| 515.611          | 514.988          | 1680.000  | 1+680,000 |
| 516.064          | 515.689          | 1689.700  | 1+689,700 |
| 516.711          | 516.645          | 1700.000  | 1+700,000 |
| 517.380          | 517.498          | 1710.653  | 1+710,653 |
| 517.967          | 518.362          | 1720.000  | 1+720,000 |
| 518.762          | 519.223          | 1740.000  | 1+740,000 |
| 518.815          | 519.176          | 1744.545  | 1+744,545 |
| 518.637          | 518.565          | 1760.000  | 1+760,000 |
| 518.051          | 517.768          | 1780.000  | 1+780,000 |

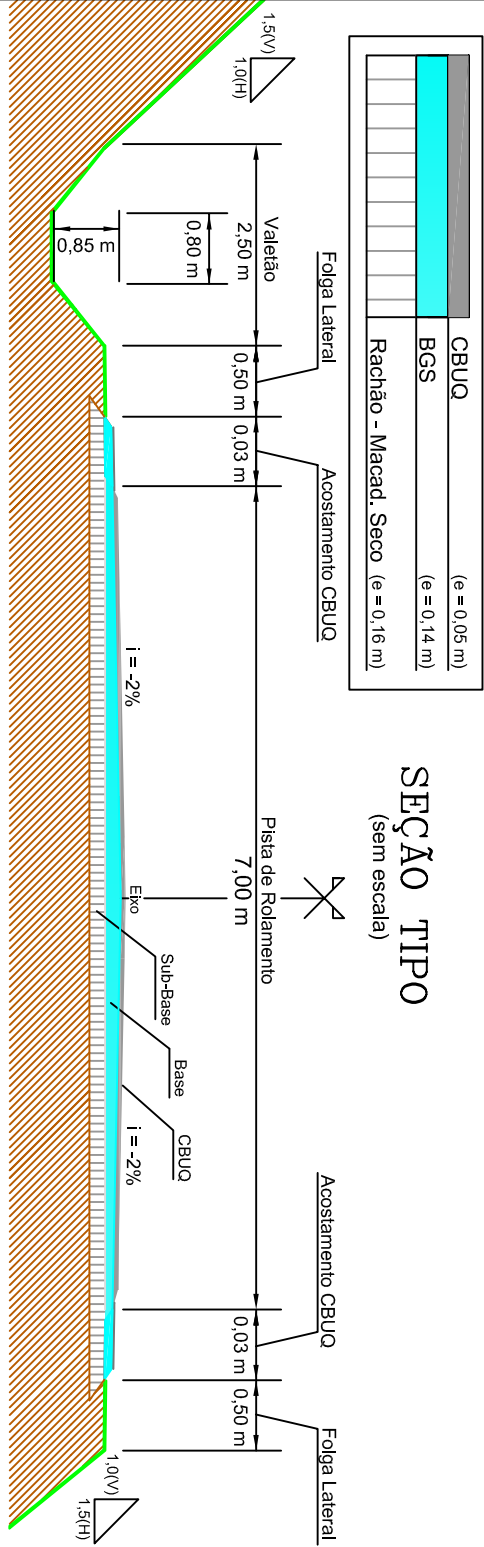
Da Est. 1+660 até 1+960  
Contemplado no Projeto FINASA  
Já encontra-se pavimentado

|                                                                                                                                                                                                                                                                             |  |                                                                                                                                 |  |                                                                                                                           |  |                                                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------|--|
| <div><p><b>L.C.A.D.</b><br/>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div><p>Resp. Técnico:</p><p>.....</p></div> |  | <div><p>Cliente:</p><p>.....</p></div> |  |                                                |  |
| <div><p>Projeto :<br/>Lauson Serafini</p></div>                                                                                                                                                                                                                             |  | <div><p>Data :<br/>Dezembro/2021</p></div>                                                                                      |  | <div><p>Resp. Técnico :<br/>Eng. Civil Lauson Serafini</p></div>                                                          |  | <div><p>CREA/RS 123168-D</p></div>             |  |
| <div><p>Desenho:<br/>Adriano Jr.</p></div>                                                                                                                                                                                                                                  |  | <div><p>Escala : H - 1:1300<br/>V - 1:130</p></div>                                                                             |  | <div><p>Cliente: Pref. Municipal de Barra do Rio Azul CNPJ: 93.539.153/0001-92</p></div>                                  |  | <div><p>Obra: Pavimentação Asfáltica</p></div> |  |
| <div><p>Aprovação:</p><p>-</p></div>                                                                                                                                                                                                                                        |  | <div><p>Revisão :<br/>01</p></div>                                                                                              |  | <div><p>Local :<br/>Estrada de Acesso a Barra do Rio Azul</p></div>                                                       |  | <div><p>Conteúdo: Planta Geométrica</p></div>  |  |





DETALHE DA IMPLANTAÇÃO REVESTIMENTO ASFALTICO



SEÇÃO TIPO

(sem escala)



Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Resp. Técnico:

.....

Cliente:

.....

Projeto :  
Lauson Serafini

Data :  
Dezembro/2021

Desenho:  
Adriano Jr.

Escala :  
H - 1:1300  
V - 1:130

Aprovação:

Revisão :  
01

Prancha :  
10

Resp. Técnico :  
Eng. Civil Lauson Serafini

CREA/RS 123168-D

Cliente: Pref. Municipal de Barra do Rio Azul

CNPJ: 93.539.153/0001-92

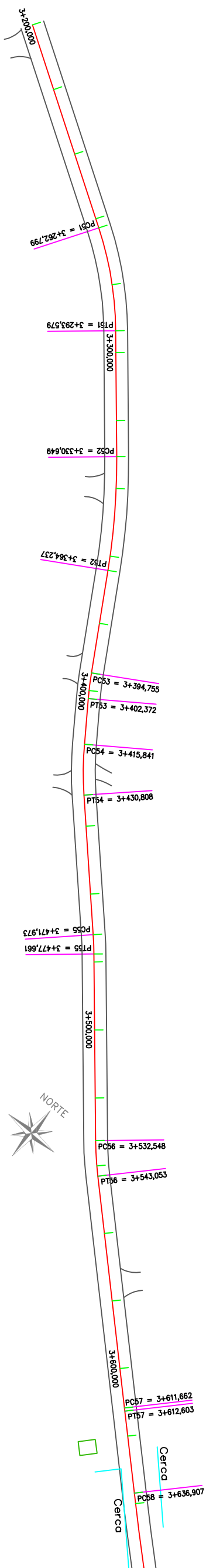
Obra: Pavimentação Asfáltica

Local : Estrada de Acesso a Barra do Rio Azul

Conteúdo: Planta Geométrica

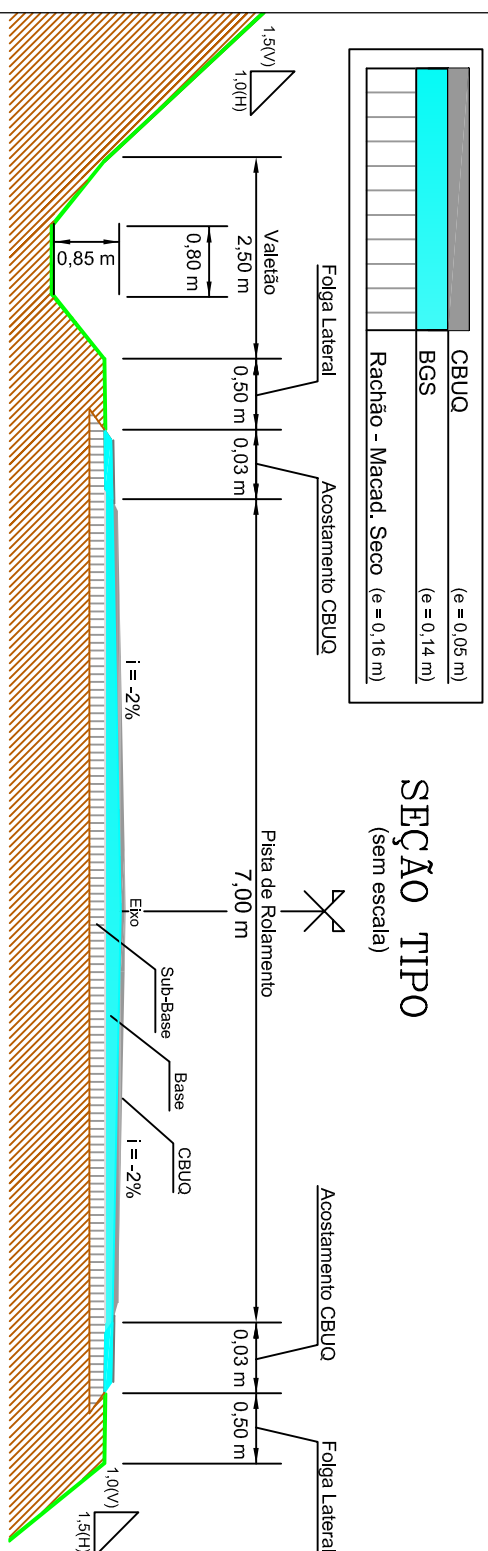






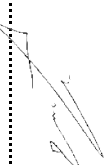
| Cotas do Projeto | Cotas do Terreno | Distância | Km        |
|------------------|------------------|-----------|-----------|
| 533.056          | 532.685          | 3200.000  | 3+200,000 |
| 533.513          | 533.010          | 3220.000  | 3+220,000 |
| 534.277          | 533.660          | 3240.000  | 3+240,000 |
| 535.348          | 535.062          |           | 3+260,000 |
| 535.522          | 535.178          | 3260.000  | 3+262,799 |
|                  |                  | 3262.799  |           |
| 536.726          | 536.863          | 3280.000  | 3+280,000 |
| 537.542          | 537.514          |           | 3+290,650 |
| 537.761          | 538.049          | 3290.650  | 3+293,579 |
|                  |                  | 3293.579  |           |
| 538.200          | 538.523          | 3300.000  | 3+300,000 |
| 539.222          | 539.997          | 3320.000  | 3+320,000 |
| 539.551          | 540.089          | 3330.649  | 3+330,649 |
| 539.716          | 540.581          | 3340.000  | 3+340,000 |
| 539.683          | 540.630          | 3360.000  | 3+360,000 |
| 539.608          | 540.509          | 3364.237  | 3+364,237 |
| 539.450          | 540.203          | 3370.650  | 3+370,650 |
| 539.180          | 539.832          | 3380.000  | 3+380,000 |
| 538.754          | 538.672          |           | 3+394,755 |
| 538.723          | 538.599          | 3394.755  | 3+395,830 |
| 538.614          | 538.590          | 3395.830  | 3+400,000 |
| 538.561          | 538.457          | 3400.000  | 3+402,372 |
|                  |                  | 3402.372  |           |
| 538.402          | 537.715          | 3415.841  | 3+415,841 |
| 538.400          | 538.080          | 3420.000  | 3+420,000 |
| 538.498          | 538.005          | 3430.808  | 3+430,808 |
| 538.594          | 538.225          | 3435.830  | 3+435,830 |
| 538.688          | 538.464          | 3440.000  | 3+440,000 |
| 539.137          | 539.392          | 3460.000  | 3+460,000 |
| 539.362          | 539.511          |           | 3+470,000 |
| 539.406          | 539.587          | 3470.000  | 3+471,973 |
|                  |                  | 3471.973  |           |
| 539.524          | 539.903          | 3477.661  | 3+477,661 |
| 539.569          | 540.005          | 3480.000  | 3+480,000 |
| 539.874          | 540.036          | 3500.000  | 3+500,000 |
| 540.035          | 540.085          | 3520.000  | 3+520,000 |
| 540.061          | 539.777          |           | 3+530,000 |
| 540.063          | 539.829          | 3530.000  | 3+532,548 |
|                  |                  | 3532.548  |           |
| 540.069          | 539.934          | 3540.000  | 3+540,000 |
| 540.072          | 539.804          | 3543.053  | 3+543,053 |
| 540.086          | 539.640          | 3560.000  | 3+560,000 |
| 540.200          | 539.658          | 3580.000  | 3+580,000 |
| 540.506          | 540.450          | 3600.000  | 3+600,000 |
| 540.741          | 540.901          |           | 3+611,662 |
| 540.760          | 540.947          | 3611.662  | 3+612,603 |
| 540.847          | 541.155          | 3612.603  | 3+616,907 |
| 540.904          | 541.410          | 3616.907  | 3+620,000 |
|                  |                  | 3620.000  |           |
| 541.041          | 541.030          |           | 3+636,907 |
| 541.034          | 540.984          | 3636.907  | 3+640,000 |
|                  |                  | 3640.000  |           |
| 540.817          | 540.195          |           | 3+656,907 |
| 540.750          | 540.190          | 3656.907  | 3+660,000 |
|                  |                  | 3660.000  |           |

## DETALHE DA IMPLANTAÇÃO REVESTIMENTO ASFÁLTICO

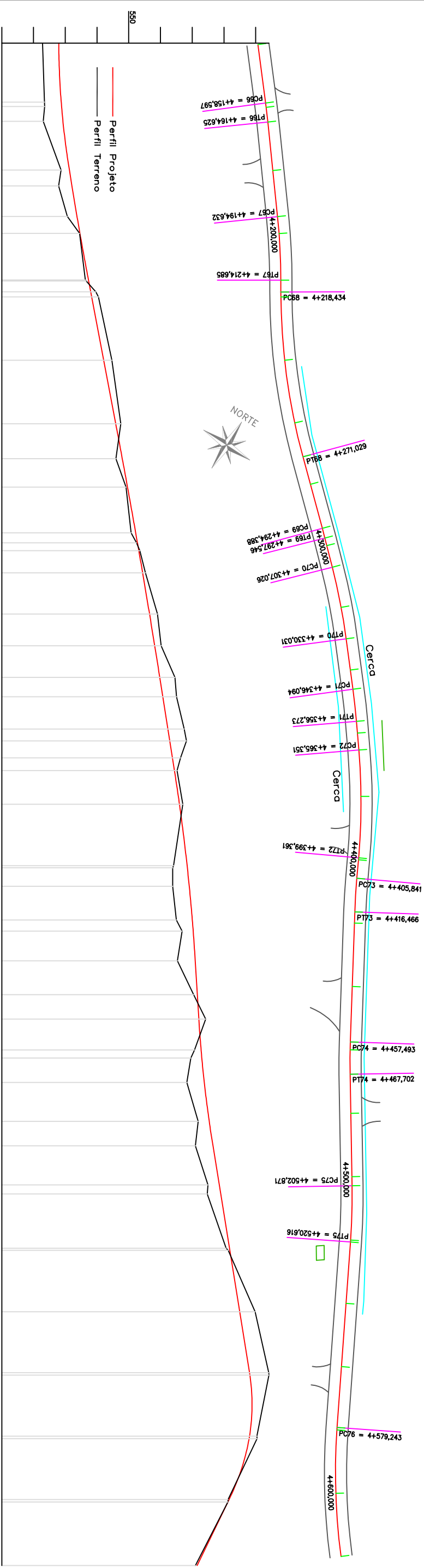


## SEÇÃO TIPO

(sem escala)

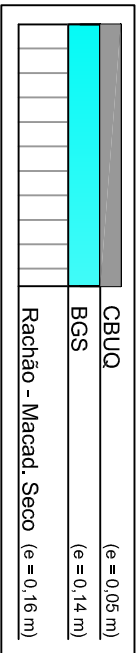
|                                                                                                                                                                                                                                      |                                  |                                                                                                       |                          |                                                                                                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                  | Resp. Técnico:<br> |                          | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021          | Resp. Técnico :<br>Eng. CIVIL Lauson Serafini                                                         | CREA/RS 123168-D         |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala : H - 1:1300<br>V - 1:130 | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92 |                                                                                                 |  |
|                                                                                                                                                                                                                                      | Revisão :<br>01                  | Obra:<br>Pavimentação Asfáltica                                                                       |                          |                                                                                                 |  |
| Aprovação:<br>-                                                                                                                                                                                                                      | Prancha :<br>12                  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                          |                                                                                                 |  |
|                                                                                                                                                                                                                                      |                                  | Conteúdo:<br>Planta Geométrica                                                                        |                          |                                                                                                 |  |



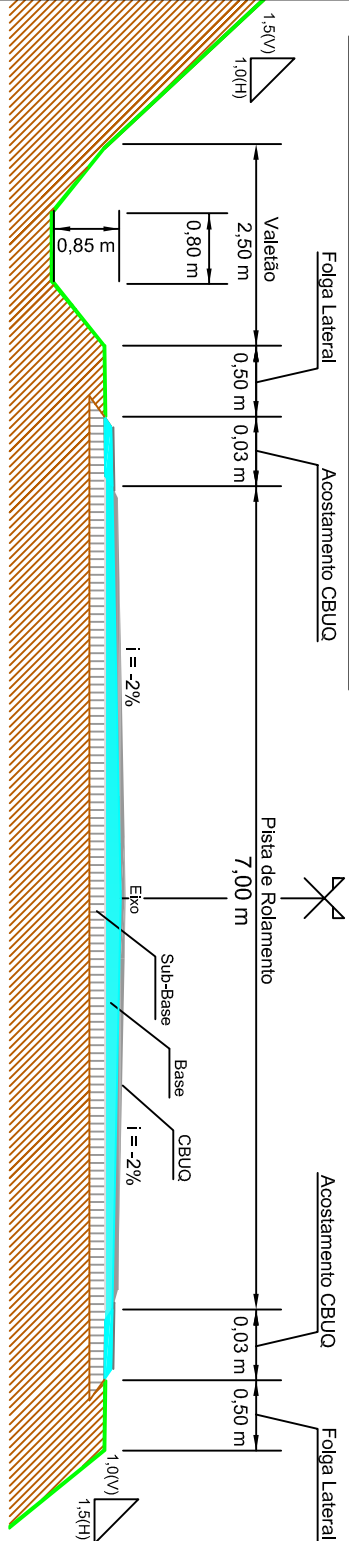


|                  |                  | Km       |           |
|------------------|------------------|----------|-----------|
| Distância        |                  |          |           |
| Cotas do Projeto | Cotas do Terreno |          |           |
| 547.796          | 547.287          | 4140.000 | 4+140,000 |
|                  |                  |          | 4+158,597 |
|                  |                  |          | 4+160,000 |
| 547.873          | 547.343          | 4158.597 |           |
| 547.884          | 547.348          | 4160.000 | 4+164,625 |
| 547.927          | 547.306          | 4164.625 |           |
|                  |                  |          | 4+180,000 |
| 548.130          | 547.867          | 4180.000 | 4+185,000 |
| 548.210          | 547.788          | 4185.000 |           |
|                  |                  |          | 4+194,632 |
| 548.370          | 548.064          | 4194.632 | 4+200,000 |
| 548.463          | 548.453          | 4200.000 |           |
|                  |                  |          | 4+214,685 |
| 548.731          | 548.630          | 4214.685 | 4+215,000 |
| 548.737          | 548.658          | 4215.000 |           |
| 548.803          | 548.962          | 4218.434 | 4+218,434 |
| 548.832          | 549.048          | 4220.000 | 4+220,000 |
|                  |                  |          | 4+240,000 |
| 549.211          | 549.467          | 4240.000 |           |
|                  |                  |          | 4+260,000 |
| 549.591          | 549.753          | 4260.000 |           |
|                  |                  |          | 4+271,029 |
| 549.797          | 549.594          | 4271.029 |           |
|                  |                  |          | 4+280,000 |
| 549.962          | 549.914          | 4280.000 |           |
|                  |                  |          | 4+294,388 |
| 550.219          | 550.073          | 4294.388 | 4+297,546 |
| 550.274          | 550.246          | 4297.546 | 4+300,000 |
| 550.317          | 550.349          | 4300.000 |           |
|                  |                  |          | 4+307,026 |
| 550.437          | 550.528          | 4307.026 |           |
|                  |                  |          | 4+320,000 |
| 550.655          | 550.905          | 4320.000 |           |
|                  |                  |          | 4+330,031 |
| 550.819          | 551.023          | 4330.031 |           |
|                  |                  |          | 4+340,000 |
| 550.978          | 551.456          | 4340.000 |           |
| 551.074          | 551.505          | 4346.094 |           |
|                  |                  |          | 4+356,273 |
| 551.234          | 551.748          | 4356.273 | 4+360,000 |
| 551.292          | 551.819          | 4360.000 |           |
|                  |                  |          | 4+365,351 |
| 551.376          | 551.631          | 4365.351 | 4+369,360 |
| 551.439          | 551.524          | 4369.360 |           |
|                  |                  |          | 4+380,000 |
| 551.598          | 551.706          | 4380.000 |           |
|                  |                  |          | 4+399,361 |
| 551.839          | 551.411          | 4399.361 | 4+400,000 |
| 551.846          | 551.385          | 4400.000 |           |
|                  |                  |          | 4+405,841 |
| 551.907          | 551.387          | 4405.841 |           |
|                  |                  |          | 4+416,466 |
| 552.003          | 551.500          | 4416.466 | 4+420,000 |
| 552.031          | 551.679          | 4420.000 |           |
|                  |                  |          | 4+429,360 |
| 552.095          | 551.531          | 4429.360 |           |
|                  |                  |          | 4+440,000 |
| 552.161          | 552.044          | 4440.000 |           |
|                  |                  |          | 4+447,700 |
| 552.208          | 552.425          | 4447.700 |           |
|                  |                  |          | 4+457,493 |
| 552.280          | 552.072          | 4457.493 | 4+460,000 |
| 552.303          | 551.954          | 4460.000 |           |
|                  |                  |          | 4+467,702 |
| 552.381          | 551.831          | 4467.702 |           |
|                  |                  |          | 4+480,000 |
| 552.536          | 552.191          | 4480.000 |           |
|                  |                  |          | 4+487,700 |
| 552.653          | 552.098          | 4487.700 |           |
|                  |                  |          | 4+500,000 |
| 552.851          | 552.495          | 4500.000 | 4+502,871 |
| 552.897          | 552.472          | 4502.871 |           |
|                  |                  |          | 4+520,000 |
| 553.173          | 553.069          | 4520.000 | 4+520,616 |
| 553.183          | 553.136          | 4520.616 |           |
|                  |                  |          | 4+540,000 |
| 553.495          | 553.984          | 4540.000 |           |
|                  |                  |          | 4+558,246 |
| 553.805          | 554.419          | 4558.246 |           |
| 553.805          | 554.035          | 4579.243 | 4+580,000 |
| 553.792          | 554.042          | 4579.243 |           |
|                  |                  |          | 4+599,240 |
| 553.160          | 553.126          | 4599.240 | 4+600,000 |
| 553.123          | 553.123          | 4600.000 |           |
|                  |                  |          | 4+620,000 |
| 552.156          | 552.101          | 4620.000 |           |

DETALHE DA IMPLANTAÇÃO REVESTIMENTO ASFALTICO



SEÇÃO TIPO



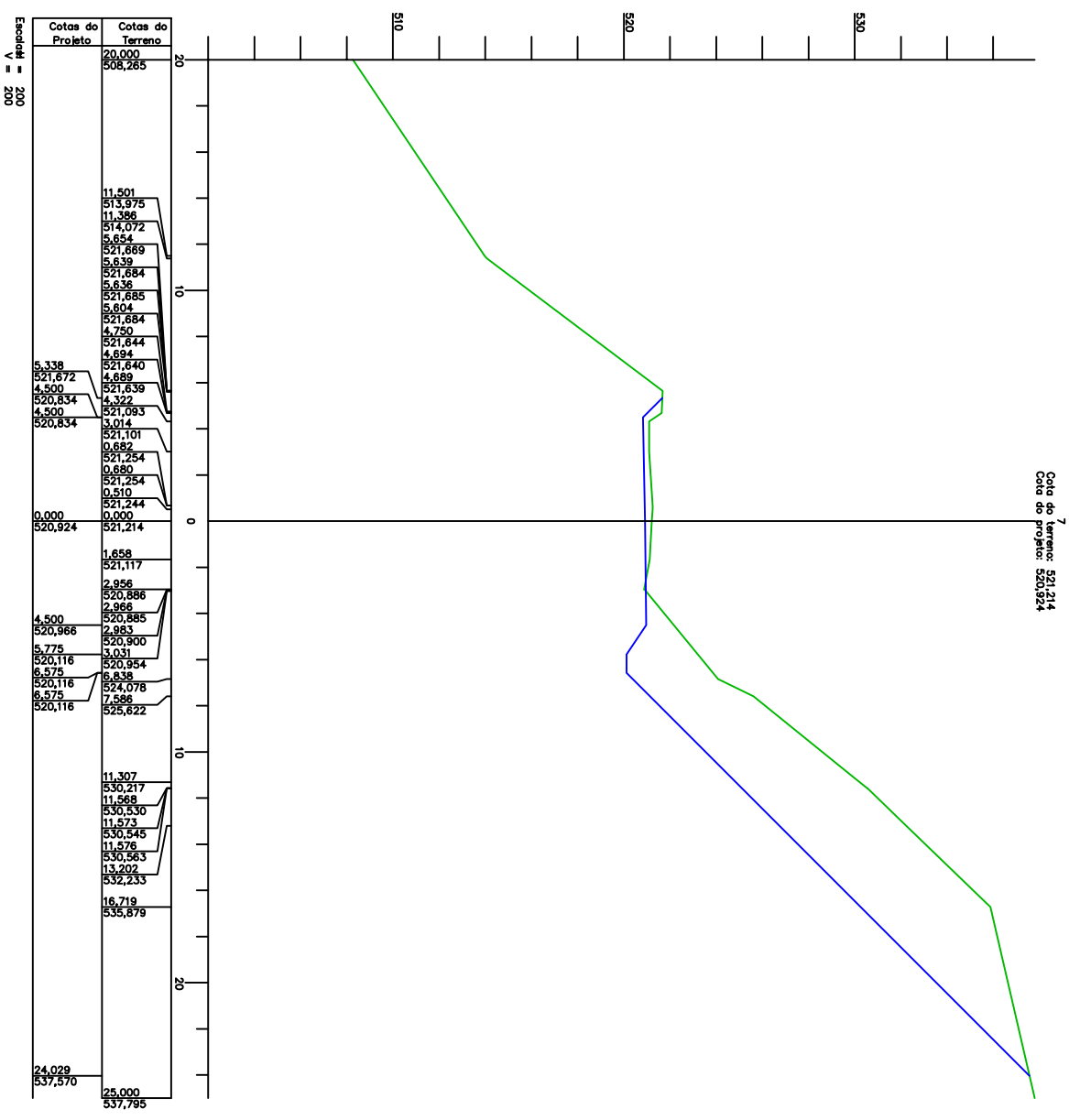
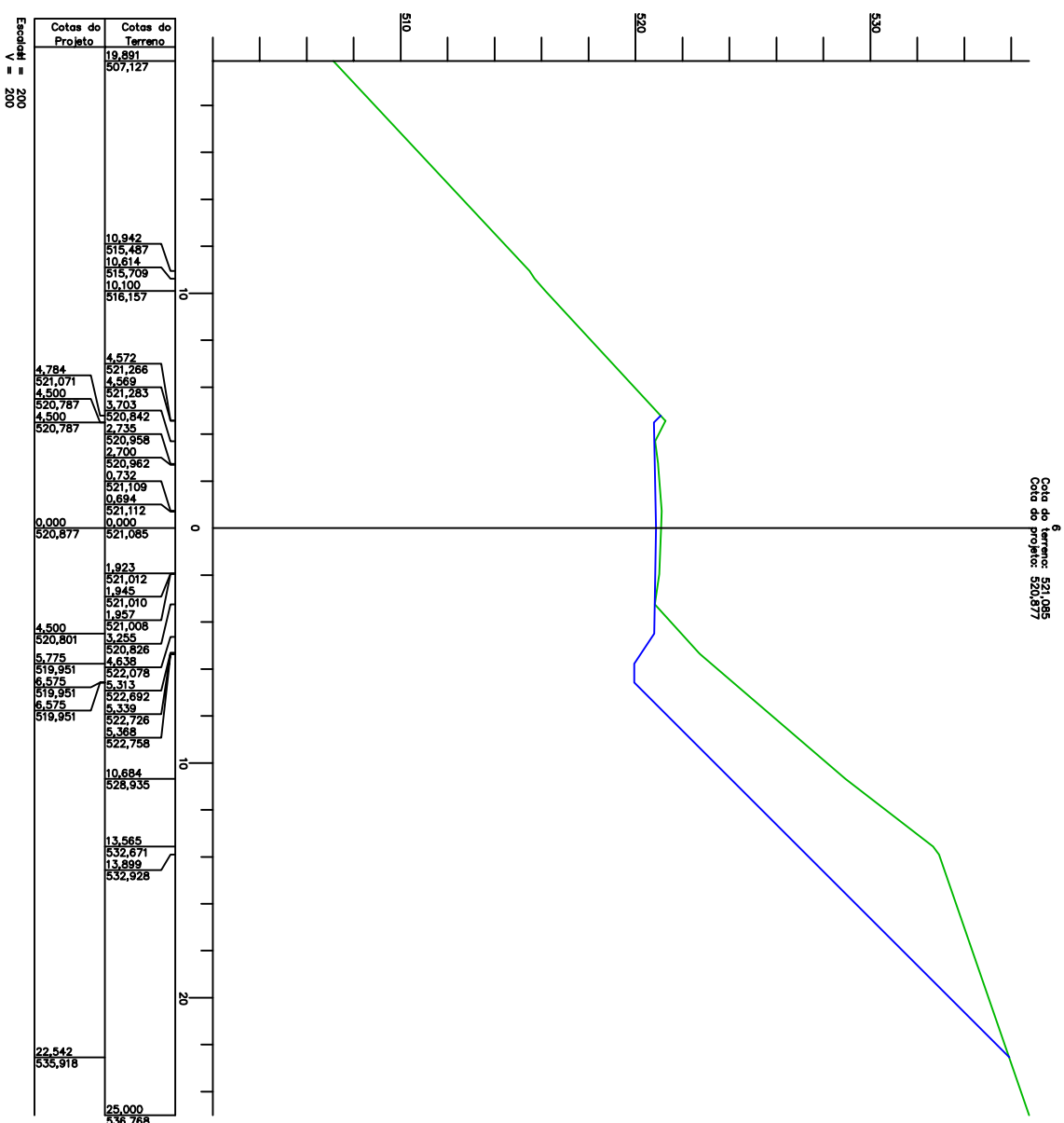
|                                                                                                                     |                                     |                                                                           |                              |          |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------|------------------------------|----------|--|
| <b>LOCAD</b><br>SERVIÇOS DE ENGENHARIA                                                                              |                                     | Resp. Técnico:                                                            |                              | Cliente: |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                     | .....                                                                     |                              | .....    |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021             | Resp. Técnico :<br>Eng. Civil Lauson Serafini                             | CREA/RS 123168-D             |          |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>H - 1:1300<br>V - 1:130 | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92 | Obra: Pavimentação Asfáltica |          |  |
| Aprovação:                                                                                                          | Revisão :<br>01                     | Local :<br>Estrada de Acesso a Barra do Rio Azul                          | Conteúdo: Planta Geométrica  |          |  |
| Prancha :<br>14                                                                                                     |                                     |                                                                           |                              |          |  |

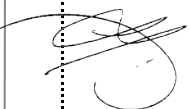
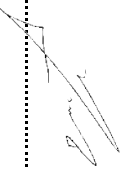




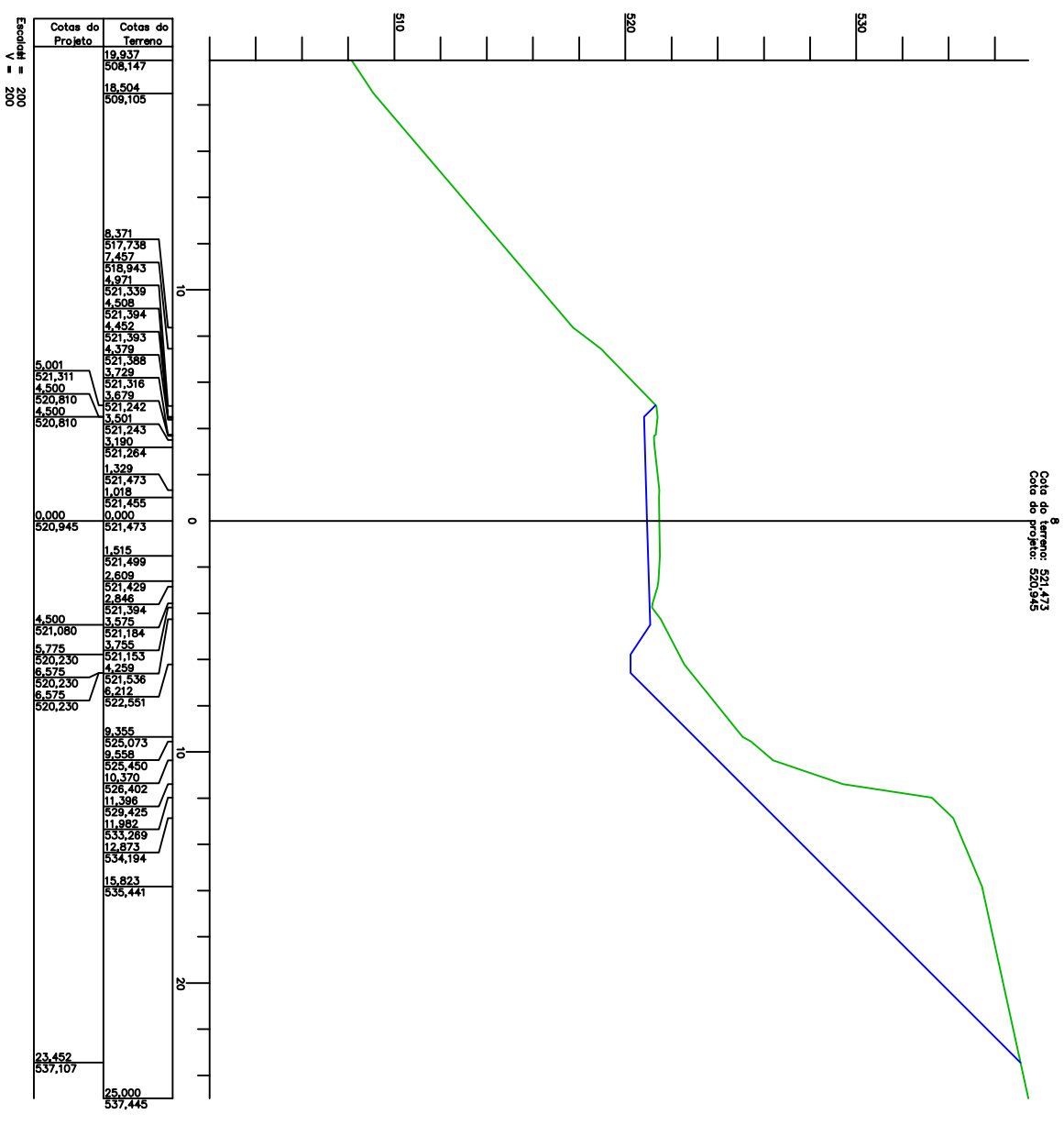
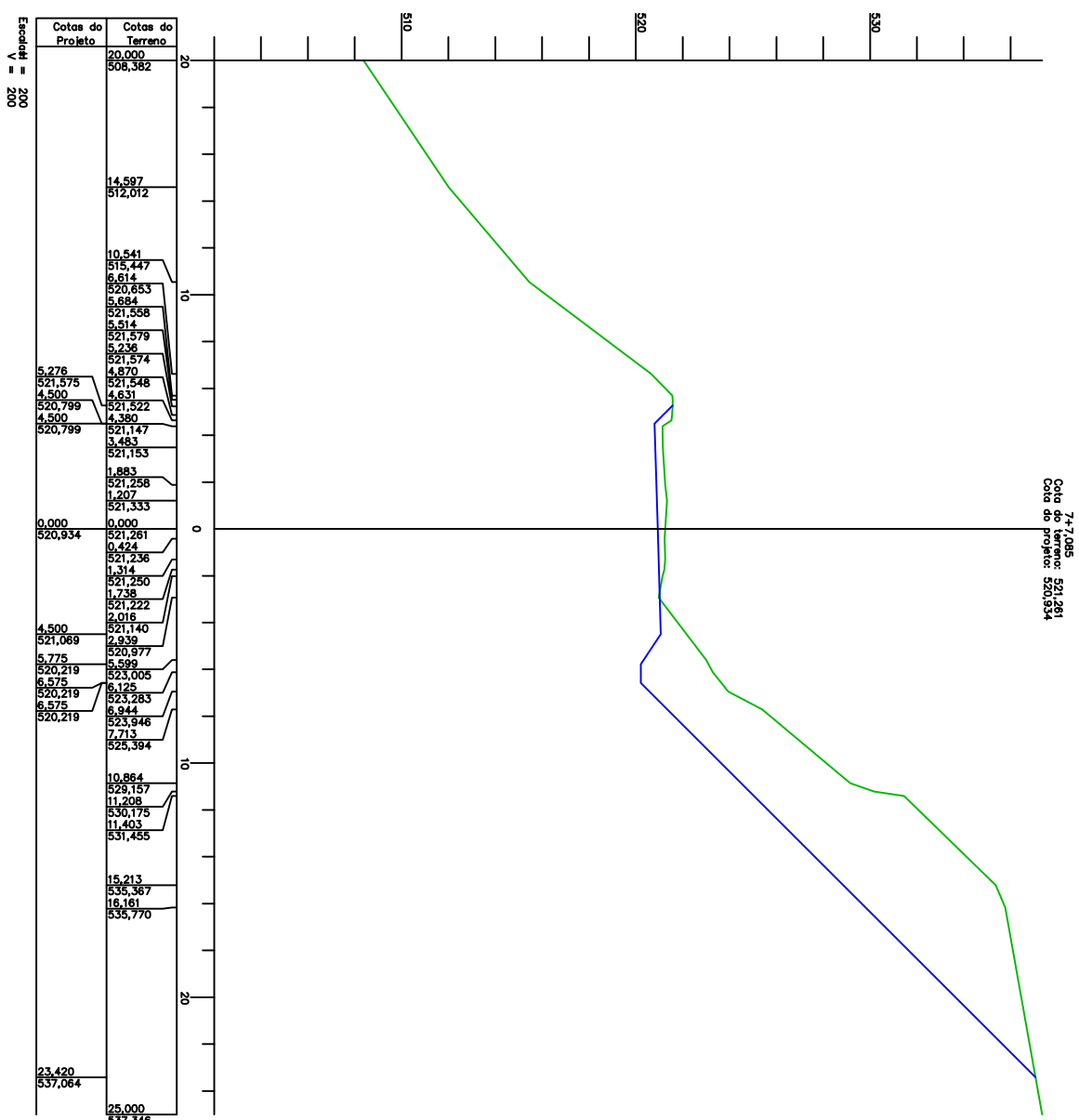


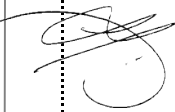
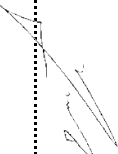




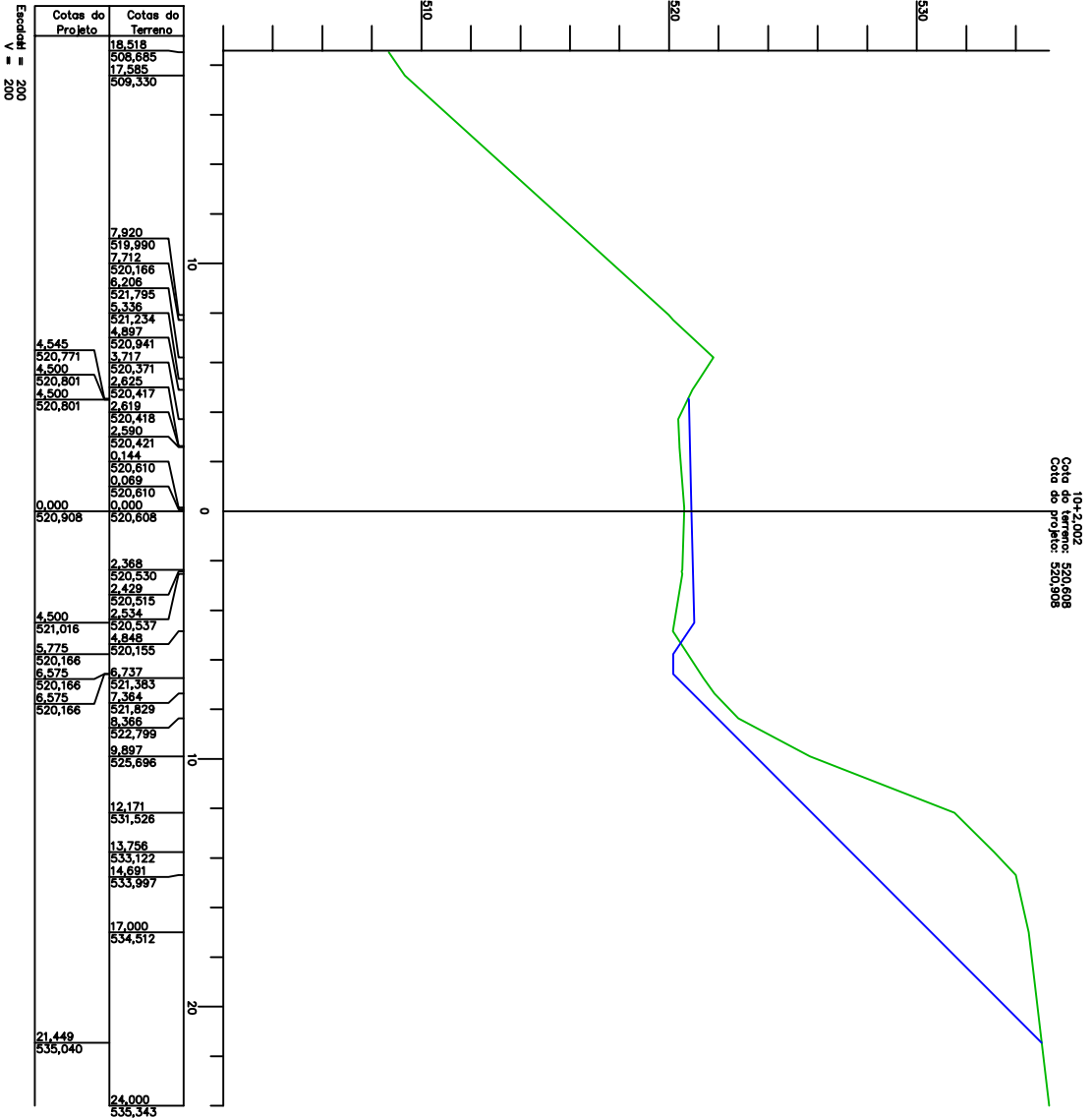
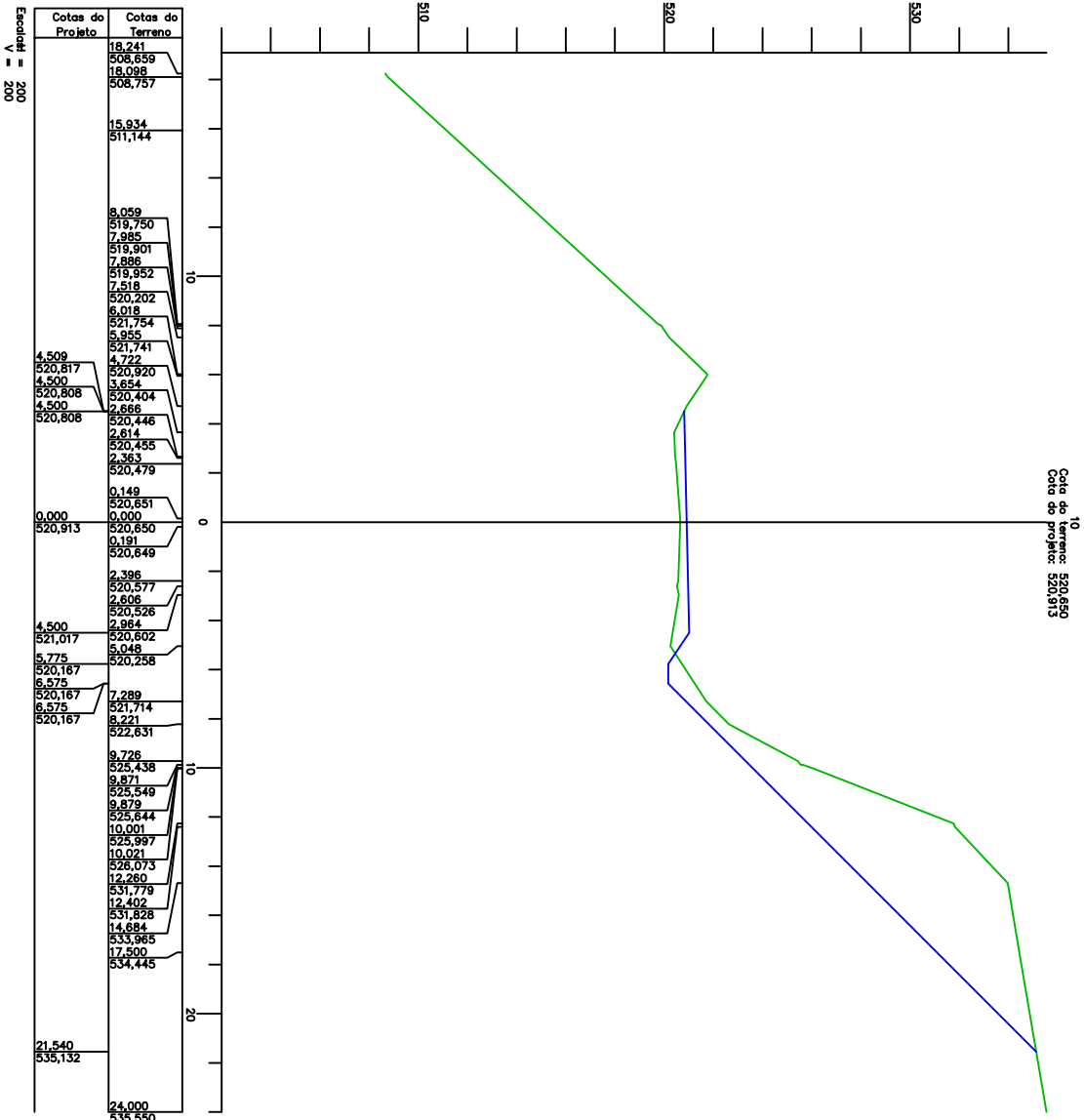
|                                                                                                                                                                                                                                                              |  |                                                                                                       |  |                                                                                                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|
| <div><b>SERVIÇOS DE ENGENHARIA</b></div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Gelúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |  | Resp. Técnico:<br> |  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                                 |  | Data :<br>Dezembro/2021                                                                               |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini      CREA/RS 123168-D                             |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                      |  | Escala :<br>1:300                                                                                     |  | Cliente: Pref. Municipal de Barra do Rio Azul      CNPJ: 93.539.153/0001-92                     |  |
| Aprovação:<br>-                                                                                                                                                                                                                                              |  | Revisão :<br>01                                                                                       |  | Obra:<br>Pavimentação Asfáltica                                                                 |  |
|                                                                                                                                                                                                                                                              |  | Plancha :<br>20                                                                                       |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                |  |
|                                                                                                                                                                                                                                                              |  |                                                                                                       |  | Conteúdo:<br>Seções Transversais                                                                |  |

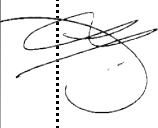
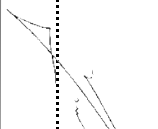


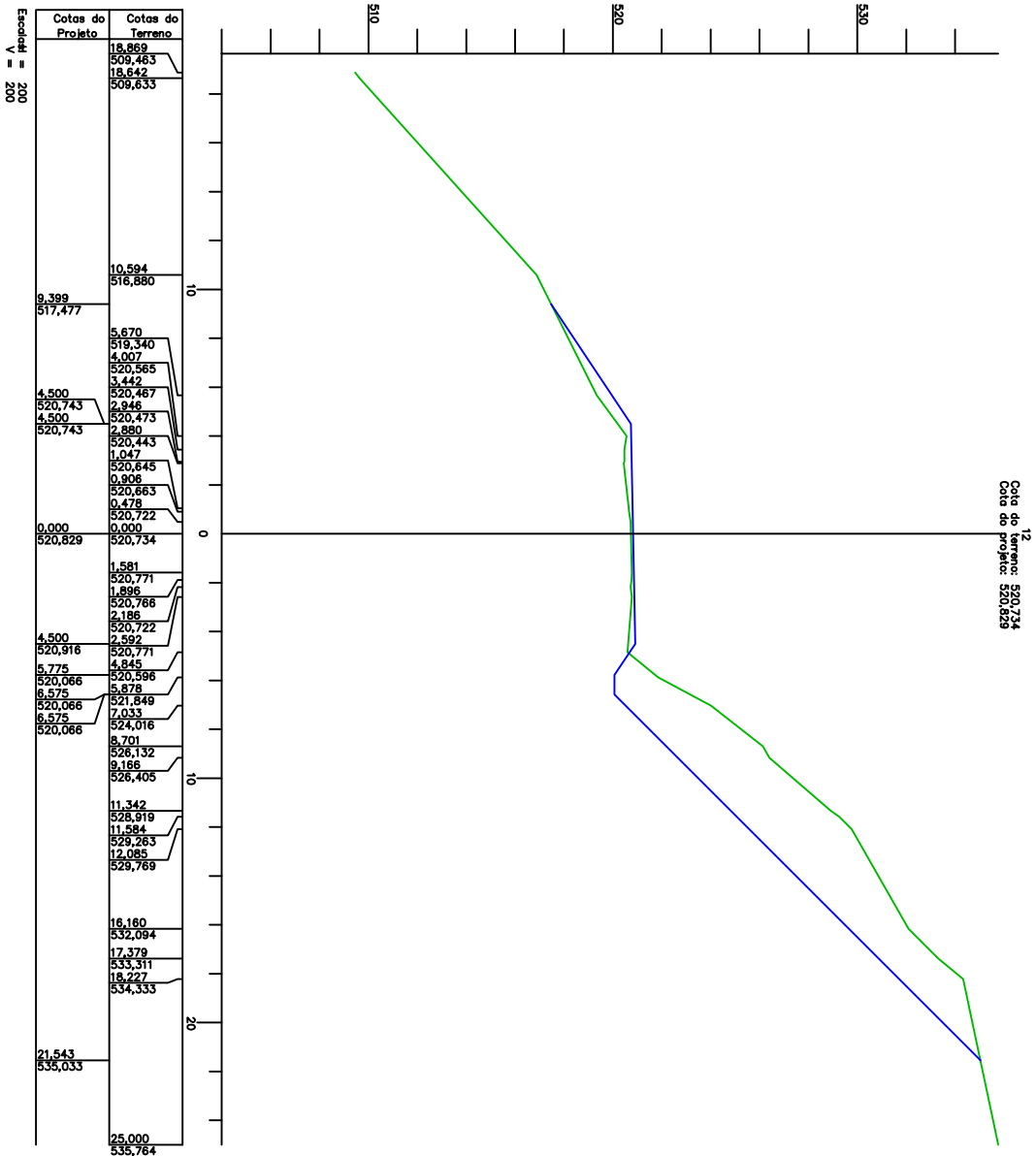
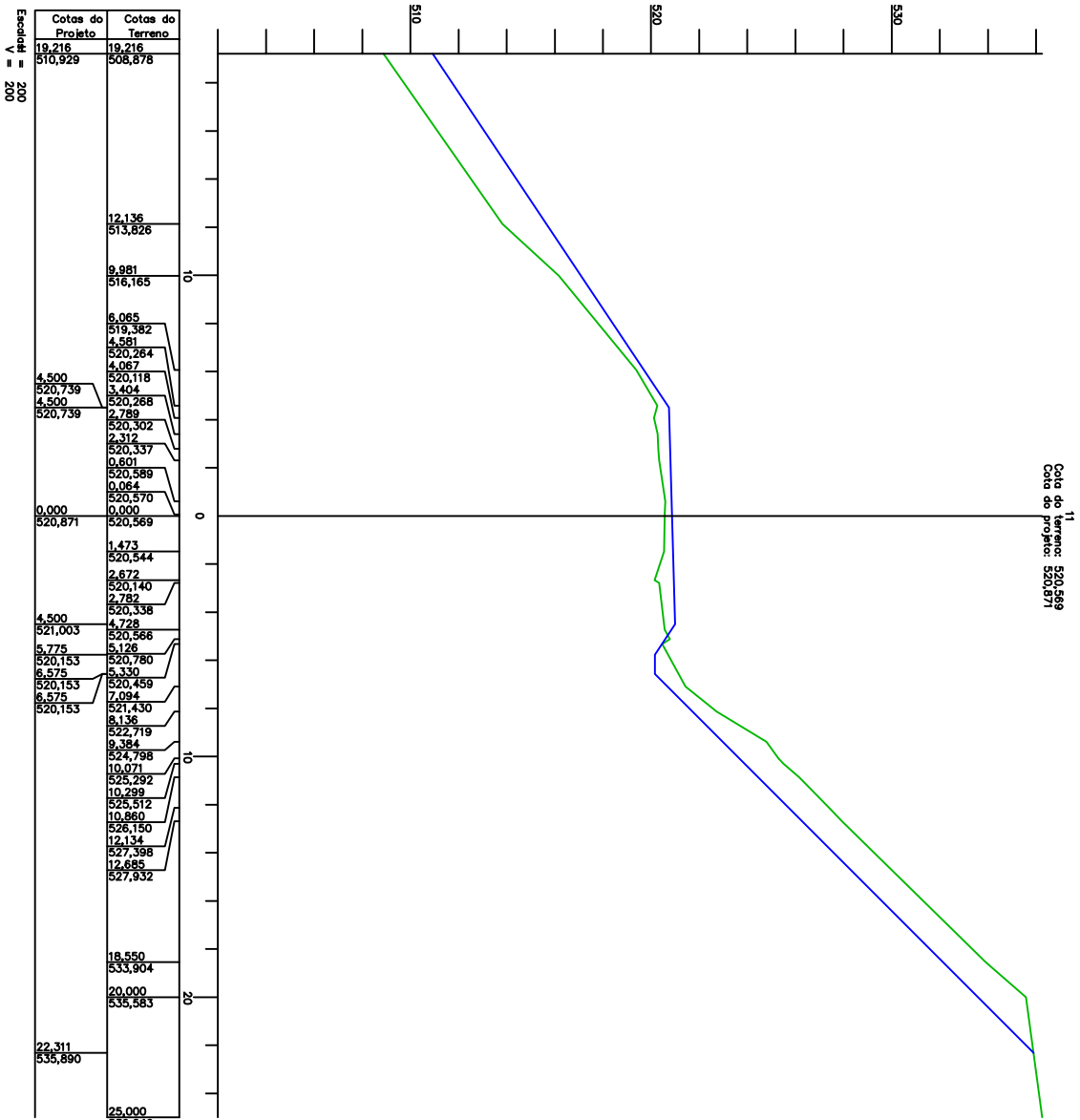


|                                                                                                                                                                                                                                                            |                         |                                                                                                       |                                  |                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------|
| <div><br/>SERVIÇOS DE ENGENHARIA</div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Gelúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |                         | Resp. Técnico:<br> |                                  | Cliente:<br> |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                               | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini      CREA/RS 123168-D                                   |                                  |                                                                                                 |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                    | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul      CNPJ: 93.539.153/0001-92                           |                                  |                                                                                                 |
|                                                                                                                                                                                                                                                            |                         | Obra:<br>Pavimentação Asfáltica                                                                       |                                  |                                                                                                 |
| Aprovação:<br>-                                                                                                                                                                                                                                            | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                                  |                                                                                                 |
|                                                                                                                                                                                                                                                            |                         | Plancha :<br>21                                                                                       | Conteúdo:<br>Seções Transversais |                                                                                                 |





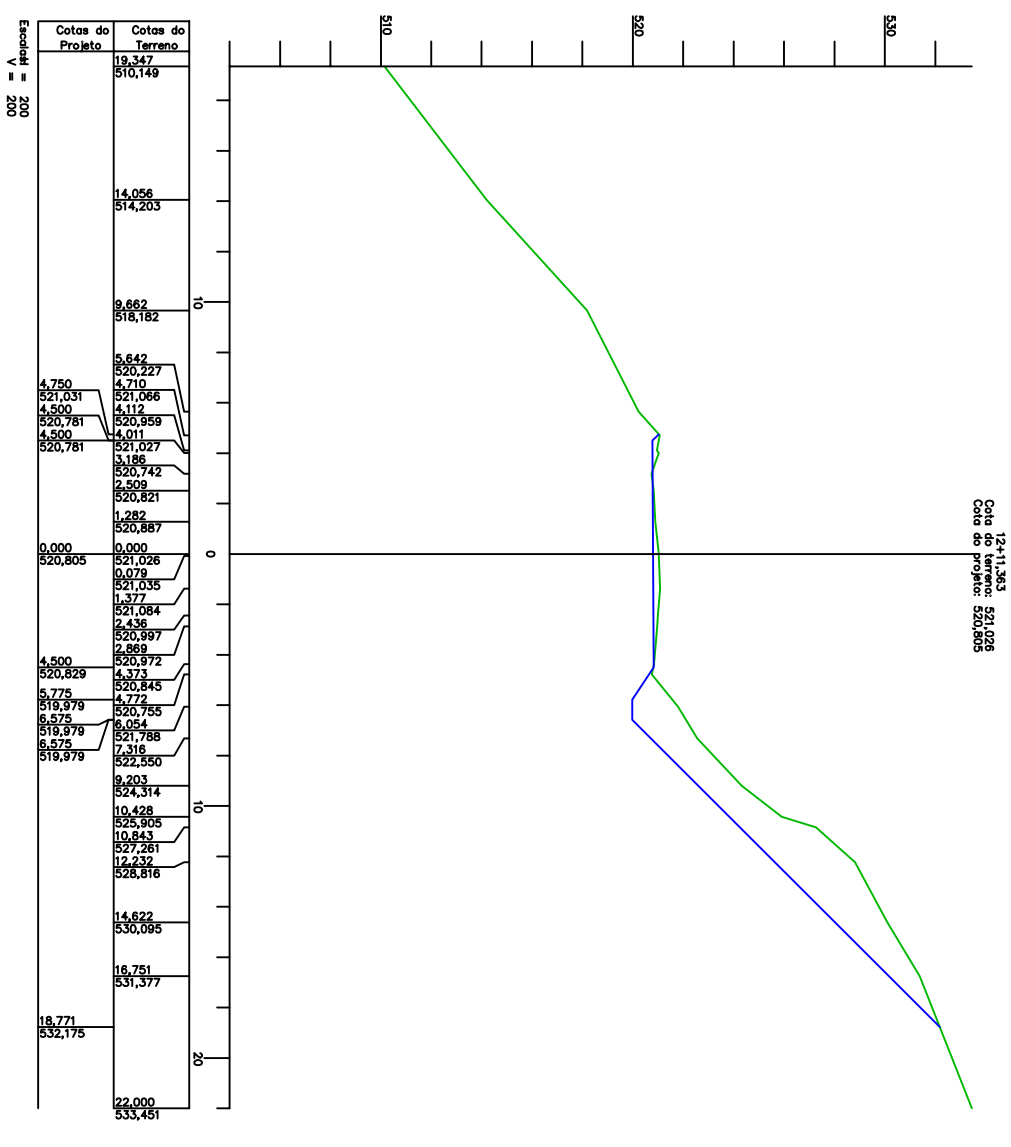
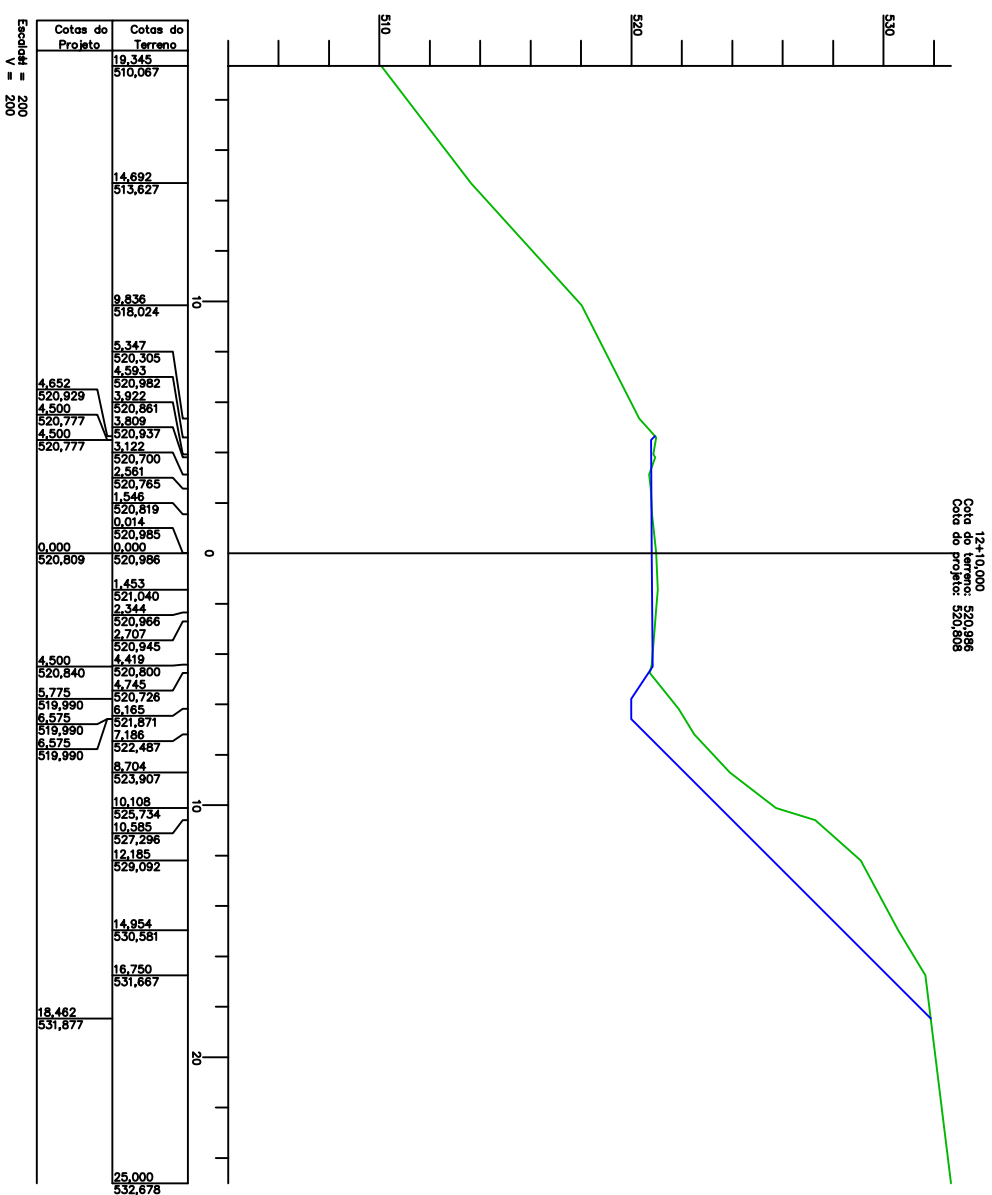
|                                                                                                                                                                                                                                                       |  |                         |  |                                                                                     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|-------------------------------------------------------------------------------------|--|
| <div><b>SERVIÇOS DE ENGENHARIA</b><br/>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |  | Resp. Técnico:          |  | Cliente:                                                                            |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                          |  | Data :<br>Dezembro/2021 |  |  |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                               |  | Escala :<br>1:300       |  |  |  |
| Aprovação:                                                                                                                                                                                                                                            |  | Revisão :<br>01         |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |  |
| -                                                                                                                                                                                                                                                     |  | Prancha :<br>23         |  | Conteúdo:<br>Seções Transversais                                                    |  |

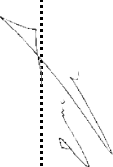


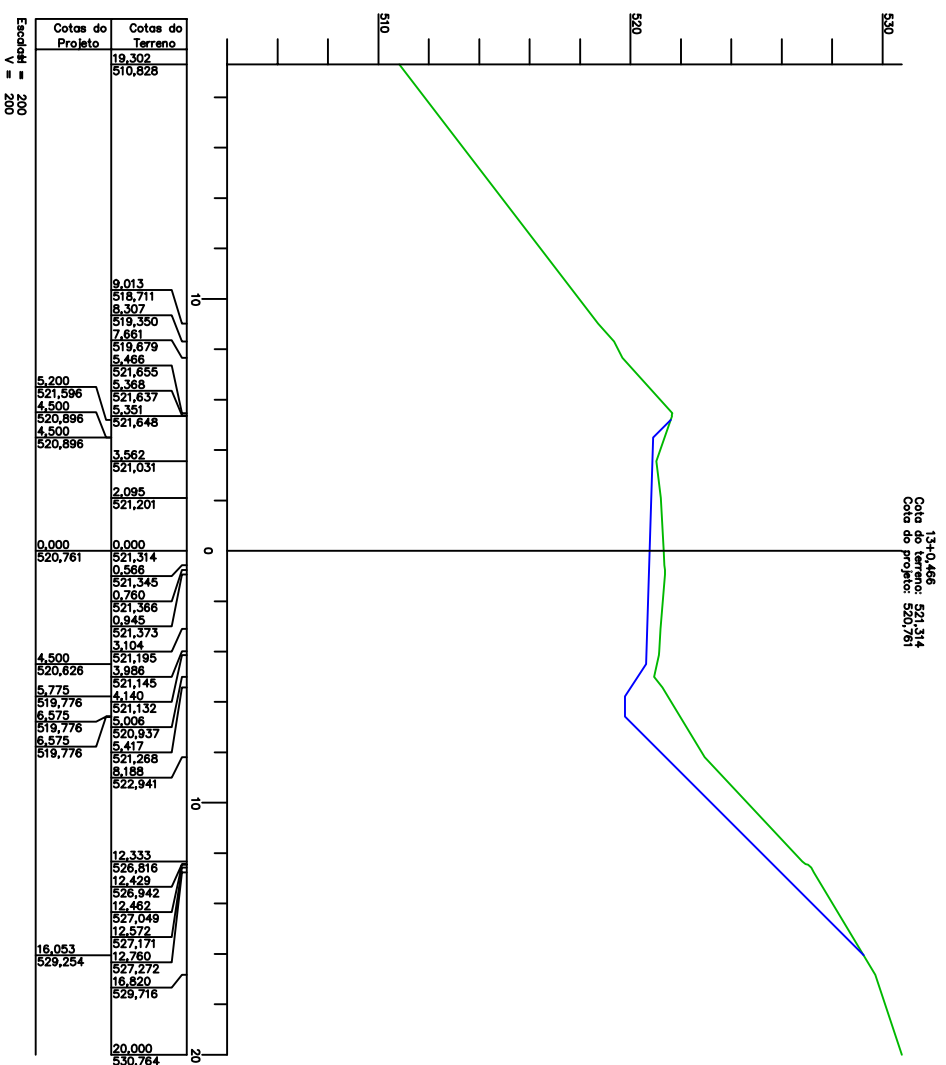
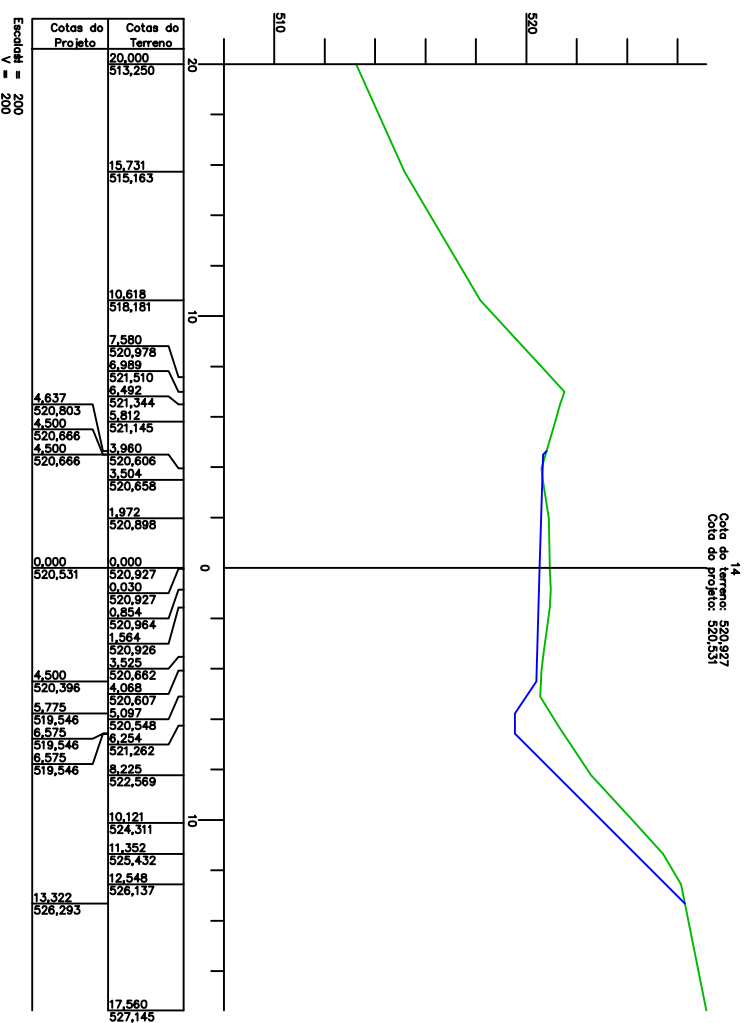
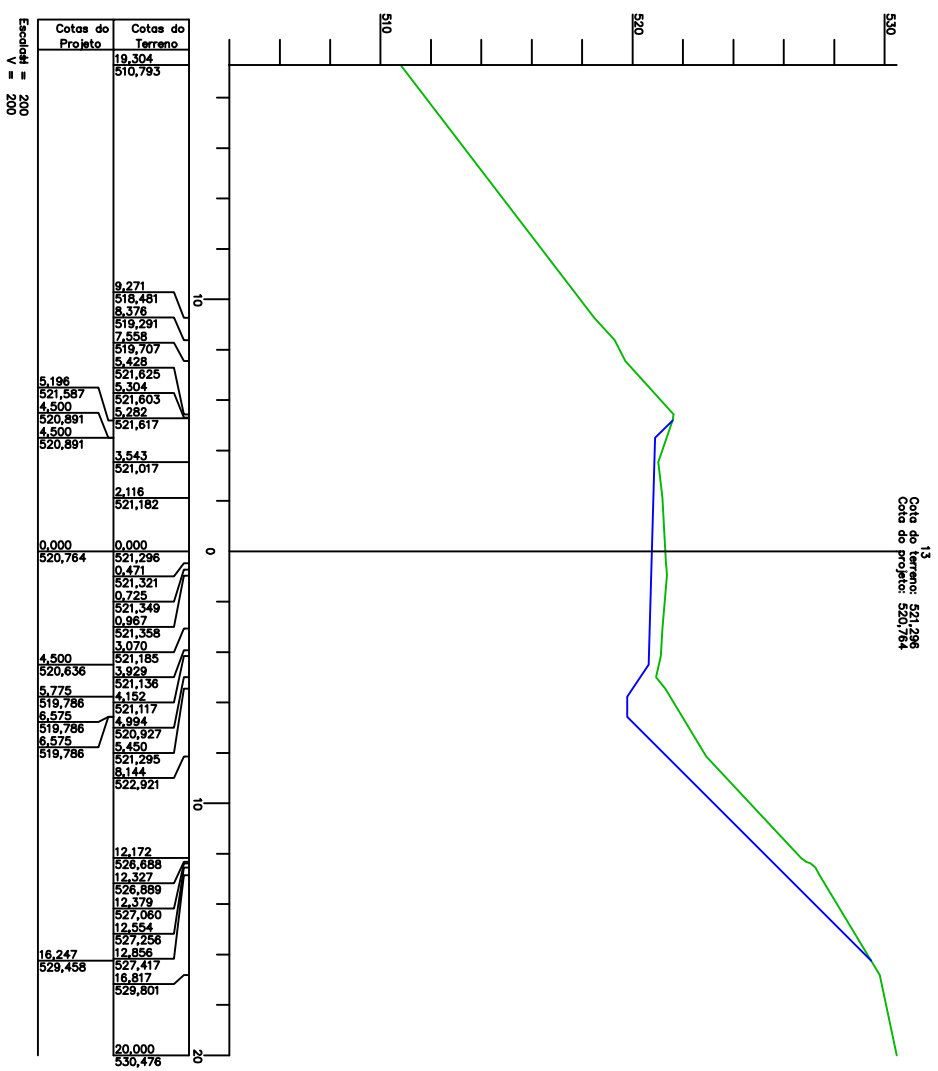
|                                                                                                                                                                                                            |  |                         |  |                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|--------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  | Resp. Técnico:          |  | Cliente:                                         |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               |  | Data :<br>Dezembro/2021 |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini    |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    |  | Escala :<br>1:300       |  | CREA/RS 123168-D                                 |  |
| Aprovação:<br>-                                                                                                                                                                                            |  | Revisão :<br>01         |  | Obra:<br>Pavimentação Asfáltica                  |  |
|                                                                                                                                                                                                            |  | Prancha :<br>24         |  | Local :<br>Estrada de Acesso a Barra do Rio Azul |  |
|                                                                                                                                                                                                            |  |                         |  | Conteúdo:<br>Seções Transversais                 |  |

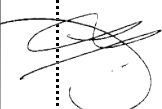
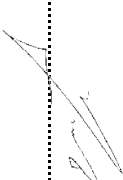


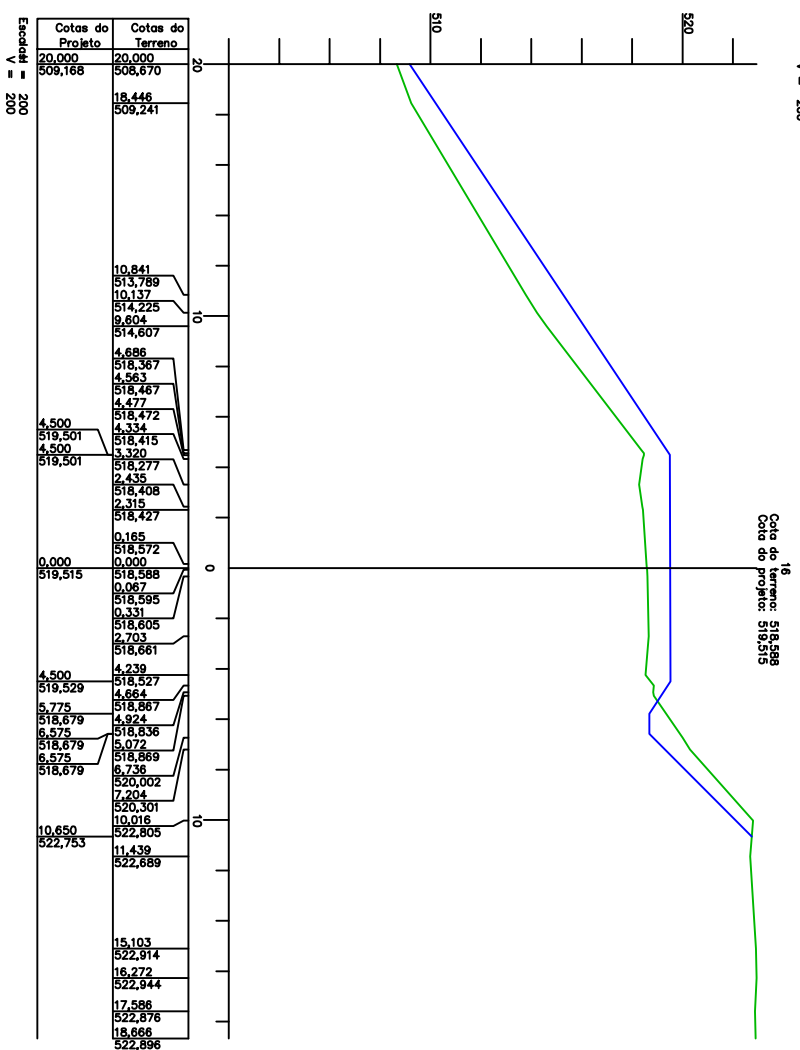
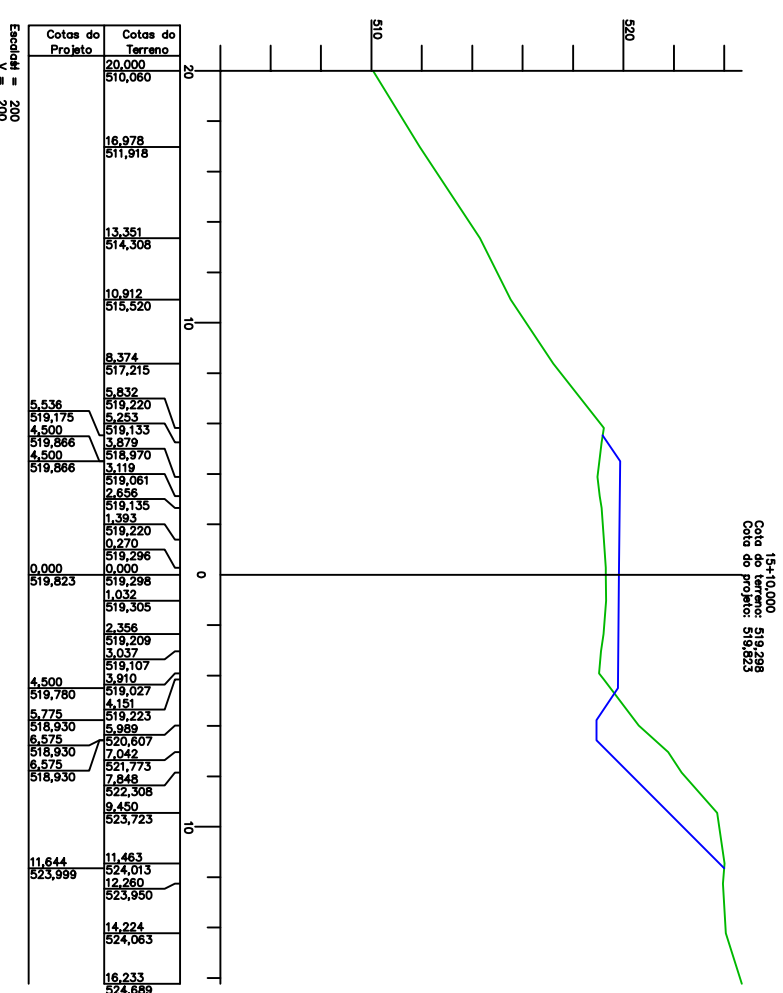


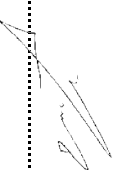


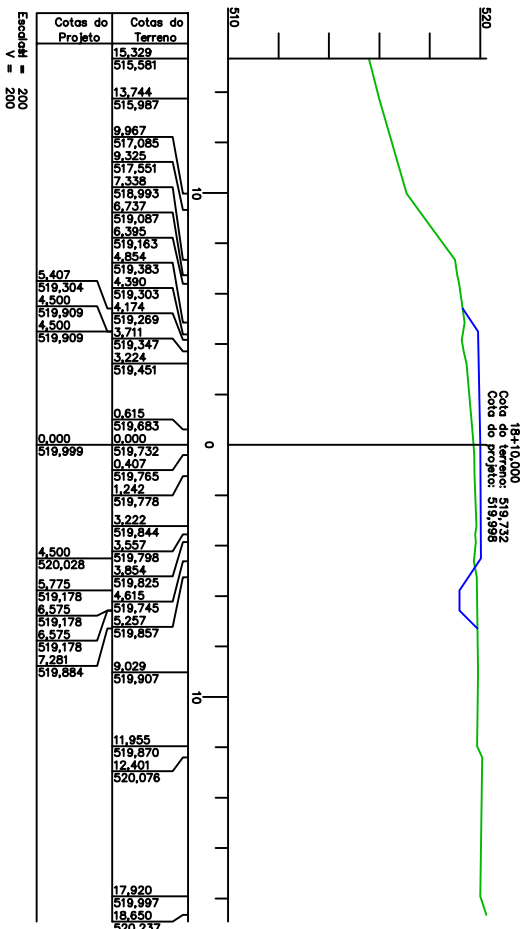
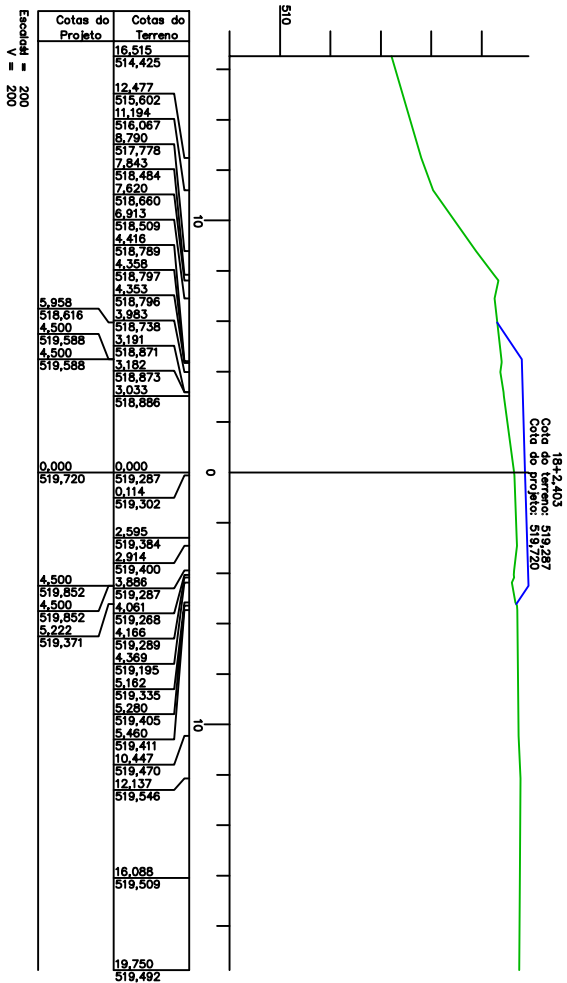
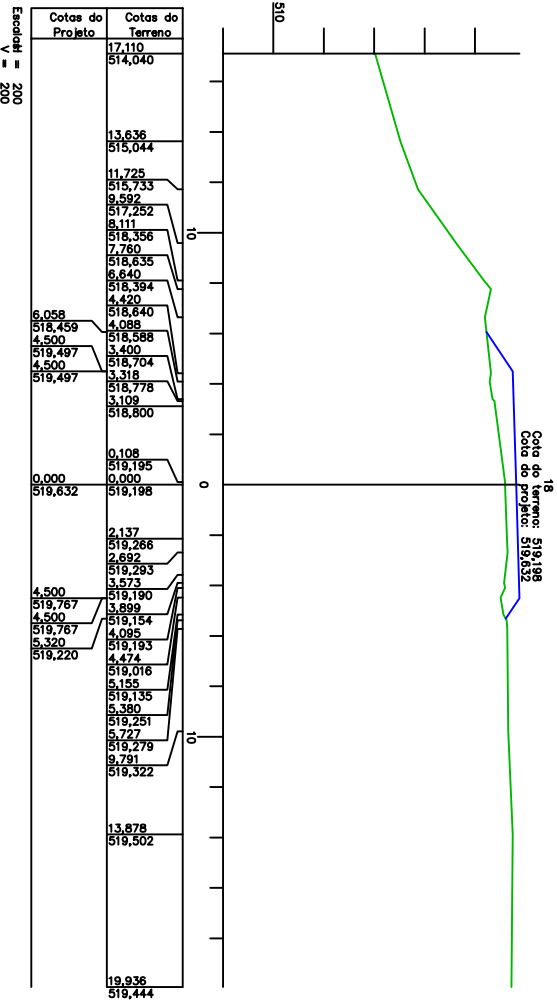
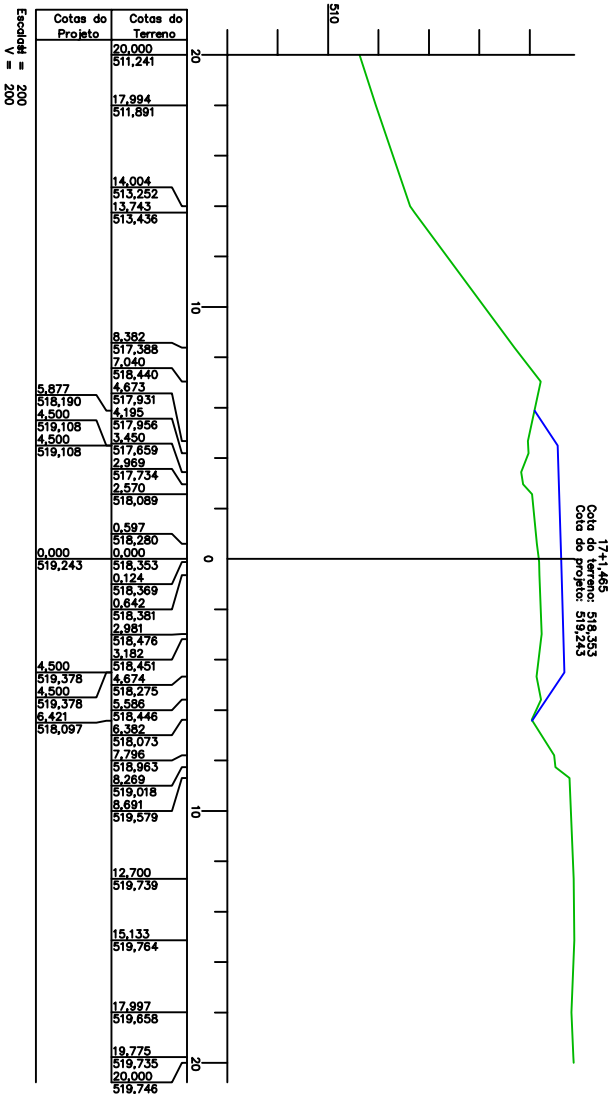
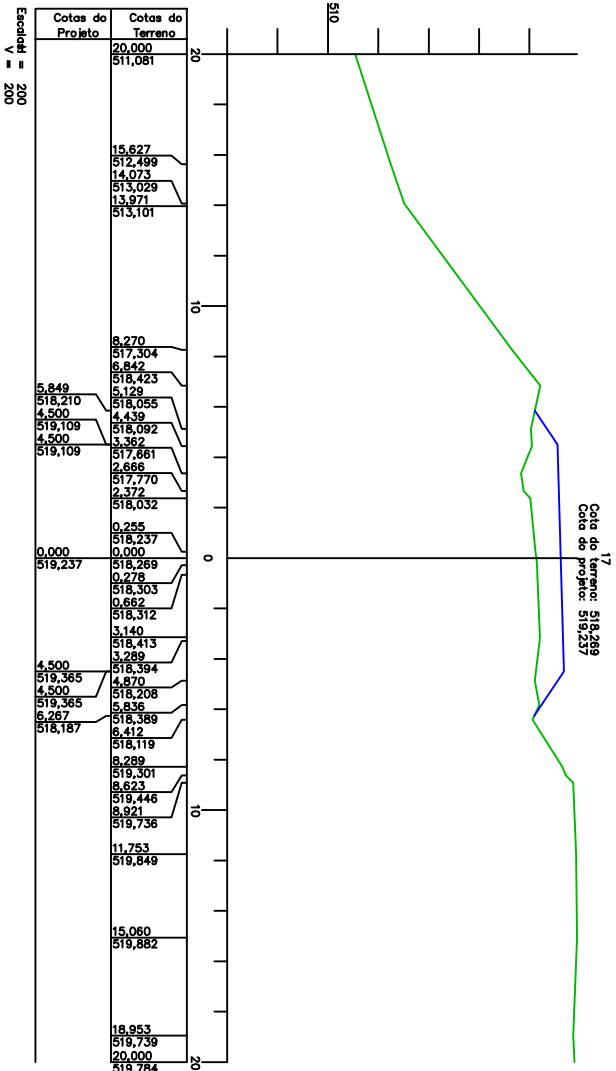
|                                                                                                                                                                                                                                                            |  |                                                                                                       |  |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|
| <div><br/>SERVIÇOS DE ENGENHARIA</div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Gelúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |  | Resp. Técnico:<br> |  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                               |  | Data :<br>Dezembro/2021                                                                               |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini      CREA/RS 123168-D                             |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                    |  | Escala :<br>1:300                                                                                     |  | Cliente: Pref. Municipal de Barra do Rio Azul      CNPJ: 93.539.153/0001-92                     |  |
|                                                                                                                                                                                                                                                            |  | Obra:<br>Pavimentação Asfáltica                                                                       |  |                                                                                                 |  |
| Aprovação:<br>-                                                                                                                                                                                                                                            |  | Revisão :<br>01                                                                                       |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                |  |
|                                                                                                                                                                                                                                                            |  | Plancha :<br>26                                                                                       |  | Conteúdo:<br>Seções Transversais                                                                |  |

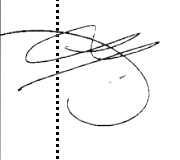


|                                                                                                                                                                                                                                      |                         |                                                                                                       |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br> | Cliente:<br> |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                                     |                                                                                                 |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul CNPJ: 93.539.153/0001-92                                |                                                                                                 |
|                                                                                                                                                                                                                                      | Revisão :<br>01         | Obra: Pavimentação Asfáltica                                                                          |                                                                                                 |
| Aprovação:<br>-                                                                                                                                                                                                                      | Prancha :<br>27         | Local : Estrada de Acesso a Barra do Rio Azul                                                         |                                                                                                 |
| Conteúdo: Seções Transversais                                                                                                                                                                                                        |                         |                                                                                                       |                                                                                                 |

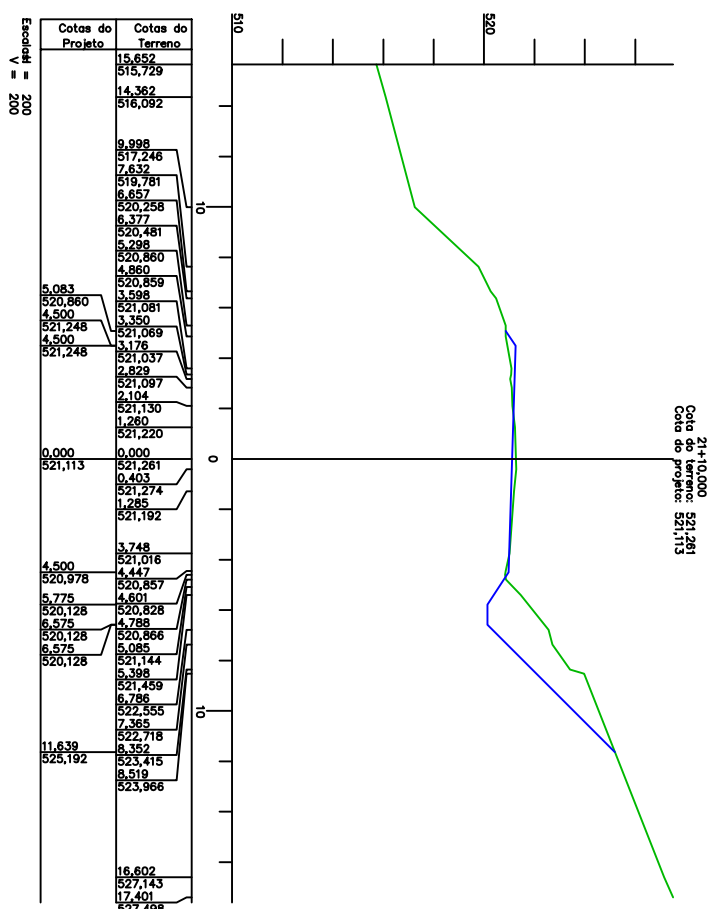
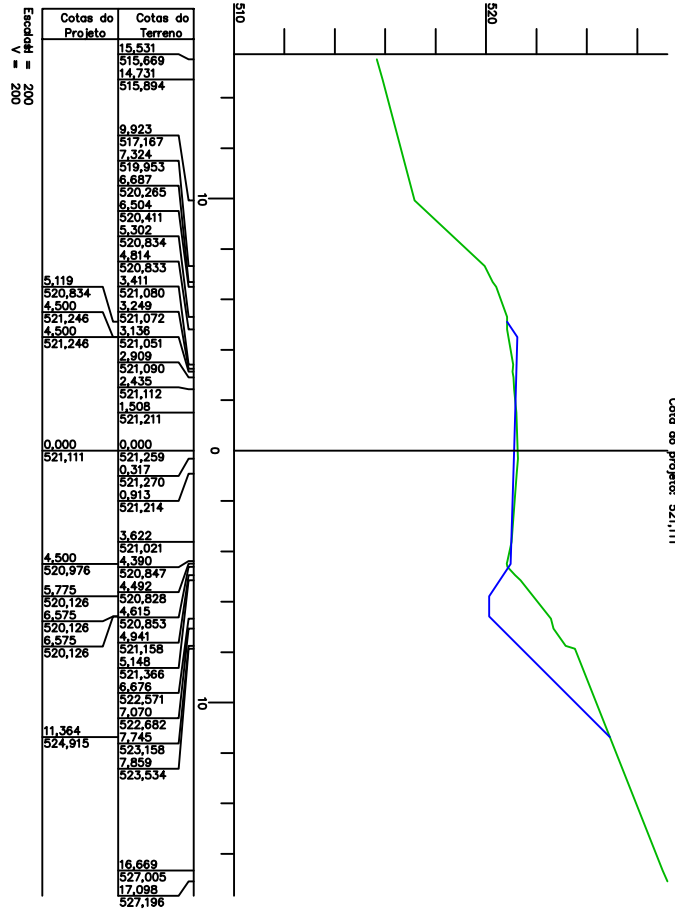
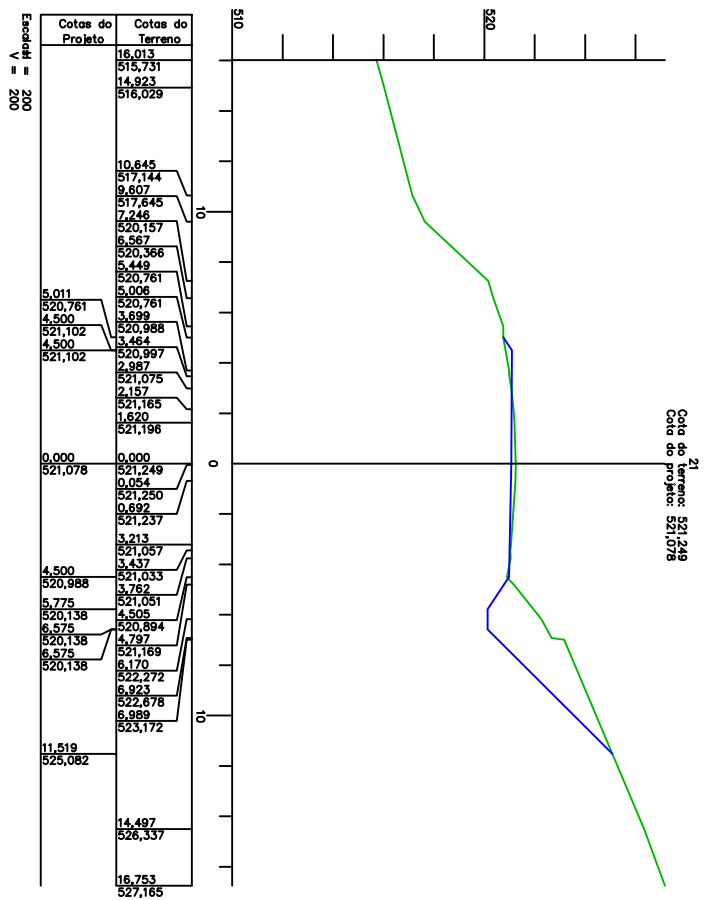
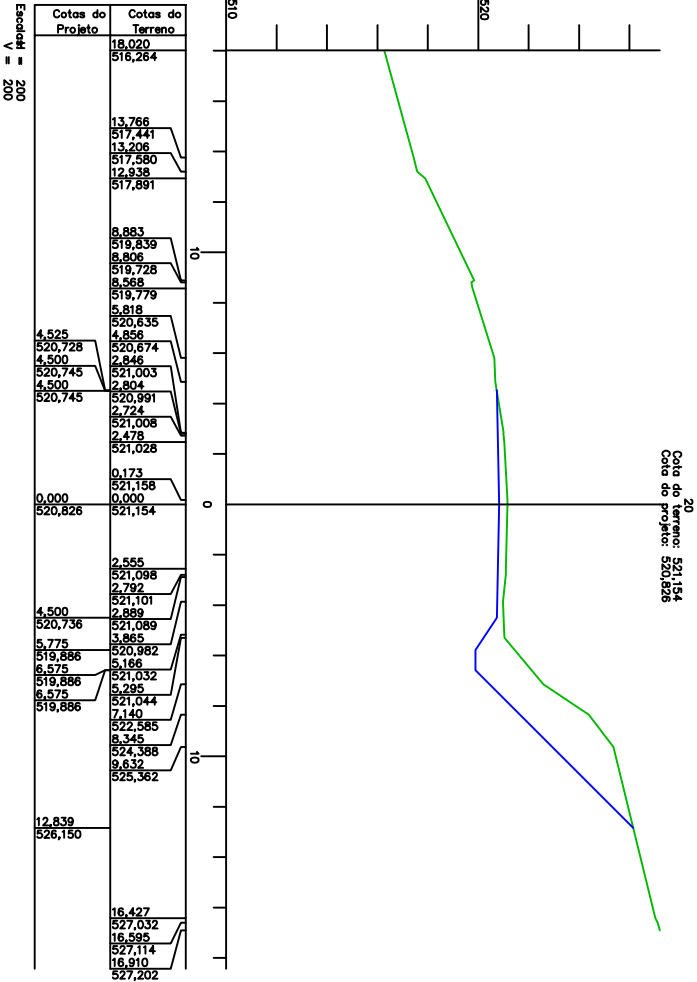
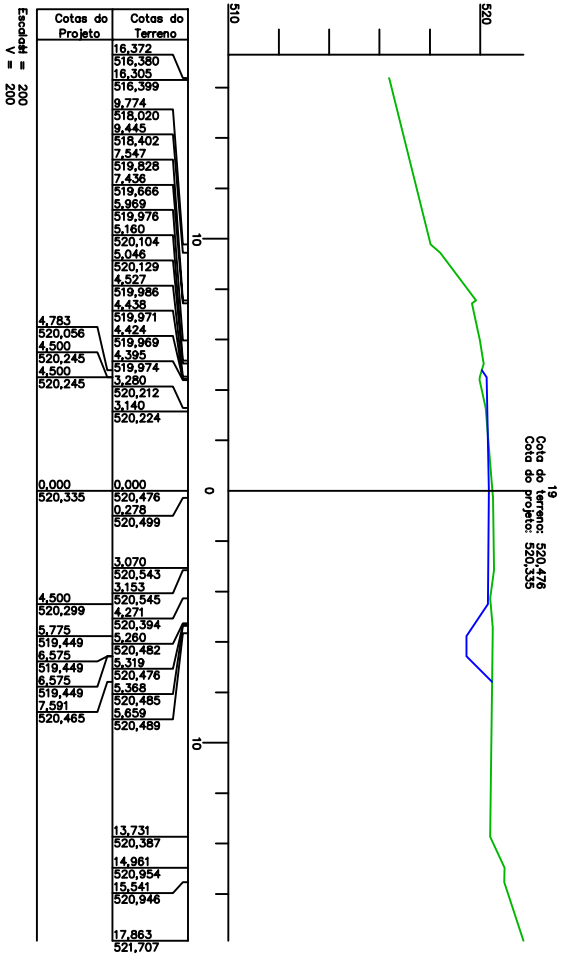


|                                                                                                                                                                                                                                                         |  |                                                                                                                      |  |                                                                                                                |  |                                                          |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|--|
| <div><p>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <p>Resp. Técnico:</p> <div></div> |  | <p>Cliente:</p> <div></div> |  |                                                          |  |
| <p>Projeto :<br/>Lauson Serafini</p>                                                                                                                                                                                                                    |  | <p>Data :<br/>Dezembro/2021</p>                                                                                      |  | <p>Resp. Técnico :<br/>Eng. Civil Lauson Serafini</p>                                                          |  | <p>CREA/RS 123168-D</p>                                  |  |
| <p>Desenho:<br/>Adriano Jr.</p>                                                                                                                                                                                                                         |  | <p>Escala :<br/>1:300</p>                                                                                            |  | <p>Cliente: Pref. Municipal de Barra do Rio Azul</p>                                                           |  | <p>CNPJ: 93.539.153/0001-92</p>                          |  |
| <p>Aprovação:<br/>-</p>                                                                                                                                                                                                                                 |  | <p>Revisão :<br/>01</p>                                                                                              |  | <p>Obra:<br/>Pavimentação Asfáltica</p>                                                                        |  | <p>Local :<br/>Estrada de Acesso a Barra do Rio Azul</p> |  |
| <p>Prancha :<br/>28</p>                                                                                                                                                                                                                                 |  | <p>Conteúdo:</p>                                                                                                     |  | <p>Seções Transversais</p>                                                                                     |  |                                                          |  |



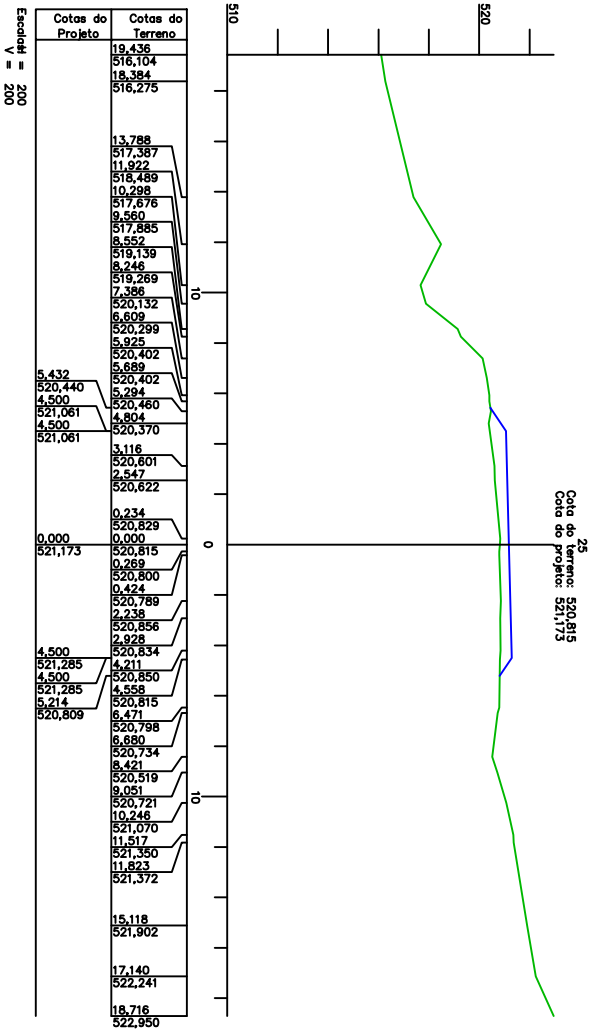
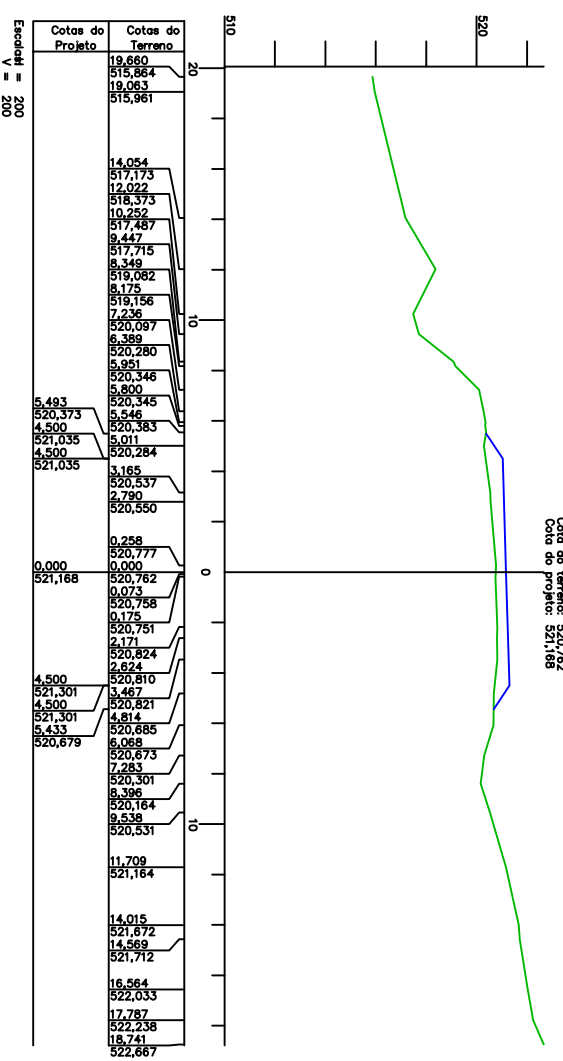
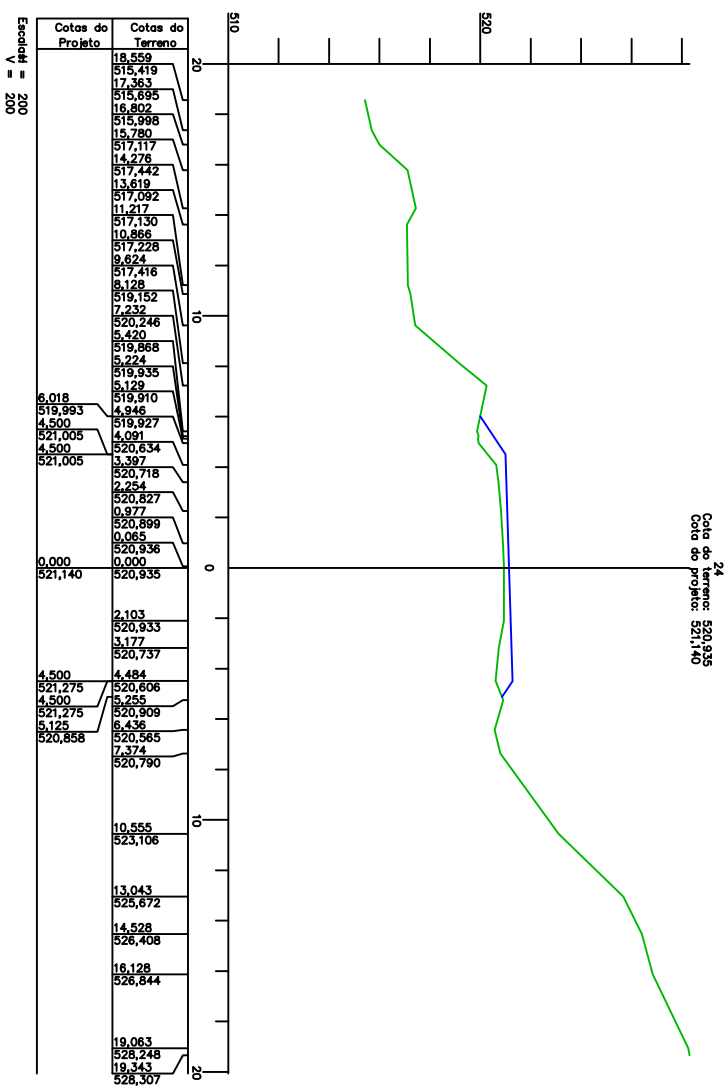
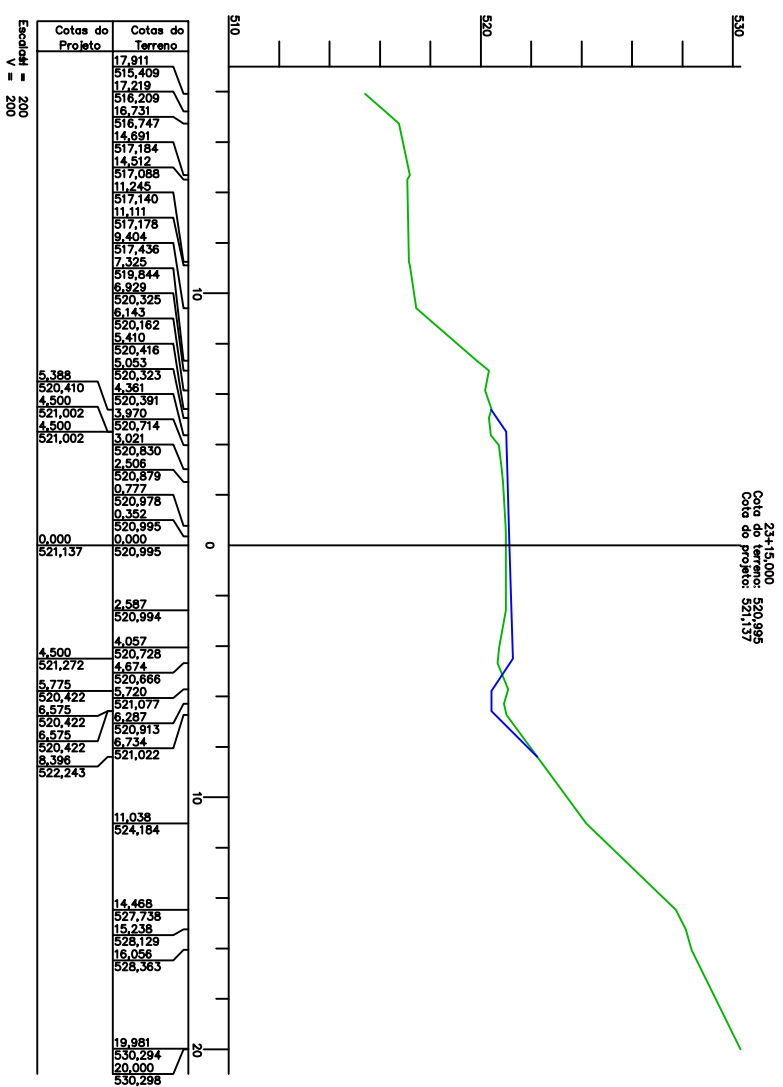
|                                                                                                                                                                                                                  |                         |                                                                                     |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|--------------------------|
|  <p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p> |                         | Resp. Técnico:                                                                      | Cliente:                 |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                     | Data :<br>Dezembro/2021 |  |                          |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                          | Escala :<br>1:300       | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       | CREA/RS 123168-D         |
| Aprovação:                                                                                                                                                                                                       | Revisão :<br>01         | Cliente: Pref. Municipal de Barra do Rio Azul                                       | CNPJ: 93.539.153/0001-92 |
| -                                                                                                                                                                                                                | Prancha :<br>29         | Obra:<br>Pavimentação Asfáltica                                                     |                          |
|                                                                                                                                                                                                                  |                         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |                          |
|                                                                                                                                                                                                                  |                         | Conteúdo:<br>Seções Transversais                                                    |                          |

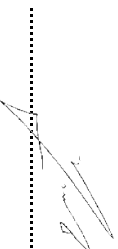


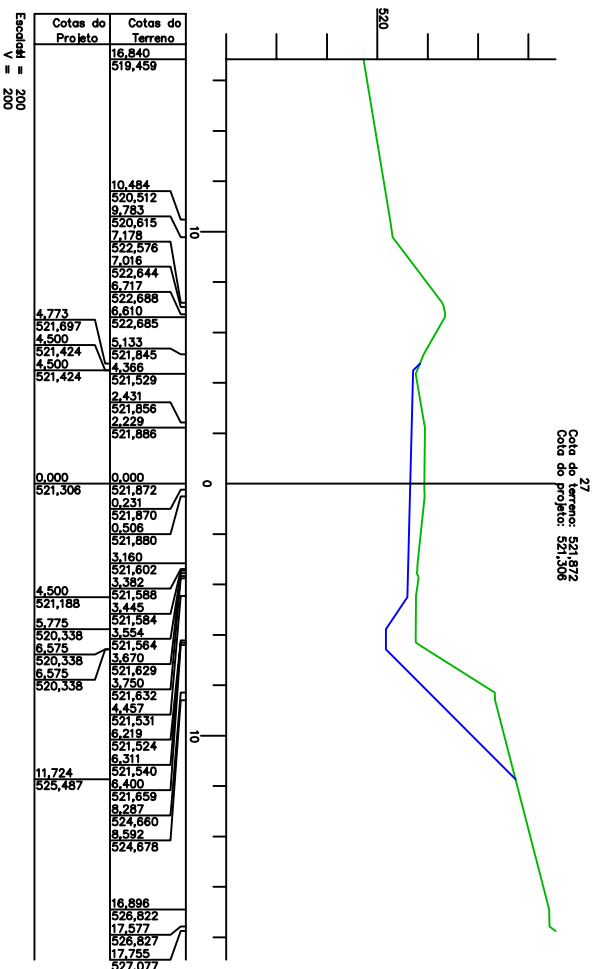
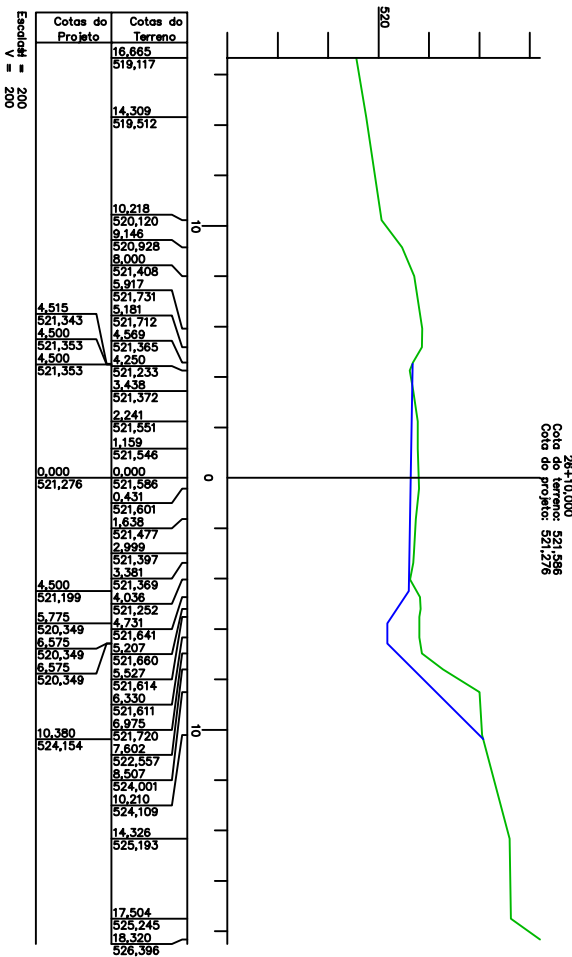
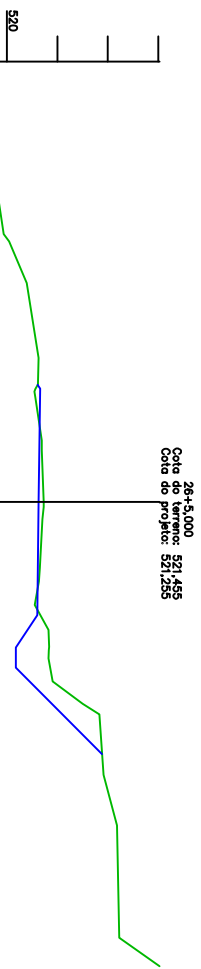
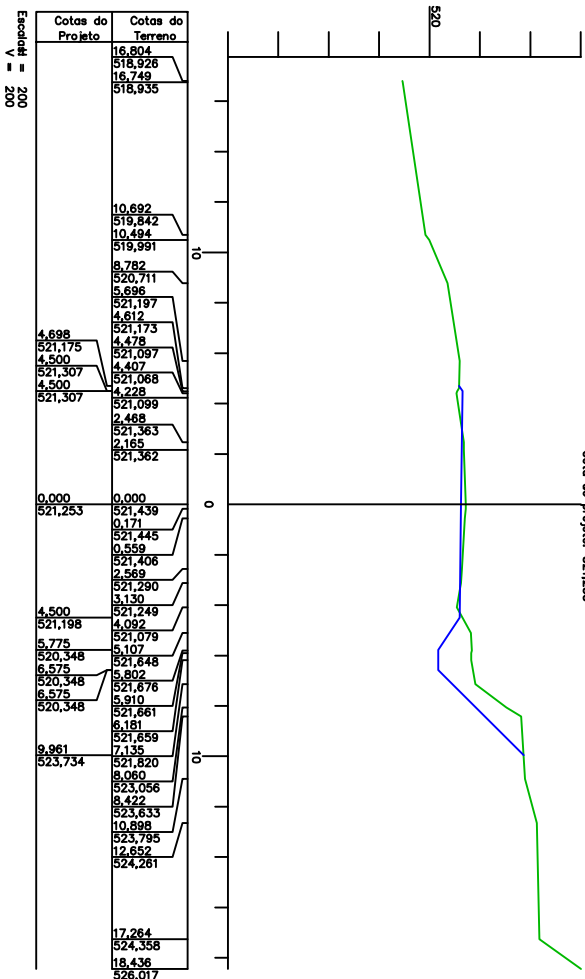
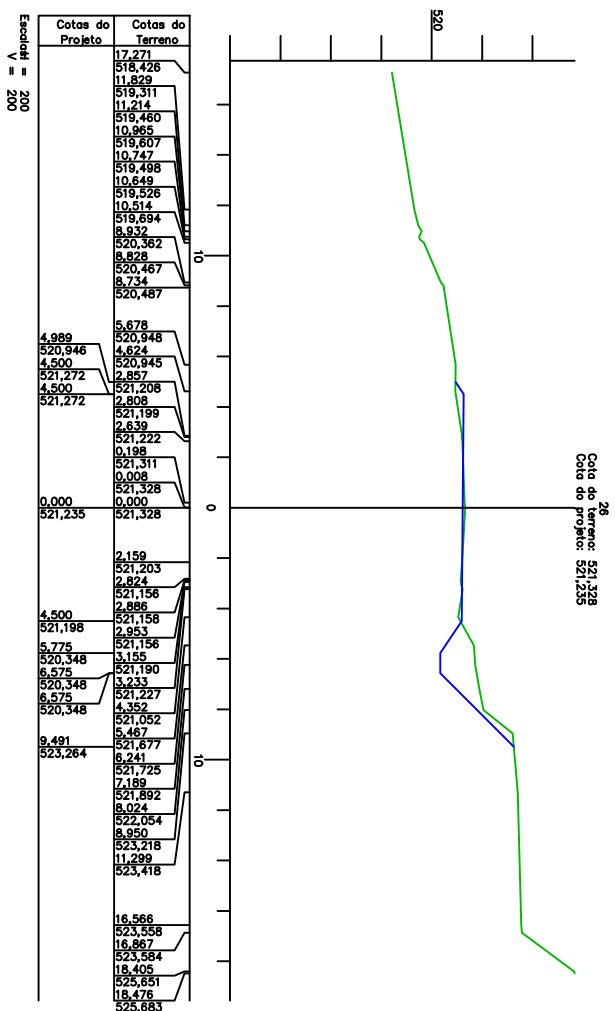


|                                                                                                                                                                                                                  |  |                                   |  |                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--|--------------------------------------------------|--|
|  <p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p> |  | Resp. Técnico:                    |  | Cliente:                                         |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                     |  | Data :<br>Dezembro/2021           |  | Eng. Civil Lauson Serafini<br>CREA/RS 123168-D   |  |
| Desenho :<br>Adriano Jr.                                                                                                                                                                                         |  | Escala :<br>1:300                 |  | Obra :<br>Pavimentação Asfáltica                 |  |
| Aprovação :<br>-                                                                                                                                                                                                 |  | Revisão :<br>01                   |  | Local :<br>Estrada de Acesso a Barra do Rio Azul |  |
| Prancha :<br>30                                                                                                                                                                                                  |  | Conteúdo :<br>Seções Transversais |  |                                                  |  |

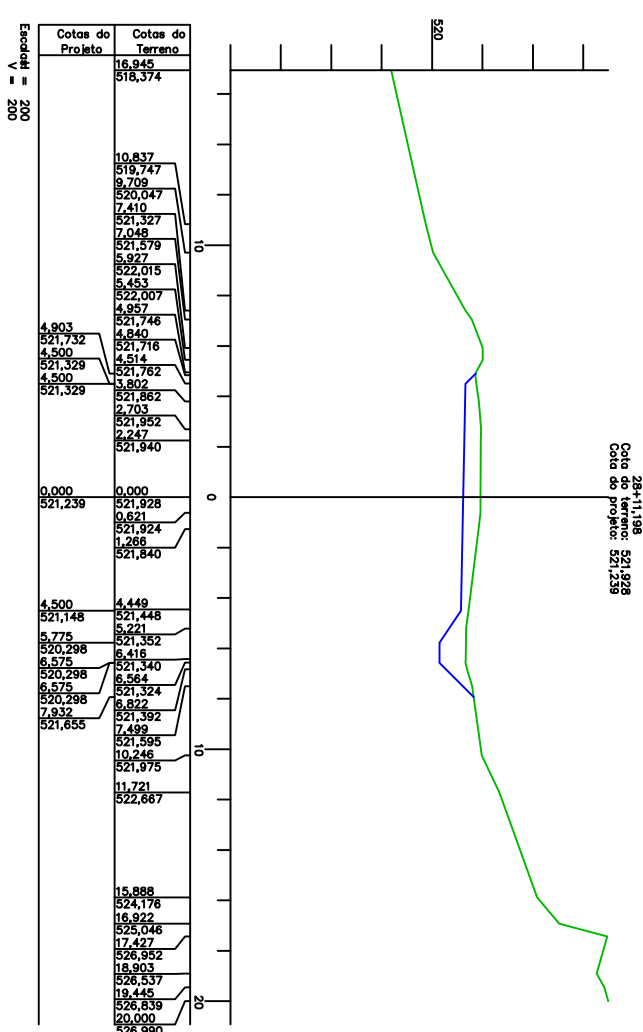
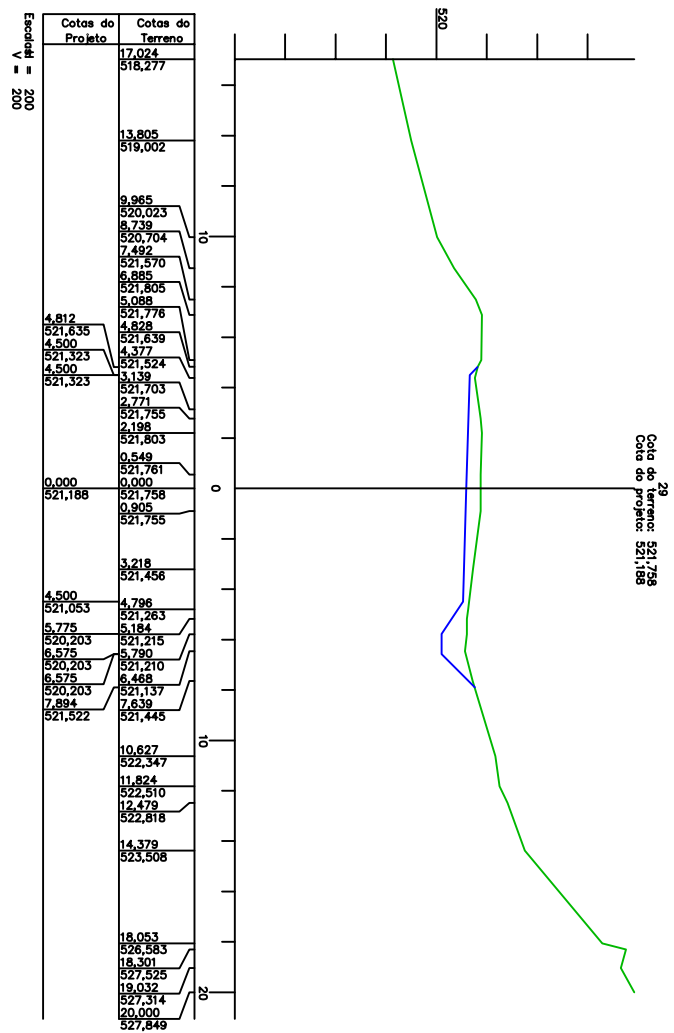
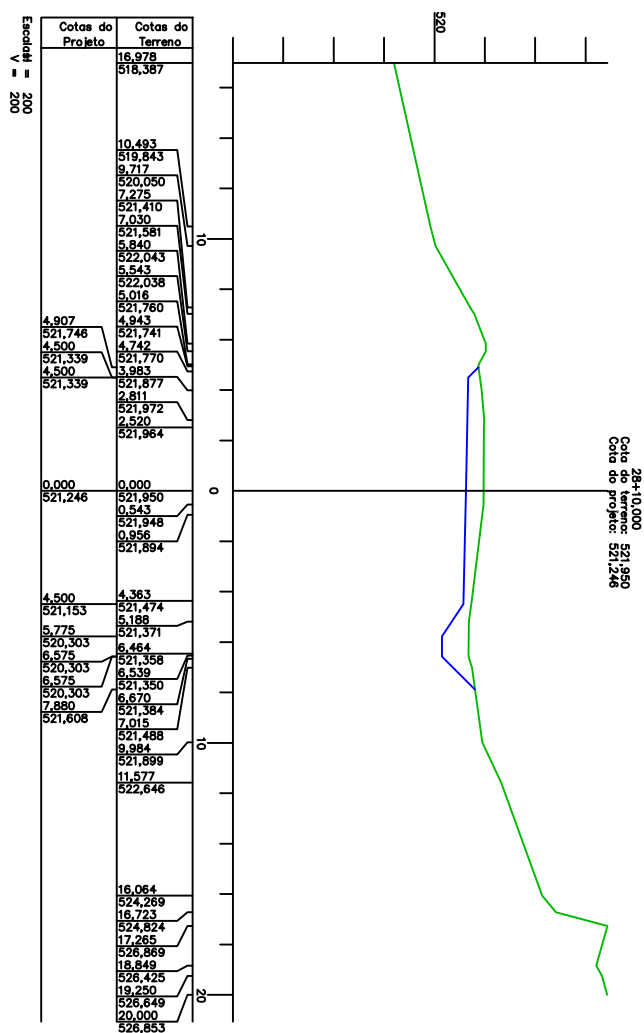
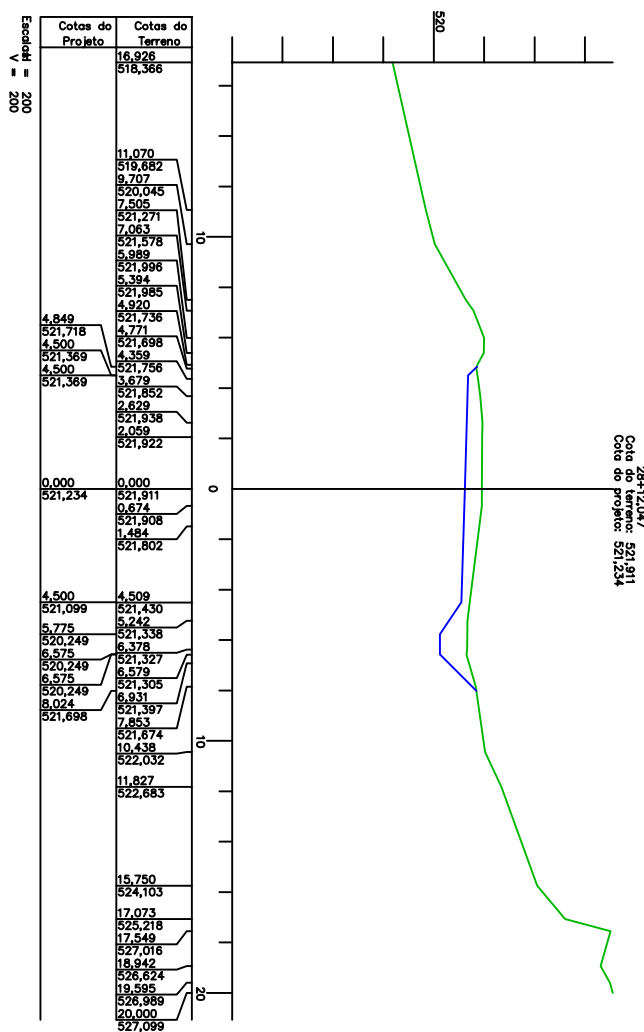
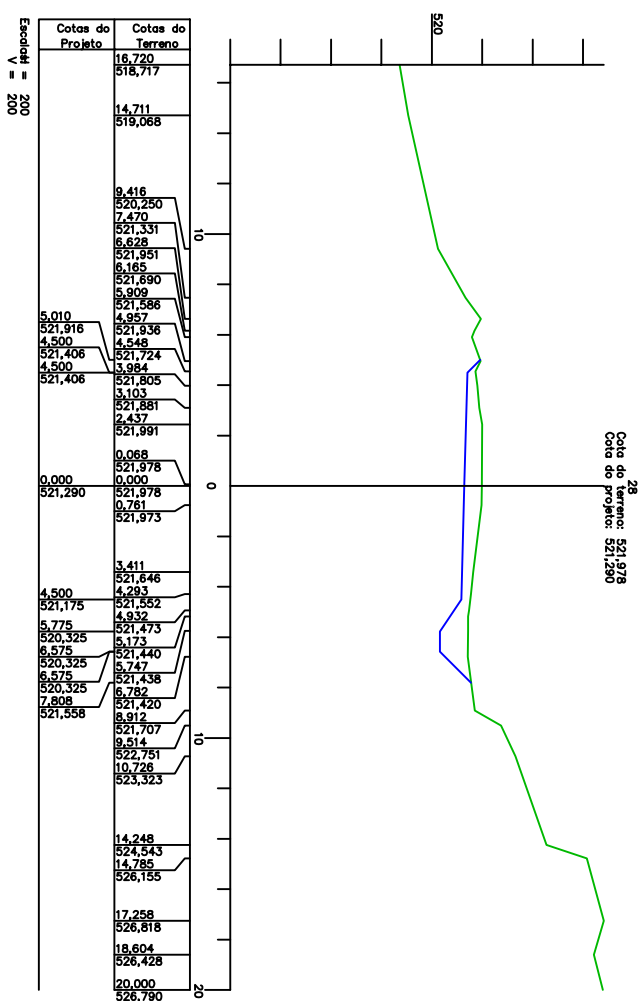


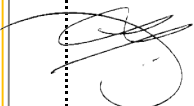
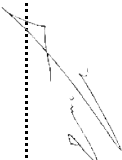


|                                                                                                                                                                                                                                      |                         |                                                                                                       |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Gelúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br> | Cliente:<br> |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                                     |                                                                                                 |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92                             |                                                                                                 |
|                                                                                                                                                                                                                                      |                         | Obra:<br>Pavimentação Asfáltica                                                                       |                                                                                                 |
| Aprovação:                                                                                                                                                                                                                           | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                                                                                                 |
| -                                                                                                                                                                                                                                    | Plancha :<br>32         | Conteúdo:<br>Seções Transversais                                                                      |                                                                                                 |

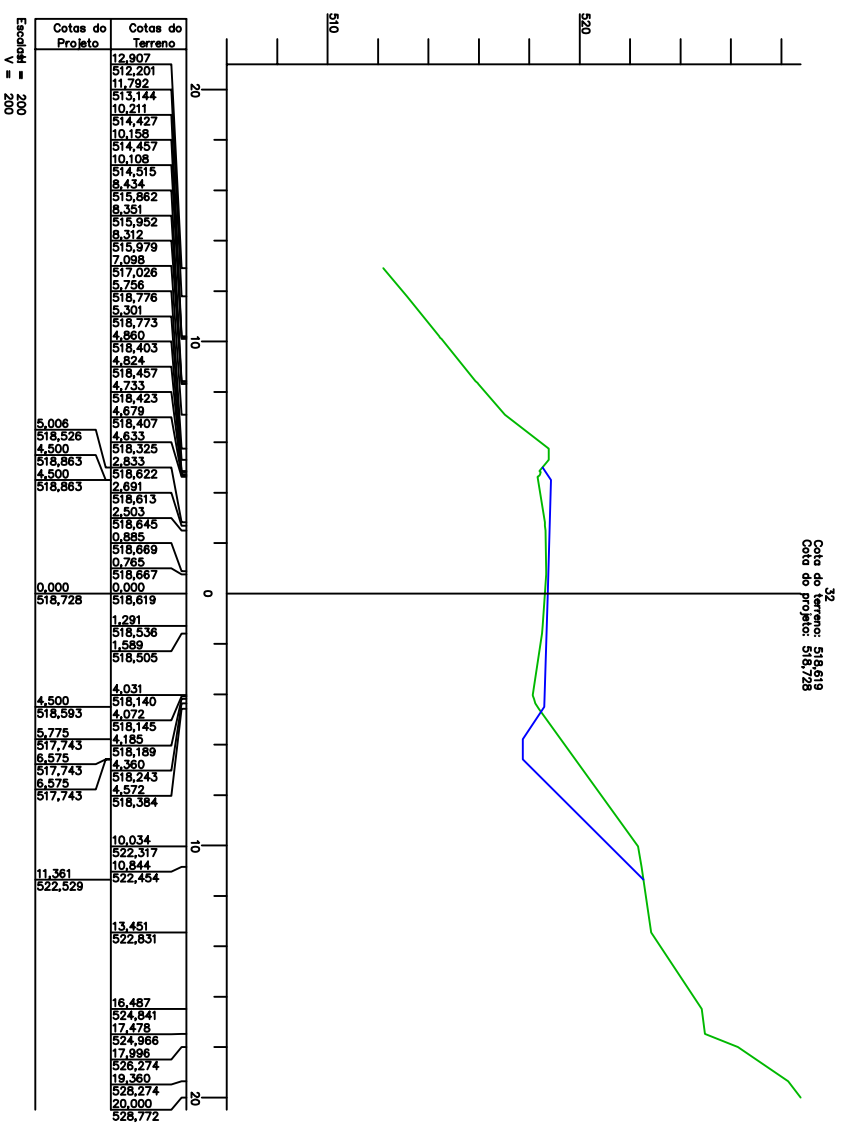
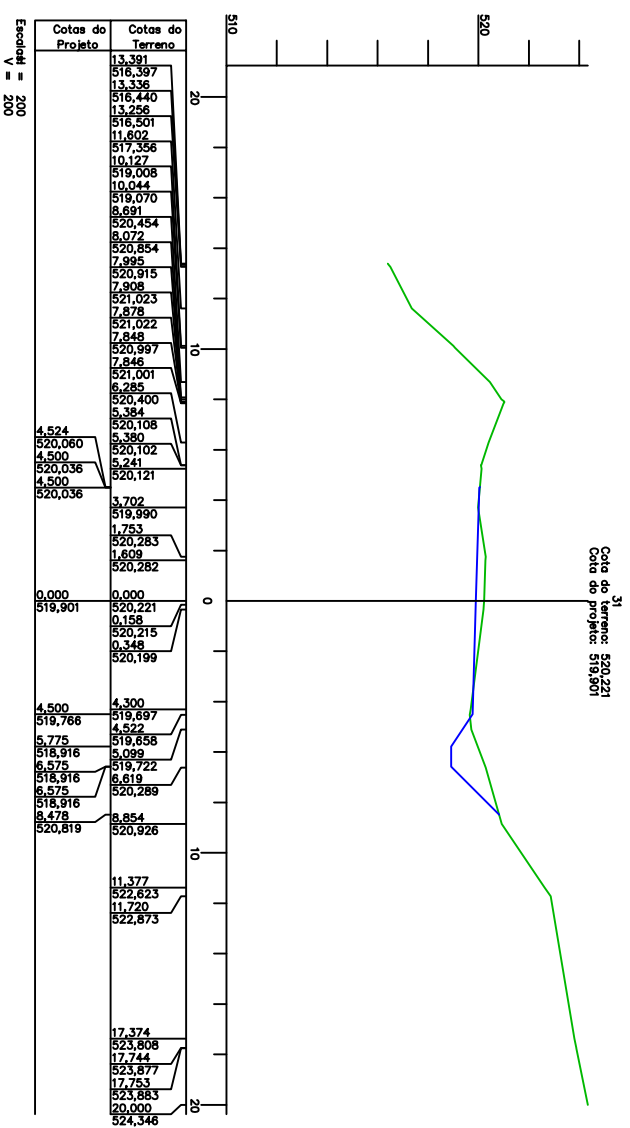
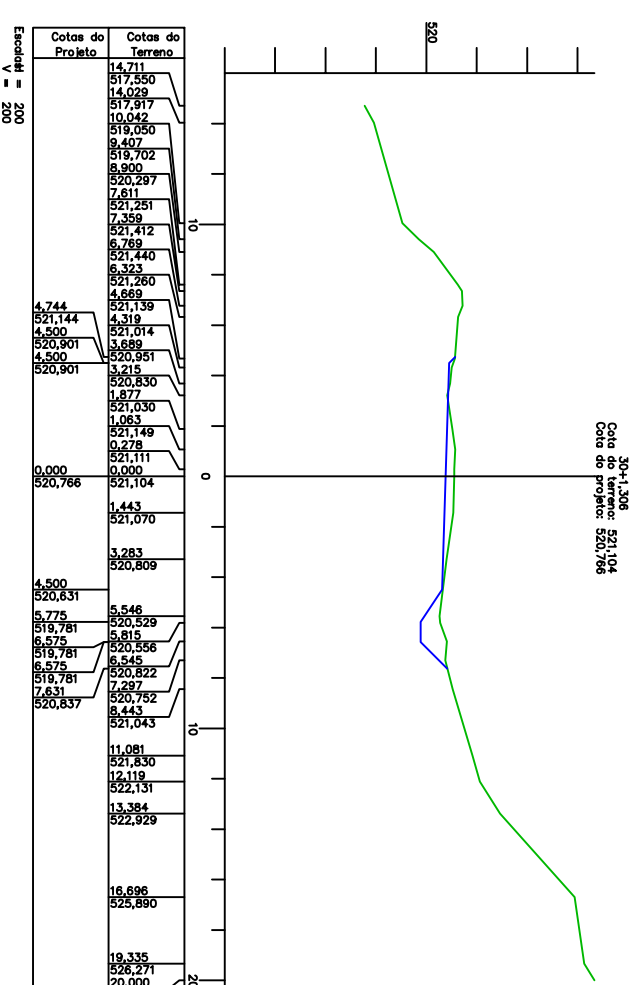
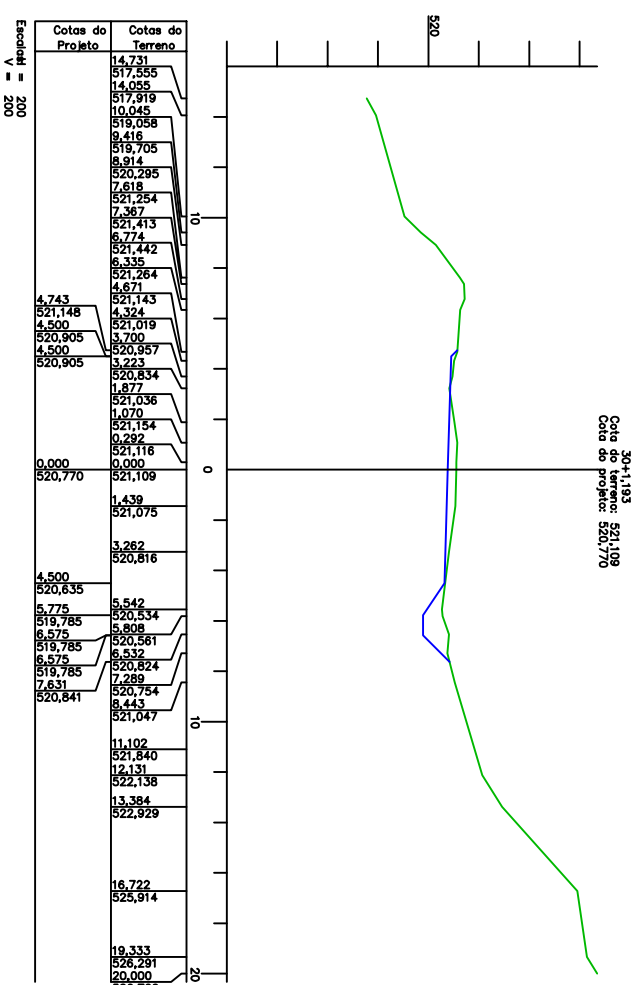
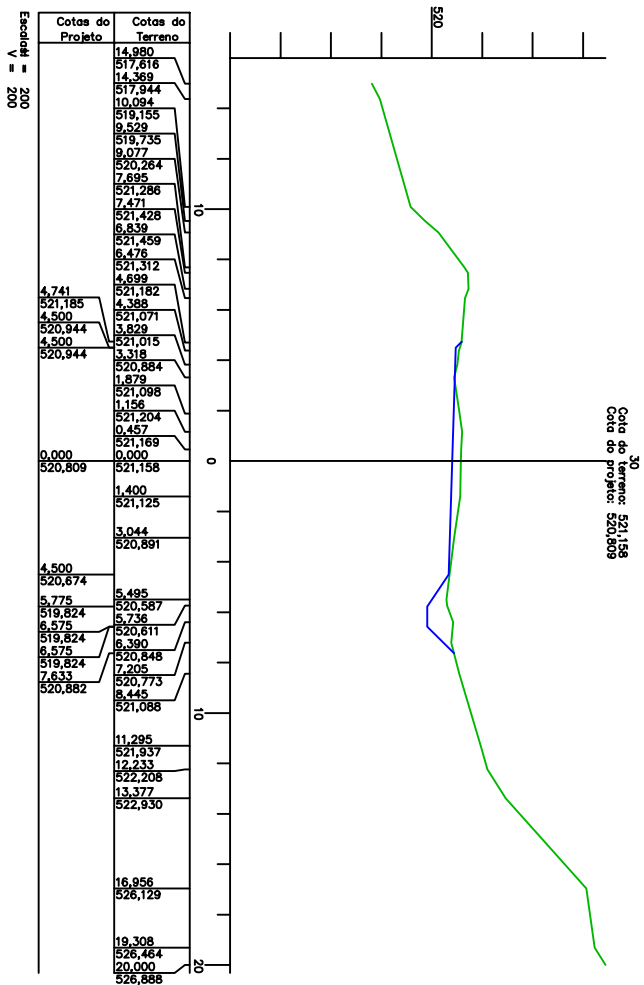


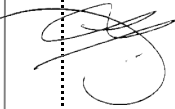
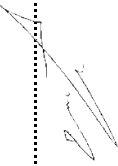
|                                                                                                                                                                                                                  |  |                                                  |  |                                                                           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|---------------------------------------------------------------------------|--|
|  <p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p> |  | Resp. Técnico:                                   |  | Cliente:                                                                  |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                     |  | Data :<br>Dezembro/2021                          |  | Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                            |  |
| Desenho :<br>Adriano Jr.                                                                                                                                                                                         |  | Escala :<br>1:300                                |  | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92 |  |
| Aprovação :<br>-                                                                                                                                                                                                 |  | Revisão :<br>01                                  |  | Obra :<br>Pavimentação Asfáltica                                          |  |
| Prancha :<br>33                                                                                                                                                                                                  |  | Local :<br>Estrada de Acesso a Barra do Rio Azul |  | Conteúdo :<br>Seções Transversais                                         |  |

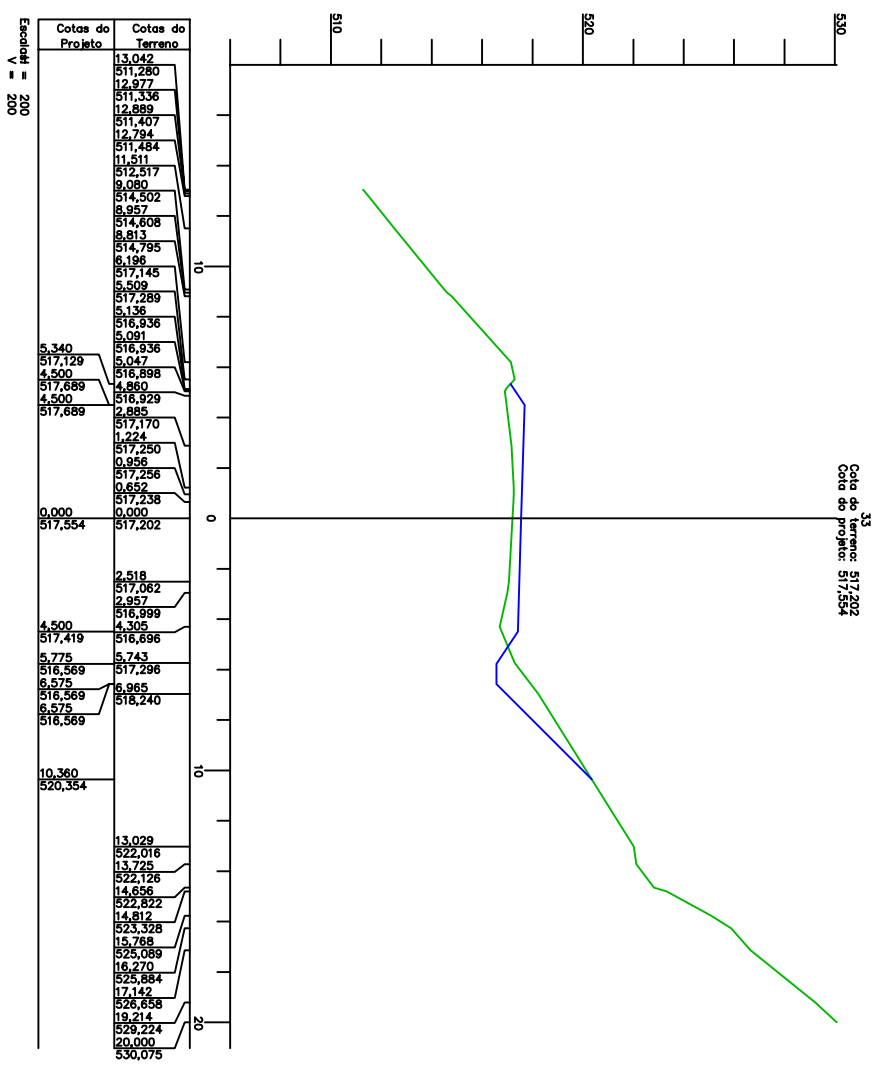
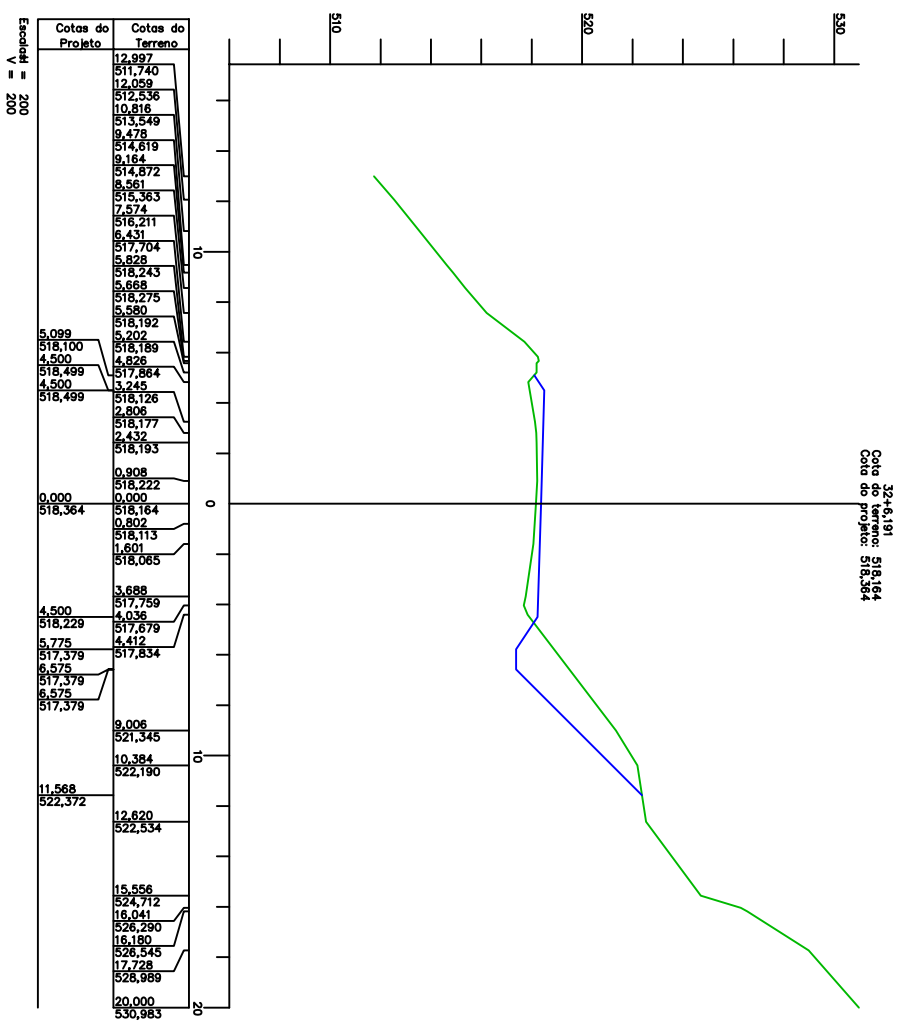
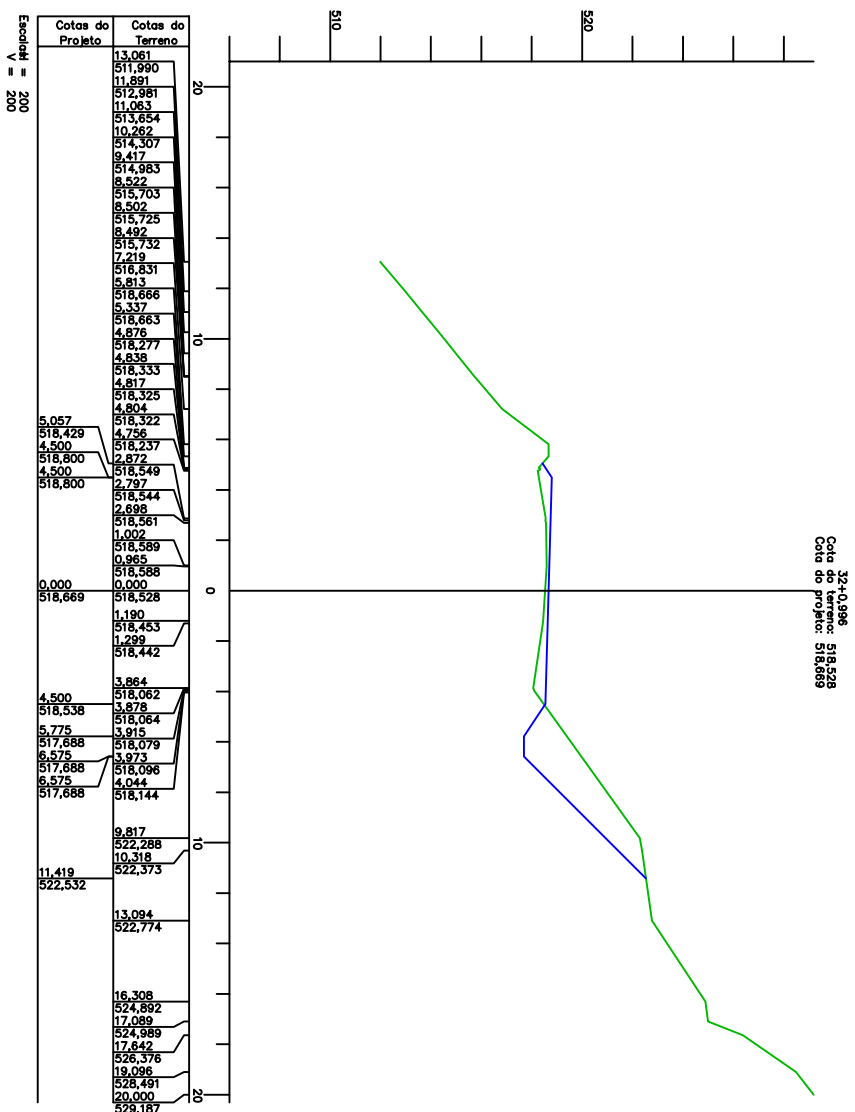


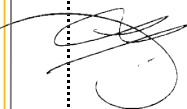
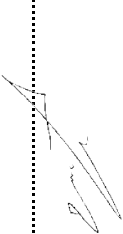
|                                                                                                                                                                                                                                                                                  |  |                                                                                                                             |  |                                                                                                                       |  |                          |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|--------------------------|--|
| <div><p><b>SERVIÇOS DE ENGENHARIA</b><br/><b>L. CAD</b></p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:<br/><br/>.....</div> |  | <div>Cliente:<br/><br/>.....</div> |  |                          |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                                                     |  | Data :<br>Dezembro/2021                                                                                                     |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                                         |  | CREA/RS 123168-D         |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                                          |  | Escala :<br>1:300                                                                                                           |  | Cliente: Pref. Municipal de Barra do Rio Azul                                                                         |  | CNPJ: 93.539.153/0001-92 |  |
|                                                                                                                                                                                                                                                                                  |  |                                                                                                                             |  | Obra:<br>Pavimentação Asfáltica                                                                                       |  |                          |  |
| Aprovação:                                                                                                                                                                                                                                                                       |  | Revisão :<br>01                                                                                                             |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                                      |  |                          |  |
| -                                                                                                                                                                                                                                                                                |  | Prancha :<br>34                                                                                                             |  | Conteúdo:<br>Seções Transversais                                                                                      |  |                          |  |



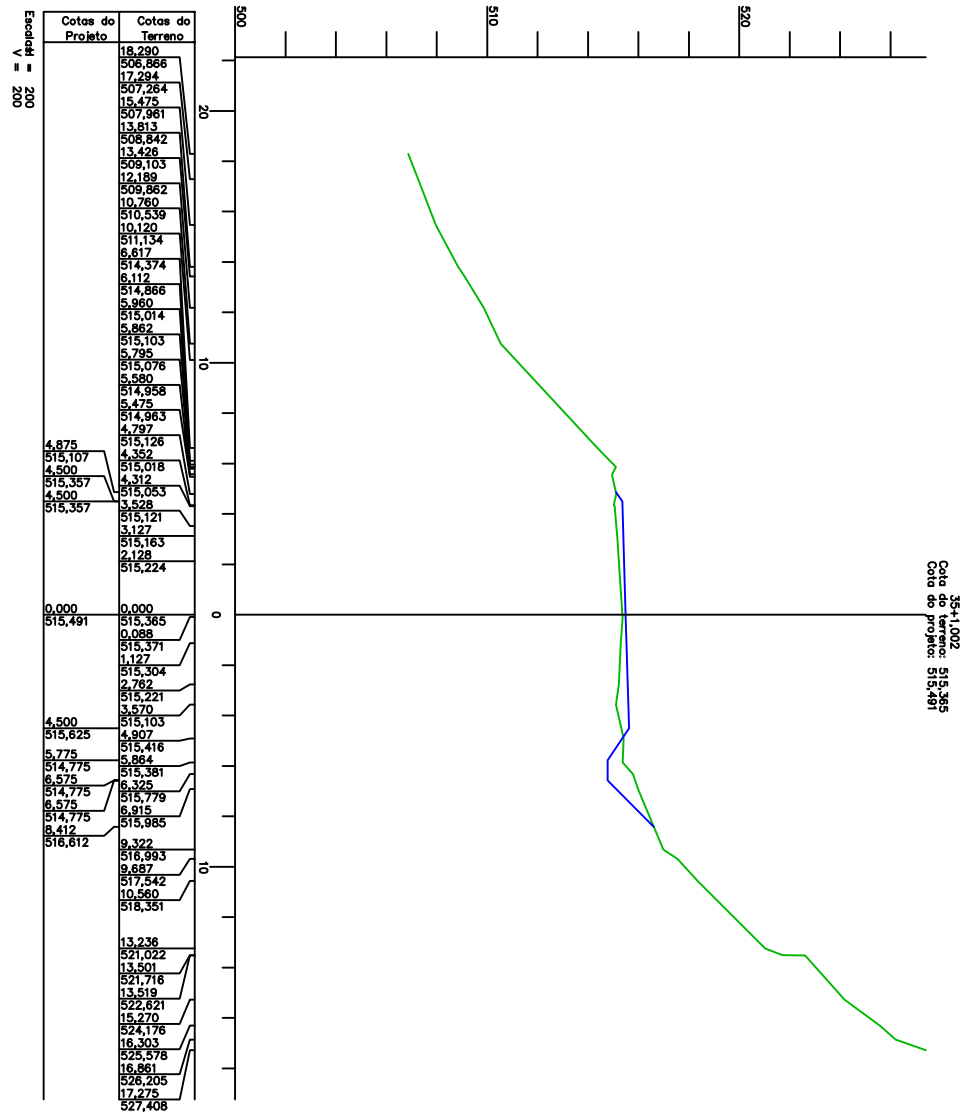
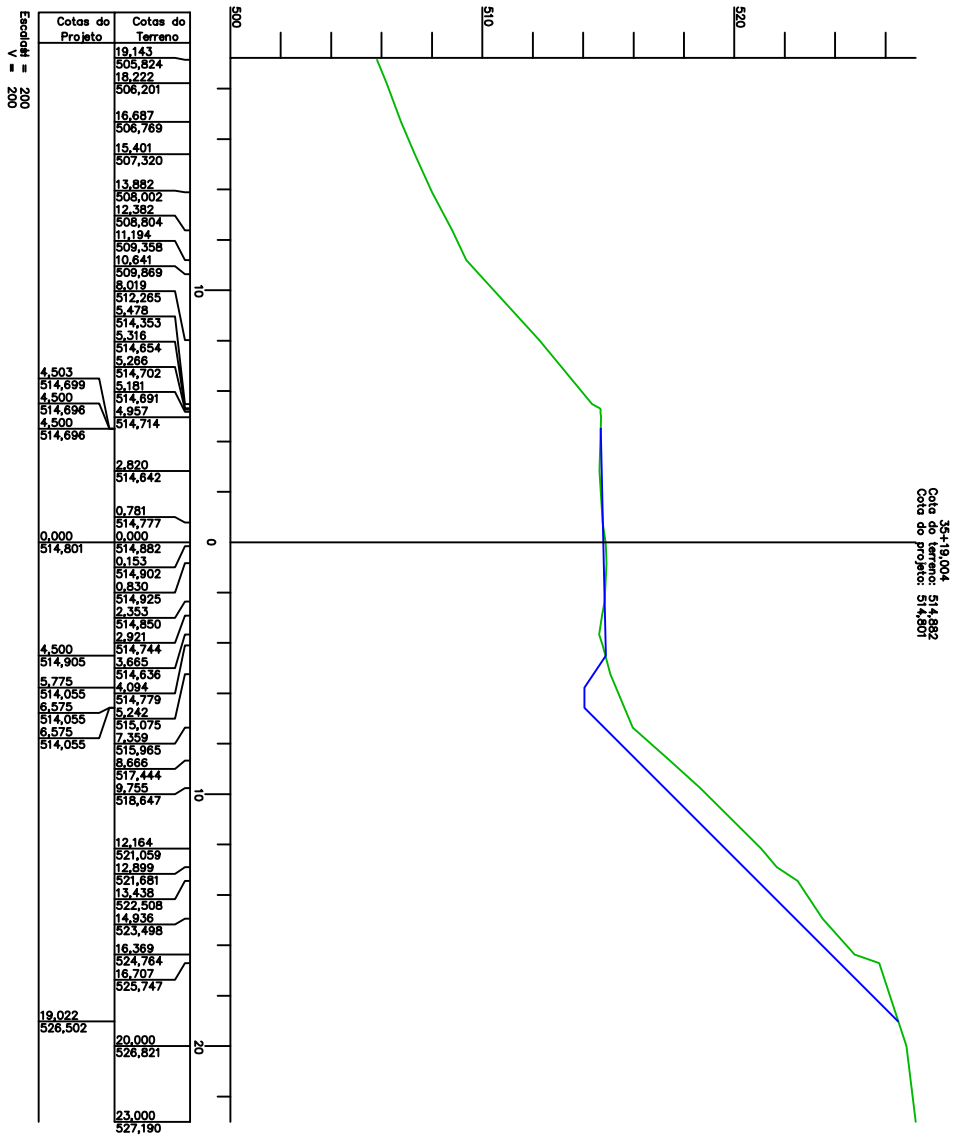
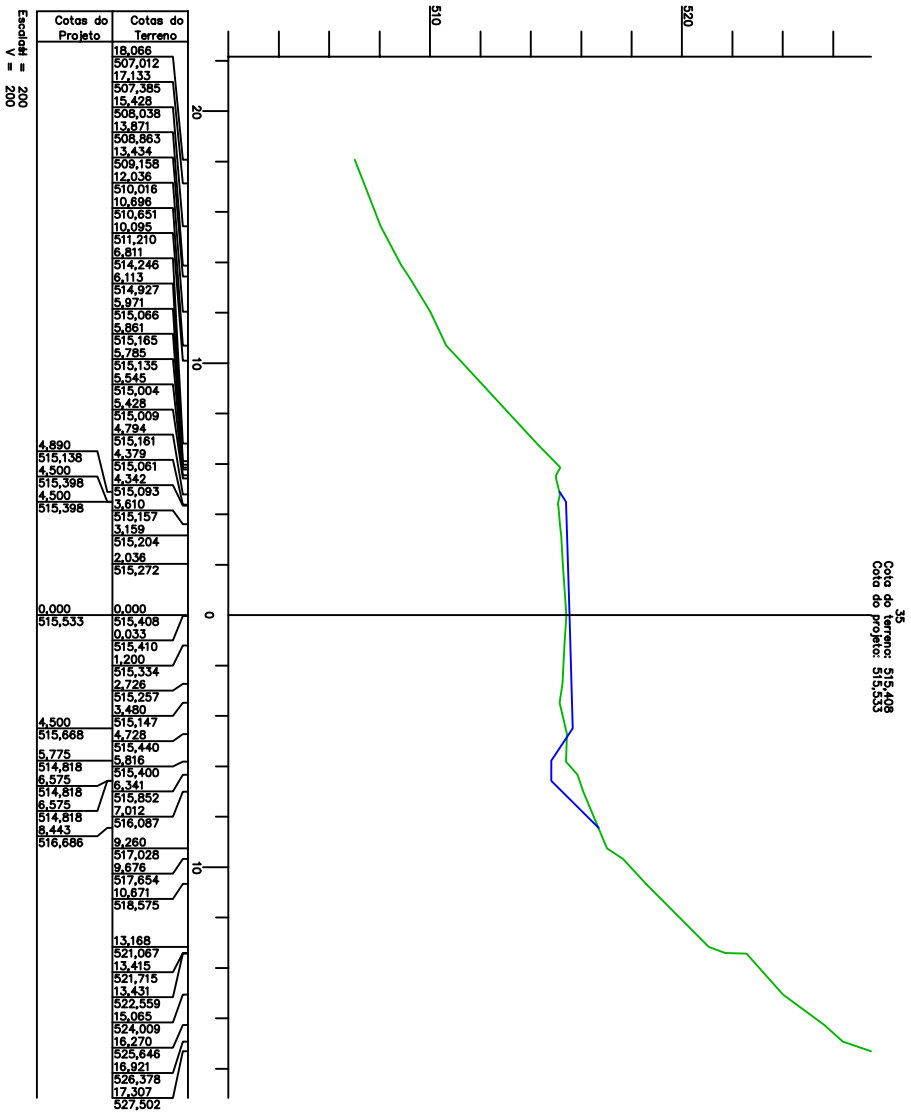


|                                                                                                                                                     |  |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div><p><b>SERVIÇOS DE ENGENHARIA</b><br/><b>LCA D</b></p></div> |  | Resp. Técnico:                                                                      |                                                                                     |
| Av. Borges de Medeiros, 615 - Sala 104<br>Gelúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335                                 |  |  |                                                                                     |
| Projeto :<br>Lauson Serafini                                                                                                                        |  | Data :<br>Dezembro/2021                                                             | Cliente:                                                                            |
| Desenho:<br>Adriano Jr.                                                                                                                             |  | Escala :<br>1:300                                                                   |  |
| Aprovação:<br>-                                                                                                                                     |  | Revisão :<br>01                                                                     |                                                                                     |
| Plancha :<br>35                                                                                                                                     |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |                                                                                     |
|                                                                                                                                                     |  | Obra:<br>Pavimentação Asfáltica                                                     |                                                                                     |
|                                                                                                                                                     |  | Conteúdo:<br>Seções Transversais                                                    |                                                                                     |

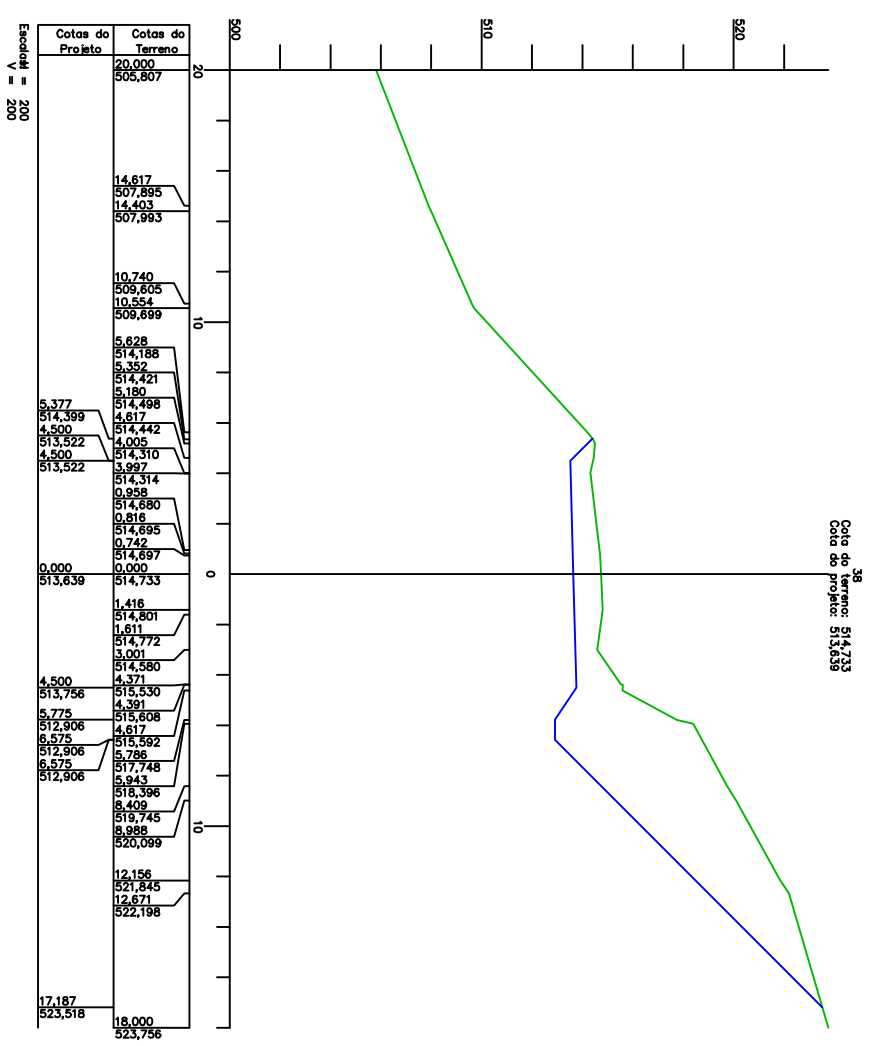
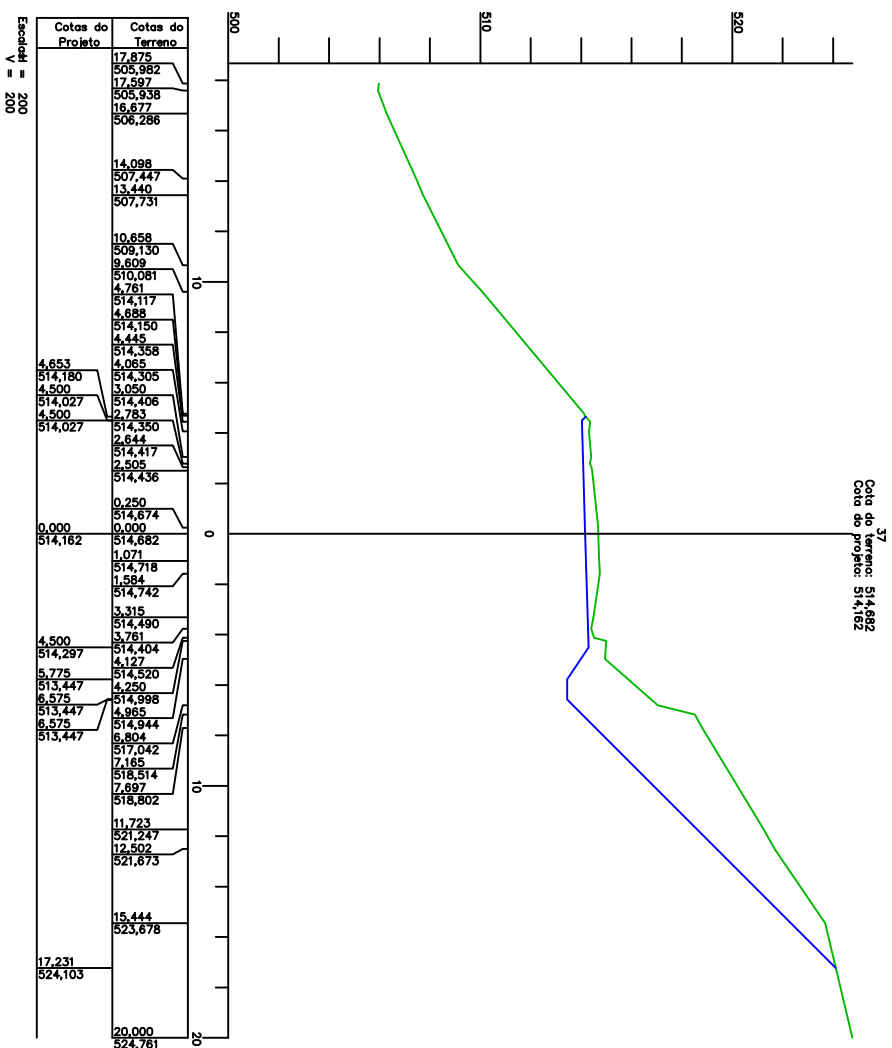
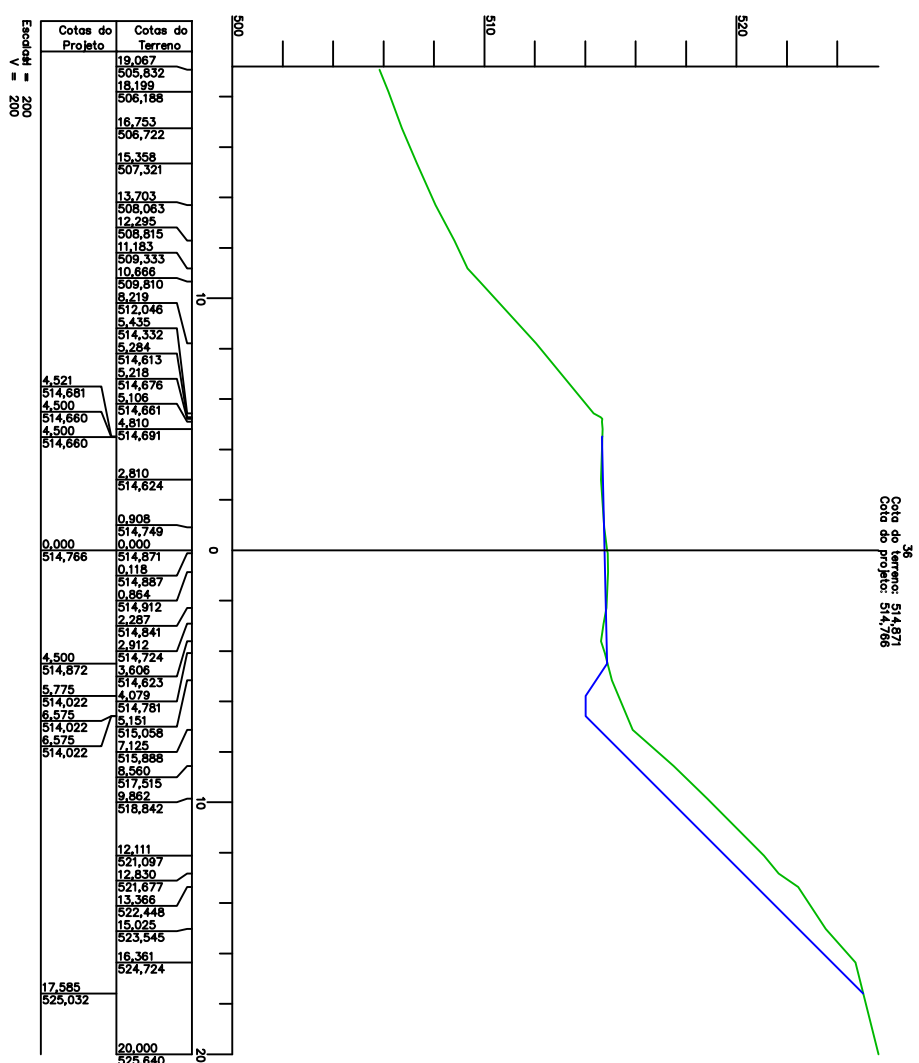


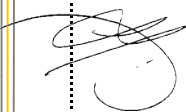
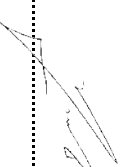
|                                                                                                                                                                                                                                      |                         |                                                                                                                |                          |                                                                                                          |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------|--|
| <br>SERVICOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br><br>..... |                          | Cliente:<br><br>..... |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                                  | CREA/RS 123168-D         |                                                                                                          |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                                                  | CNPJ: 93.539.153/0001-92 |                                                                                                          |  |
|                                                                                                                                                                                                                                      |                         | Obra:<br>Pavimentação Asfáltica                                                                                |                          |                                                                                                          |  |
| Aprovação:<br>-                                                                                                                                                                                                                      | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                               |                          |                                                                                                          |  |
|                                                                                                                                                                                                                                      | Prancha :<br>36         | Conteúdo:<br>Seções Transversais                                                                               |                          |                                                                                                          |  |



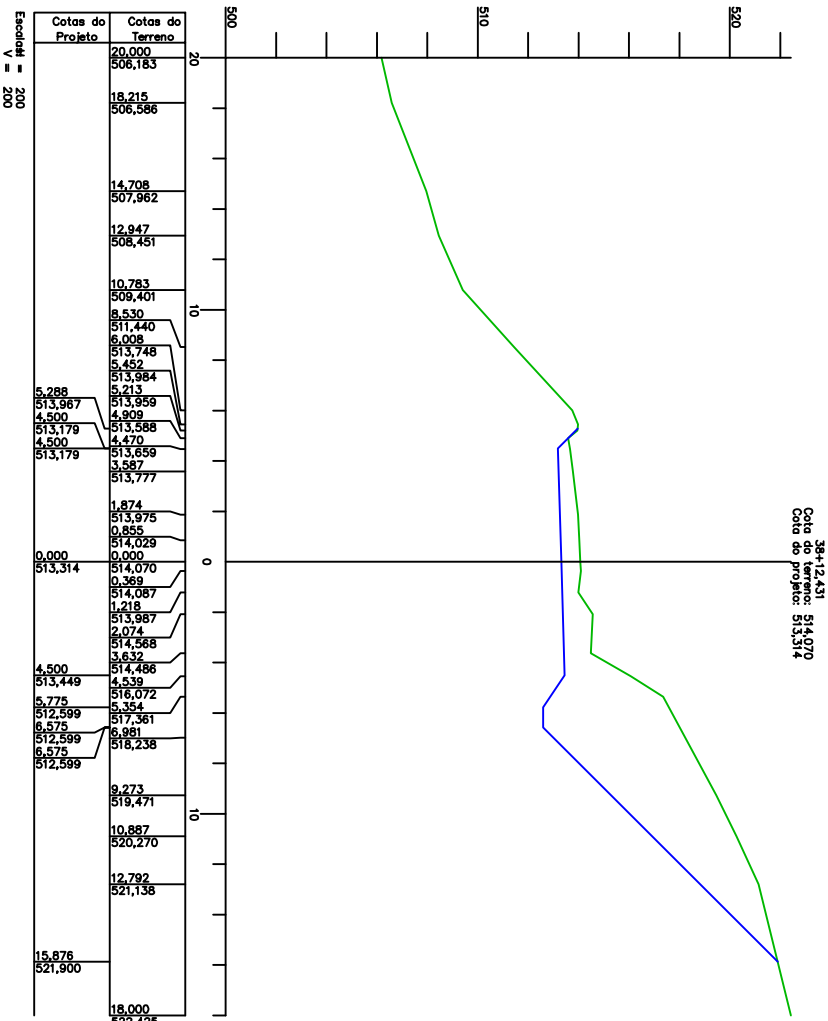
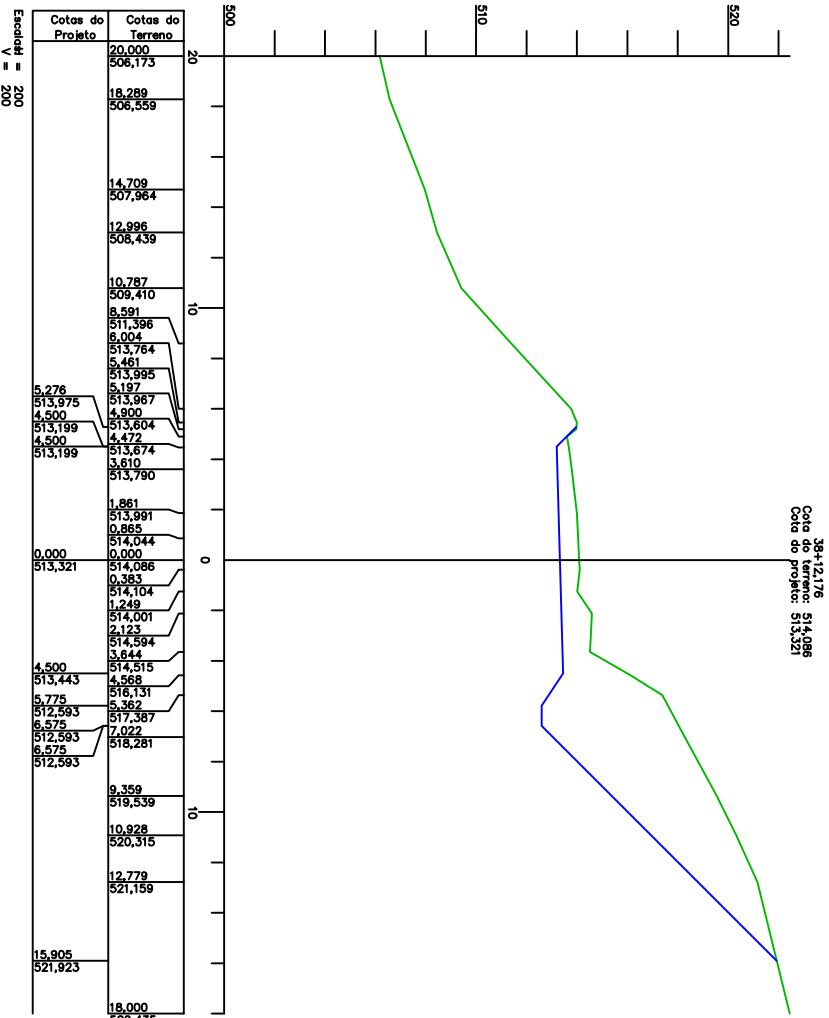
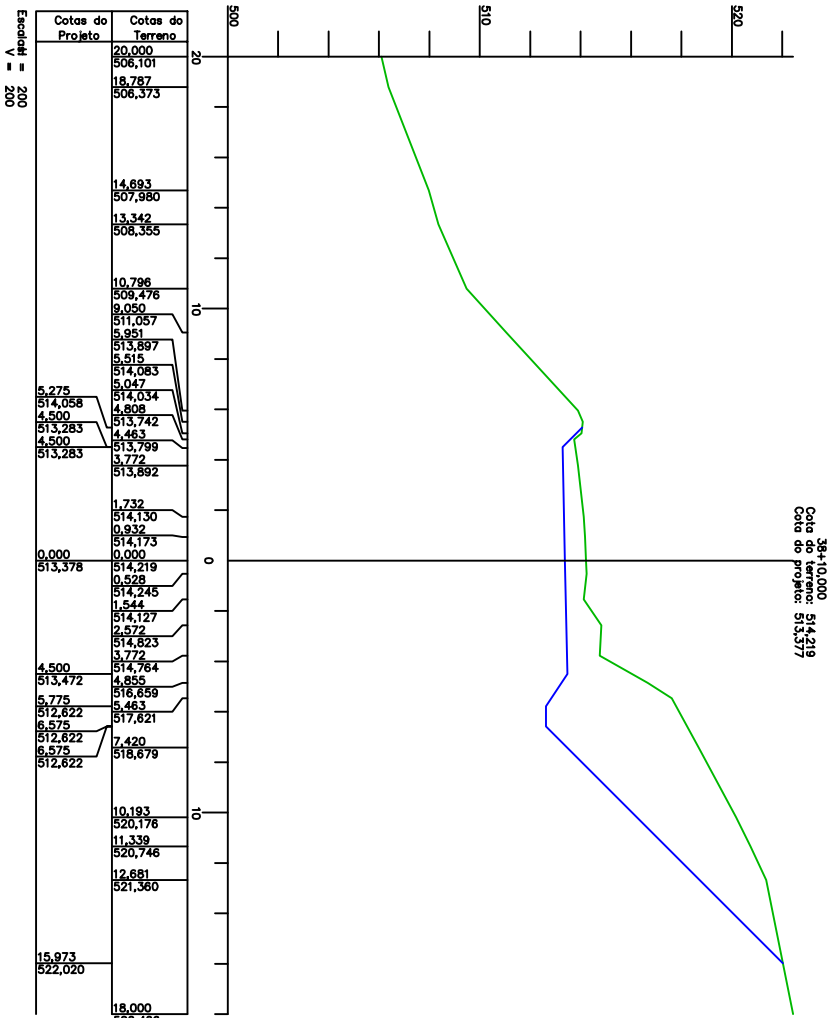


|                                                                                                                                                                                                            |  |                         |  |                                                                         |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|-------------------------------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  | Resp. Técnico:          |  | Cliente:                                                                |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               |  | Data :<br>Dezembro/2021 |  | Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                          |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    |  | Escala :<br>1:300       |  | Cliente: Pref. Municipal de Barra do Rio Azul<br>Pavimentação Asfáltica |  |
| Aprovação:                                                                                                                                                                                                 |  | Revisão :<br>01         |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                        |  |
| -                                                                                                                                                                                                          |  | Prancha :<br>38         |  | Conteúdo:<br>Seções Transversais                                        |  |



|                                                                                                                                                                                                                                                                                       |                         |                                                                                                       |  |                                                                                                 |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|
| <div><p><b>SERVIÇOS DE ENGENHARIA</b><br/><b>L. CAD</b></p></div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |                         | Resp. Técnico:<br> |  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                                                          | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                                     |  |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                                               | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92                             |  |                                                                                                 |  |
|                                                                                                                                                                                                                                                                                       |                         | Obra:<br>Pavimentação Asfáltica                                                                       |  |                                                                                                 |  |
| Aprovação:                                                                                                                                                                                                                                                                            | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |  |                                                                                                 |  |
| -                                                                                                                                                                                                                                                                                     | Plancha :<br>39         | Conteúdo:<br>Seções Transversais                                                                      |  |                                                                                                 |  |

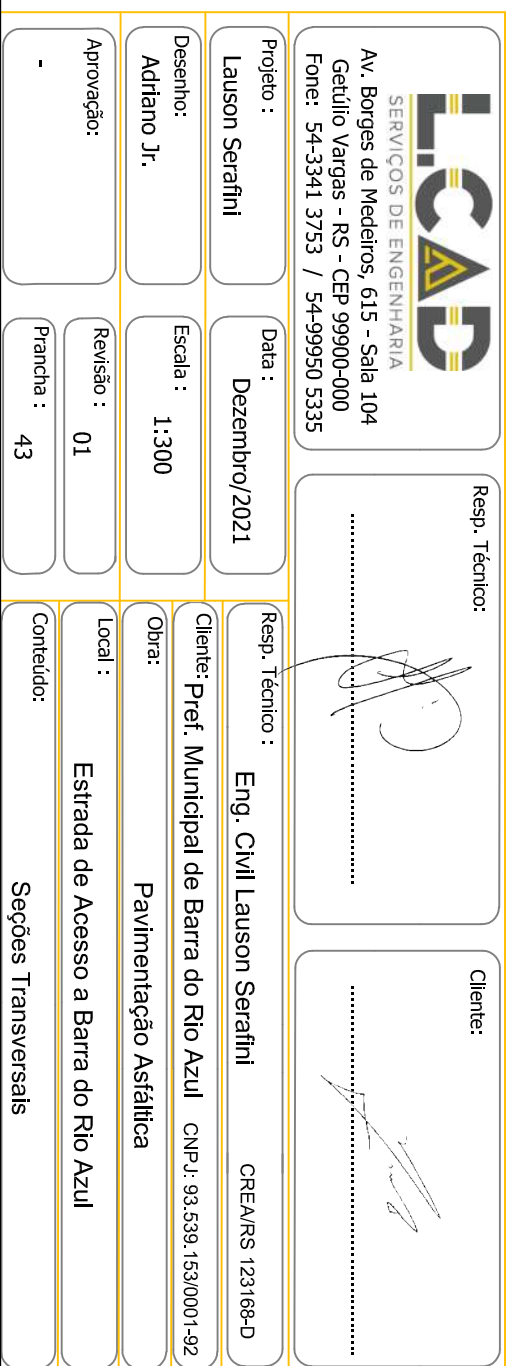
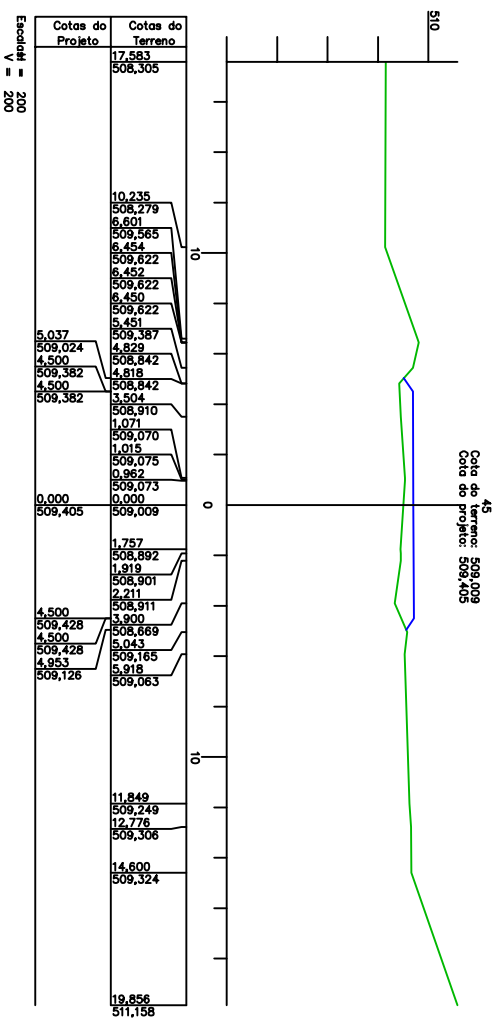
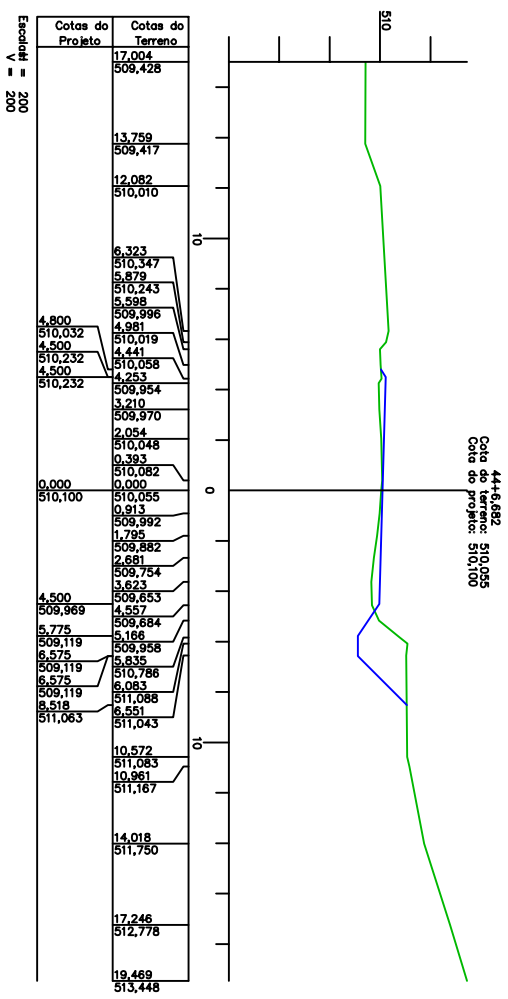
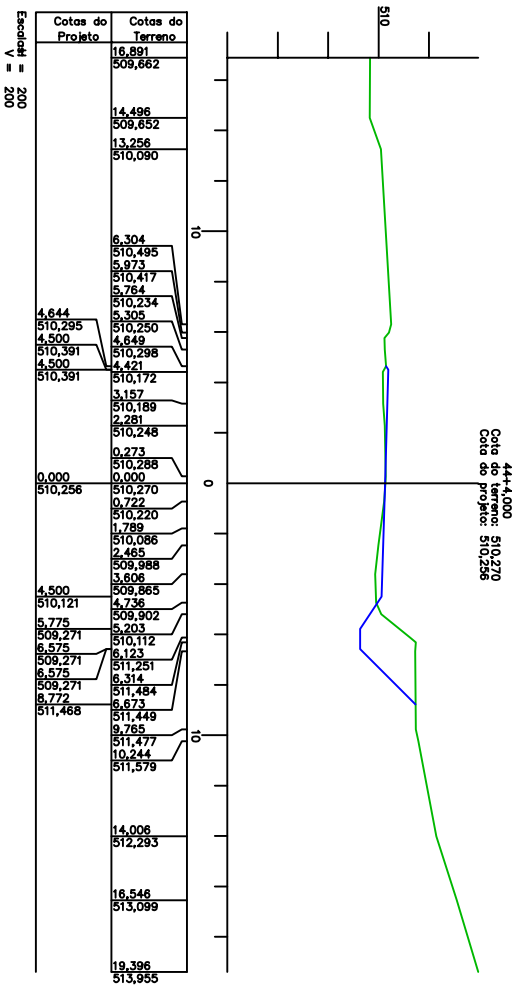
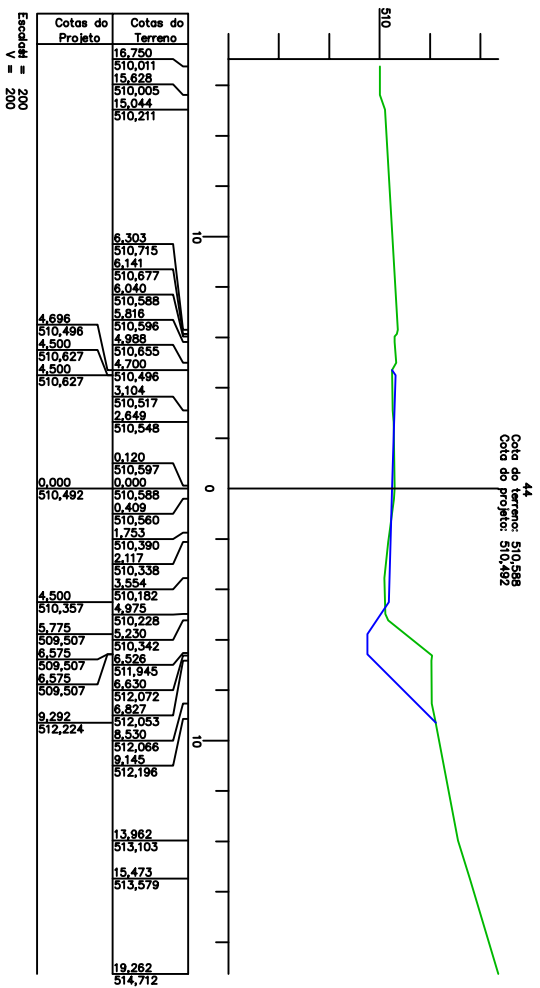
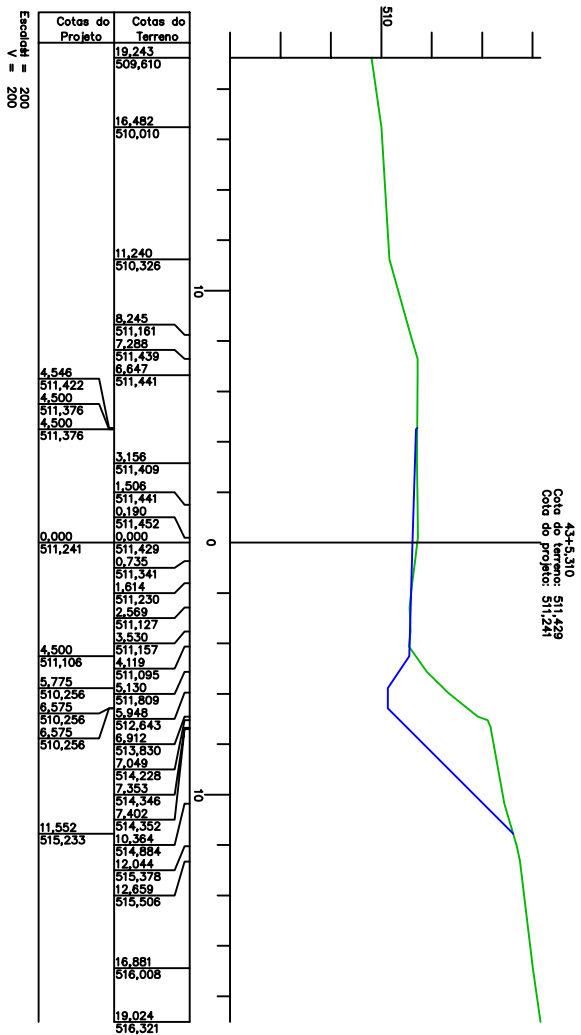


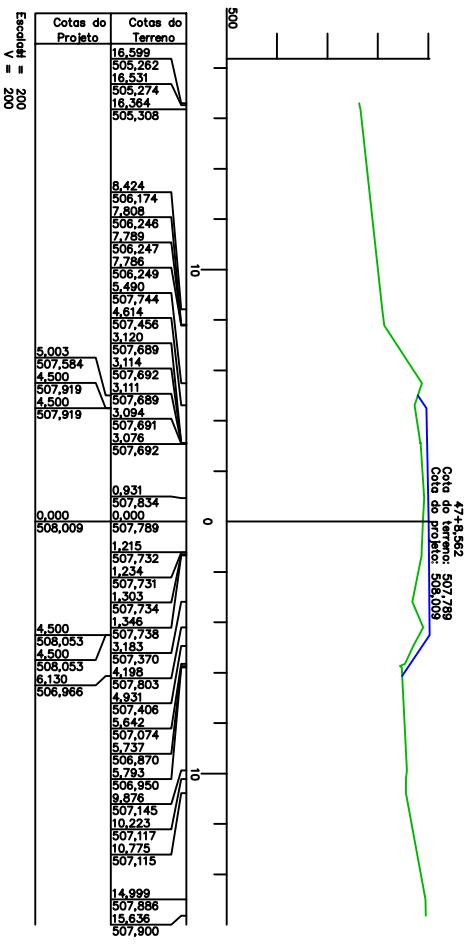
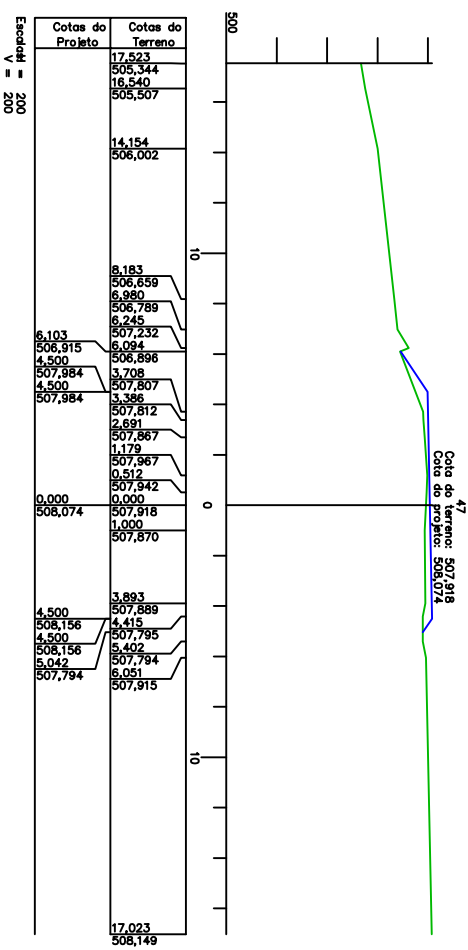
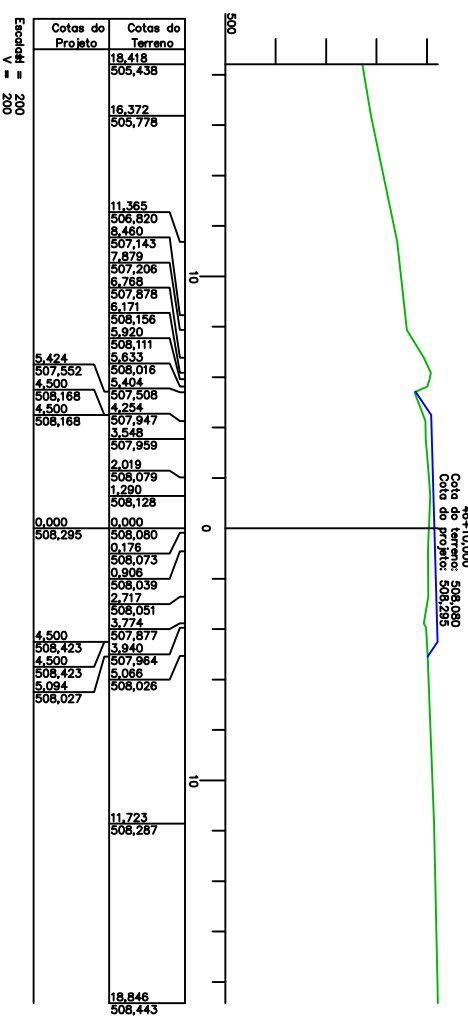
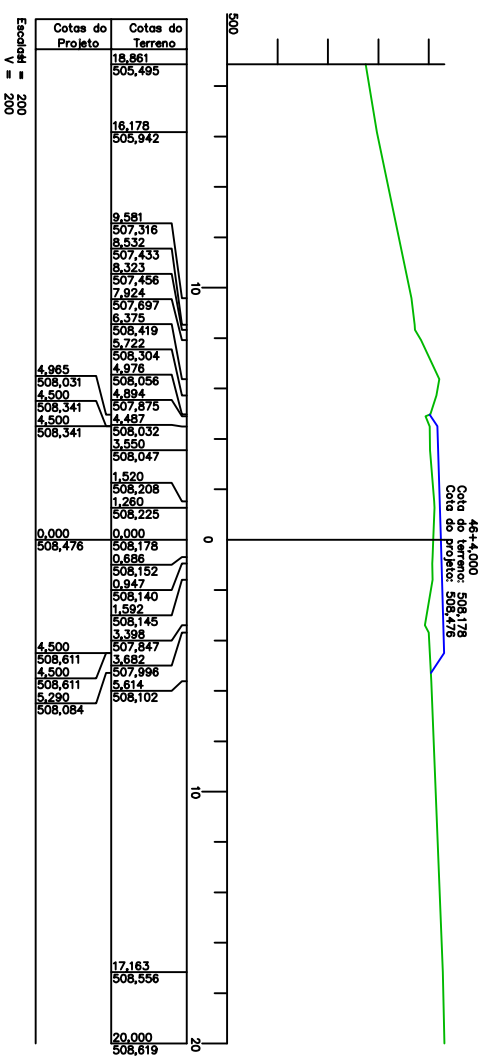
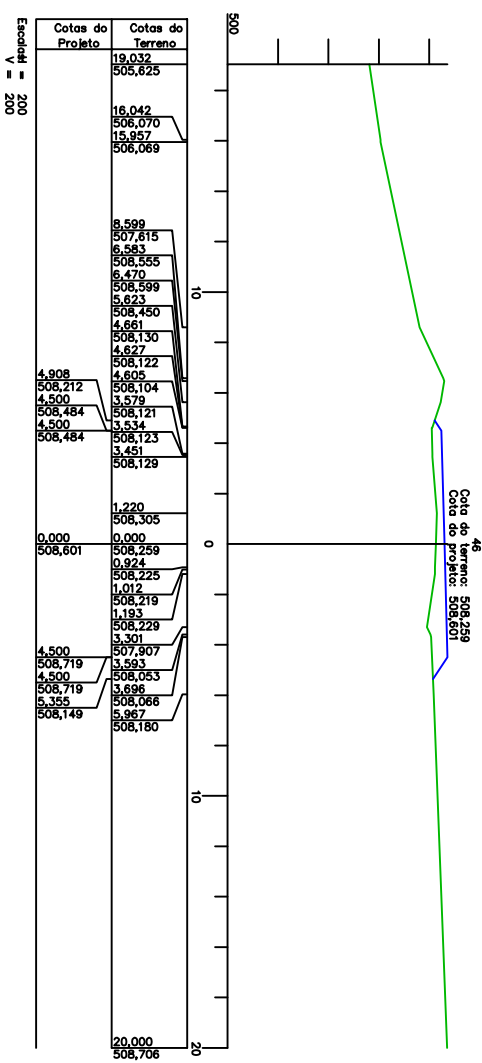
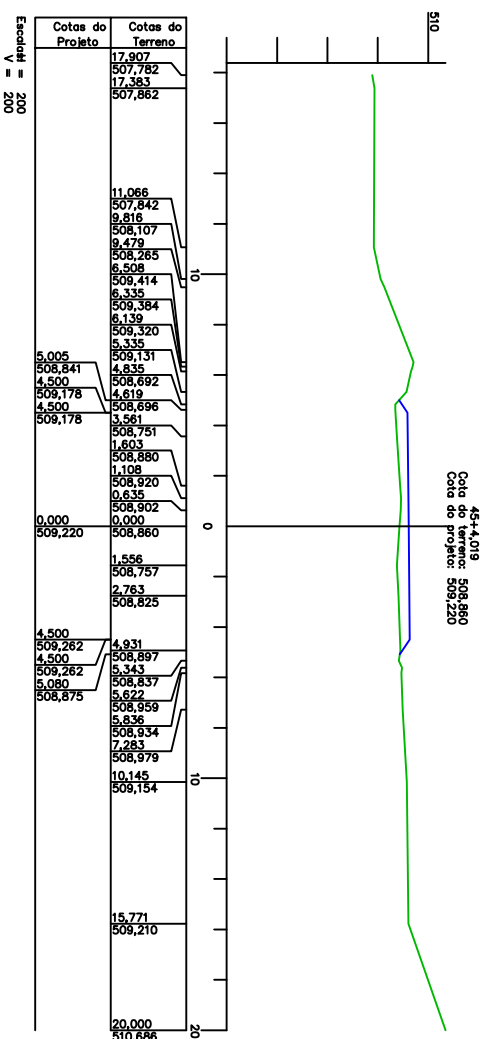


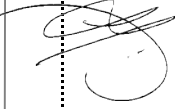
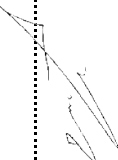
|                                                                                                                                                                                                            |  |                         |  |                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|--------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  | Resp. Técnico:          |  | Cliente:                                         |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               |  | Data :<br>Dezembro/2021 |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini    |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    |  | Escala :<br>1:300       |  | Cliente: Pref. Municipal de Barra do Rio Azul    |  |
| Aprovação:                                                                                                                                                                                                 |  | Revisão :<br>01         |  | Obra: Pavimentação Asfáltica                     |  |
| -                                                                                                                                                                                                          |  | Prancha :<br>40         |  | Local :<br>Estrada de Acesso a Barra do Rio Azul |  |
|                                                                                                                                                                                                            |  |                         |  | Conteúdo: Seções Transversais                    |  |



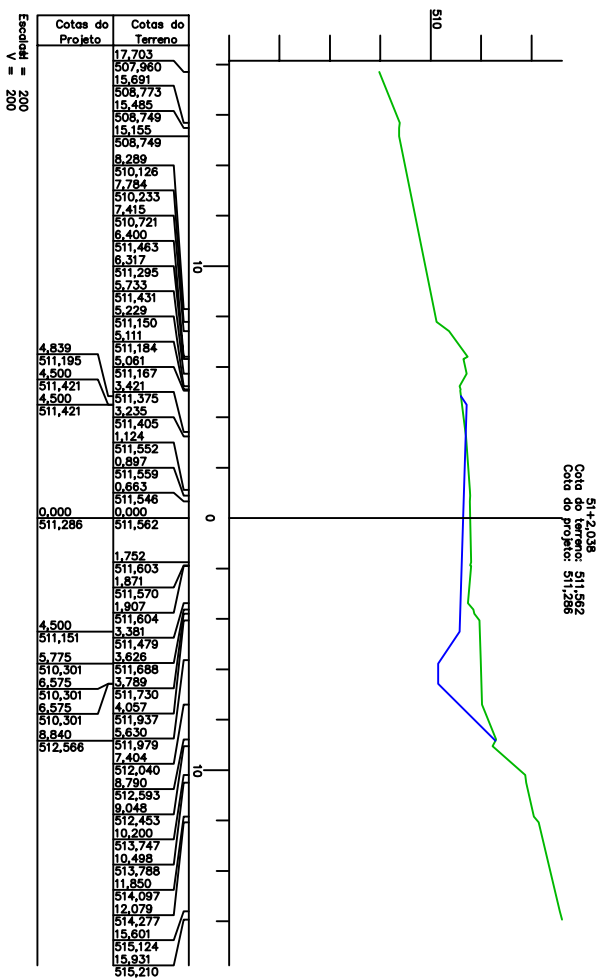
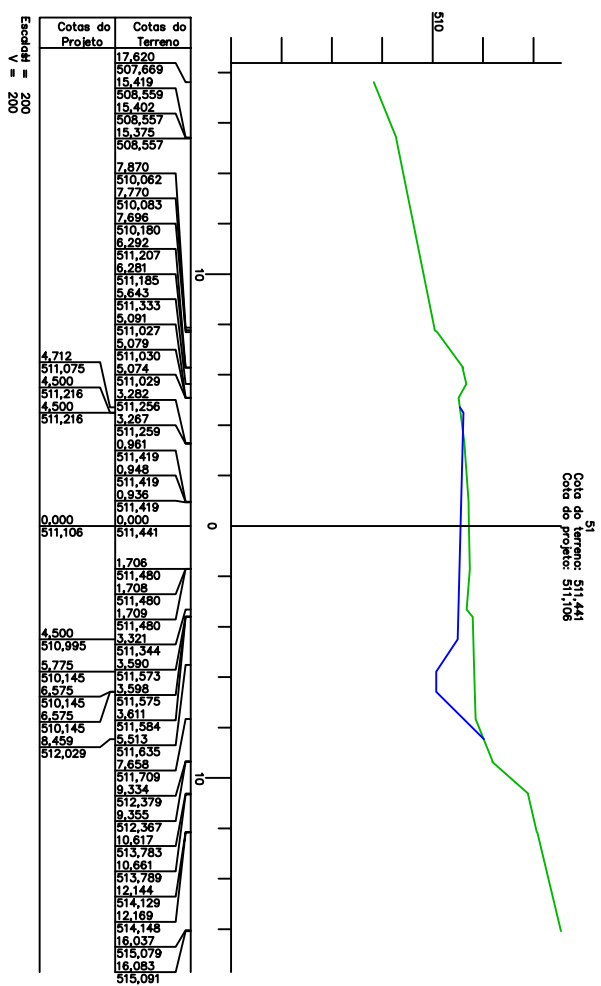
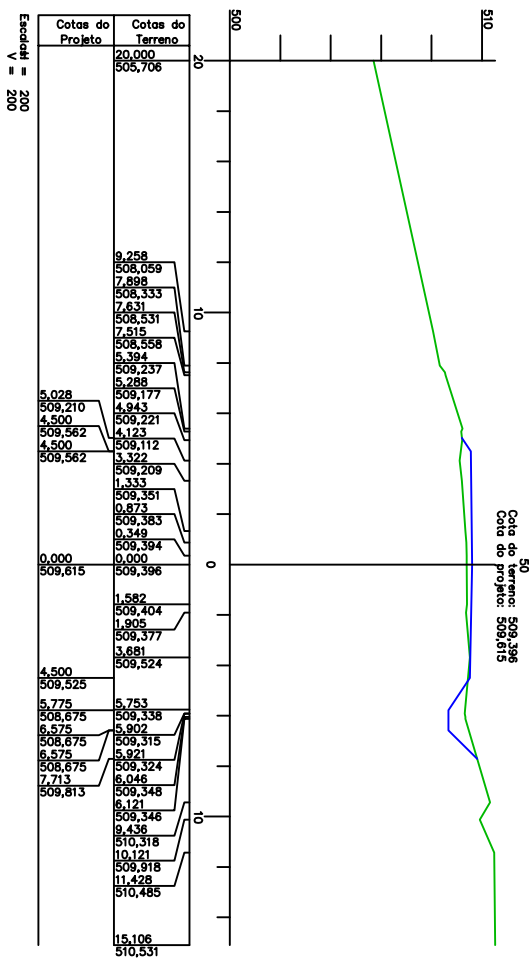
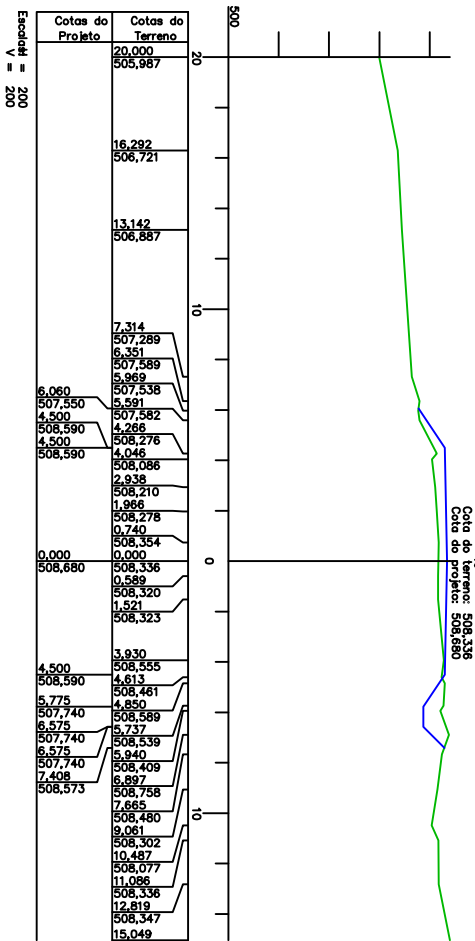
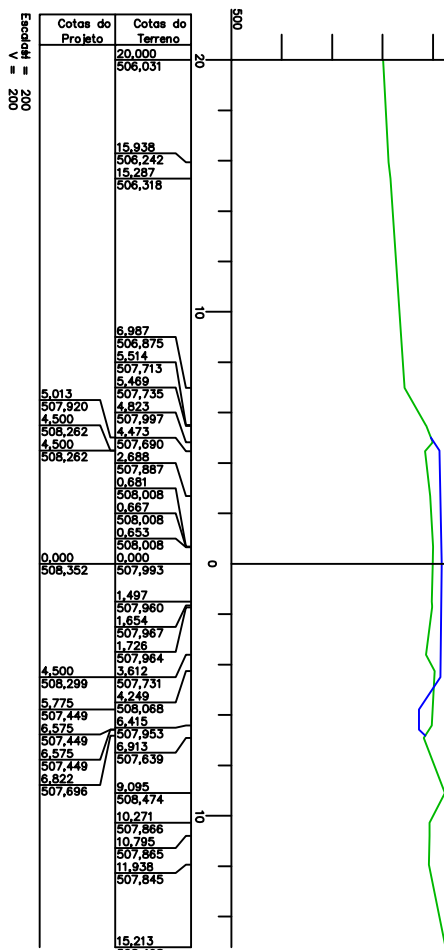
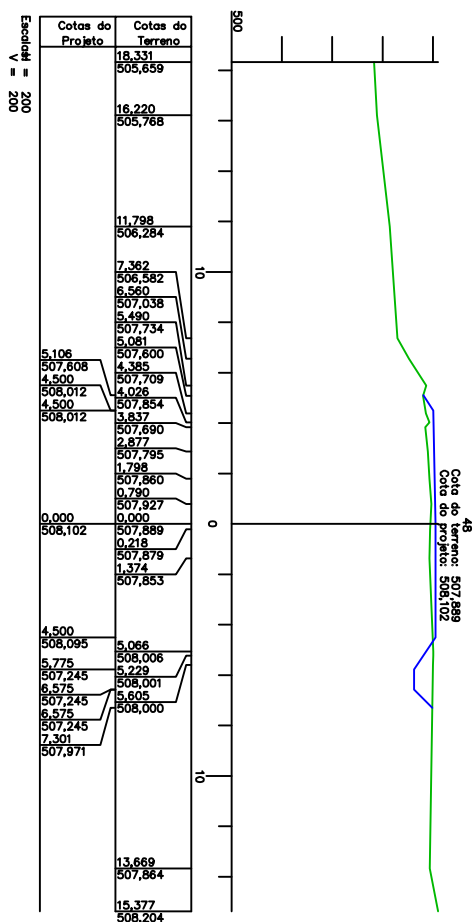


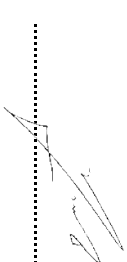


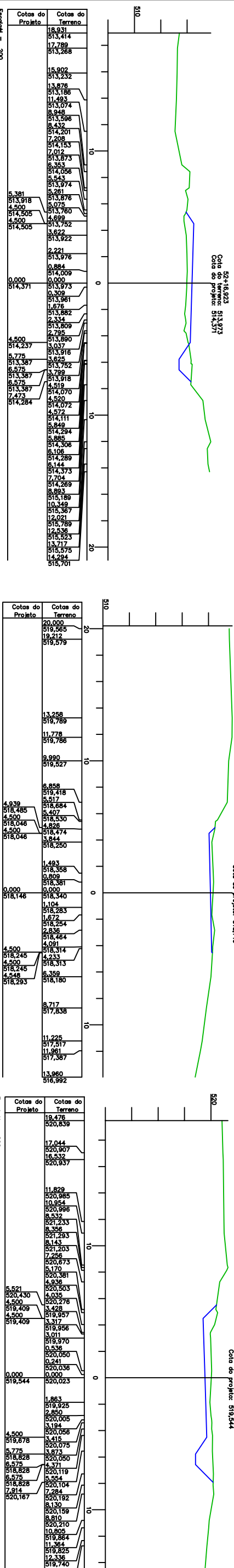
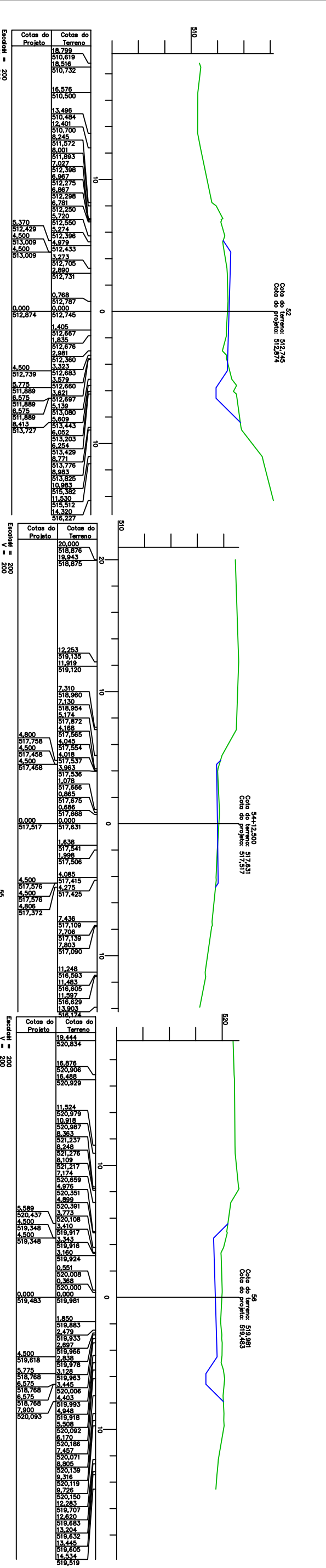


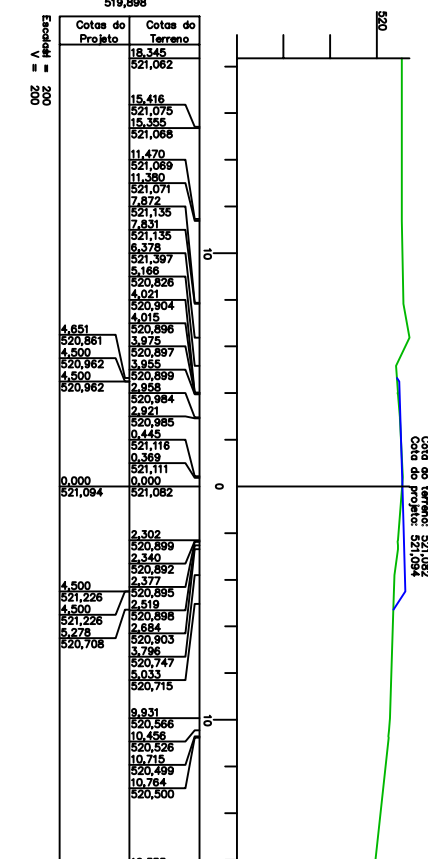
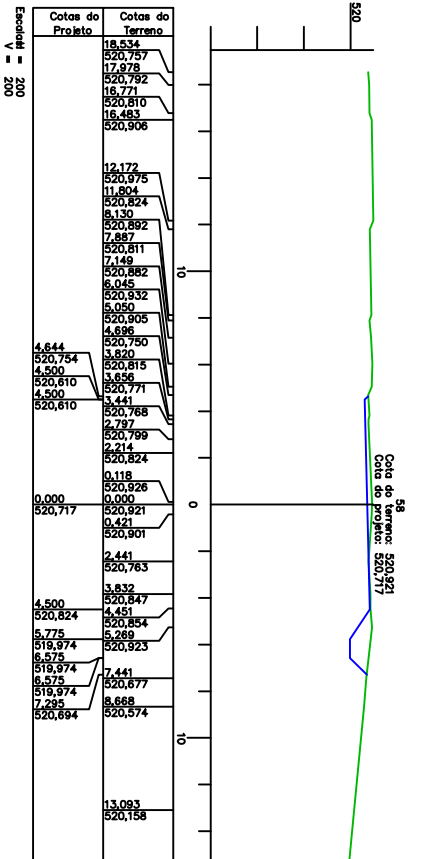
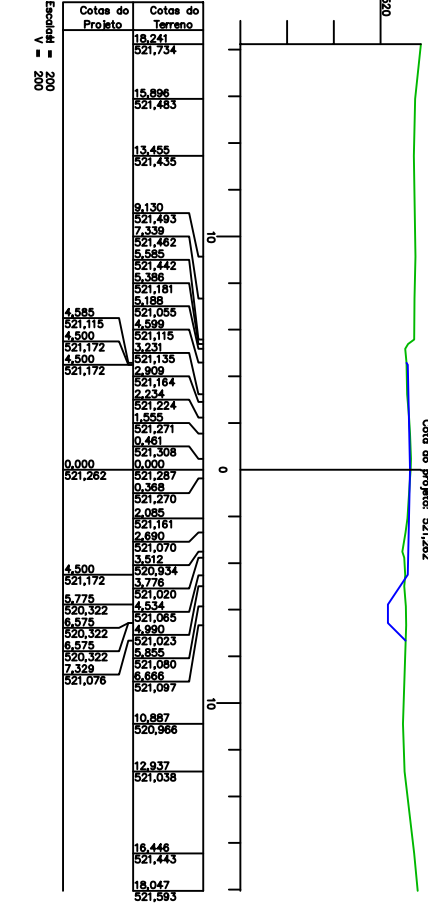
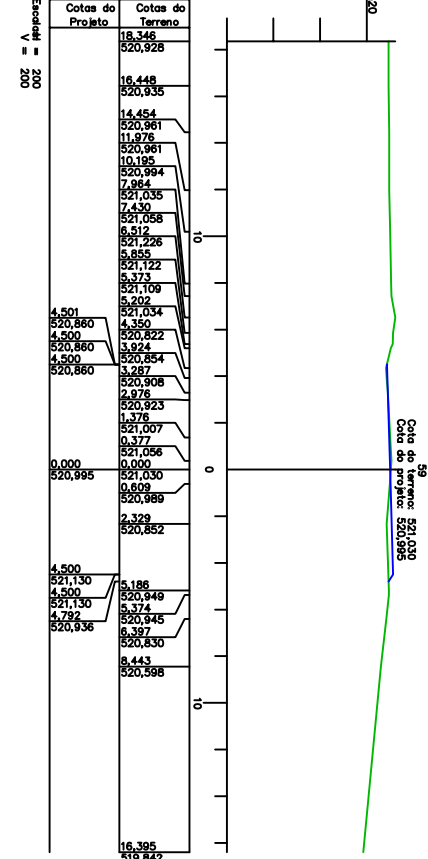
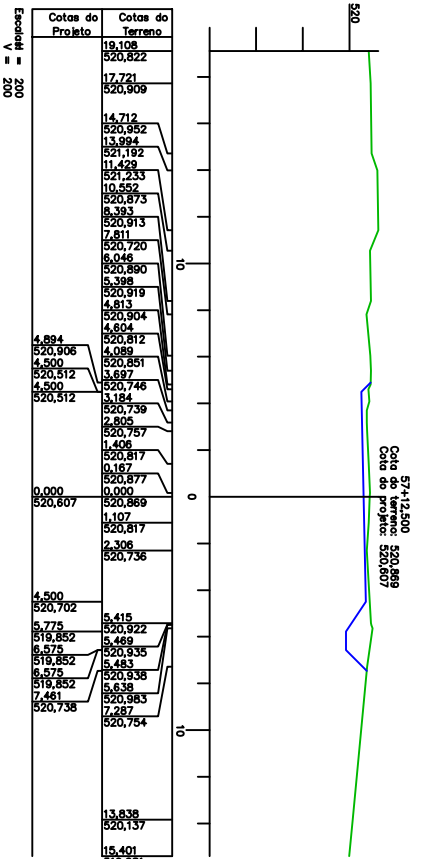
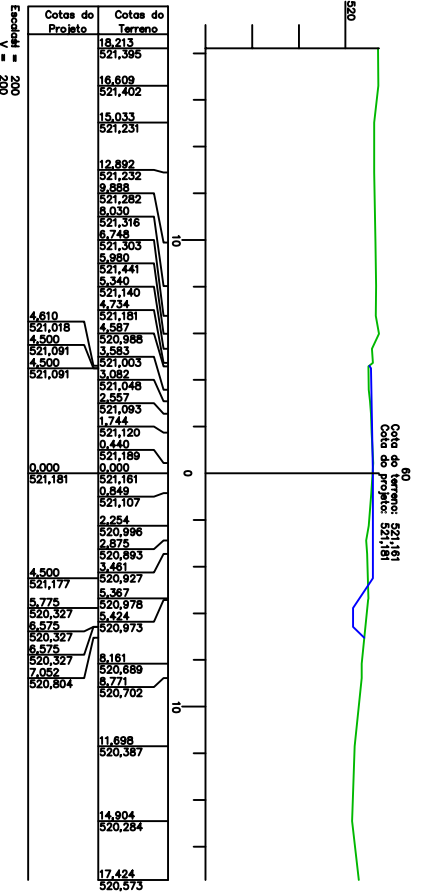
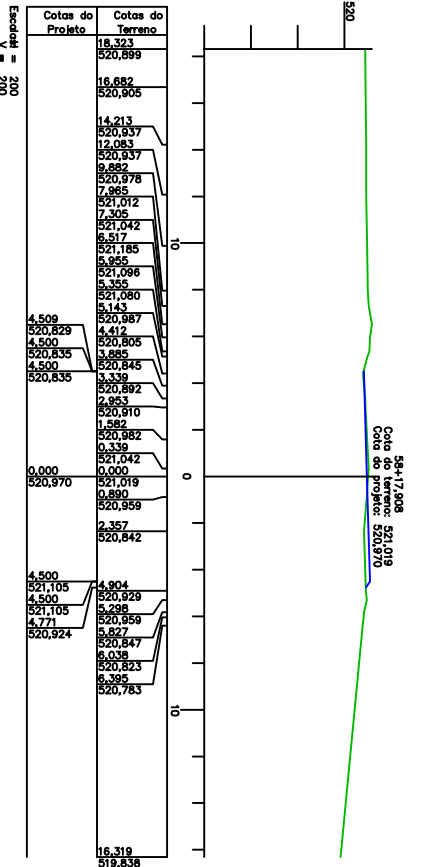
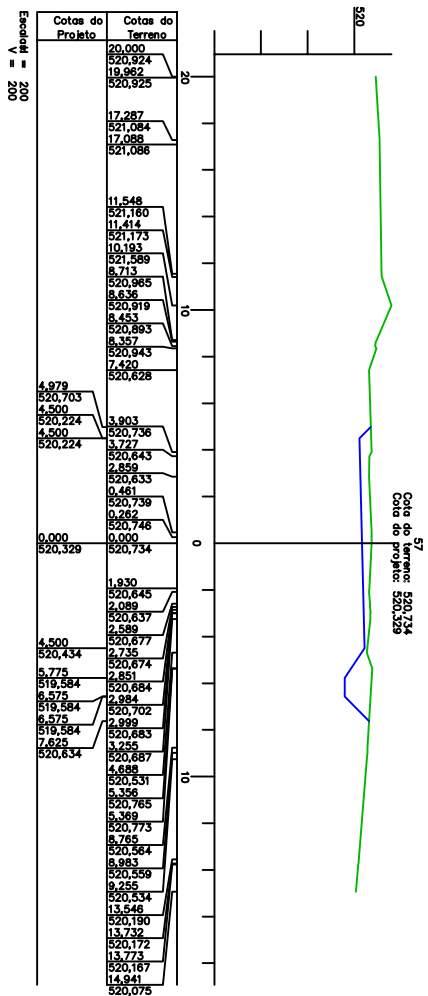
|                                                                                                                     |                         |                                                                                     |  |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA       |                         | Resp. Técnico:                                                                      |  | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |  |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       |  | CREA/RS 123168-D                                                                    |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                       |  | CNP.J.: 93.539.153/0001-92                                                          |  |
|                                                                                                                     |                         | Obra:<br>Pavimentação Asfáltica                                                     |  |                                                                                     |  |
| Aprovação:                                                                                                          | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |  |                                                                                     |  |
| -                                                                                                                   | Prancha :<br>44         | Conteúdo:<br>Seções Transversais                                                    |  |                                                                                     |  |



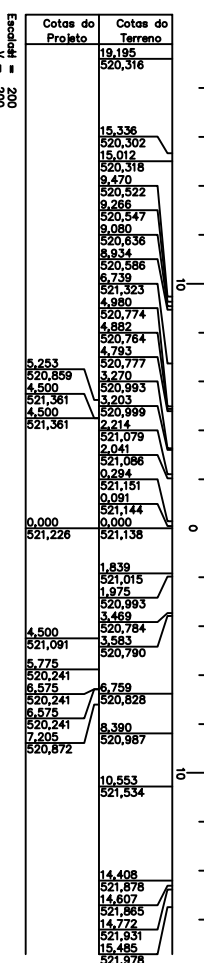
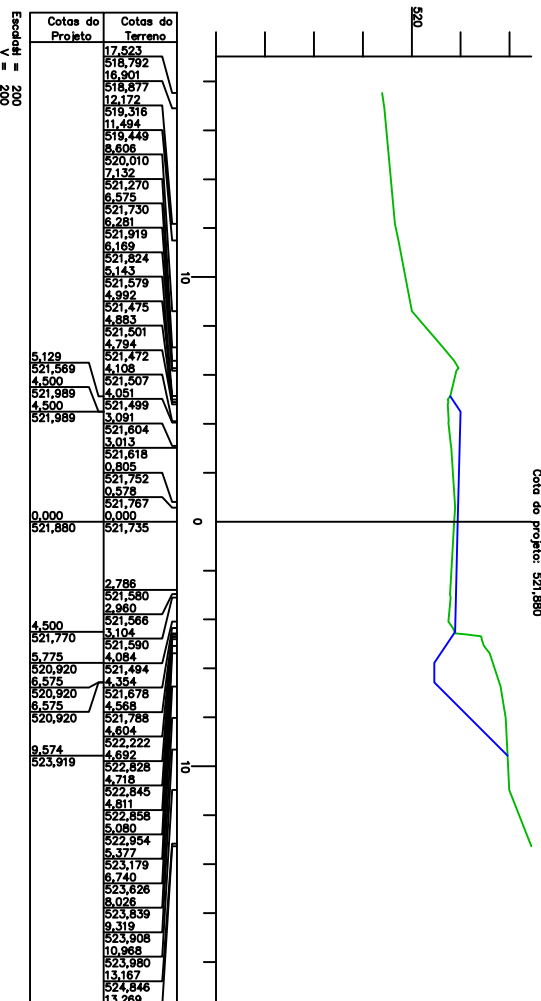
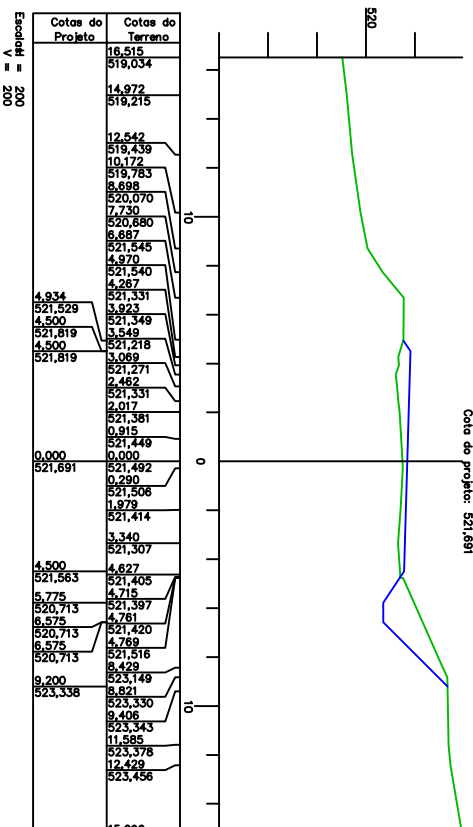
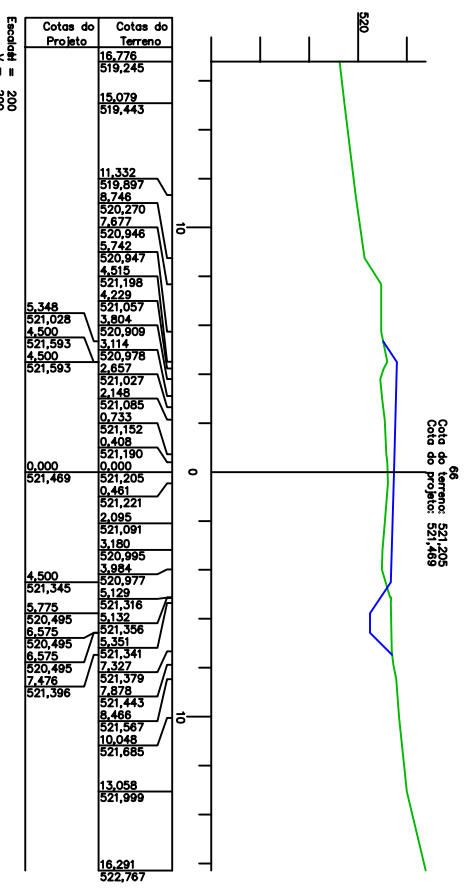


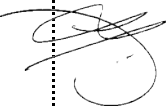
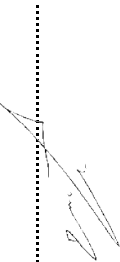
|                                                                                                                                                                                                                                                                             |                         |                                                                                                                             |  |                                                                                                                       |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|
| <div><p><b>L.C.A.D.</b><br/>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |                         | <div>Resp. Técnico:<br/><br/>.....</div> |  | <div>Cliente:<br/><br/>.....</div> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                                                | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini      CREA/RS 123168-D                                                         |  |                                                                                                                       |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                                     | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul      CNPJ: 93.539.153/0001-92                                                 |  |                                                                                                                       |  |
|                                                                                                                                                                                                                                                                             |                         | Obra: Pavimentação Asfáltica                                                                                                |  |                                                                                                                       |  |
| Aprovação:                                                                                                                                                                                                                                                                  | Revisão :<br>01         | Local : Estrada de Acesso a Barra do Rio Azul                                                                               |  |                                                                                                                       |  |
| -                                                                                                                                                                                                                                                                           | Plancha :<br>45         | Conteúdo: Seções Transversais                                                                                               |  |                                                                                                                       |  |

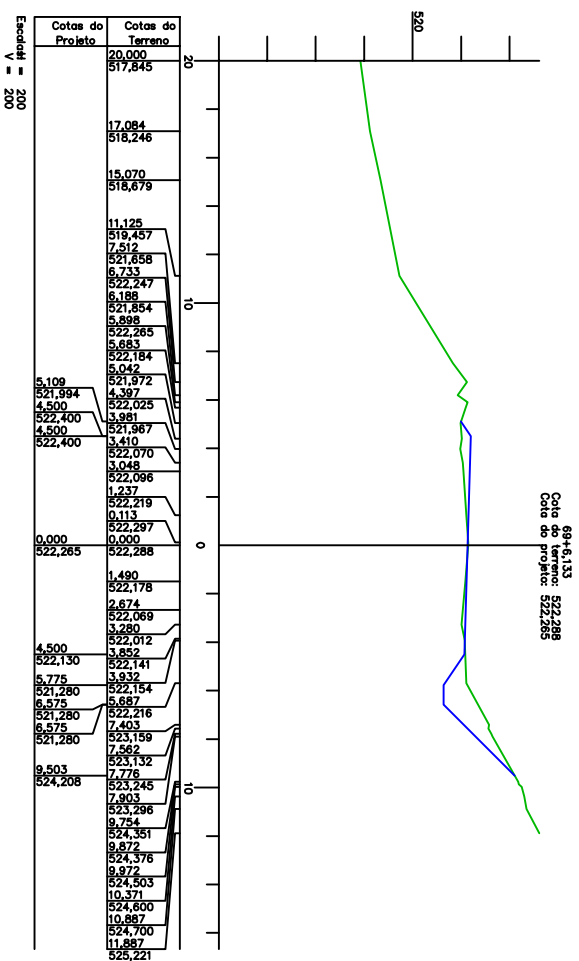
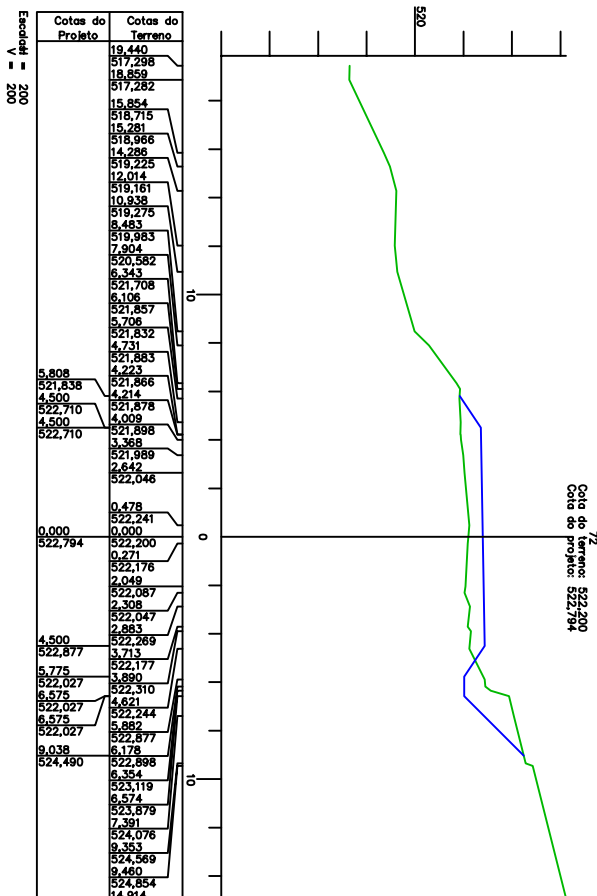
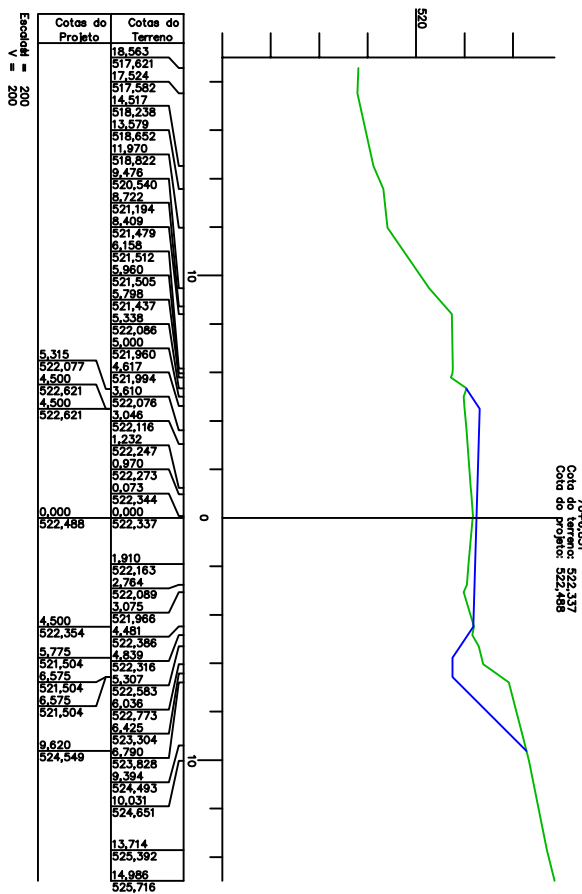
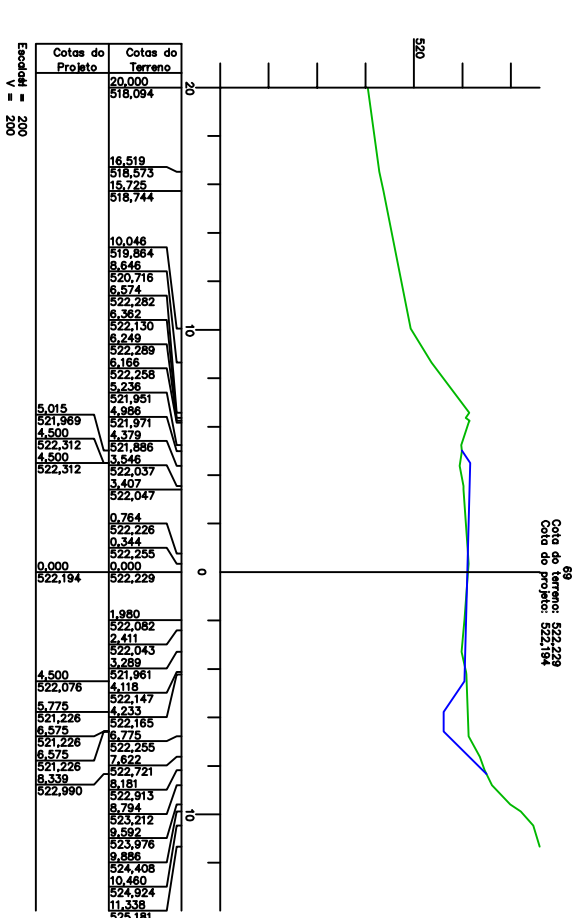
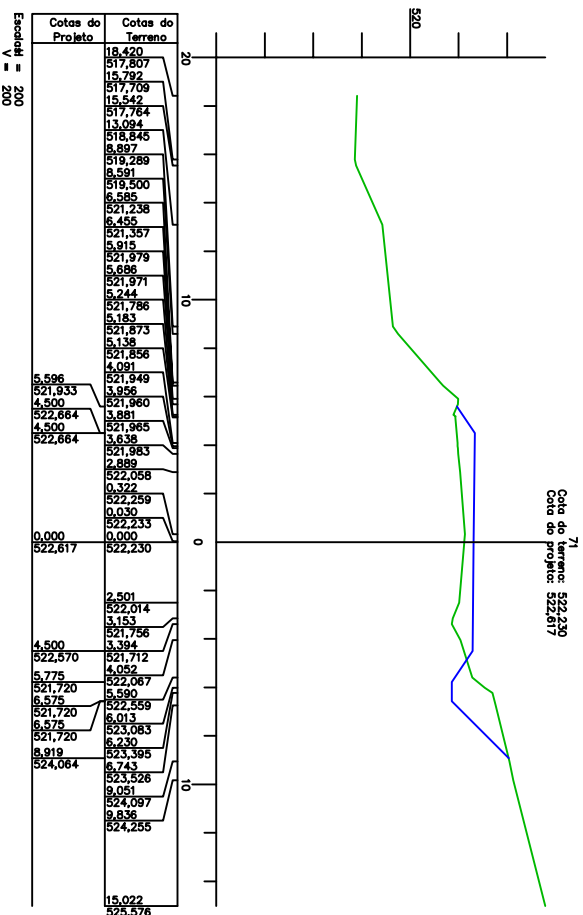
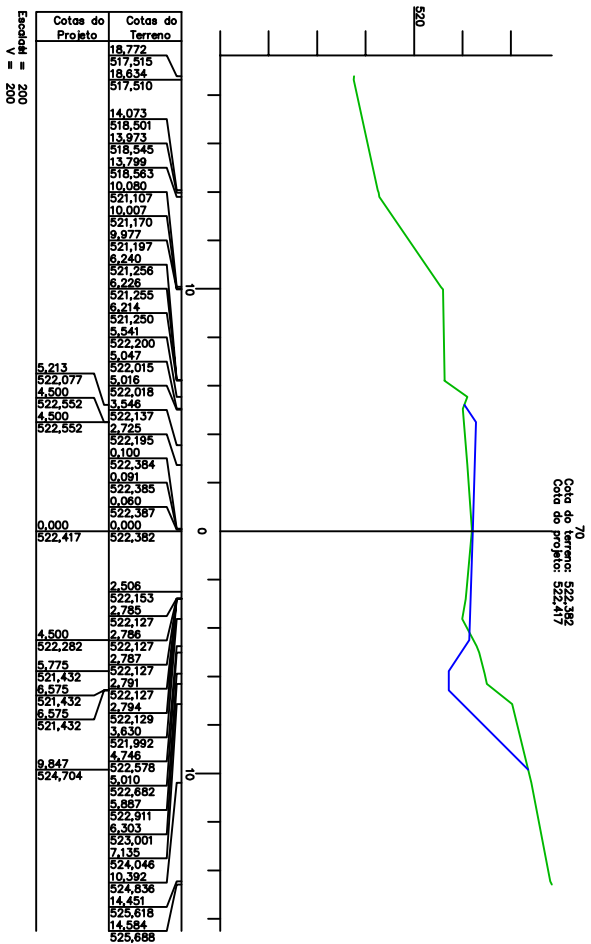
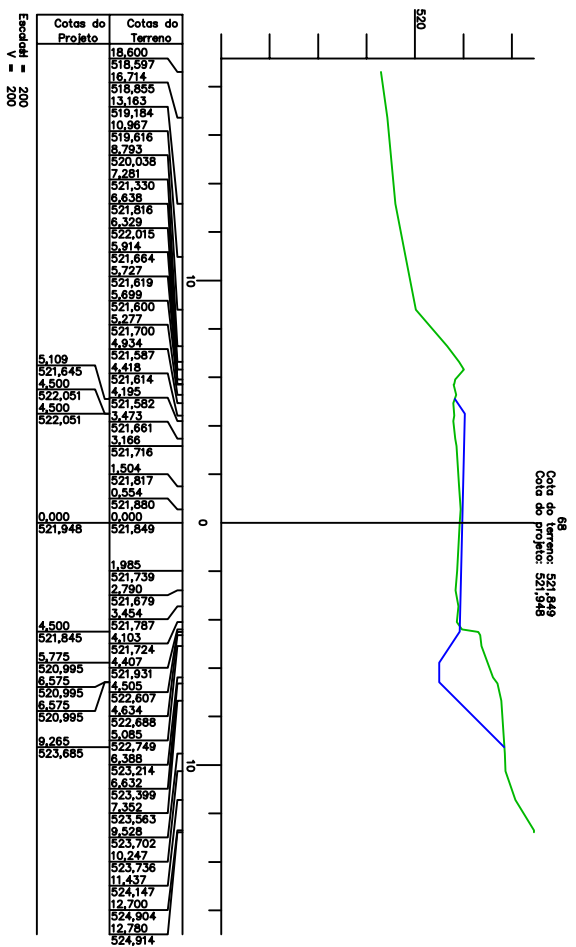


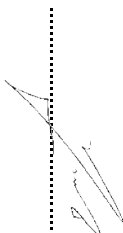




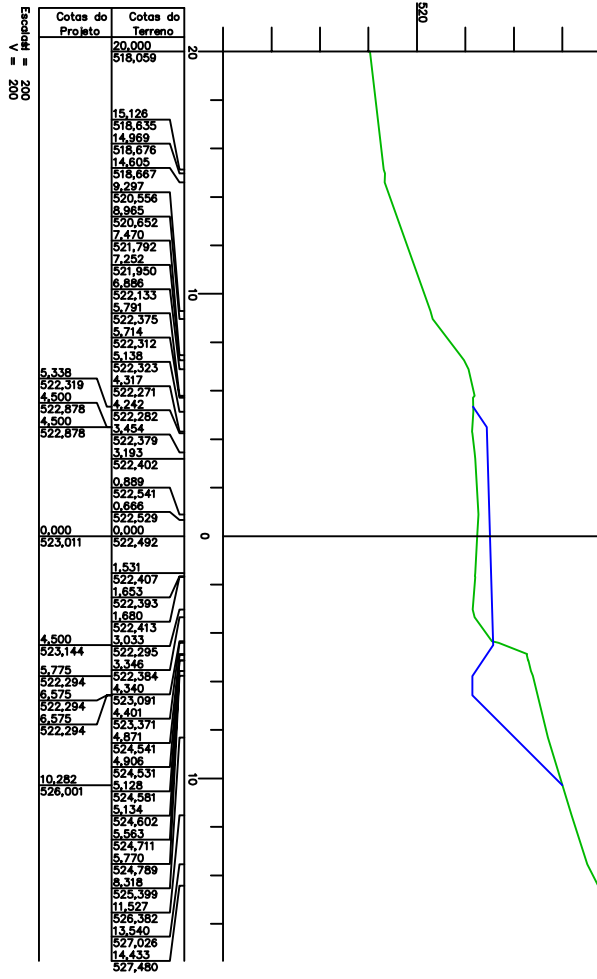
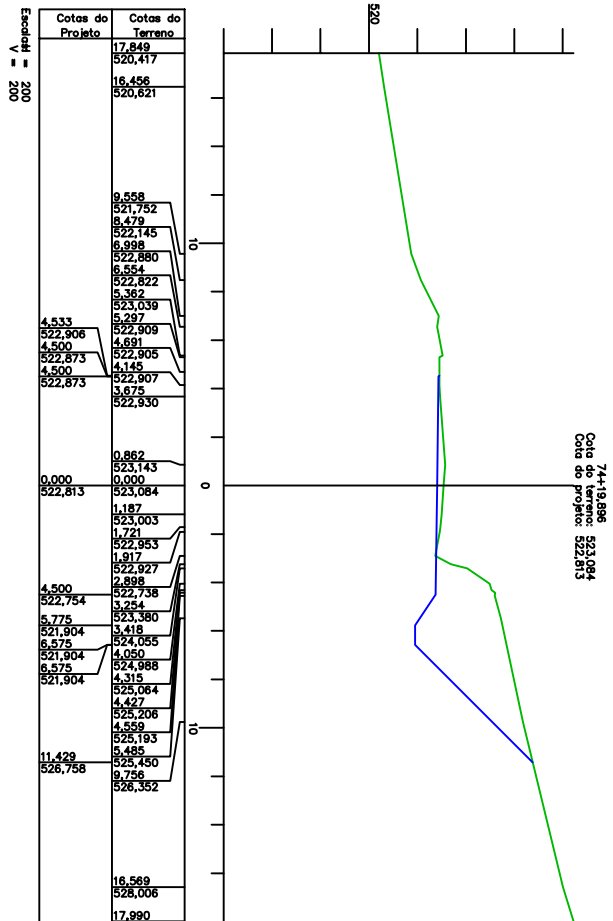
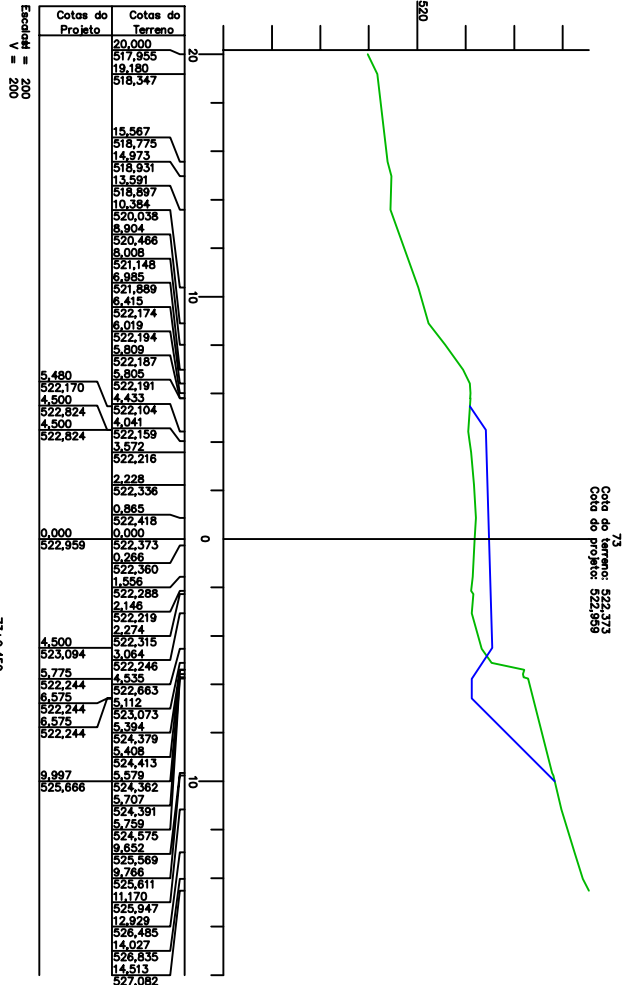
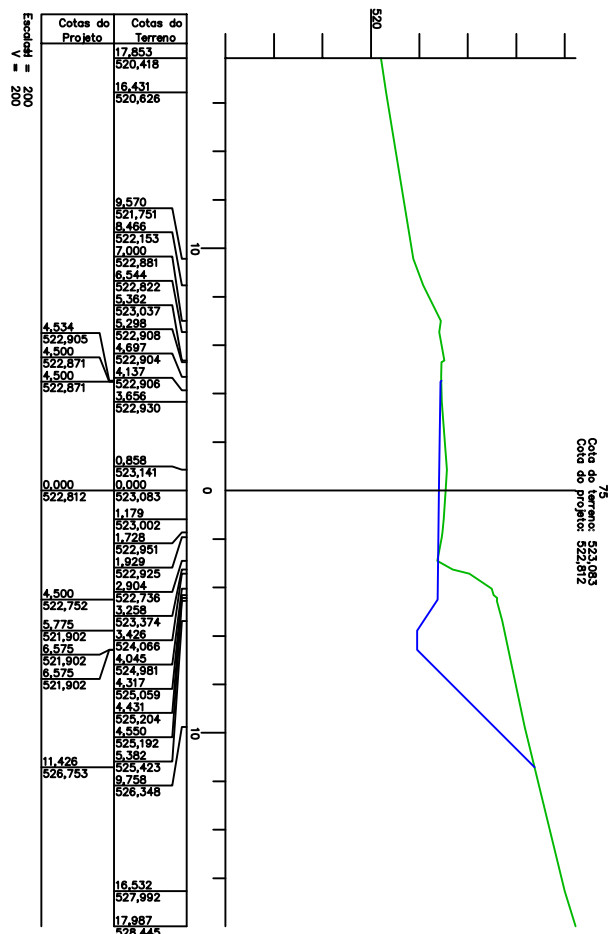
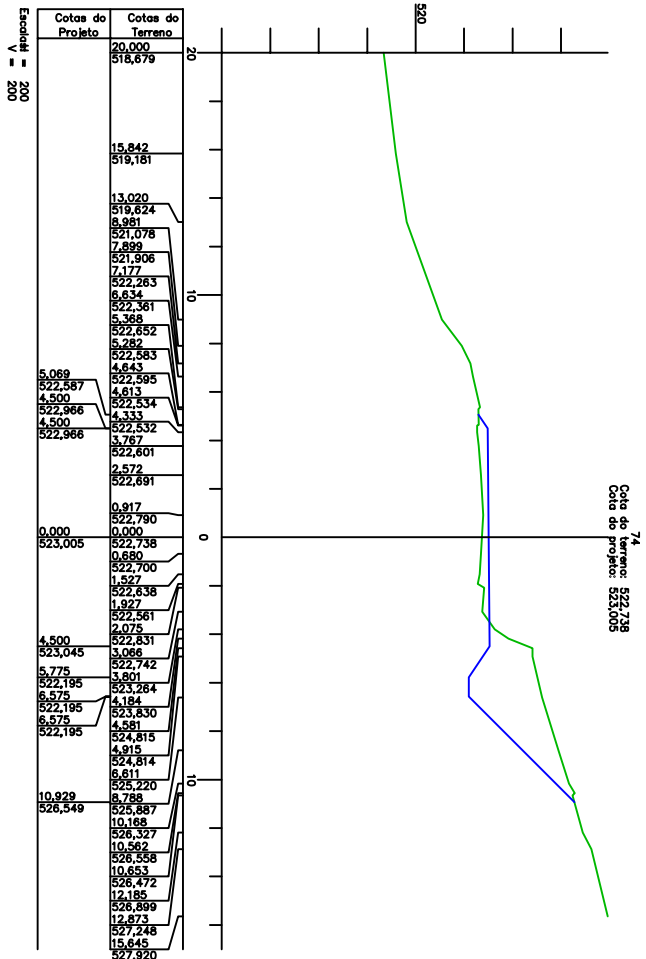
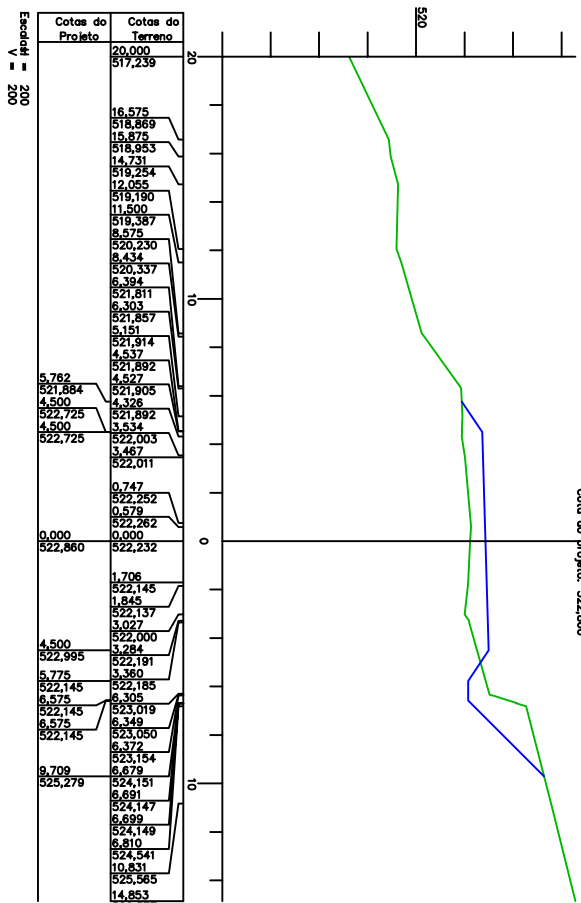


|                                                                                                                                                                                                                                                         |  |                                                                                                                          |  |                                                                                                                    |  |                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|-------------------------------------|--|
| <div><p>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:</div> <div></div> |  | <div>Cliente:</div> <div></div> |  |                                     |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                |  | <div>Data :<br/>Dezembro/2021</div>                                                                                      |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini</div>                                                          |  | <div>CREA/RS 123168-D</div>         |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                     |  | <div>Escala :<br/>1:300</div>                                                                                            |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul</div>                                                           |  | <div>CNPJ: 93.539.153/0001-92</div> |  |
| <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                                                                                                                                                             |  | <div>Revisão :<br/>01</div>                                                                                              |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                       |  |                                     |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                             |  | <div>Plancha :<br/>48</div>                                                                                              |  | <div>Conteúdo:<br/>Seções Transversais</div>                                                                       |  |                                     |  |



|                                                                                                                                                                                                                                      |                         |                                                                                                                |  |                                                                                                          |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br><br>..... |  | Cliente:<br><br>..... |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                                              |  |                                                                                                          |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul    CNPJ: 93.539.153/0001-92                                      |  |                                                                                                          |  |
|                                                                                                                                                                                                                                      |                         | Obra: Pavimentação Asfáltica                                                                                   |  |                                                                                                          |  |
| Aprovação:                                                                                                                                                                                                                           | Revisão :<br>01         | Local : Estrada de Acesso a Barra do Rio Azul                                                                  |  |                                                                                                          |  |
| -                                                                                                                                                                                                                                    | Prancha :<br>49         | Conteúdo: Seções Transversais                                                                                  |  |                                                                                                          |  |







SERVIÇOS DE ENGENHARIA

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Resp. Técnico:

.....

Cliente:

.....

Projeto : Lauson Serafini

Data : Dezembro/2021

Desenho: Adriano Jr.

Escala : 1:300

Aprovação: -

Revisão : 01

Prancha : 50

Resp. Técnico : Eng. Civil Lauson Serafini

CREA/RS 123168-D

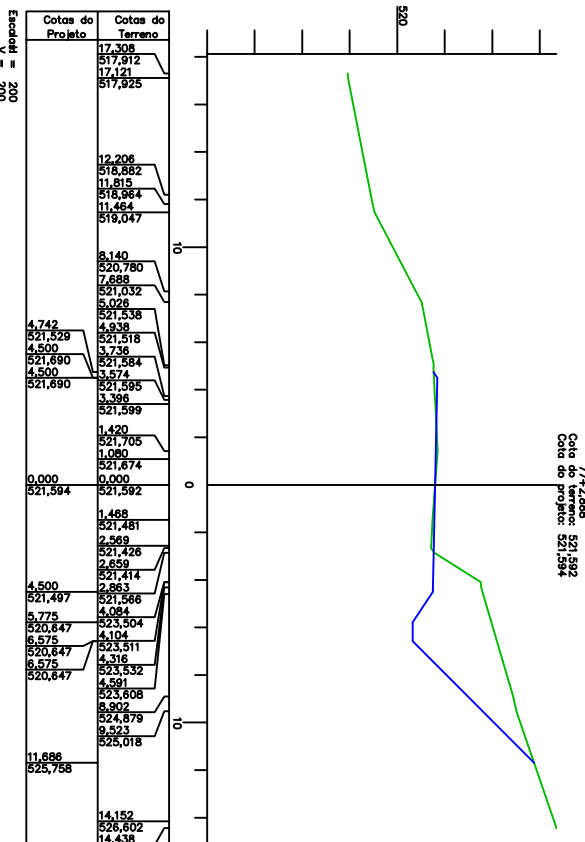
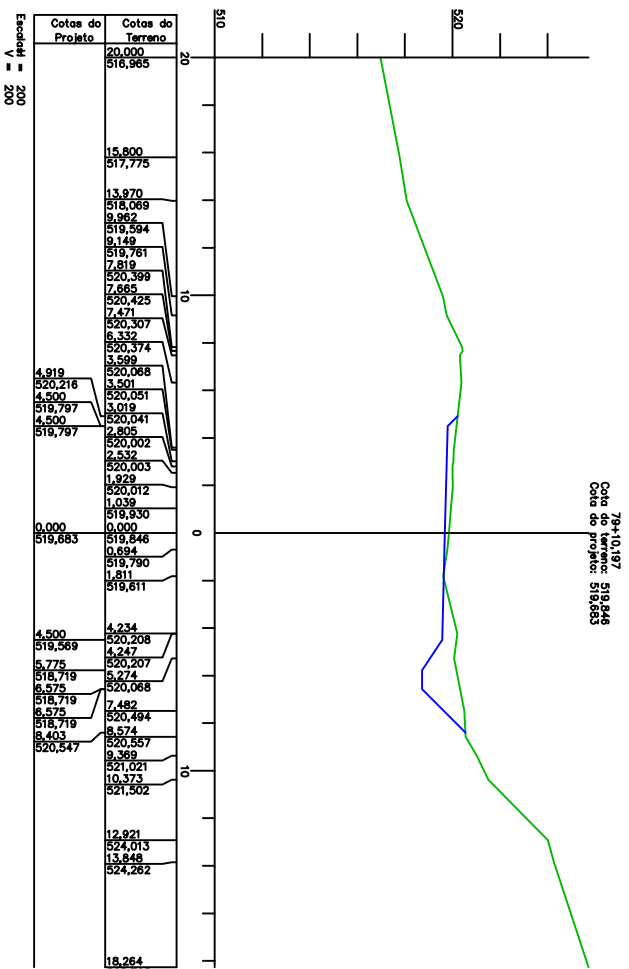
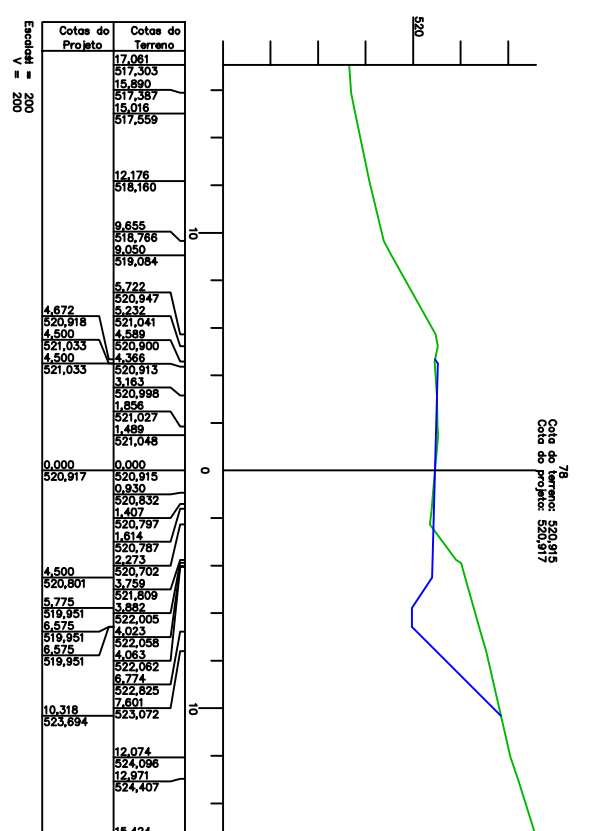
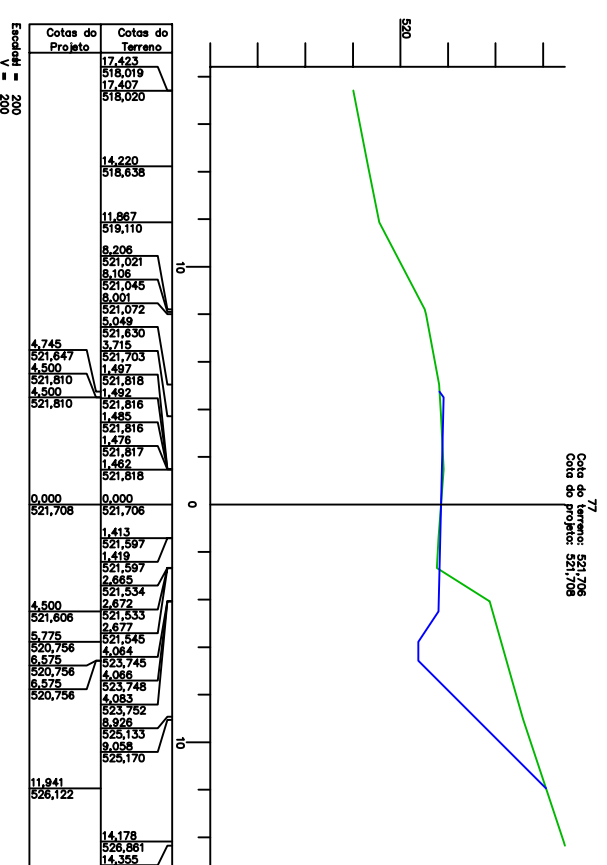
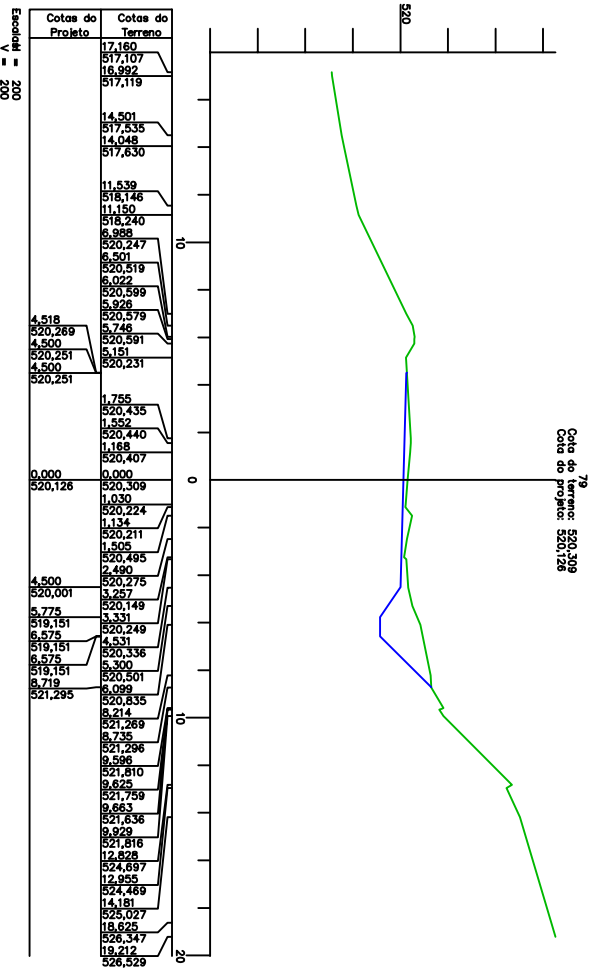
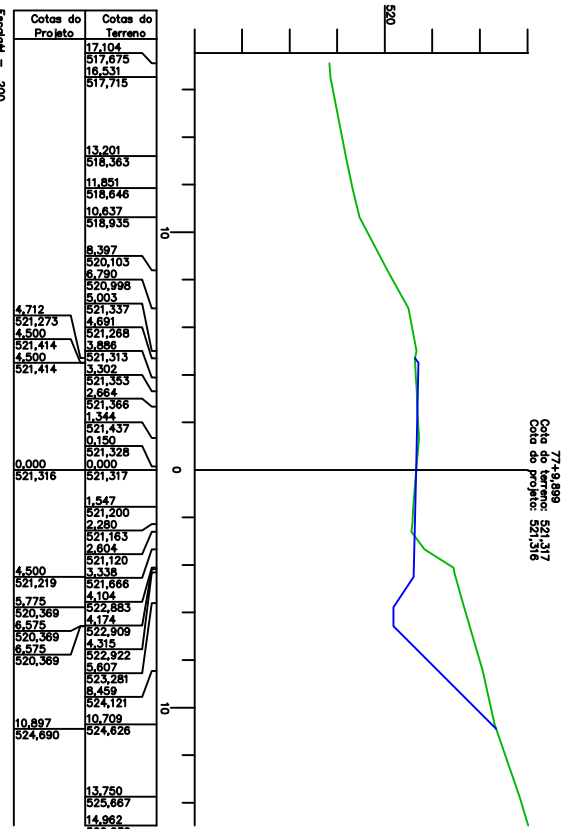
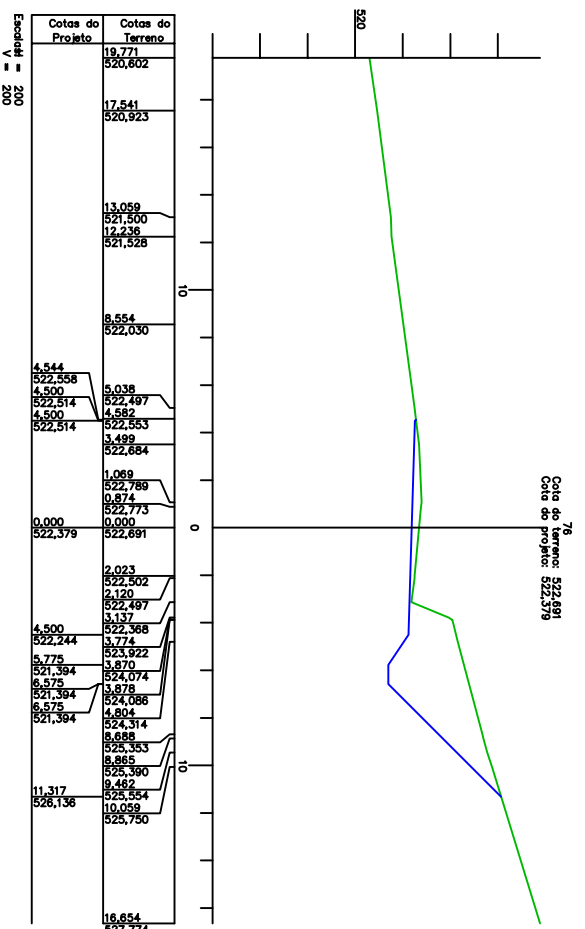
Cliente: Pref. Municipal de Barra do Rio Azul

CNPJ: 93.539.153/0001-92

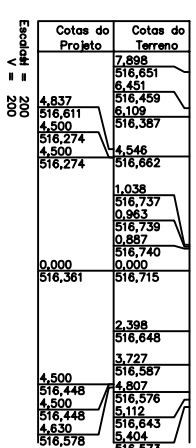
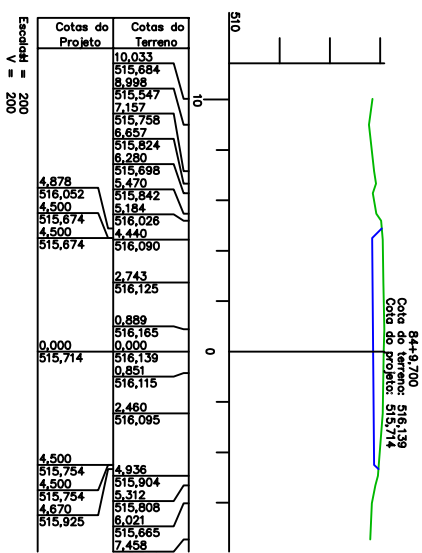
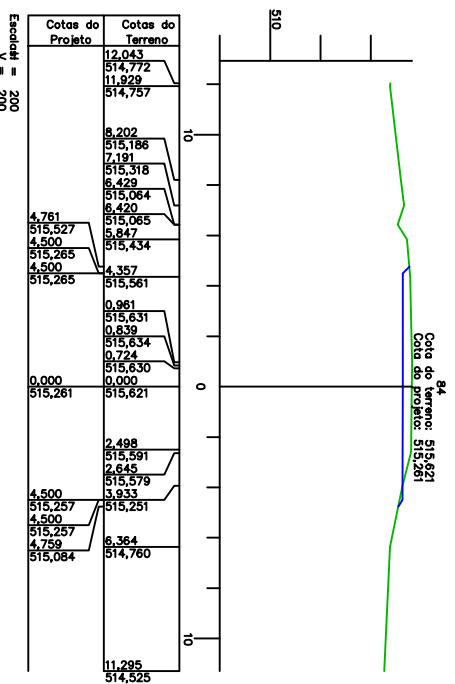
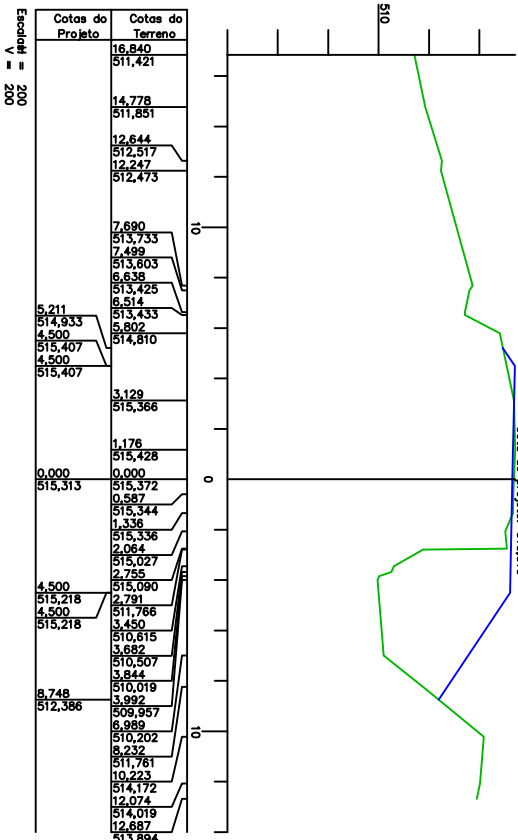
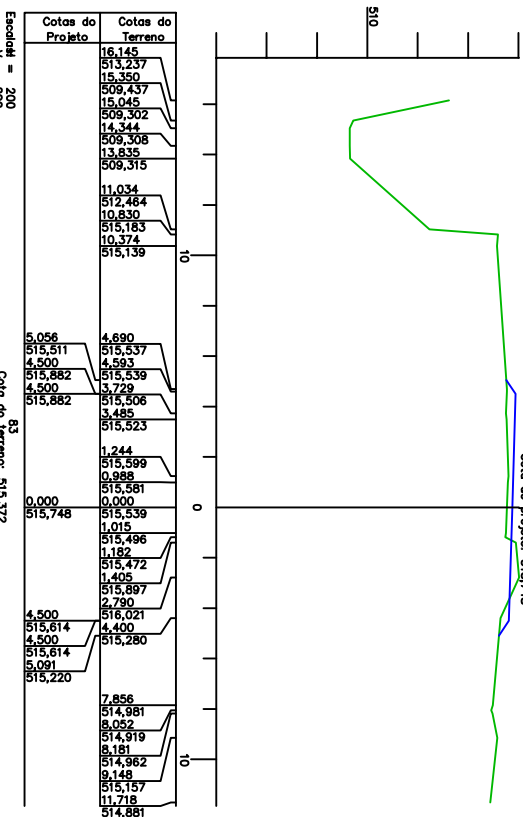
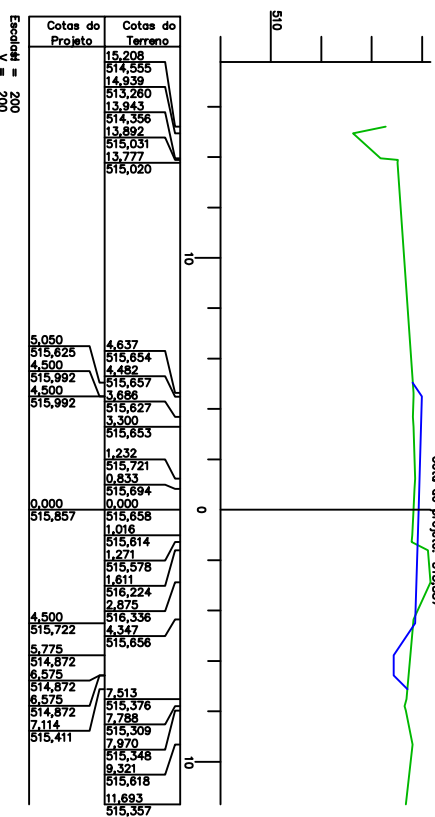
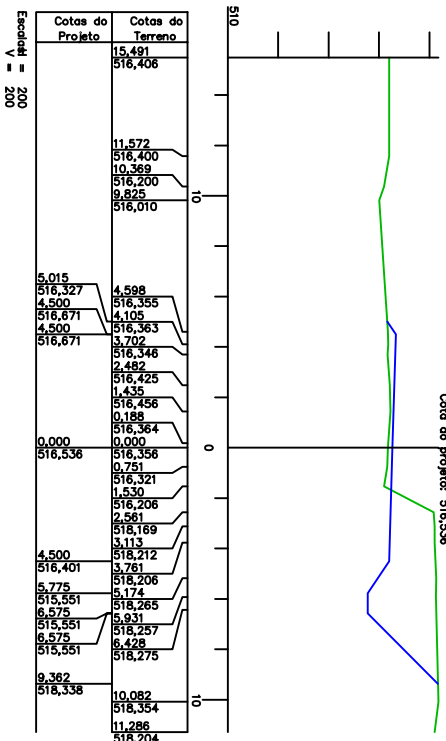
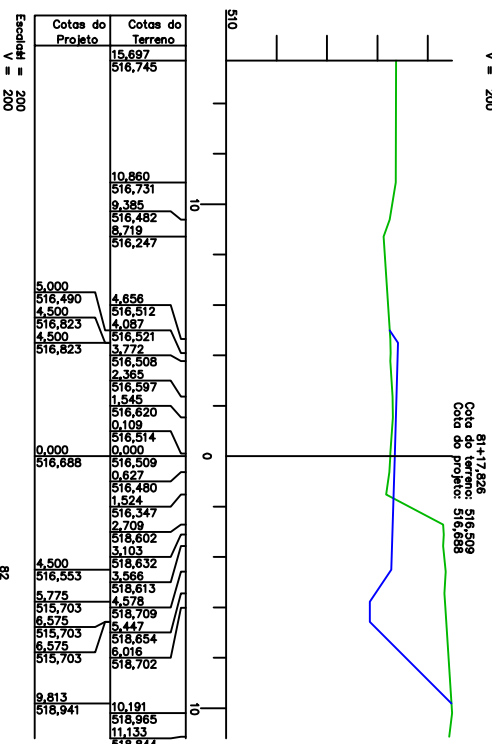
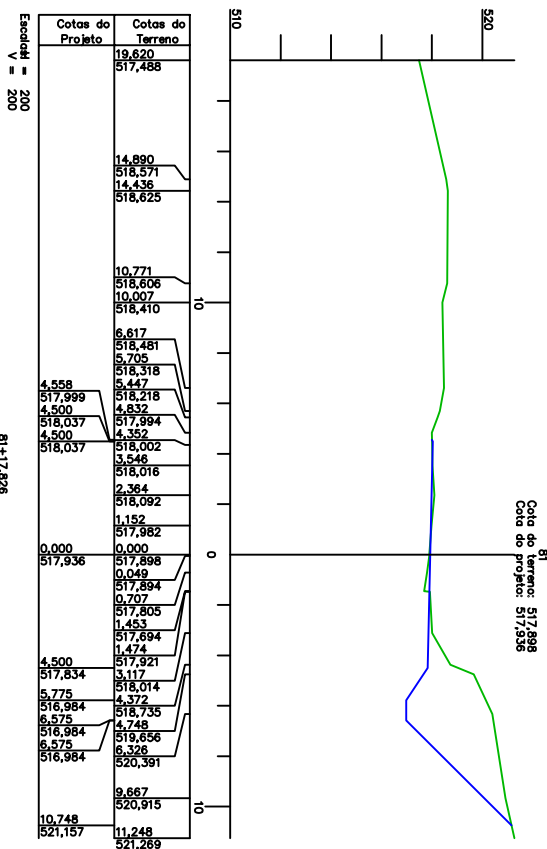
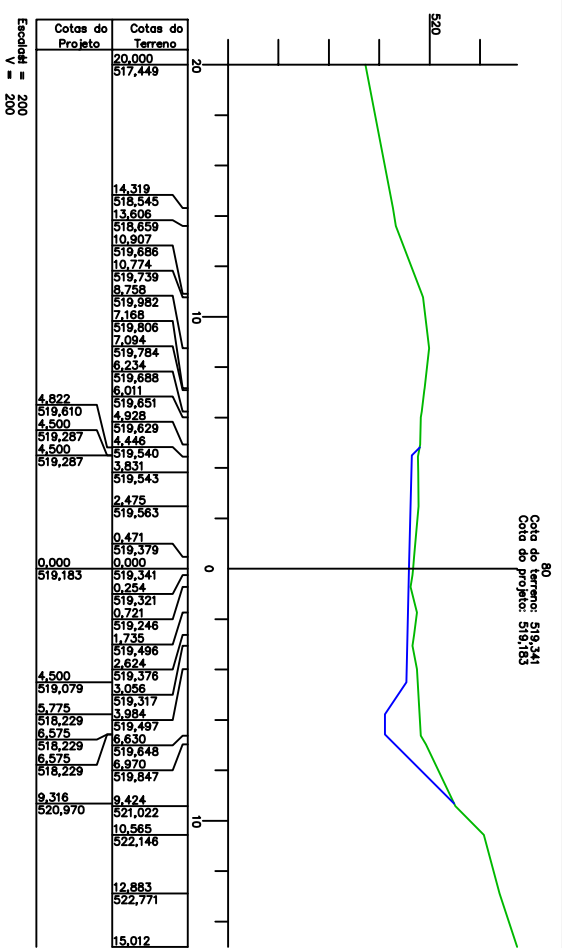
Obra: Pavimentação Asfáltica

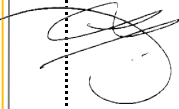
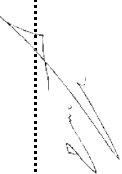
Local : Estrada de Acesso a Barra do Rio Azul

Conteúdo: Seções Transversais

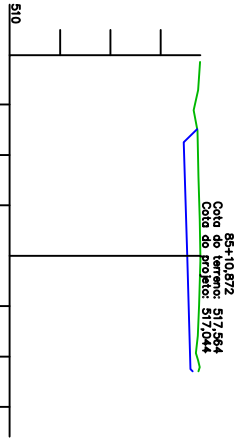


|                                                                                                                                                                                                                  |  |                                                  |  |                                                                           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|---------------------------------------------------------------------------|--|
|  <p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p> |  | Resp. Técnico:                                   |  | Cliente:                                                                  |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                     |  | Data :<br>Dezenbro/2021                          |  | Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                            |  |
| Desenho :<br>Adriano Jr.                                                                                                                                                                                         |  | Escala :<br>1:300                                |  | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92 |  |
| Aprovação :<br>-                                                                                                                                                                                                 |  | Revisão :<br>01                                  |  | Obra :<br>Pavimentação Asfáltica                                          |  |
| Prancha :<br>51                                                                                                                                                                                                  |  | Local :<br>Estrada de Acesso a Barra do Rio Azul |  | Conteúdo :<br>Seções Transversais                                         |  |

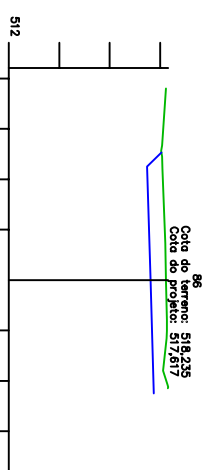


|                                                                                                                     |                         |                                                                                     |  |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA       |                         | Resp. Técnico:                                                                      |  | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |  |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       |  | CREA/RS 123168-D                                                                    |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                       |  | CNP.J: 93.539.153/0001-92                                                           |  |
|                                                                                                                     |                         | Obra:<br>Pavimentação Asfáltica                                                     |  |                                                                                     |  |
| Aprovação:<br>-                                                                                                     | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |  |                                                                                     |  |
|                                                                                                                     | Prancha :<br>52         | Conteúdo:<br>Seções Transversais                                                    |  |                                                                                     |  |

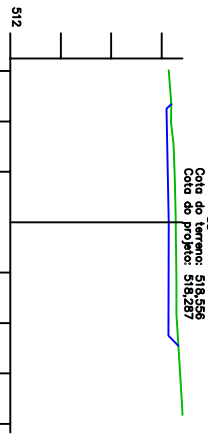




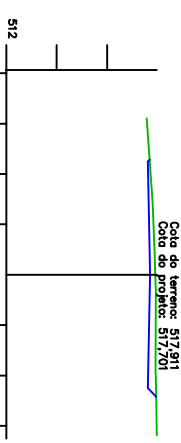
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 6,683            | 517,556          |
| 6,571            | 517,474          |
| 6,029            | 517,306          |
| 517,438          | 517,450          |
| 4,500            | 516,909          |
| 0,000            | 517,489          |
| 0,000            | 517,539          |
| 0,000            | 517,564          |
| 0,219            | 517,568          |
| 1,964            | 517,519          |
| 3,182            | 517,462          |
| 3,883            | 517,389          |
| 4,158            | 517,480          |
| 4,500            | 517,179          |
| 4,584            | 517,537          |
| 517,263          | 517,498          |



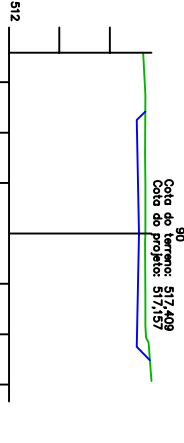
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 7,608            | 518,231          |
| 5,336            | 518,081          |
| 5,120            | 518,038          |
| 4,901            | 518,078          |
| 4,500            | 518,048          |
| 4,418            | 517,482          |
| 517,482          | 518,091          |
| 0,000            | 518,200          |
| 0,000            | 518,235          |
| 1,583            | 518,272          |
| 2,018            | 517,593          |
| 2,315            | 518,263          |
| 2,428            | 518,252          |
| 4,164            | 518,122          |
| 4,500            | 518,300          |
| 4,500            | 518,319          |
| 518,306          | 518,306          |



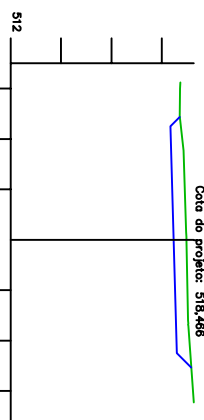
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 6,031            | 518,280          |
| 4,500            | 518,687          |
| 518,197          | 518,578          |
| 518,197          | 518,366          |
| 0,000            | 518,087          |
| 0,000            | 518,468          |
| 0,000            | 518,517          |
| 0,000            | 518,556          |
| 0,313            | 518,563          |
| 2,265            | 518,589          |
| 3,648            | 518,586          |
| 4,500            | 518,262          |
| 518,262          | 7,349            |
| 518,661          | 518,808          |
| 518,661          | 7,646            |
| 518,661          | 518,827          |



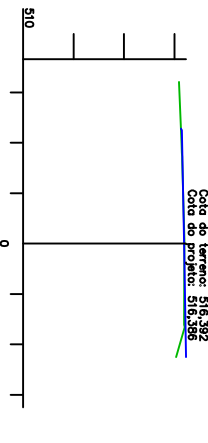
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 6,210            | 517,569          |
| 5,148            | 517,593          |
| 4,576            | 517,687          |
| 4,500            | 517,611          |
| 4,500            | 517,611          |
| 0,000            | 517,813          |
| 0,000            | 517,879          |
| 0,000            | 517,911          |
| 0,618            | 517,933          |
| 0,625            | 517,934          |
| 0,633            | 517,934          |
| 3,926            | 517,926          |
| 4,500            | 517,611          |
| 4,500            | 517,611          |
| 517,948          | 517,977          |



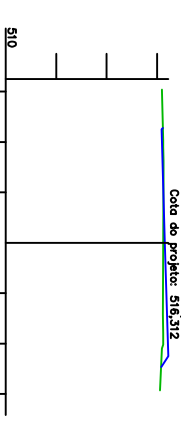
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 7,174            | 517,328          |
| 5,495            | 517,413          |
| 4,843            | 517,067          |
| 4,500            | 517,067          |
| 0,000            | 517,401          |
| 0,000            | 517,417          |
| 0,000            | 517,409          |
| 0,353            | 517,407          |
| 2,600            | 517,412          |
| 3,666            | 517,410          |
| 4,500            | 517,067          |
| 4,500            | 517,067          |
| 517,597          | 517,556          |



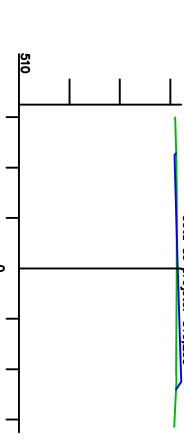
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 6,249            | 518,727          |
| 518,708          | 518,714          |
| 4,500            | 518,704          |
| 4,500            | 518,334          |
| 0,000            | 518,862          |
| 0,309            | 518,964          |
| 0,109            | 518,972          |
| 0,000            | 518,974          |
| 0,000            | 518,974          |
| 3,209            | 519,042          |
| 3,380            | 519,046          |
| 4,500            | 519,041          |
| 4,500            | 519,041          |
| 519,169          | 519,051          |
| 519,169          | 6,456            |
| 519,169          | 519,267          |



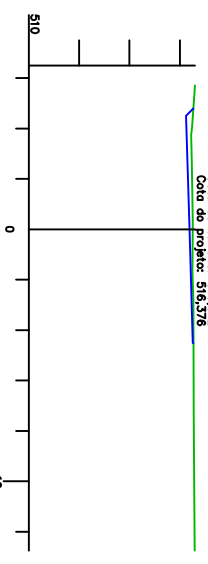
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 6,418            | 518,184          |
| 4,561            | 518,278          |
| 518,255          | 518,299          |
| 518,255          | 518,302          |
| 0,000            | 518,312          |
| 0,147            | 518,392          |
| 0,000            | 518,392          |
| 0,000            | 518,388          |
| 3,095            | 518,388          |
| 3,222            | 518,410          |
| 4,500            | 518,466          |
| 4,500            | 518,466          |
| 518,463          | 518,072          |



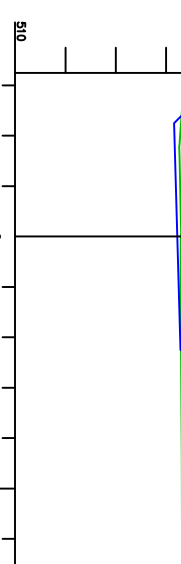
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 4,557            | 518,194          |
| 518,234          | 518,247          |
| 518,234          | 518,247          |
| 4,500            | 518,247          |
| 4,500            | 518,247          |
| 0,000            | 518,247          |
| 0,000            | 518,247          |
| 2,831            | 518,233          |
| 3,613            | 518,248          |
| 4,042            | 518,247          |
| 4,500            | 518,247          |
| 4,825            | 518,200          |
| 518,164          | 518,117          |



| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 5,996            | 516,201          |
| 4,574            | 516,248          |
| 4,500            | 516,241          |
| 4,500            | 516,241          |
| 0,000            | 516,255          |
| 0,000            | 516,263          |
| 0,000            | 516,254          |
| 4,052            | 516,235          |
| 4,500            | 516,434          |
| 4,500            | 516,434          |
| 518,228          | 516,155          |



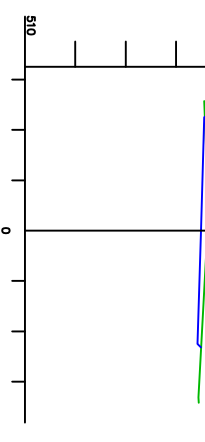
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 5,707            | 516,599          |
| 4,500            | 516,478          |
| 516,241          | 516,450          |
| 0,000            | 516,470          |
| 0,353            | 516,515          |
| 0,000            | 516,512          |
| 1,695            | 516,499          |
| 2,833            | 516,532          |
| 4,500            | 516,511          |
| 516,511          | 7,271            |
| 516,537          | 516,546          |
| 516,537          | 12,758           |
| 516,537          | 516,587          |



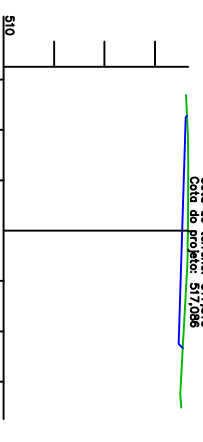
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 5,644            | 516,572          |
| 4,500            | 516,524          |
| 516,307          | 516,524          |
| 516,307          | 516,524          |
| 0,156            | 516,585          |
| 0,000            | 516,584          |
| 0,000            | 516,584          |
| 2,554            | 516,568          |
| 3,094            | 516,582          |
| 4,500            | 516,569          |
| 4,500            | 516,569          |
| 516,587          | 8,692            |
| 516,587          | 516,618          |
| 516,587          | 13,568           |
| 516,587          | 516,624          |



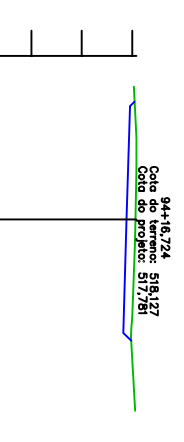
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 5,550            | 516,185          |
| 4,500            | 517,016          |
| 516,943          | 516,988          |
| 516,943          | 516,988          |
| 0,000            | 517,072          |
| 0,000            | 517,085          |
| 0,000            | 517,070          |
| 0,665            | 517,068          |
| 1,279            | 517,057          |
| 4,056            | 516,908          |
| 4,500            | 516,770          |
| 4,500            | 516,770          |
| 516,907          | 6,283            |
| 516,907          | 7,855            |
| 516,907          | 516,778          |



| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 5,144            | 517,112          |
| 4,500            | 517,209          |
| 517,121          | 517,213          |
| 0,000            | 517,197          |
| 0,000            | 517,192          |
| 0,653            | 517,190          |
| 0,958            | 517,187          |
| 4,248            | 517,013          |
| 4,500            | 516,851          |
| 516,851          | 6,614            |
| 516,992          | 516,887          |
| 516,992          | 6,636            |
| 516,992          | 516,901          |



| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 5,383            | 517,241          |
| 4,500            | 517,308          |
| 517,221          | 517,327          |
| 0,000            | 517,310          |
| 0,511            | 517,307          |
| 0,975            | 517,299          |
| 1,401            | 517,285          |
| 4,350            | 517,127          |
| 4,500            | 516,951          |
| 4,500            | 516,951          |
| 517,110          | 6,476            |
| 517,110          | 517,013          |
| 517,110          | 7,018            |
| 517,110          | 517,046          |



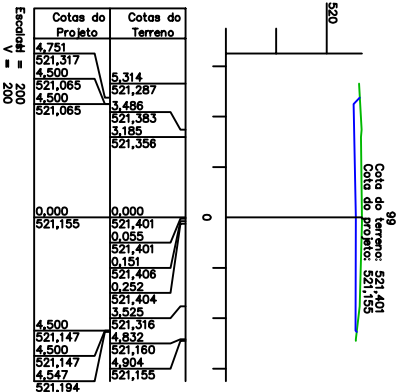
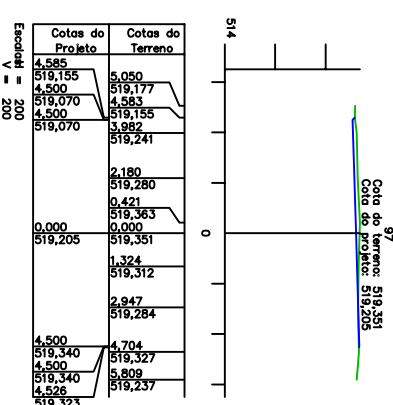
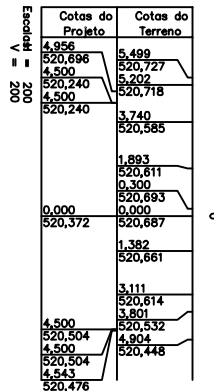
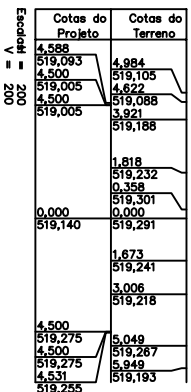
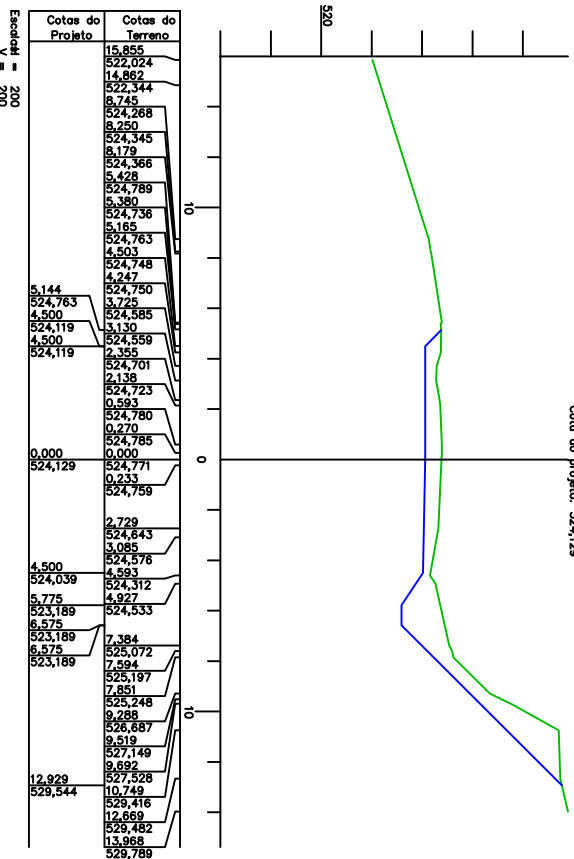
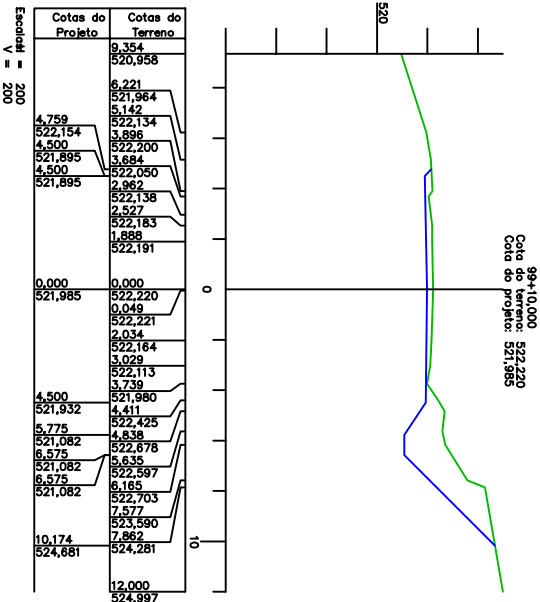
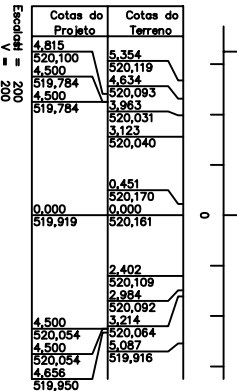
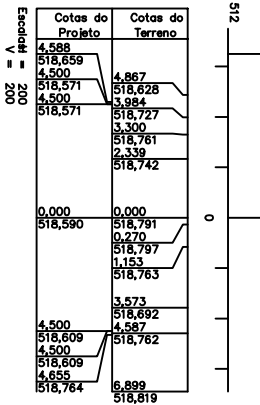
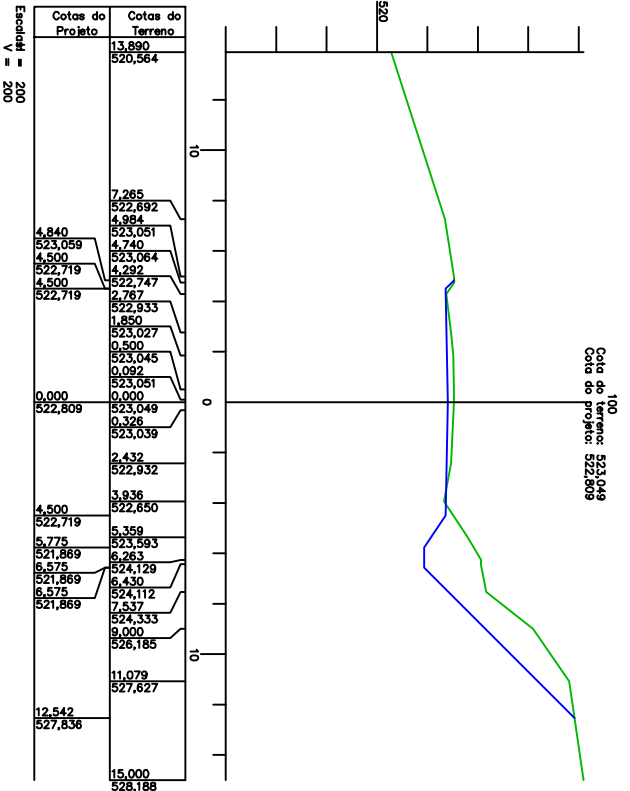
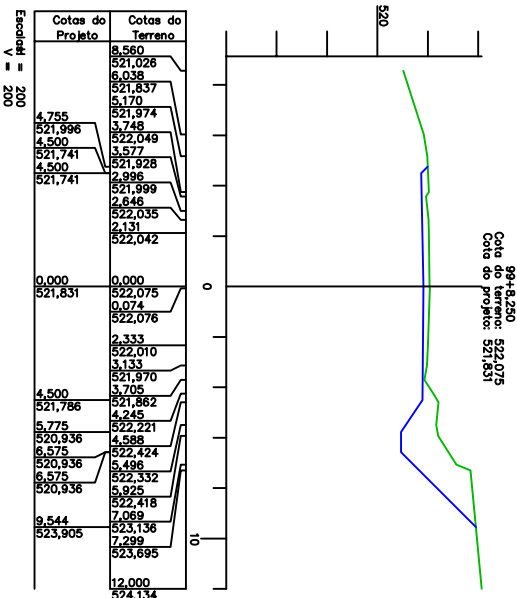
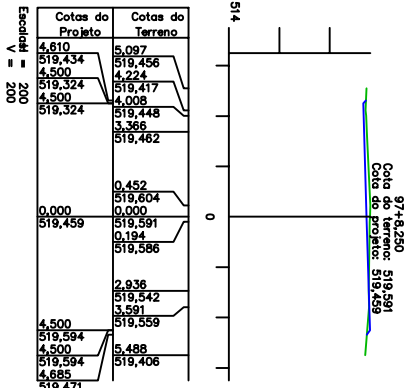
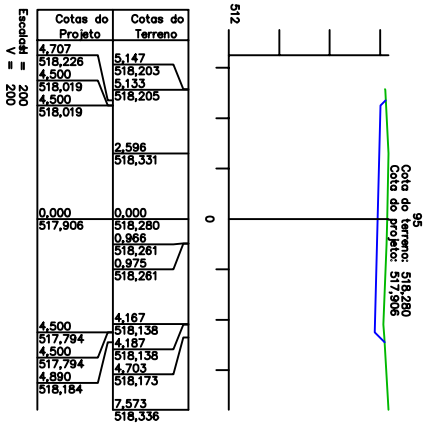
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 5,271            | 518,066          |
| 4,500            | 518,166          |
| 517,915          | 518,174          |
| 517,915          | 518,169          |
| 0,000            | 518,127          |
| 0,000            | 518,104          |
| 3,861            | 517,999          |
| 4,327            | 517,972          |
| 4,670            | 517,952          |
| 4,612            | 517,960          |
| 517,960          | 7,593            |
| 517,960          | 518,119          |

**L.C.A.D.**  
SERVIÇOS DE ENGENHARIA  
Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Resp. Técnico:  
.....

Cliente:  
.....

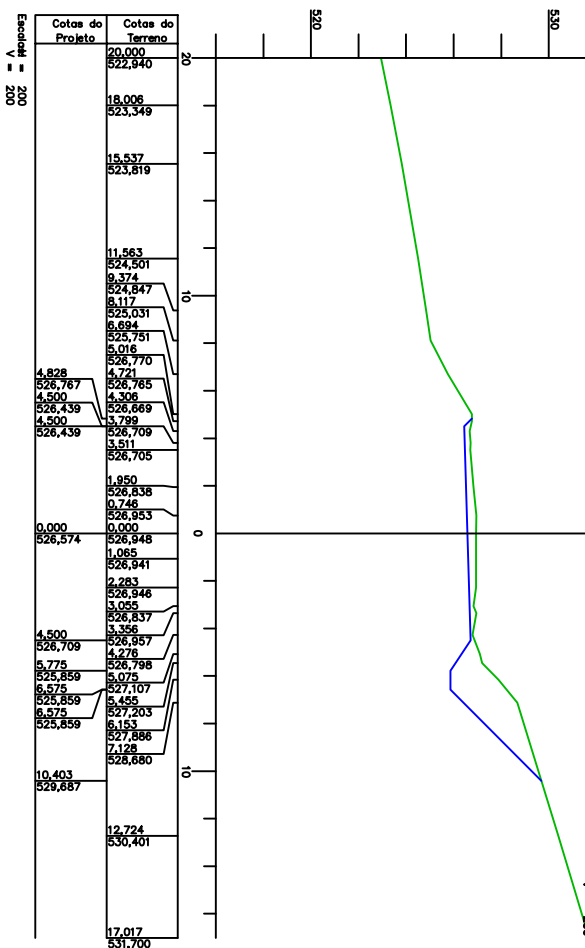
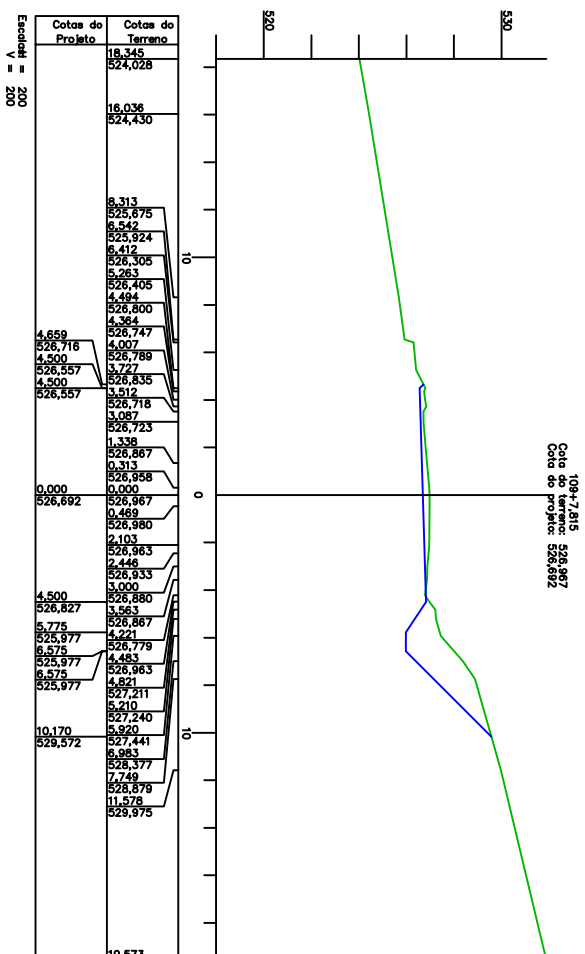
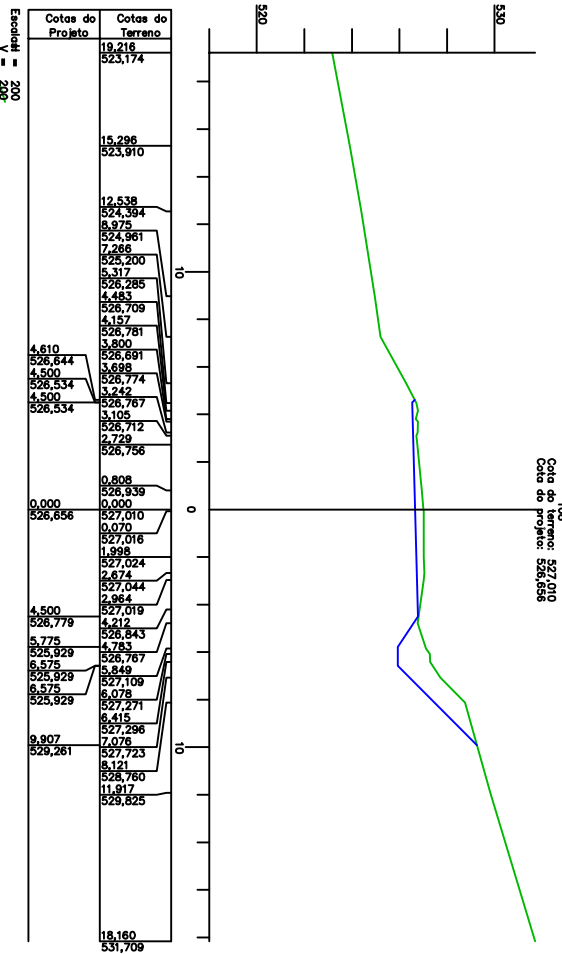
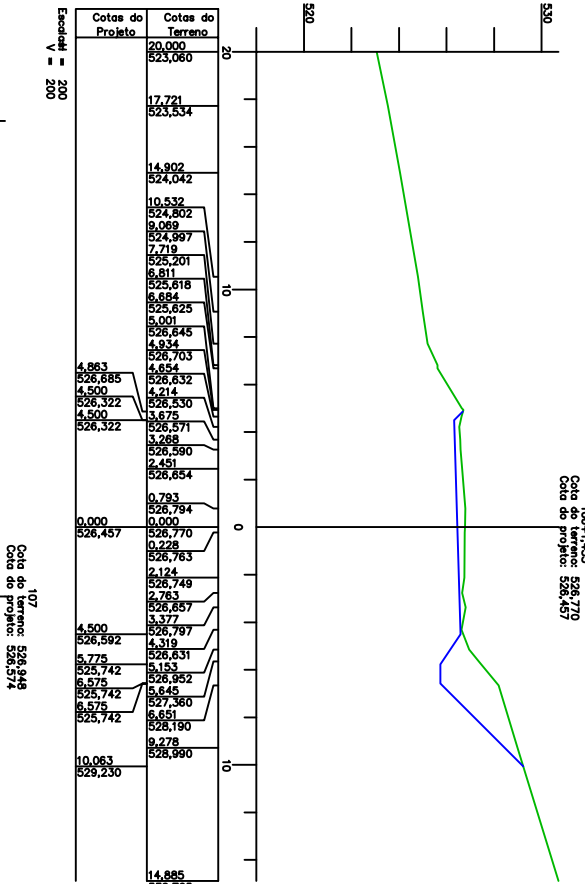
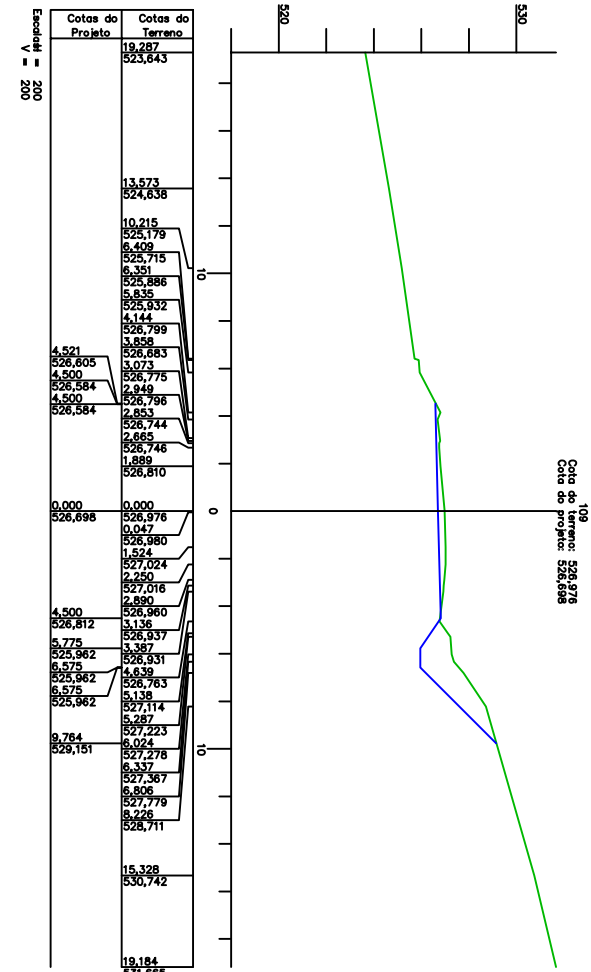
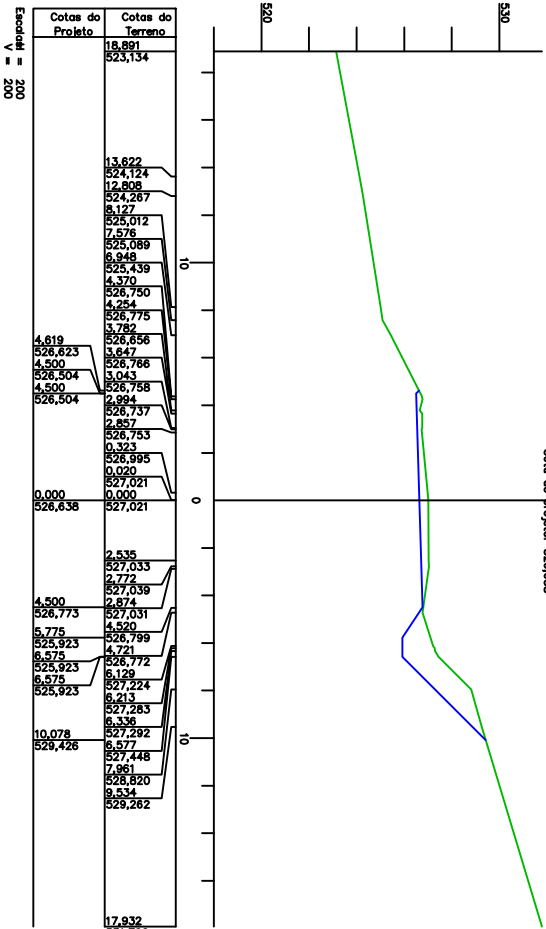
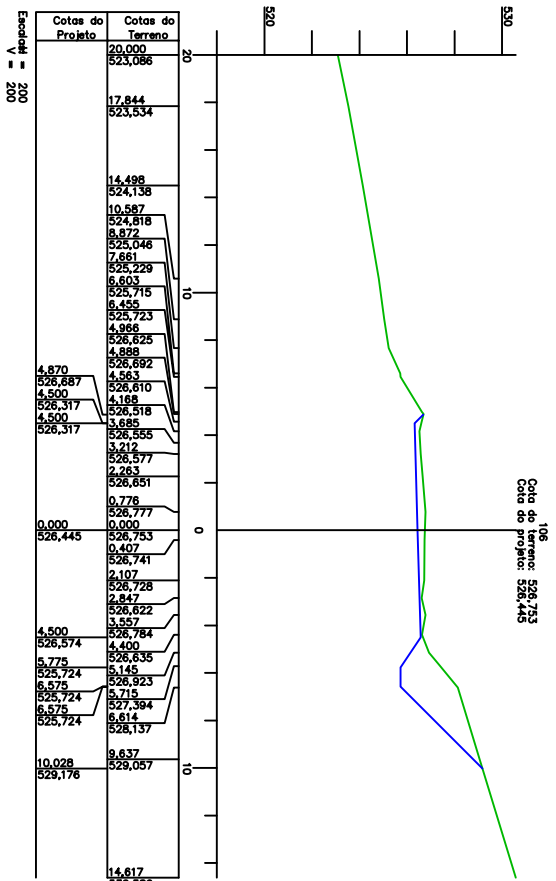
|                              |                                                  |                                                                           |
|------------------------------|--------------------------------------------------|---------------------------------------------------------------------------|
| Projeto :<br>Lauson Serafini | Data :<br>Dezembro/2021                          | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D         |
| Desenho :<br>Adriano Jr.     | Escala :<br>1:300                                | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92 |
| Aprovação :<br>-             | Revisão :<br>01                                  | Obra :<br>Pavimentação Asfáltica                                          |
| Prancha :<br>53              | Local :<br>Estrada de Acesso a Barra do Rio Azul | Conteúdo :<br>Seções Transversais                                         |



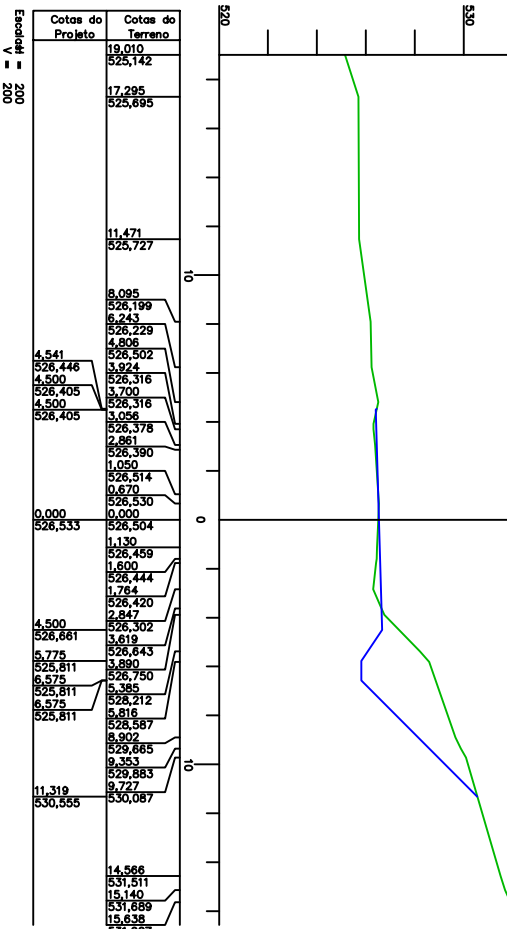
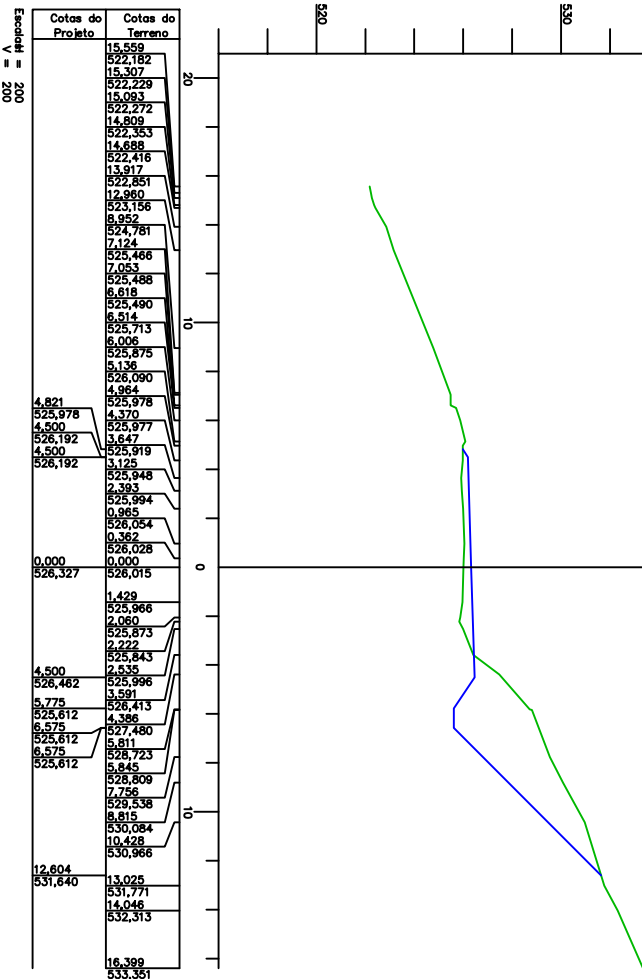
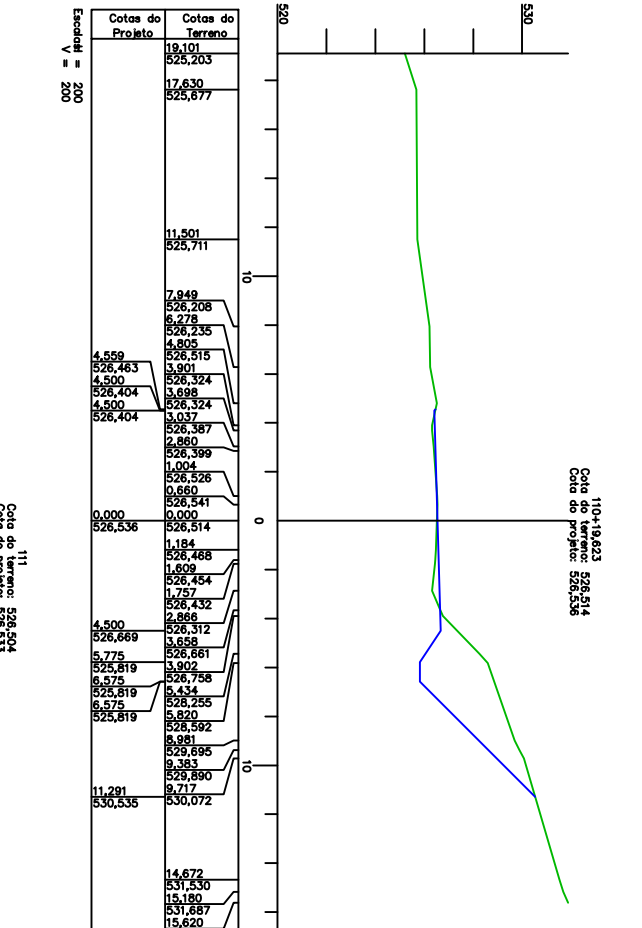
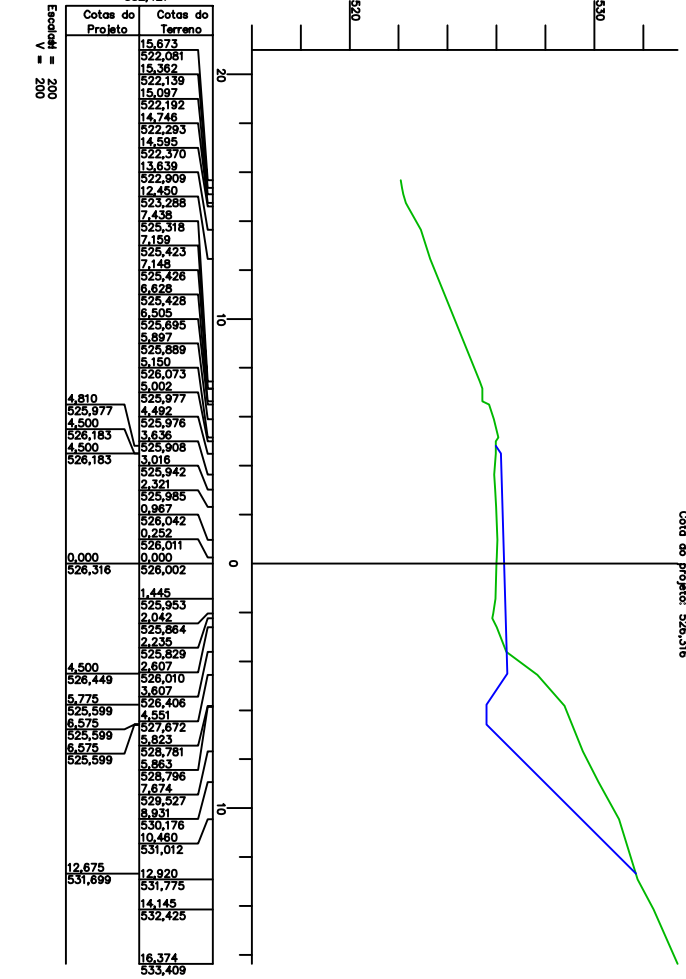
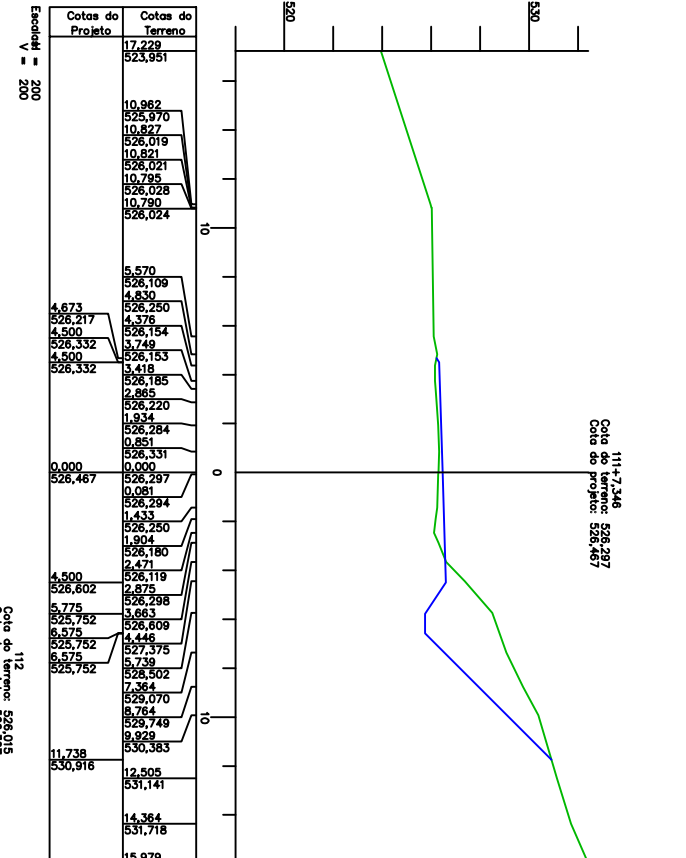
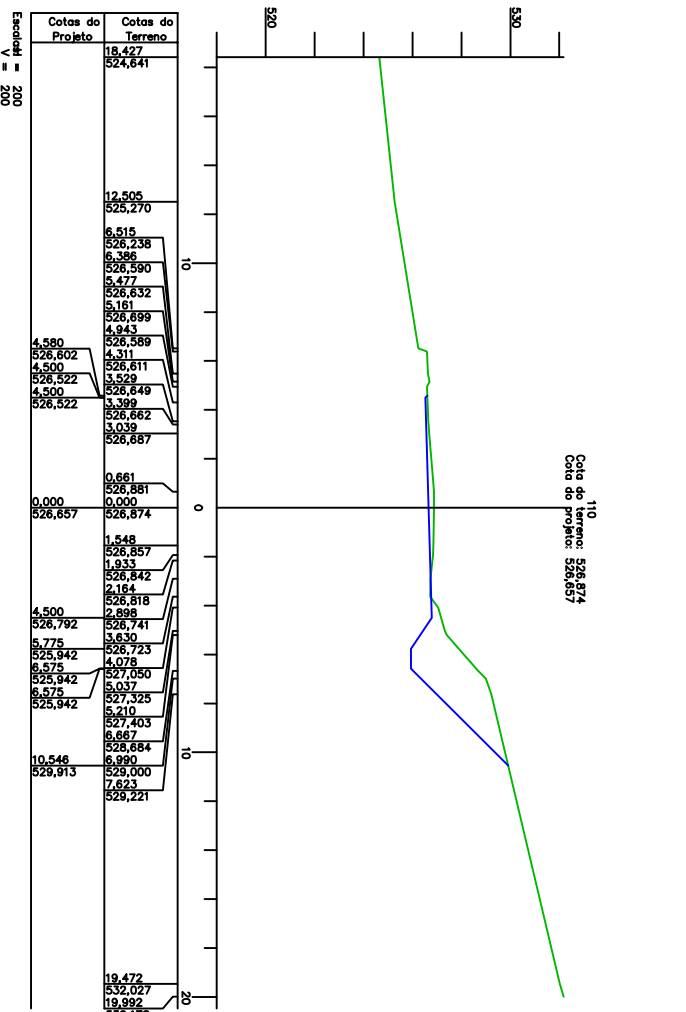
|                                                                                                                     |                                                  |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
|                                  |                                                  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                                  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021                          |
| Desenho :<br>Adriano Jr.                                                                                            | Escala :<br>1:300                                |
| Aprovação :<br>-                                                                                                    | Revisão :<br>01                                  |
| Prancha :<br>54                                                                                                     | Local :<br>Estrada de Acesso a Barra do Rio Azul |
| Seções Transversais                                                                                                 |                                                  |
| Resp. Técnico:                                                                                                      | Eng. Civil Lauson Serafini                       |
| Cliente:                                                                                                            | CREA/RS 123168-D                                 |
|                                                                                                                     | CNPJ: 93.539.153/0001-92                         |
|                                                                                                                     | Obra: Pavimentação Asfáltica                     |

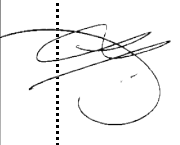
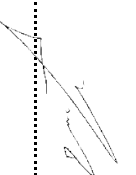


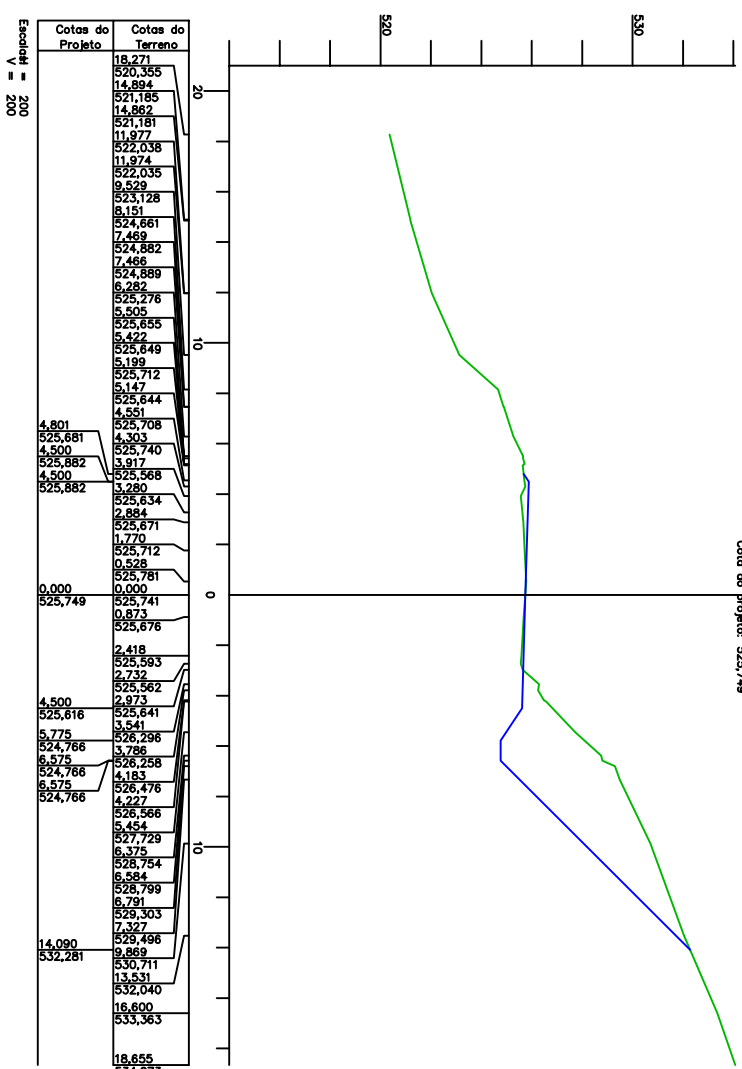
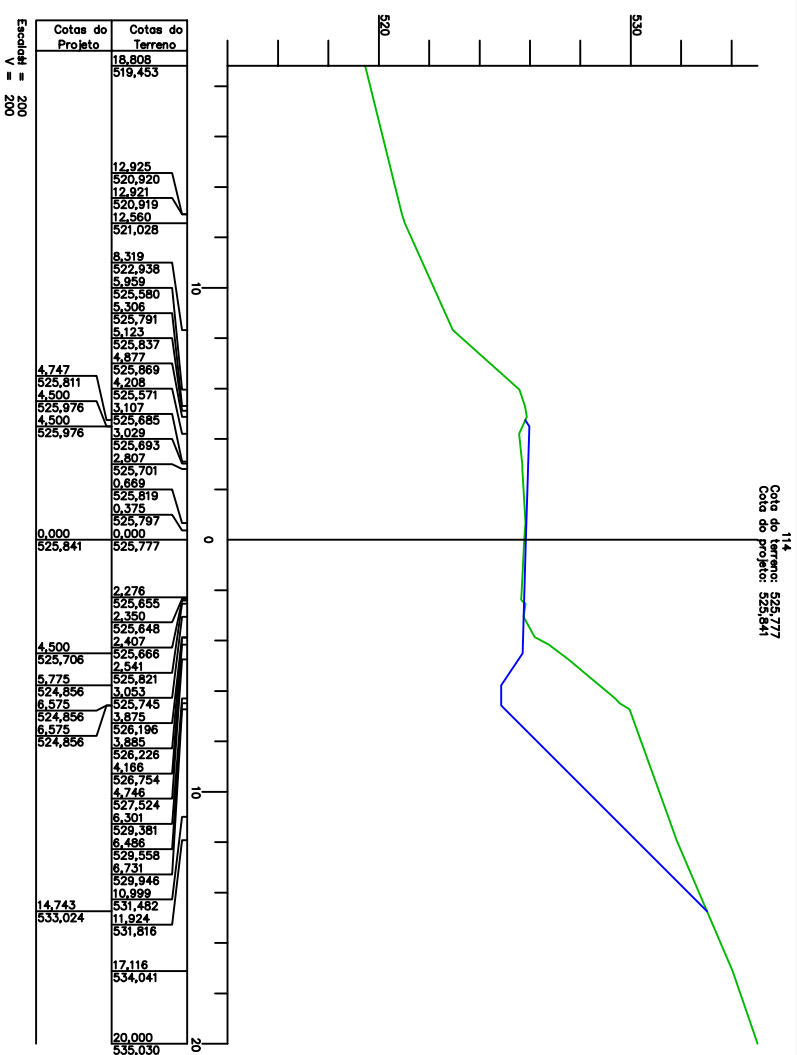
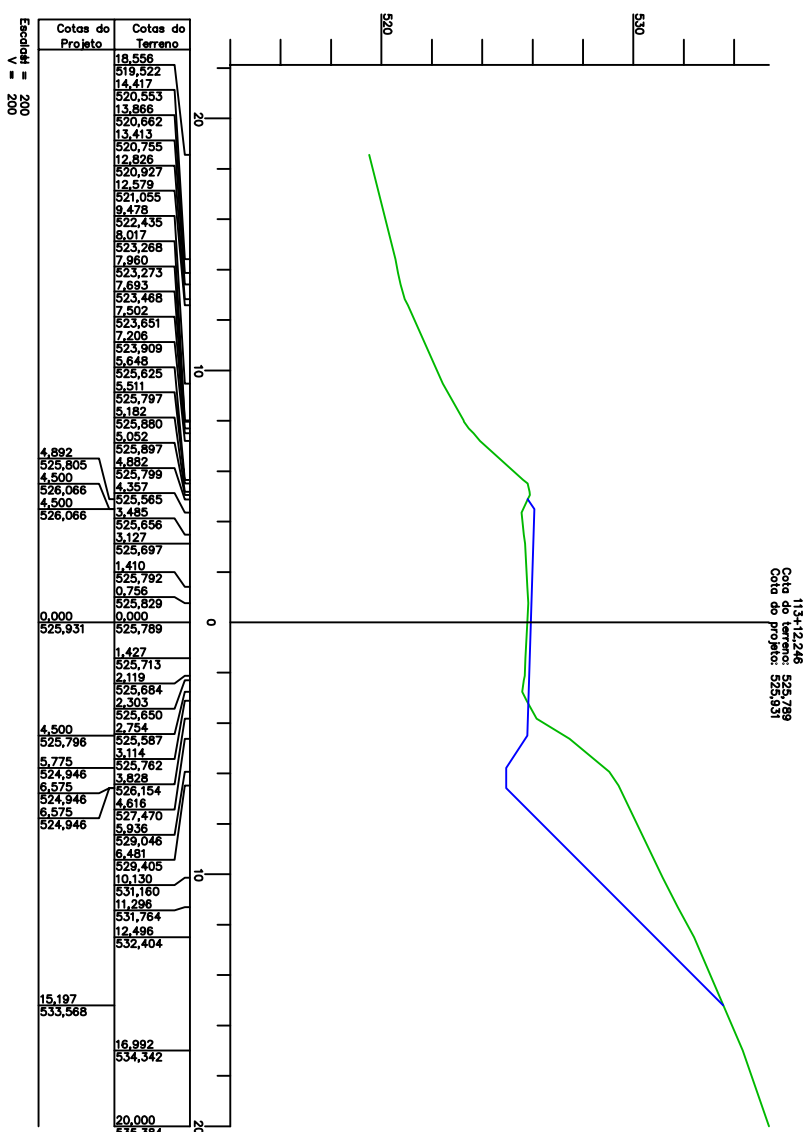
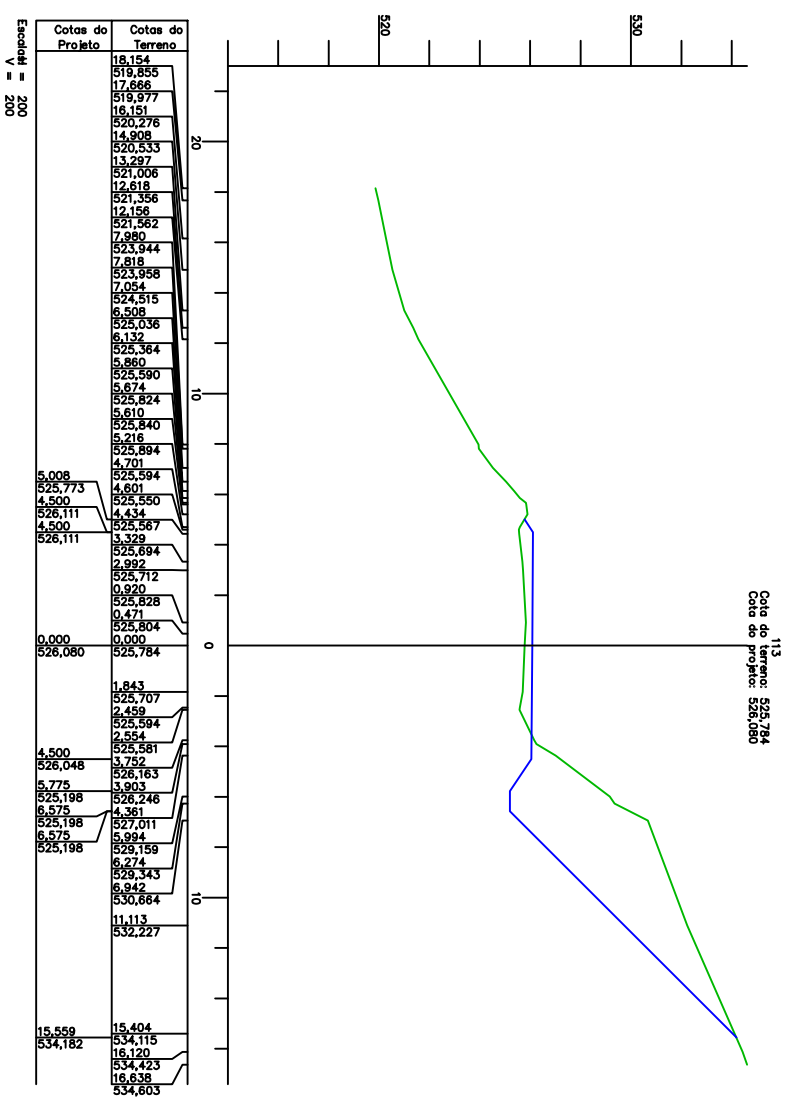




|                                                                                                                                                                                                                                      |  |                                                  |  |                                                                           |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|---------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  | Resp. Técnico:                                   |  | Cliente:                                                                  |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         |  | Data :<br>Dezembro/2021                          |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D         |  |
| Desenho :<br>Adriano Jr.                                                                                                                                                                                                             |  | Escala :<br>1:300                                |  | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92 |  |
| Aprovação :<br>-                                                                                                                                                                                                                     |  | Revisão :<br>01                                  |  | Obra :<br>Pavimentação Asfáltica                                          |  |
| Prancha :<br>56                                                                                                                                                                                                                      |  | Local :<br>Estrada de Acesso a Barra do Rio Azul |  | Conteúdo :<br>Seções Transversais                                         |  |

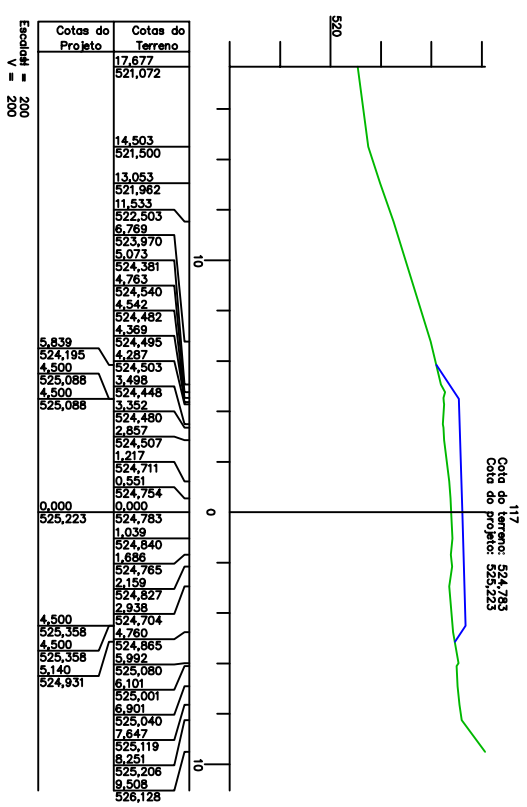
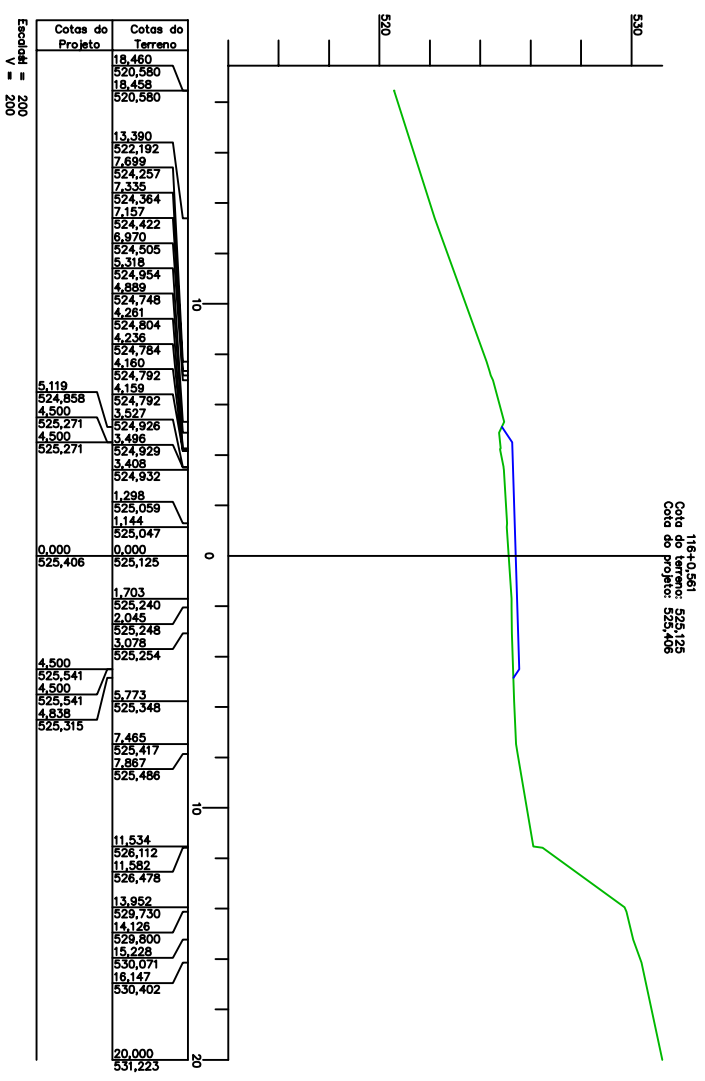
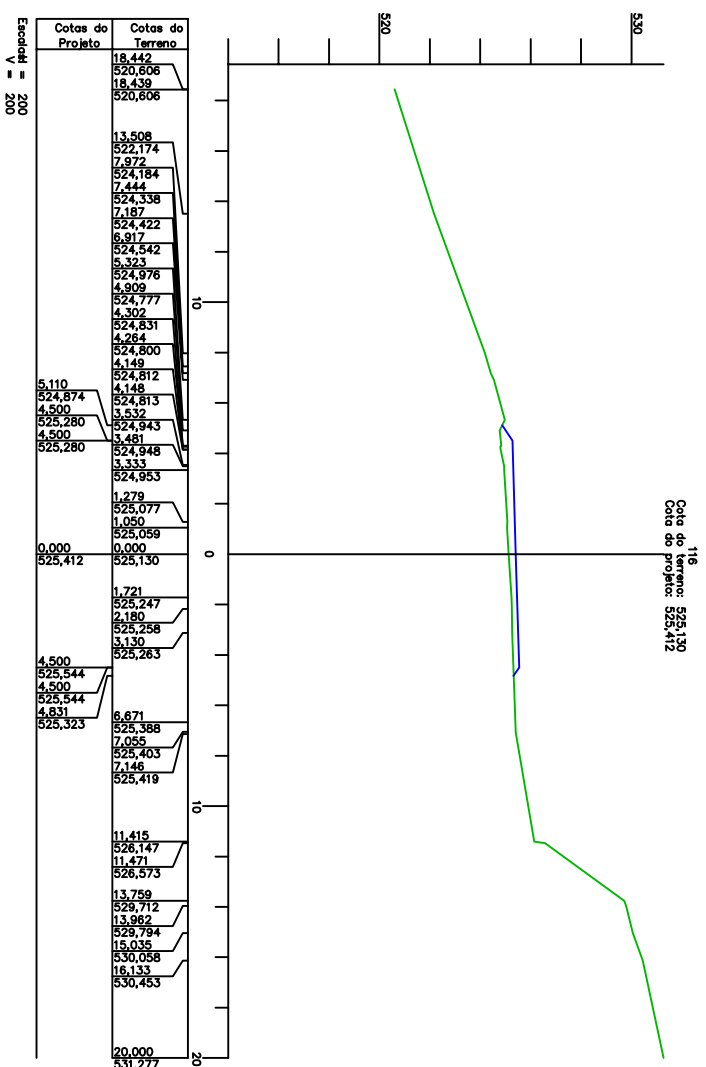
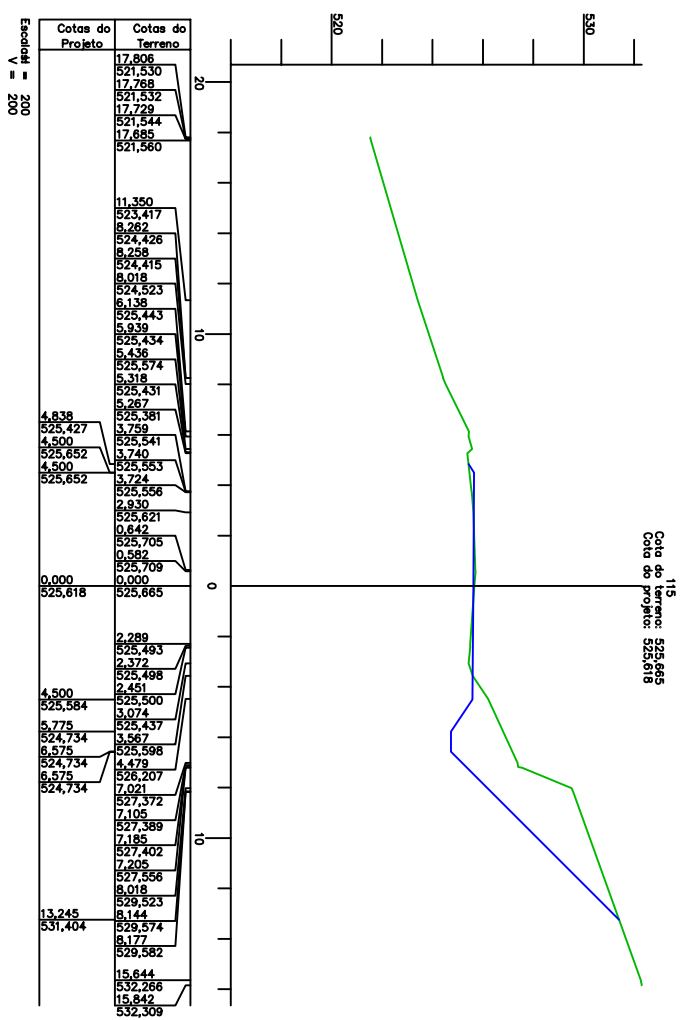


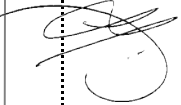
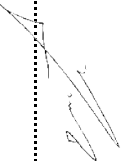
|                                                                                                                                                                                                                                      |                         |                                                                                                       |                                                  |                                                                                                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br> |                                                  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D                                 |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92                         |                                                                                                 |  |
| Aprovação:<br>-                                                                                                                                                                                                                      | Revisão :<br>01         | Obra:<br>Pavimentação Asfáltica                                                                       | Local :<br>Estrada de Acesso a Barra do Rio Azul |                                                                                                 |  |
| Prancha :<br>57                                                                                                                                                                                                                      |                         | Conteúdo:<br>Seções Transversais                                                                      |                                                  |                                                                                                 |  |

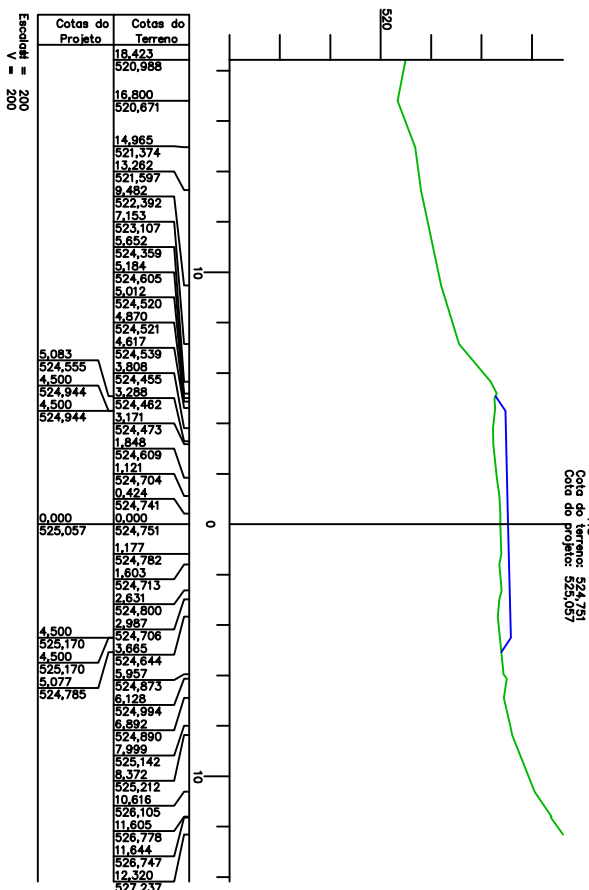
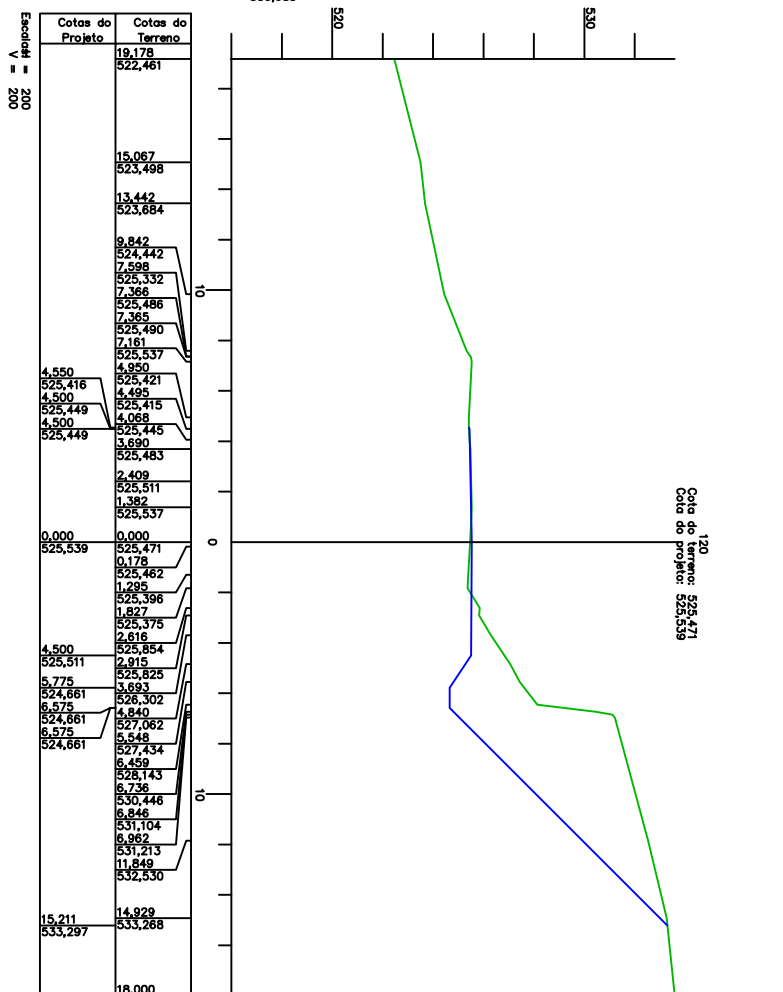
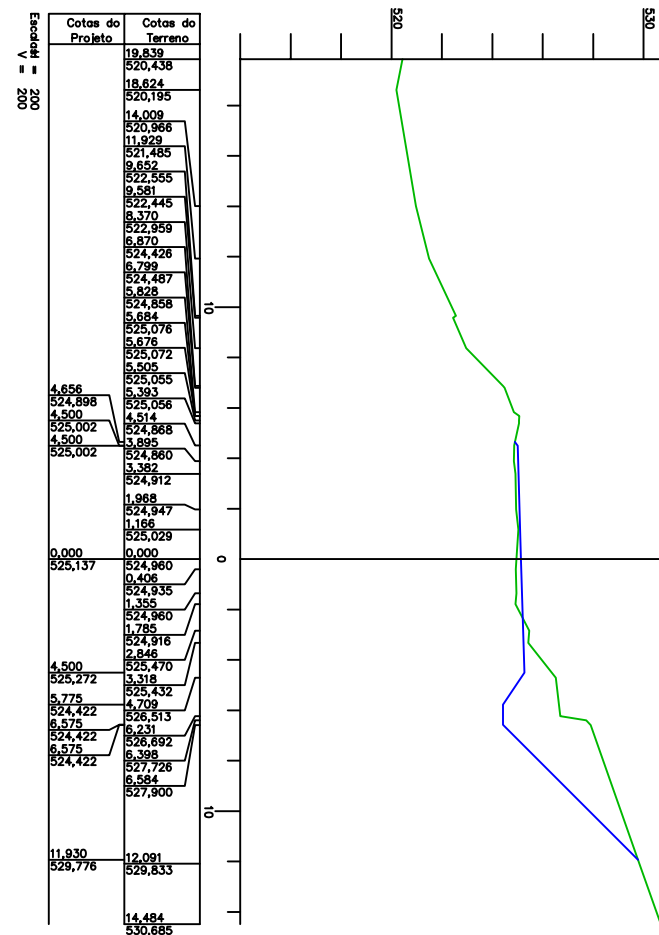
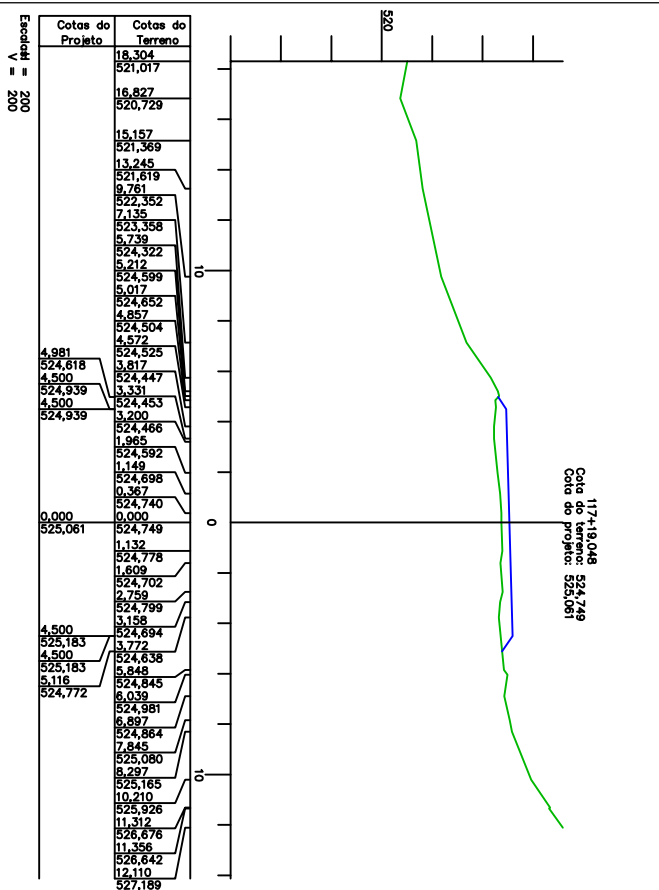
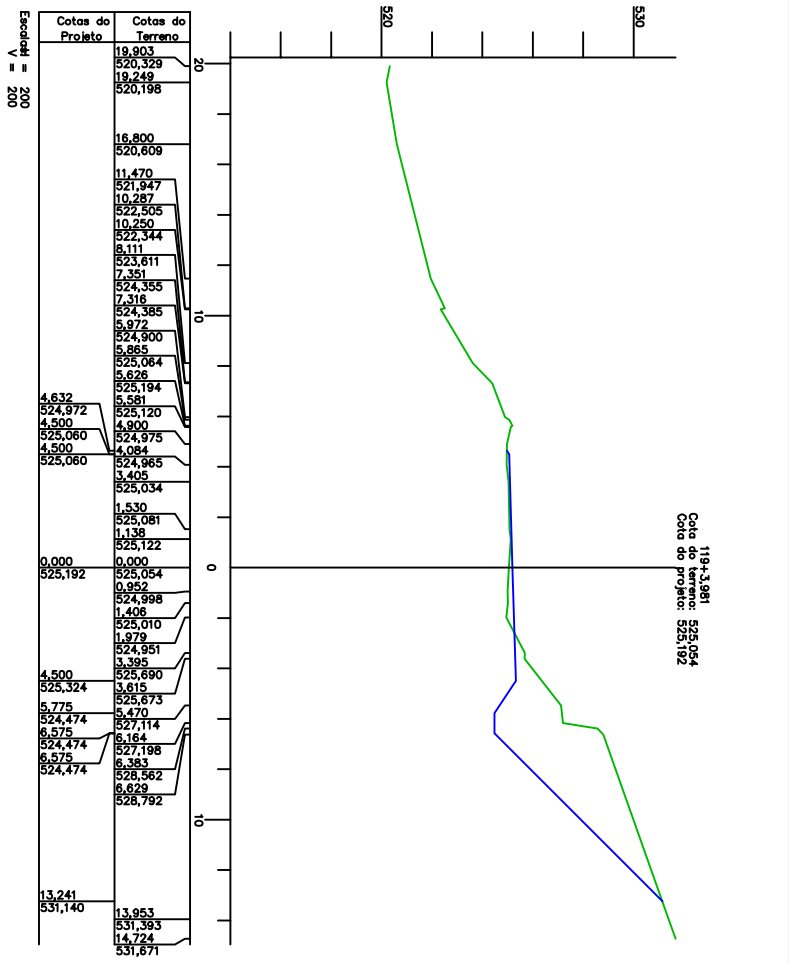
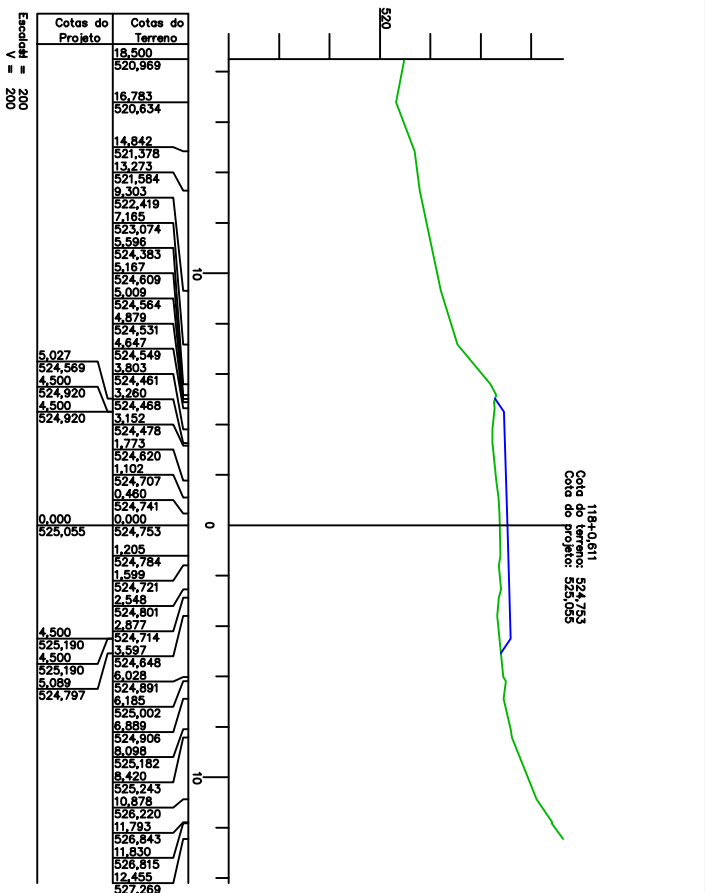
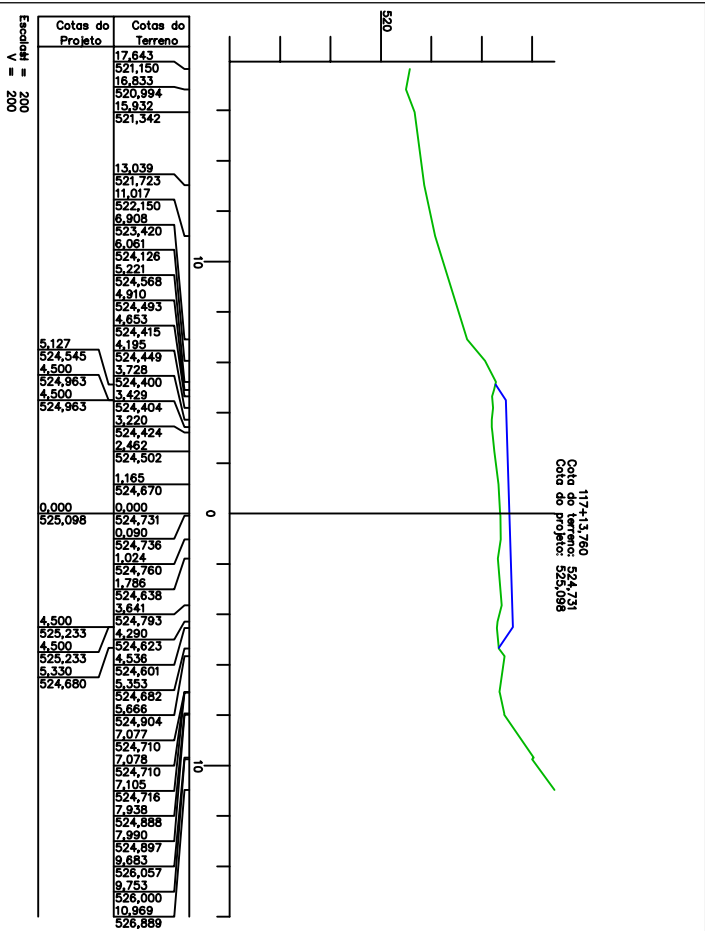


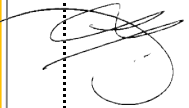
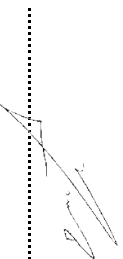
|                                                                                                                                                                                                                                      |                                 |                                                                                                       |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Gelúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                 | Resp. Técnico:<br> | Cliente:<br> |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021         | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                                     |                                                                                                 |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala :<br>1:300               | Cliente: Pref. Municipal de Barra do Rio Azul CNPJ: 93.539.153/0001-92                                |                                                                                                 |
|                                                                                                                                                                                                                                      | Obra:<br>Pavimentação Asfáltica |                                                                                                       |                                                                                                 |
| Aprovação:<br>-                                                                                                                                                                                                                      | Revisão :<br>01                 | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                                                                                                 |
|                                                                                                                                                                                                                                      | Plancha :<br>58                 | Conteúdo:<br>Seções Transversais                                                                      |                                                                                                 |

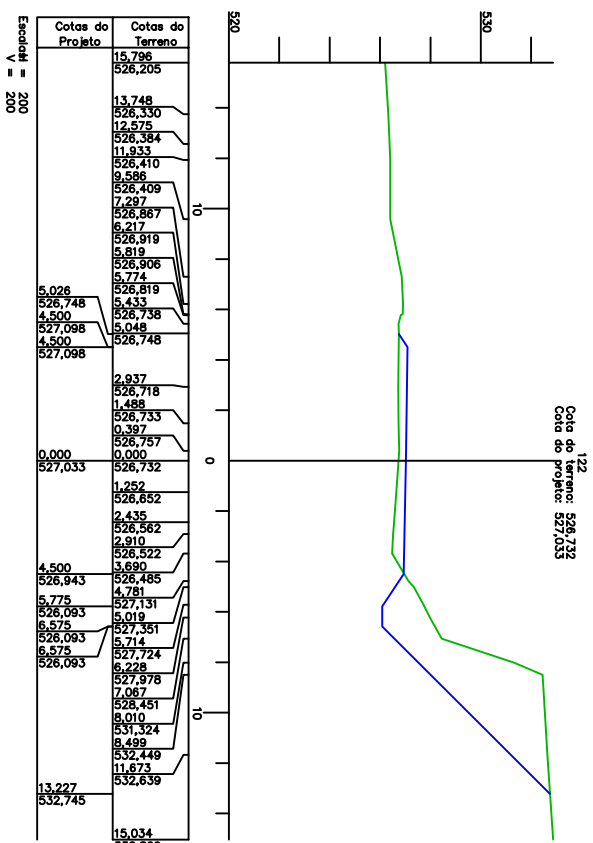
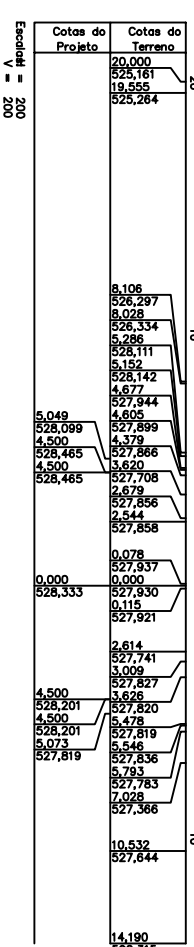
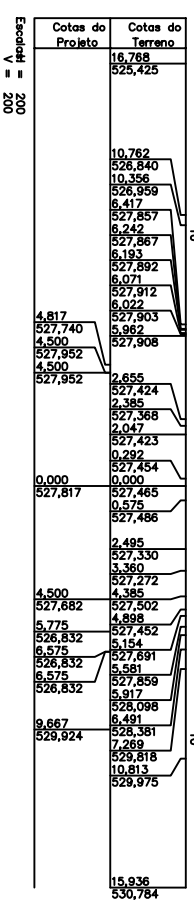
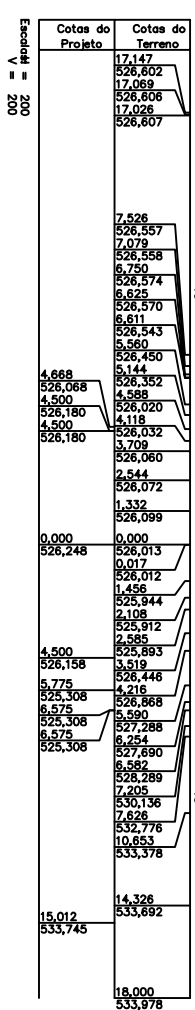
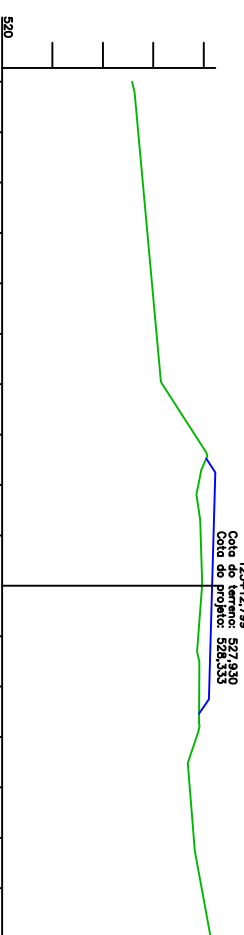
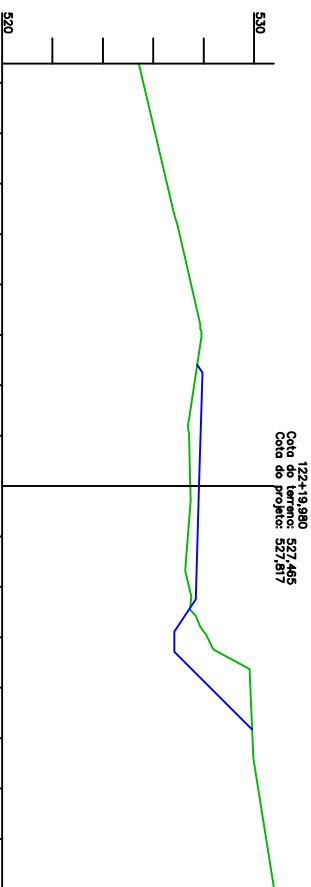
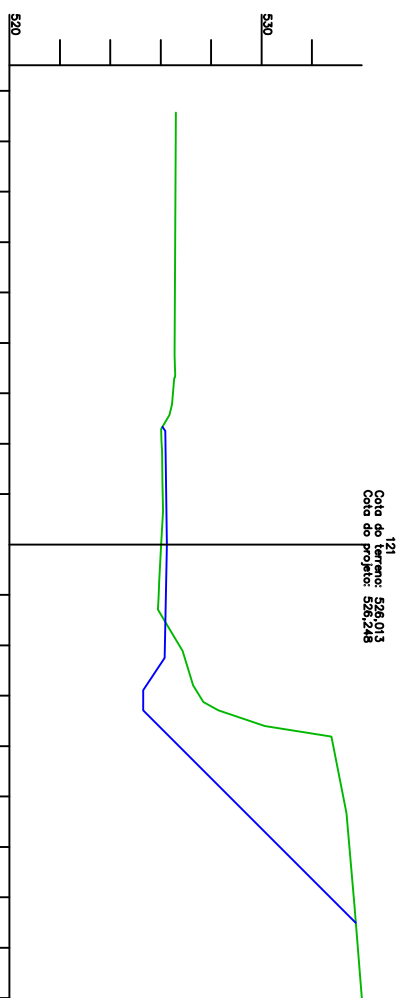
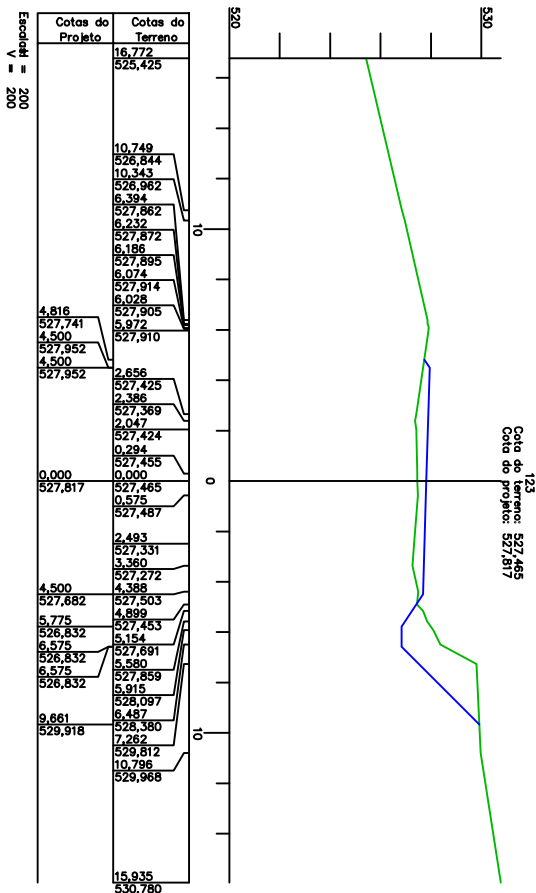
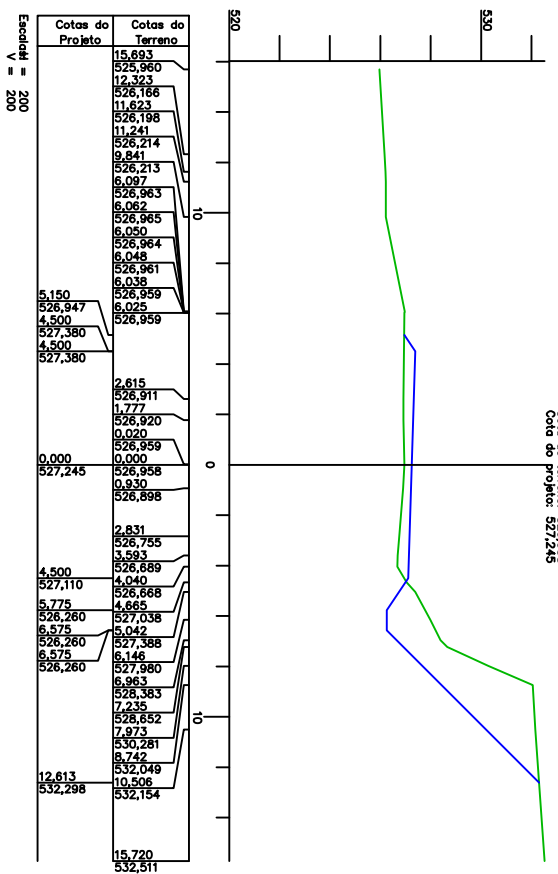
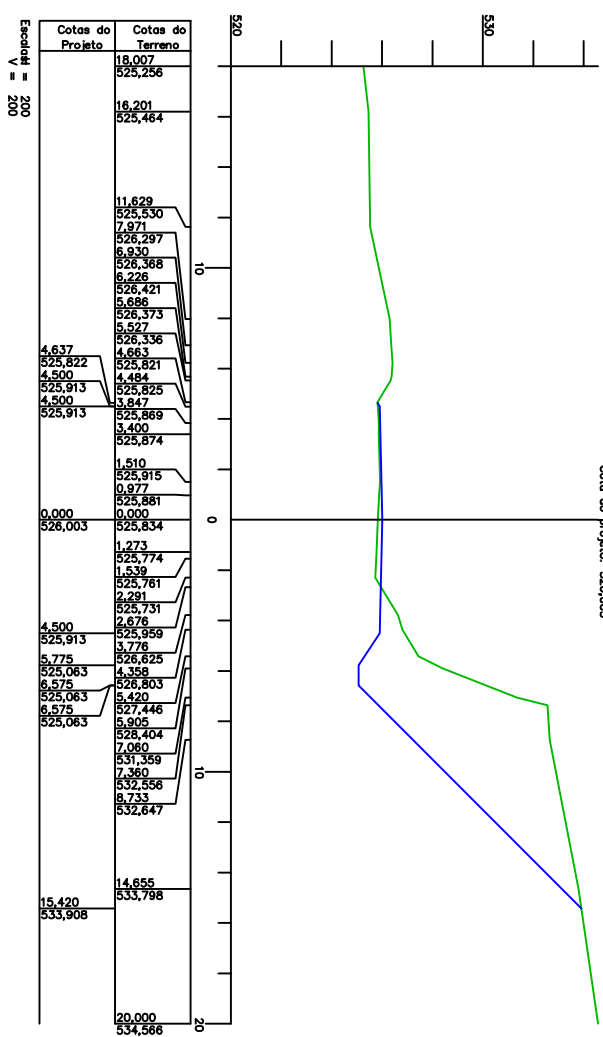


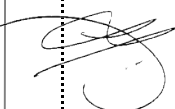
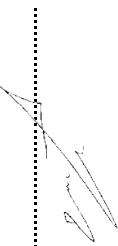


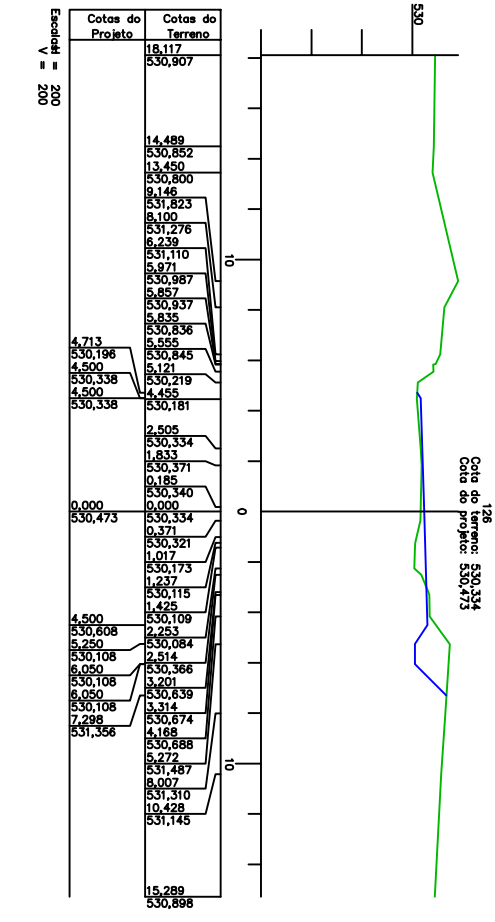
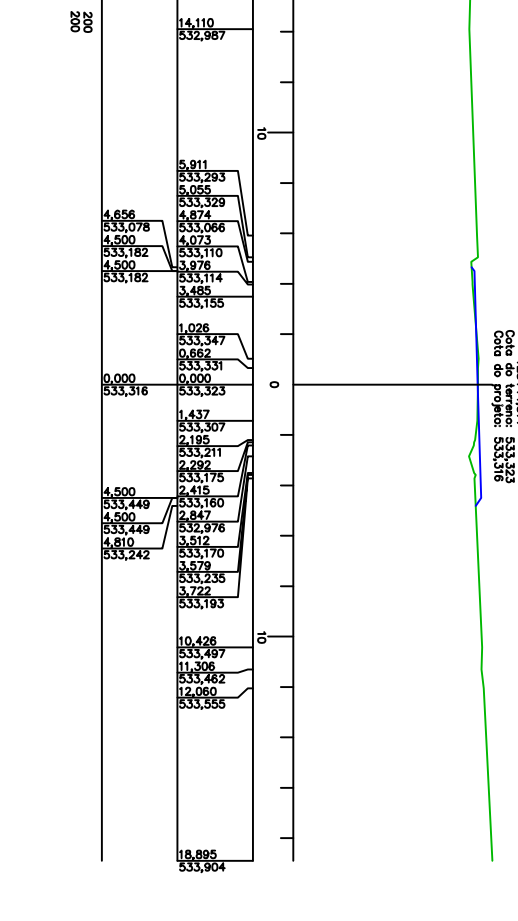
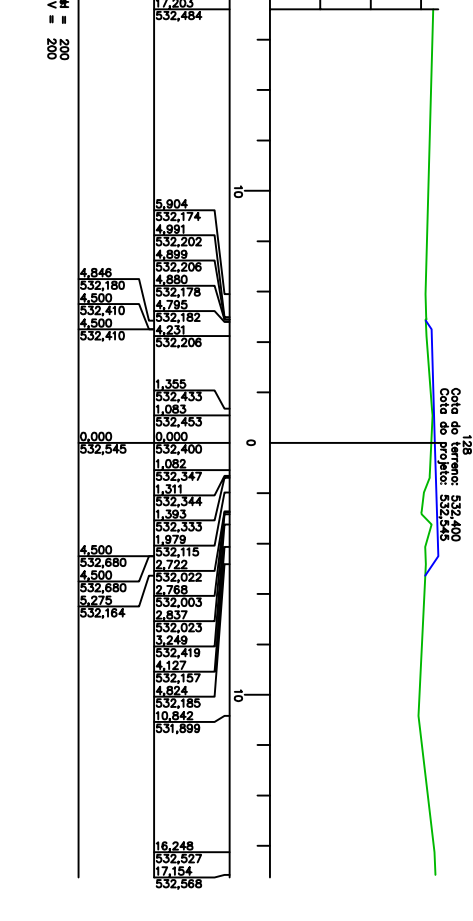
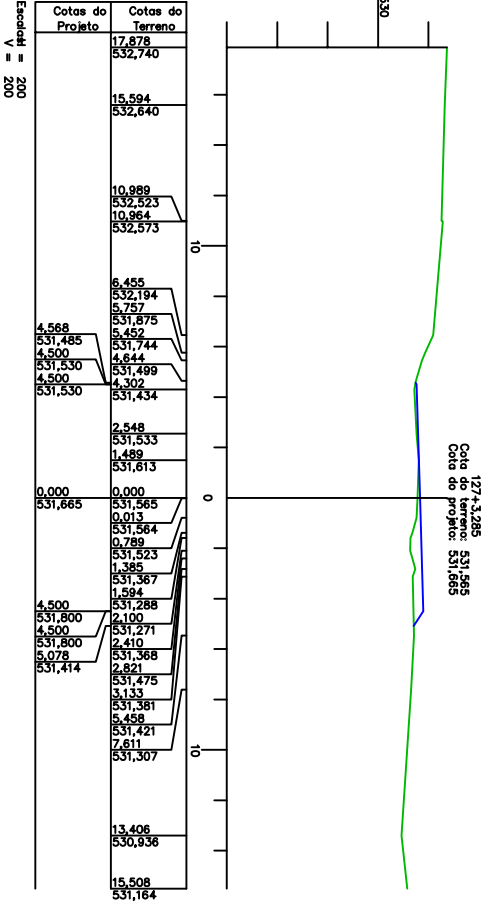
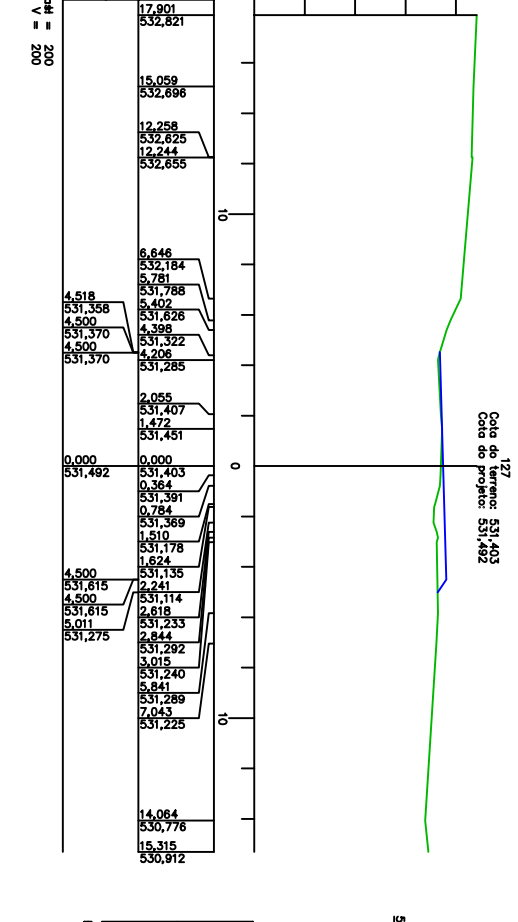
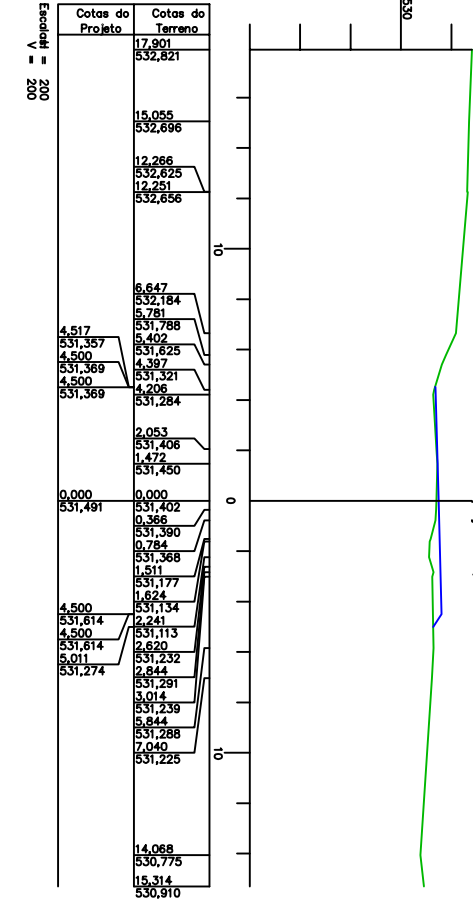
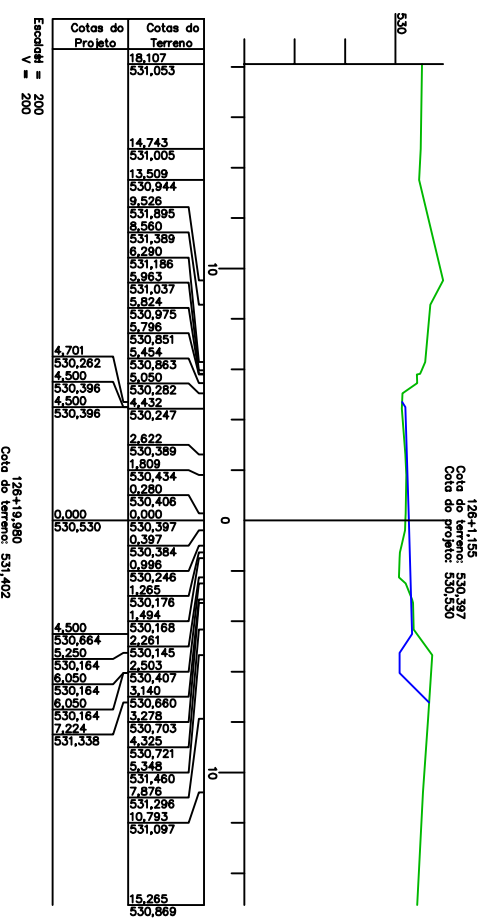
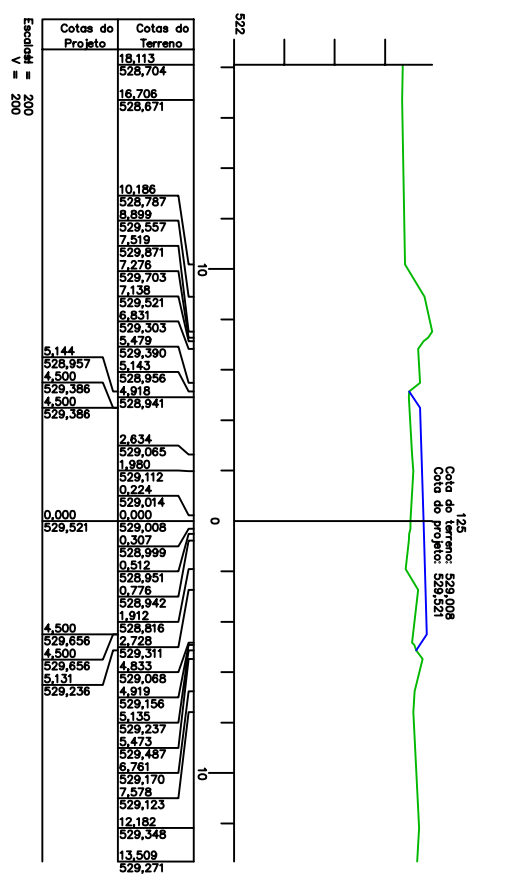
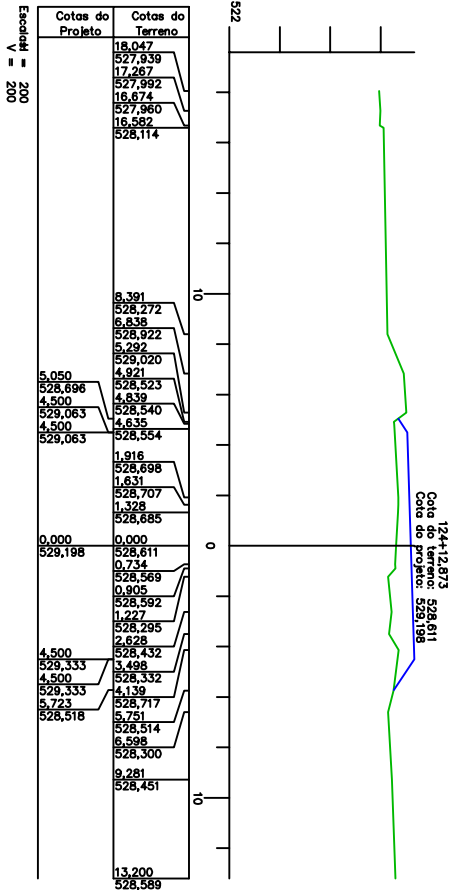
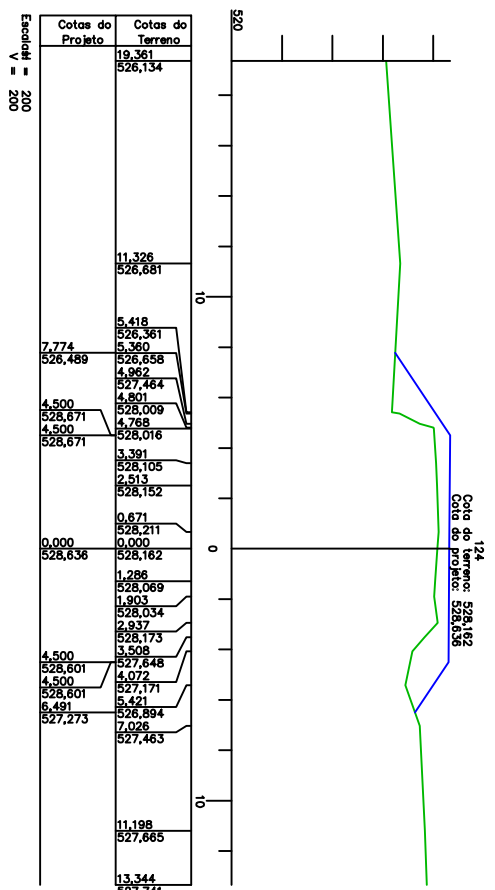
|                                                                                                                                                                                                                                                            |                         |                                                                                                                |  |                                                                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|--|
| <div><br/>SERVIÇOS DE ENGENHARIA</div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Gelúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |                         | Resp. Técnico:<br><br>..... |  | Cliente:<br><br>..... |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                               | Data :<br>Dezenbro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini      CREA/RS 123168-D                                            |  |                                                                                                          |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                    | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul      CNPJ: 93.539.153/0001-92                                    |  |                                                                                                          |  |
|                                                                                                                                                                                                                                                            |                         | Obra: Pavimentação Asfáltica                                                                                   |  |                                                                                                          |  |
| Aprovação:                                                                                                                                                                                                                                                 | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                               |  |                                                                                                          |  |
| -                                                                                                                                                                                                                                                          |                         | Conteúdo: Seções Transversais                                                                                  |  |                                                                                                          |  |



|                                                                                                                                                                                                                                                                             |                                     |                                                                                                                             |                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <div><p><b>L.C.A.D.</b><br/>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |                                     | <div>Resp. Técnico:<br/><br/>.....</div> | <div>Cliente:<br/><br/>.....</div> |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                                    | <div>Data :<br/>Dezembro/2021</div> | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini<br/>CREA/RS 123168-D</div>                                              |                                                                                                                       |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                                         | <div>Escala :<br/>1:300</div>       | <div>Cliente: Pref. Municipal de Barra do Rio Azul<br/>CNPJ: 93.639.153/0001-92</div>                                       | <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                           |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                                                 | <div>Revisão :<br/>01</div>         | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                                | <div>Conteúdo:<br/>Seções Transversais</div>                                                                          |



|                                                                                                                        |  |                              |  |                                                                                     |  |                                               |  |                                                                                     |  |
|------------------------------------------------------------------------------------------------------------------------|--|------------------------------|--|-------------------------------------------------------------------------------------|--|-----------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>LACAD |  | Resp. Técnico:               |  |  |  | Cliente:                                      |  |  |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335    |  | Projeto :<br>Lauson Serafini |  | Data :<br>Dezembro/2021                                                             |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini |  | CREA/RS 123168-D                                                                    |  |
| Desenho:<br>Adriano Jr.                                                                                                |  | Escala :<br>1:300            |  | Cliente: Pref. Municipal de Barra do Rio Azul    CNPJ: 93.539.153/0001-92           |  | Obra:<br>Pavimentação Asfáltica               |  |                                                                                     |  |
| Aprovação:<br>-                                                                                                        |  | Revisão :<br>01              |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |  | Conteúdo:<br>Seções Transversais              |  |                                                                                     |  |
| Prancha :<br>61                                                                                                        |  |                              |  |                                                                                     |  |                                               |  |                                                                                     |  |



**L.C.A.D.**  
SERVIÇOS DE ENGENHARIA

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Projeto : Lauson Serafini

Data : Dezembro/2021

Resp. Técnico:

Eng. Civil Lauson Serafini

Desenho: Adriano Jr.

Escala : 1:300

Ciente: Pref. Municipal de Barra do Rio Azul CNPJ: 93.539.153/0001-92

Aprovação: -

Revisão : 01

Obra: Pavimentação Asfáltica

Prancha : 62

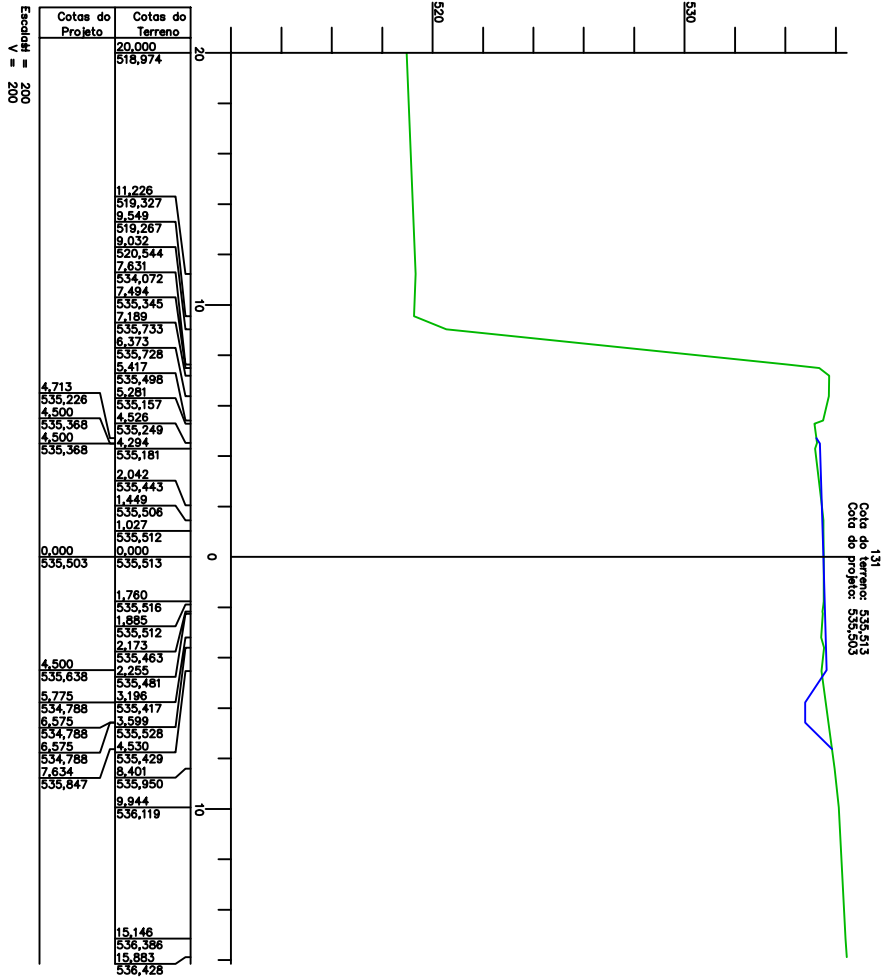
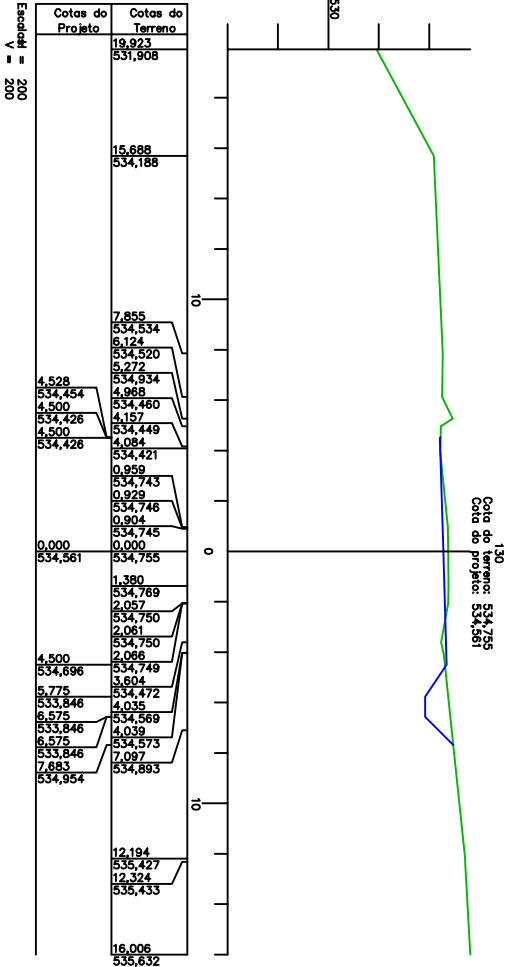
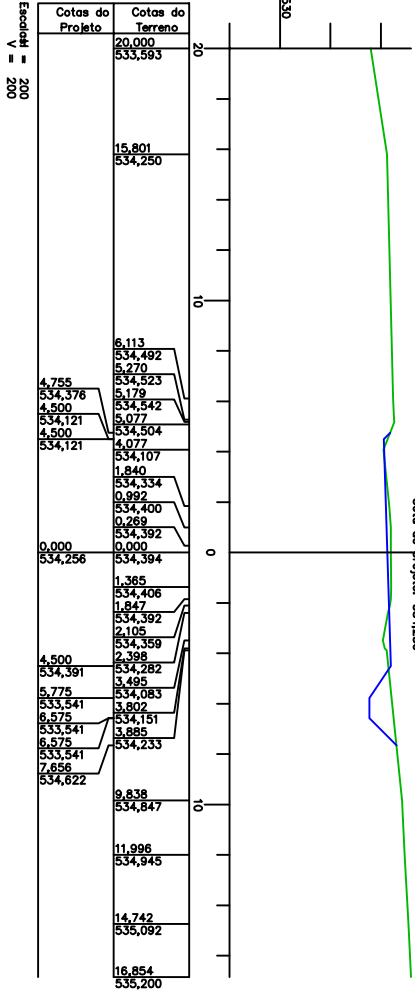
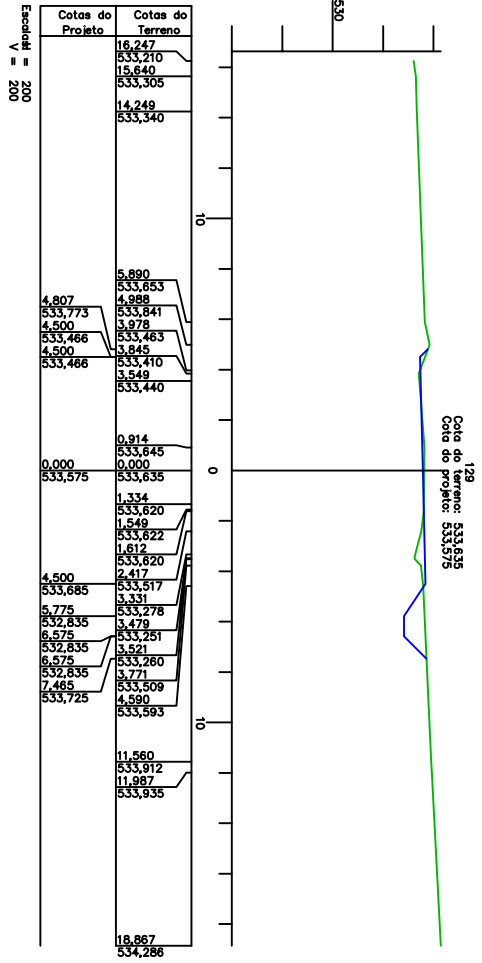
Local : Estrada de Acesso a Barra do Rio Azul

Conteúdo: Seções Transversais

Resp. Técnico:

Ciente:







Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Resp. Técnico:

.....

Cliente:

.....

Projeto :  
Lauson Serafini

Data :  
Dezembro/2021

Resp. Técnico :  
Eng. Civil Lauson Serafini

CREA/RS 123168-D

Desenho:  
Adriano Jr.

Escala :  
1:300

Cliente: Pref. Municipal de Barra do Rio Azul

CNPJ: 93.539.153/0001-92

Obra:  
Pavimentação Asfáltica

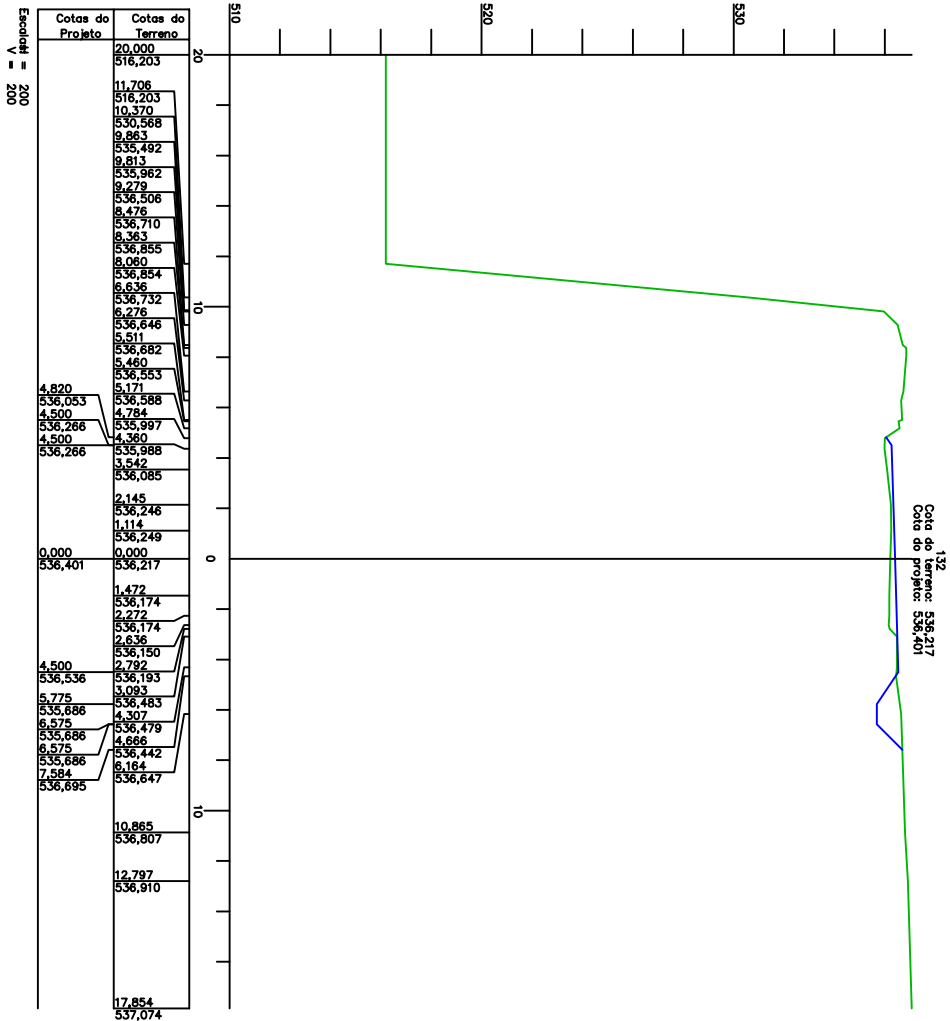
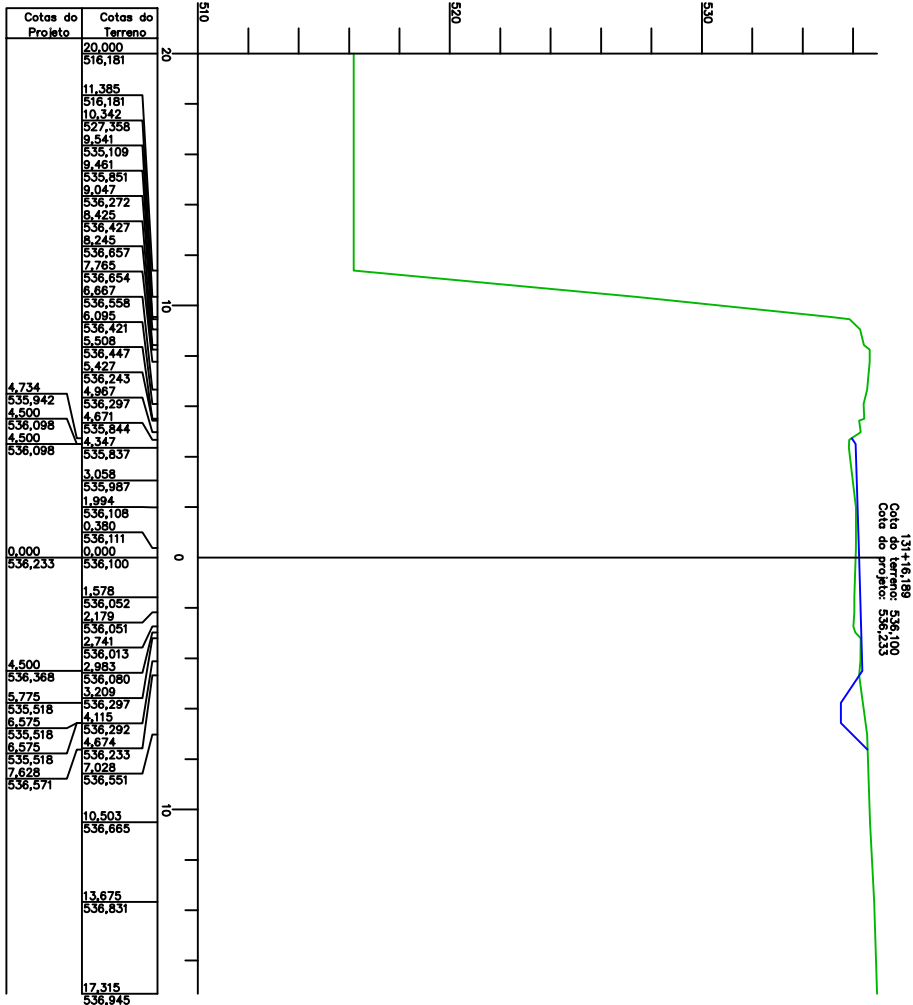
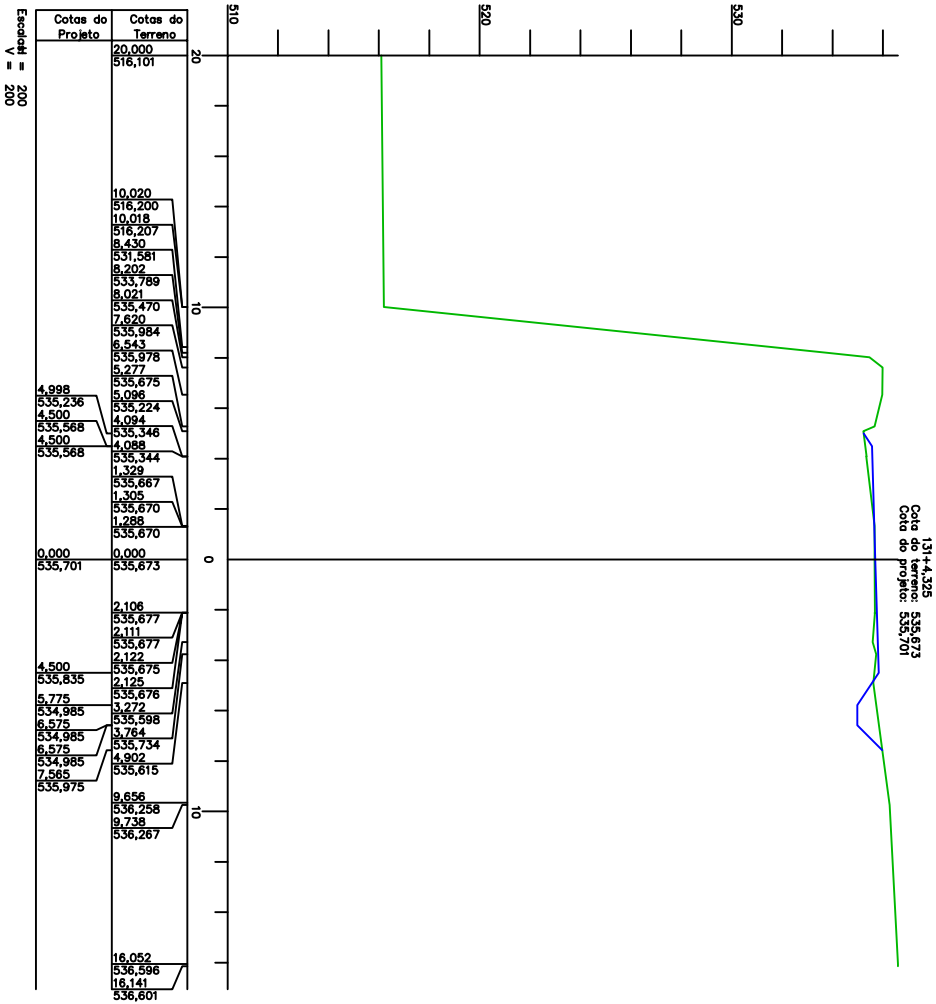
Local :  
Estrada de Acesso a Barra do Rio Azul

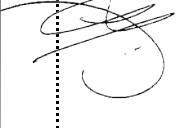
Conteúdo:  
Seções Transversais

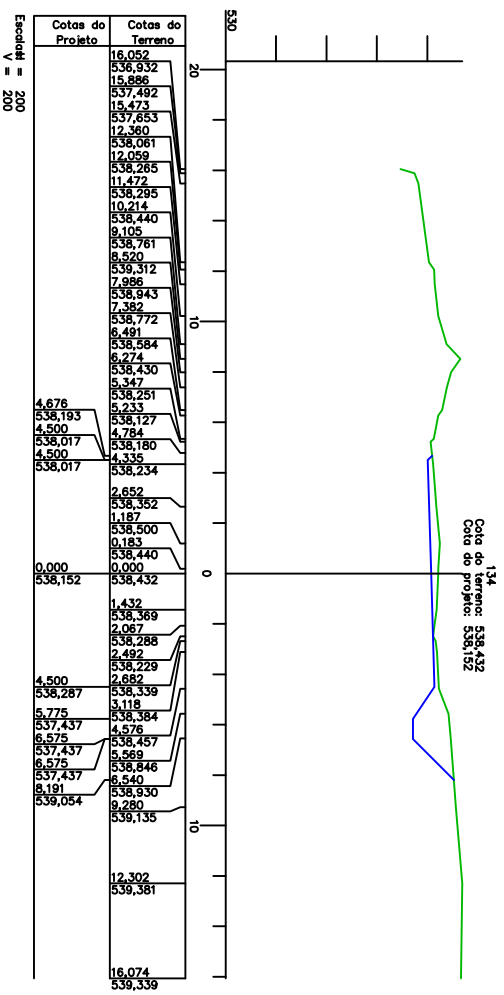
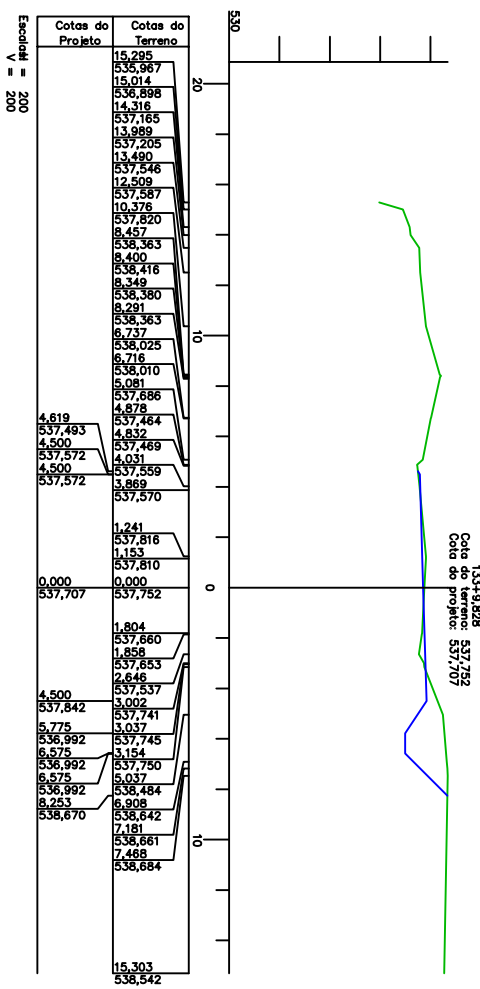
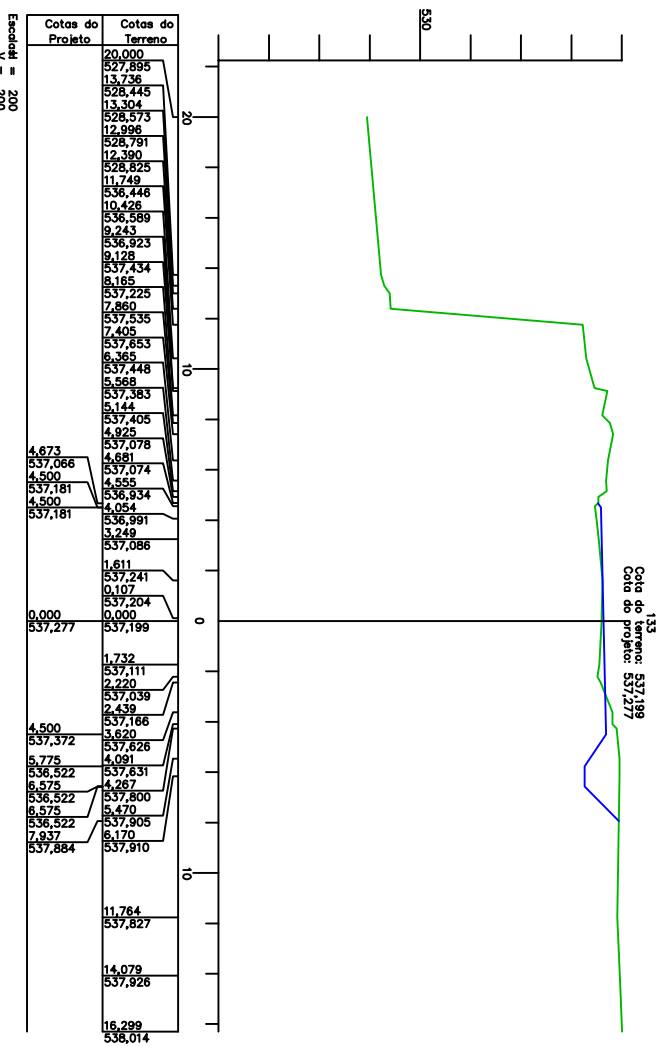
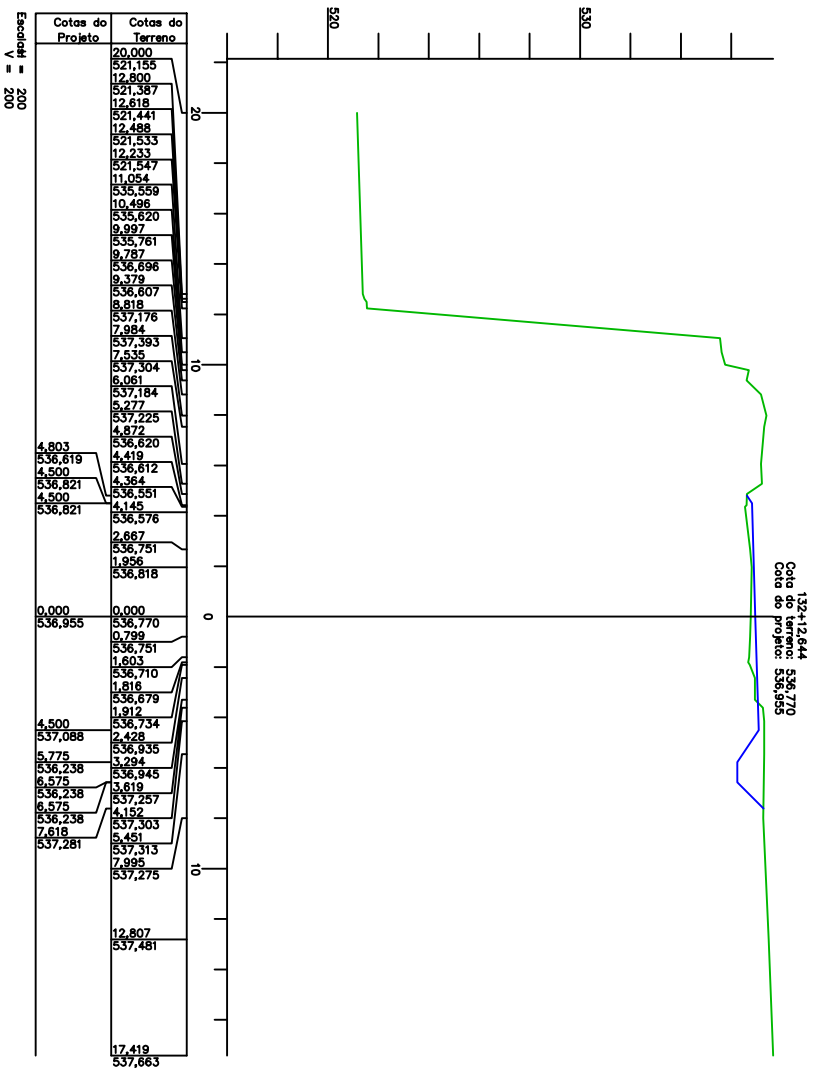
Aprovação:

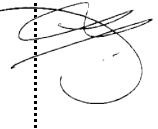
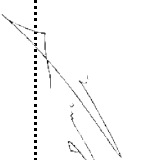
Revisão :  
01

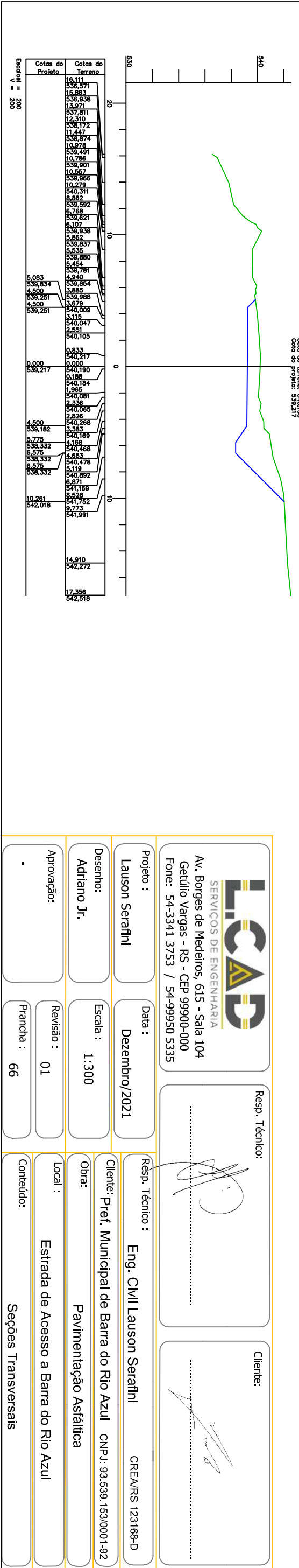
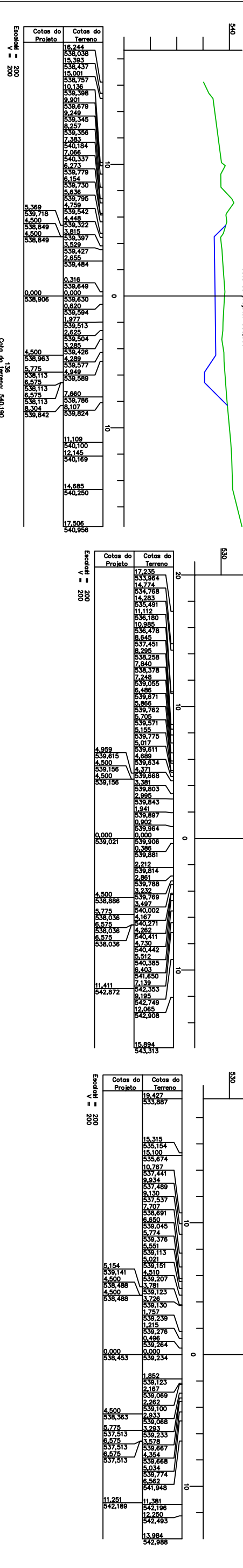
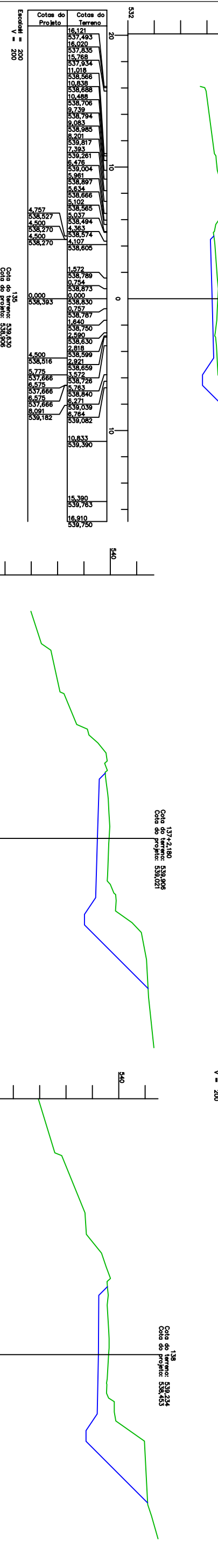
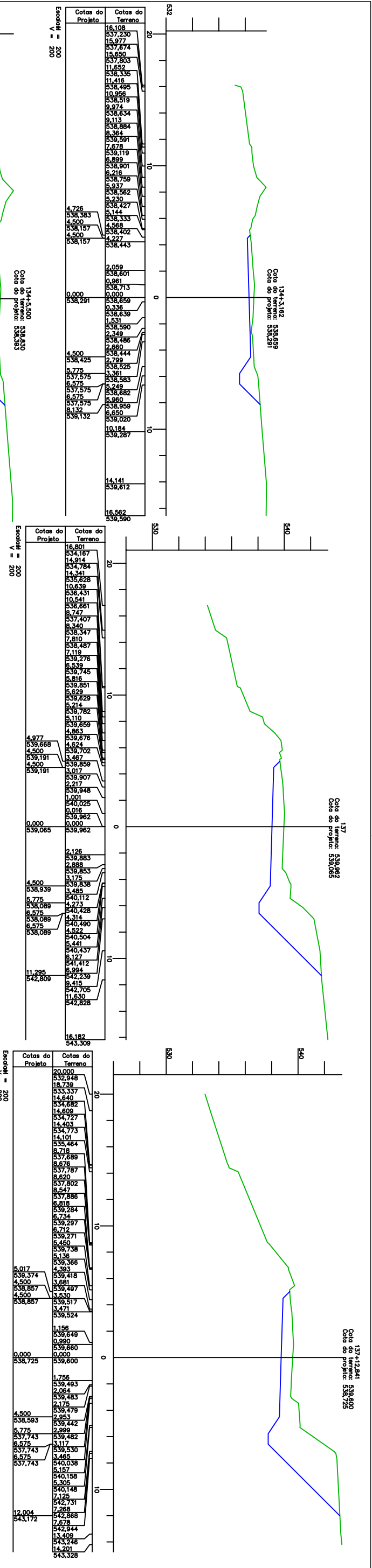
Prancha :  
63

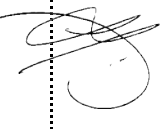
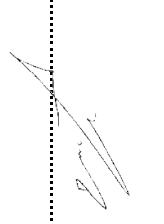


|                                                                                                                                                                                                            |                         |                                                                                     |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|----------|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:                                                                      | Cliente: |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               | Data :<br>Dezembro/2021 |  |          |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul CNPJ: 93.539.153/0001-92              |          |
| Aprovação:                                                                                                                                                                                                 | Revisão :<br>01         | Obra: Pavimentação Asfáltica                                                        |          |
| -                                                                                                                                                                                                          | Prancha :<br>64         | Local : Estrada de Acesso a Barra do Rio Azul                                       |          |
| Conteúdo: Seções Transversais                                                                                                                                                                              |                         |                                                                                     |          |

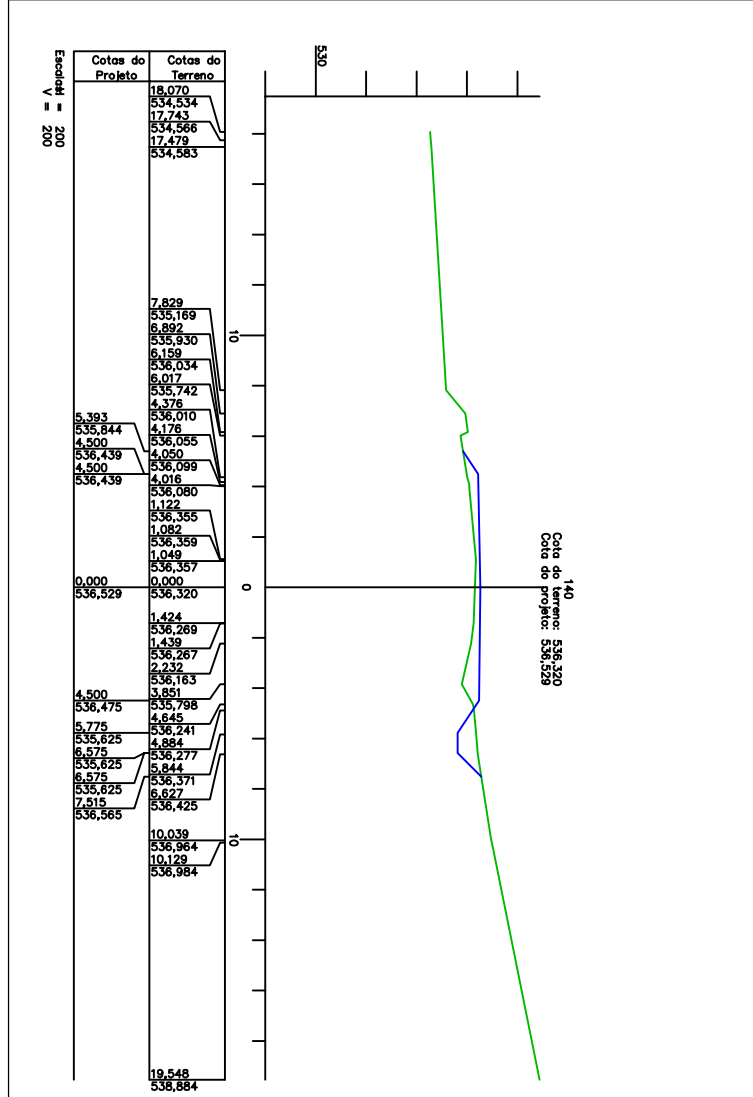
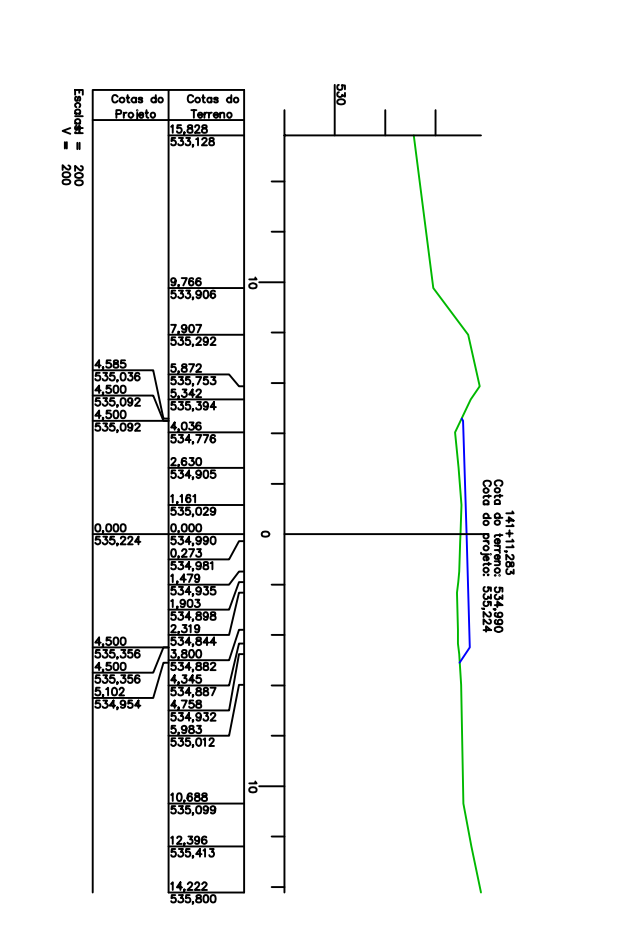
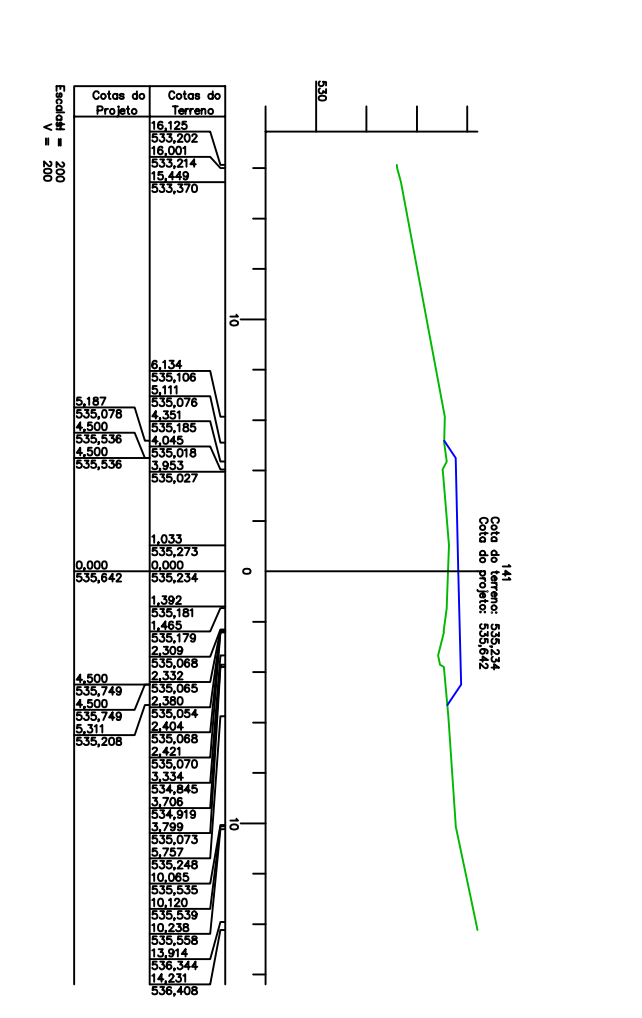
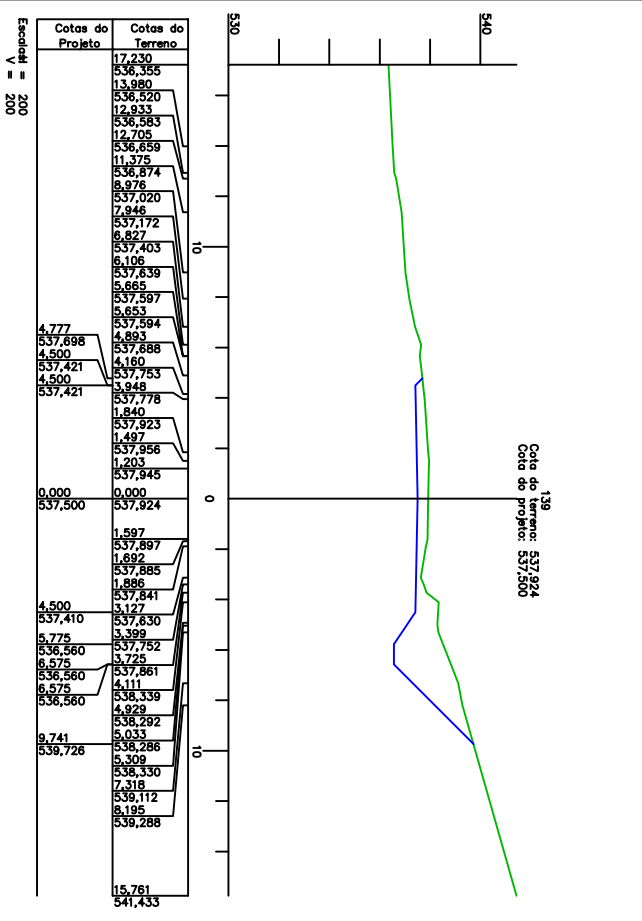
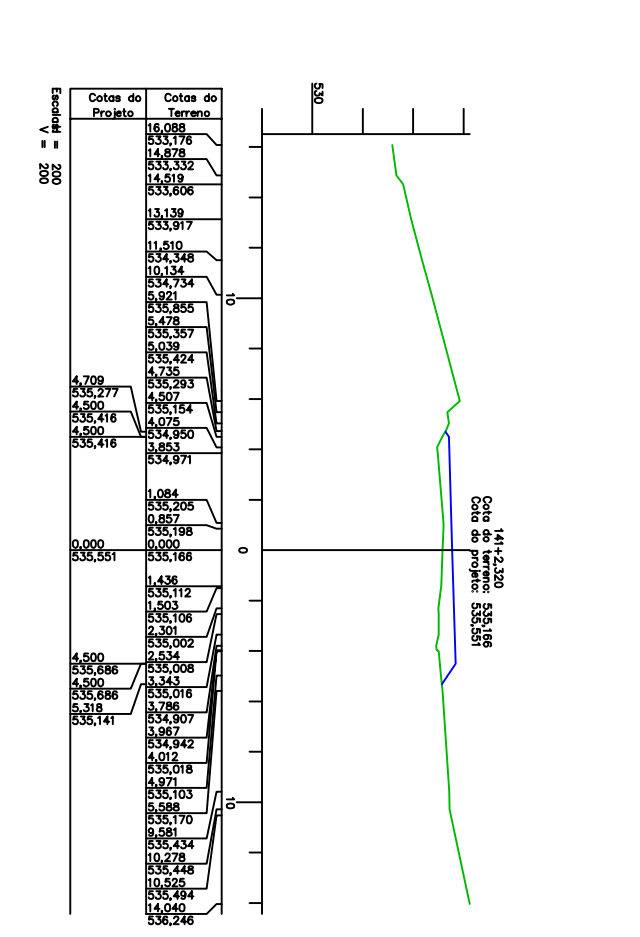
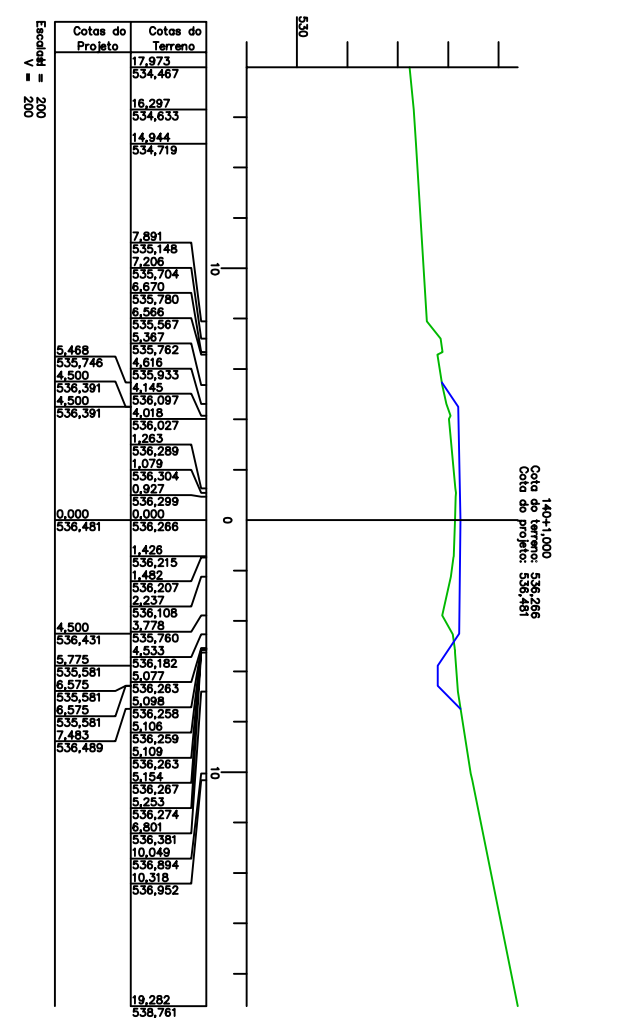
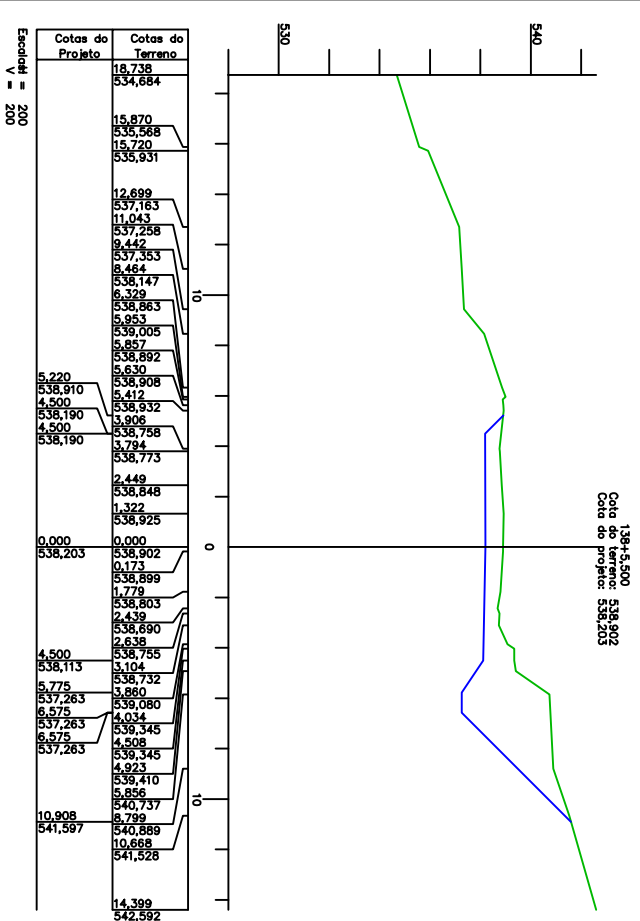


|                                                                                                                     |                         |                                                                                     |                          |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------|--|
|                                  |                         | Resp. Técnico:                                                                      |                          | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |                          |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       | CREA/RS 123168-D         |                                                                                     |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                       | CNPJ: 93.539.153/0001-92 | Obra:<br>Pavimentação Asfáltica                                                     |  |
| Aprovação:<br>-                                                                                                     | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |                          | Conteúdo:<br>Seções Transversais                                                    |  |
| Prancha :<br>65                                                                                                     |                         |                                                                                     |                          |                                                                                     |  |

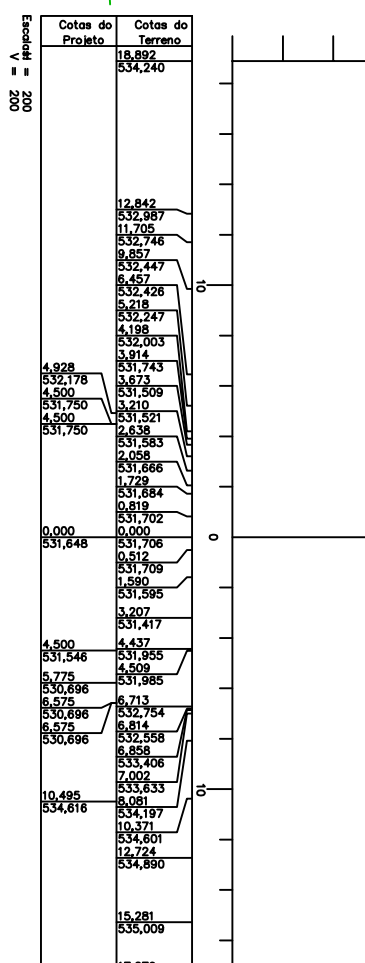
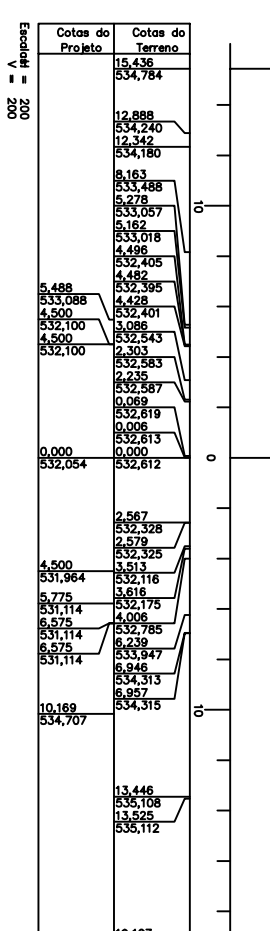
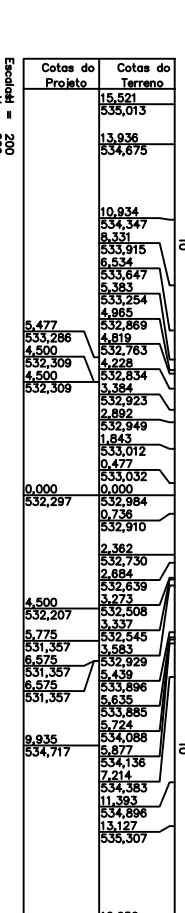
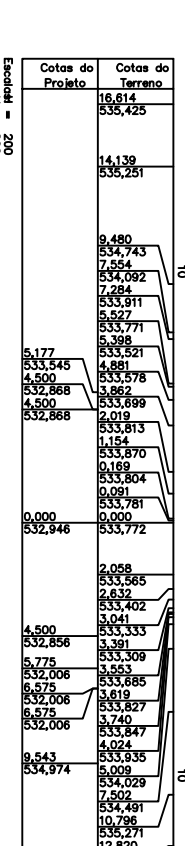
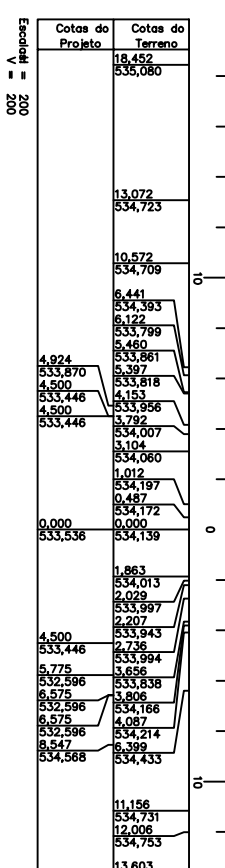
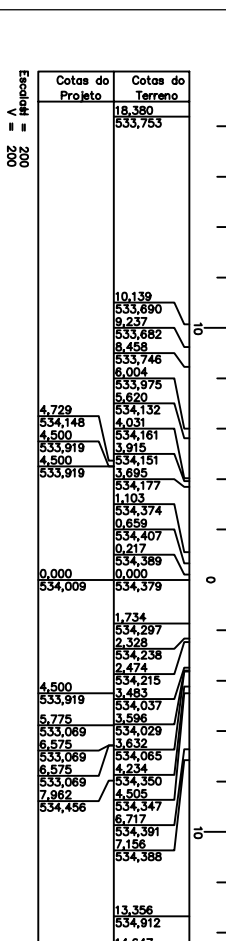
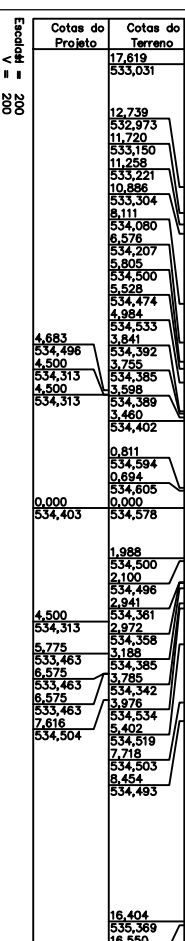
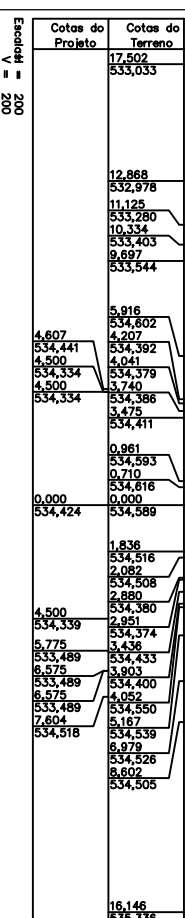
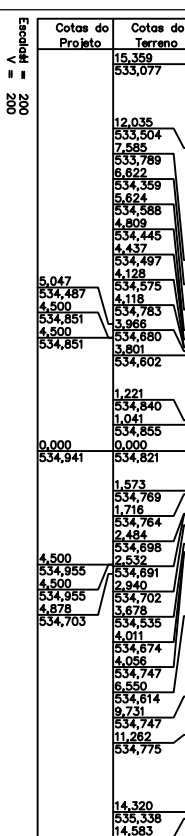


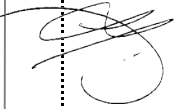
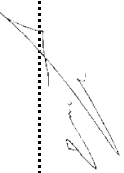
|                                                                                                                     |  |                                                                                     |  |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
|                                  |  | Resp. Técnico:                                                                      |  | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  |  |  |  |  |
| Projeto :<br>Lauson Serafini                                                                                        |  | Data :<br>Dezembro/2021                                                             |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       |  |
| Desenho :<br>Adriano Jr.                                                                                            |  | Escala :<br>1:300                                                                   |  | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92           |  |
| Aprovação :<br>-                                                                                                    |  | Revisão :<br>01                                                                     |  | Obra :<br>Pavimentação Asfáltica                                                    |  |
| Prancha :<br>66                                                                                                     |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |  | Conteúdo :<br>Seções Transversais                                                   |  |

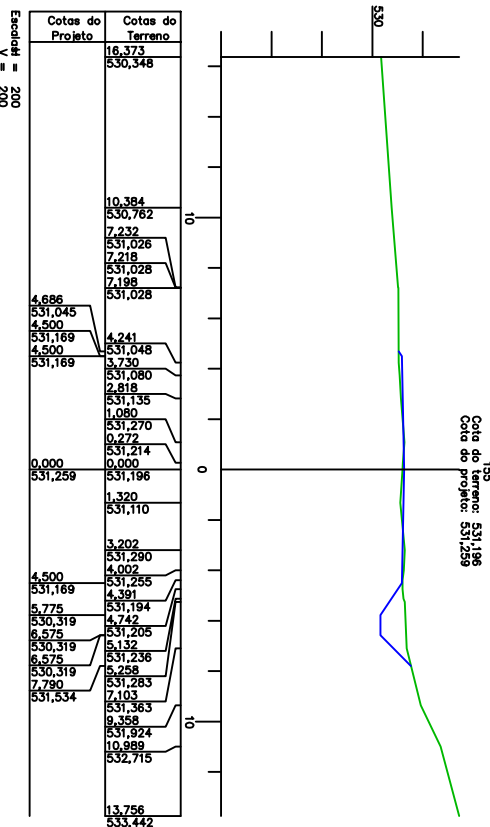
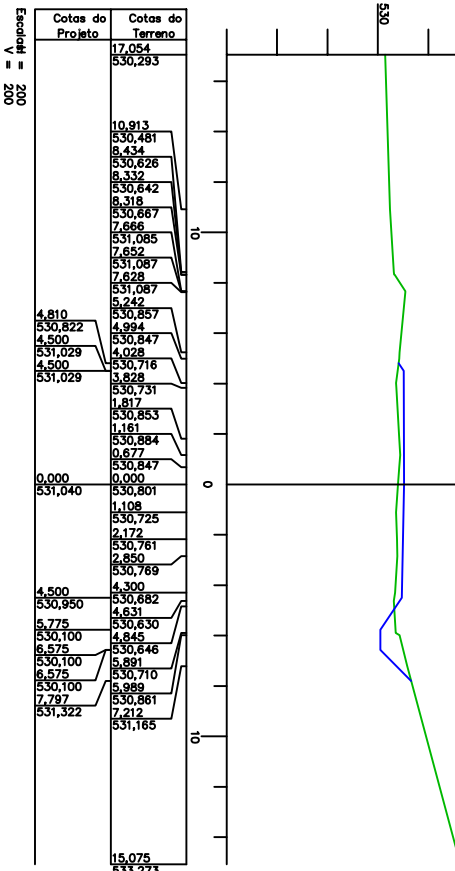
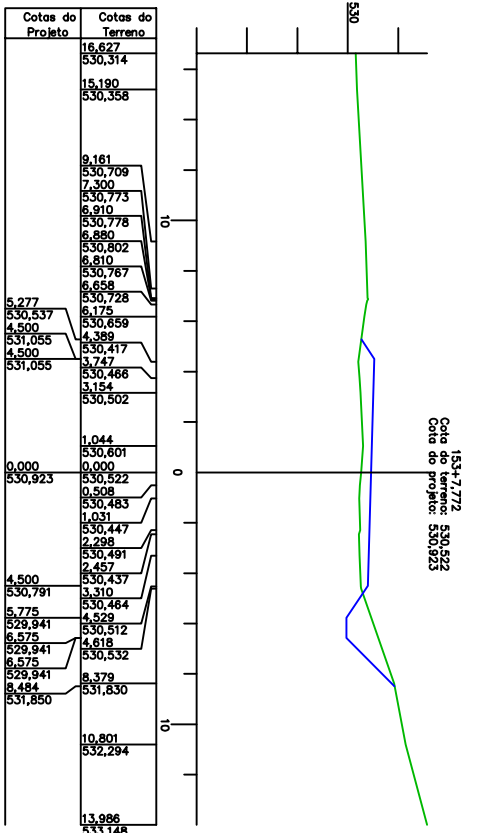
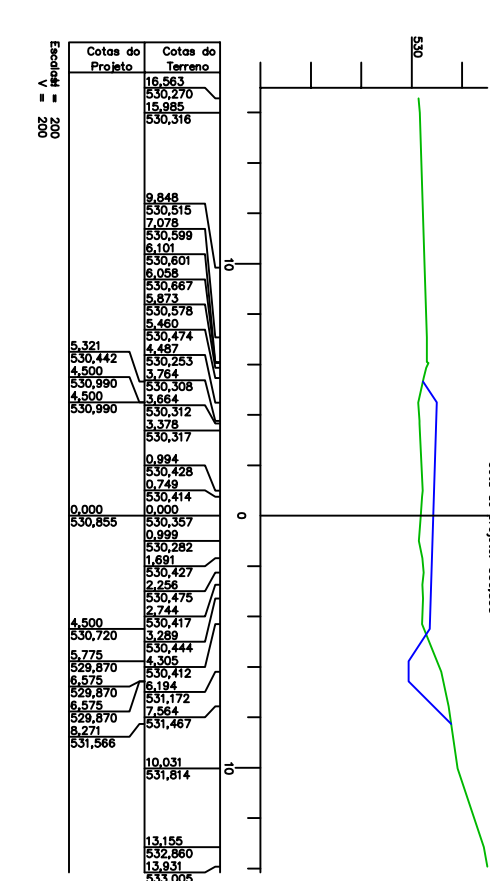
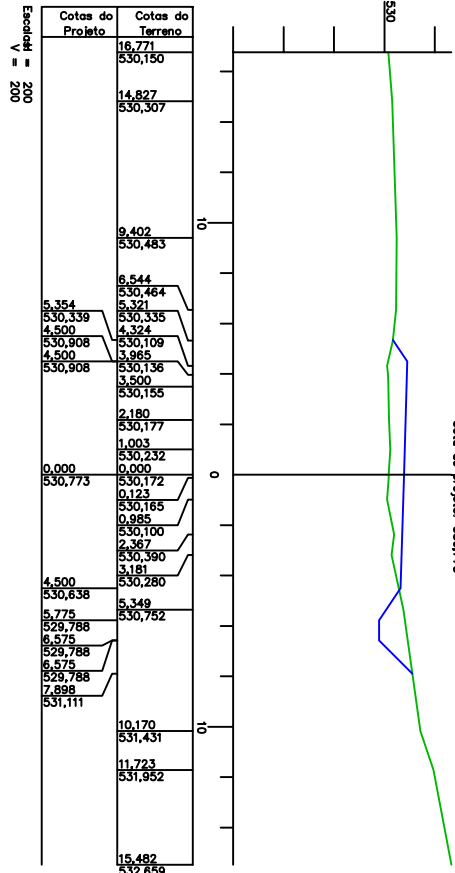
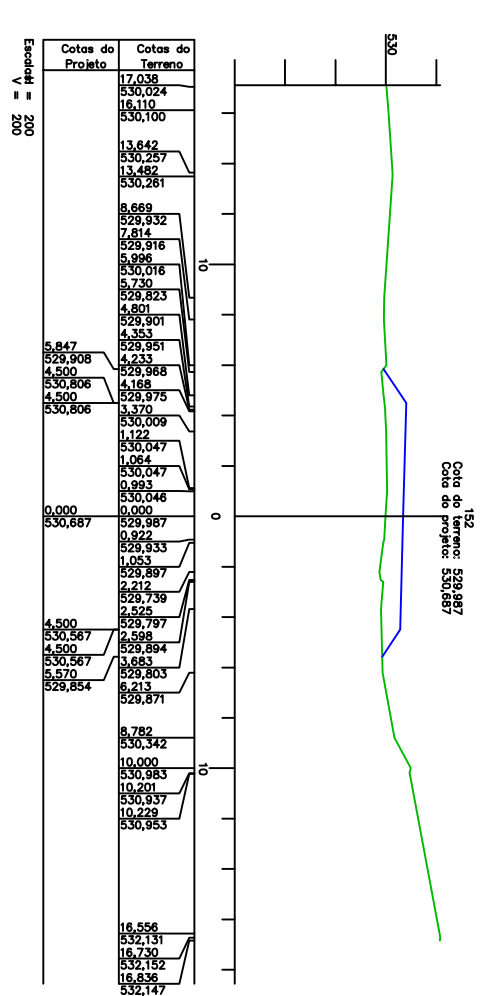
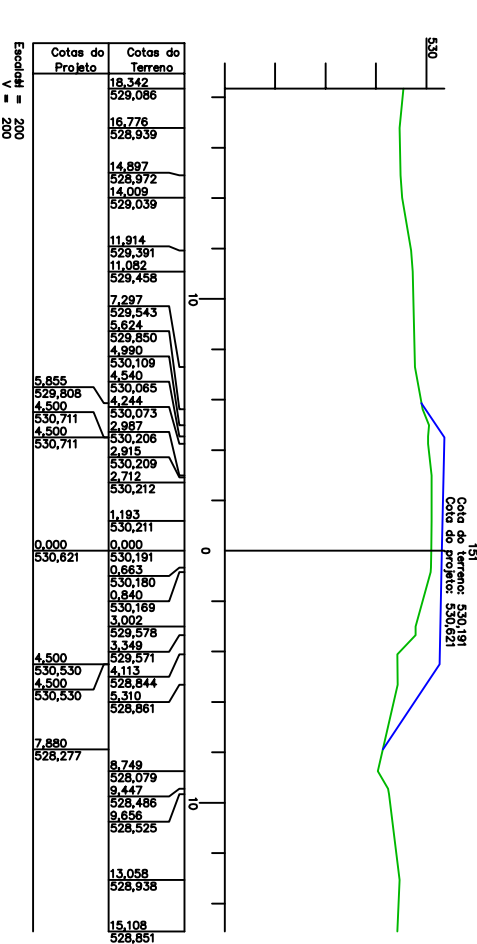
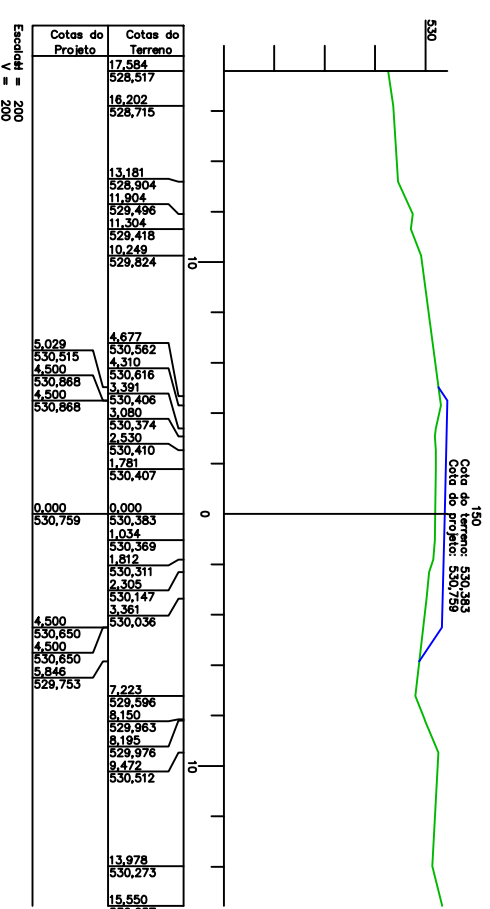
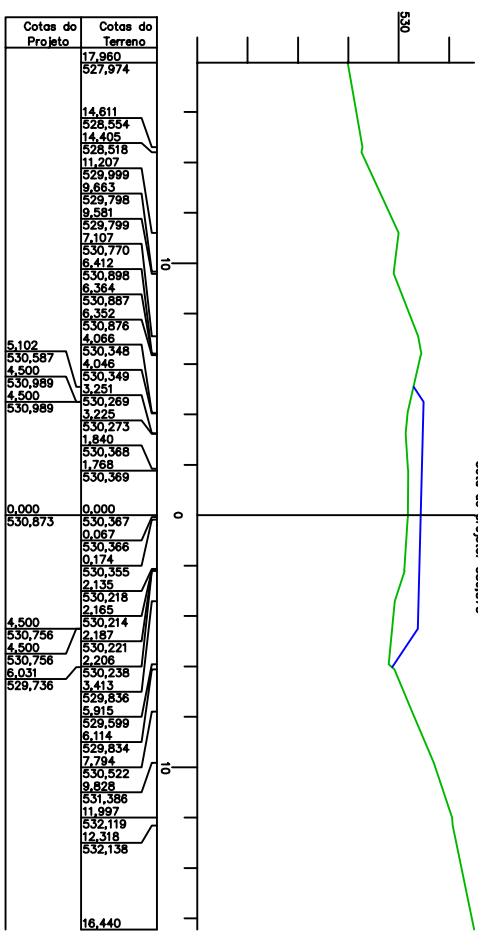
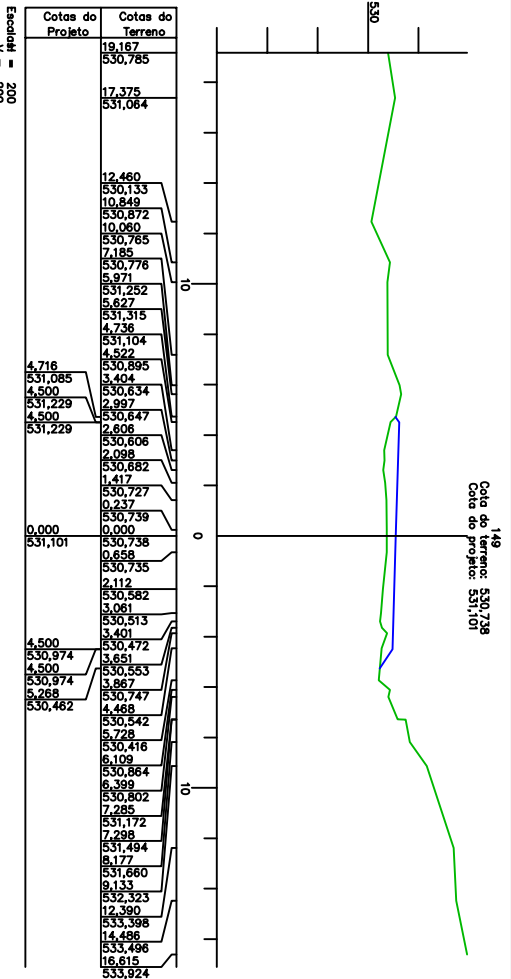




|                                                                                                                     |                                                  |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
|                                  |                                                  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                                  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021                          |
| Desenho :<br>Adriano Jr.                                                                                            | Escala :<br>1:300                                |
| Aprovação :<br>-                                                                                                    | Revisão :<br>01                                  |
| Prancha :<br>67                                                                                                     | Local :<br>Estrada de Acesso a Barra do Rio Azul |
| Seções Transversais                                                                                                 |                                                  |
| Resp. Técnico:                                                                                                      | Cliente:                                         |
| .....                                                                                                               | .....                                            |



|                                                                                                                                                                                                                                                                           |  |                                                                                                                             |  |                                                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|
| <div><p><b>L. CAD</b><br/>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:<br/><br/>.....</div> |  | <div>Cliente:<br/><br/>.....</div> |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                                  |  | <div>Data :<br/>Dezembro/2021</div>                                                                                         |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini<br/>CREA/RS 123168-D</div>                                        |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                                       |  | <div>Escala :<br/>1:300</div>                                                                                               |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul<br/>CNPJ: 93.539.153/0001-92</div>                                 |  |
| <div>Obrat:<br/>Pavimentação Asfáltica</div>                                                                                                                                                                                                                              |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                                |  | <div>Conteúdo:<br/>Seções Transversais</div>                                                                          |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                                               |  | <div>Revisão :<br/>01</div>                                                                                                 |  | <div>Prancha :<br/>68</div>                                                                                           |  |





SERVIÇOS DE ENGENHARIA

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Projeto :  
Lauson Serafini

Data :  
Dezembro/2021

Resp. Técnico:  
Eng. Civil Lauson Serafini  
CREA/RS 123168-D

Desenho:  
Adriano Jr.

Escala :  
1:300

Ciente: Pref. Municipal de Barra do Rio Azul  
CNPJ: 93.539.153/0001-92  
Pavimentação Asfáltica

Revisão :  
01

Local :  
Estrada de Acesso a Barra do Rio Azul

Aprovação:  
-

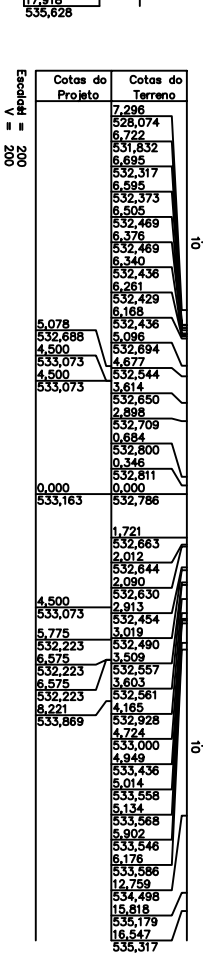
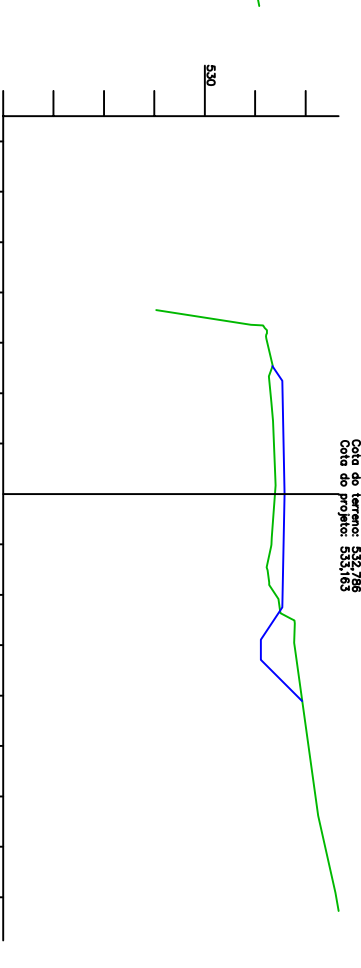
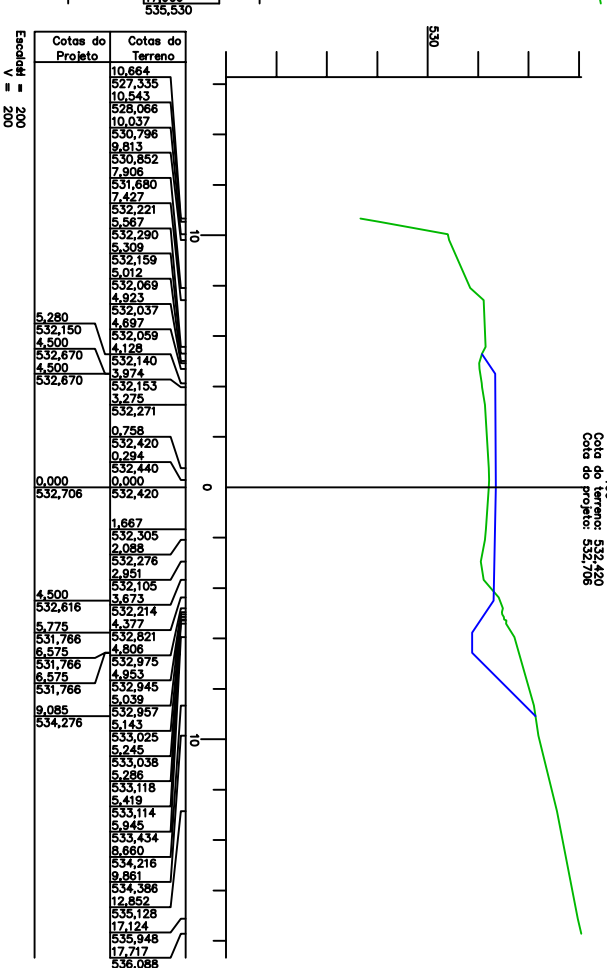
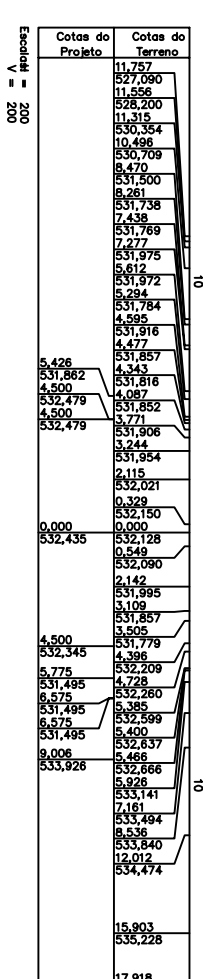
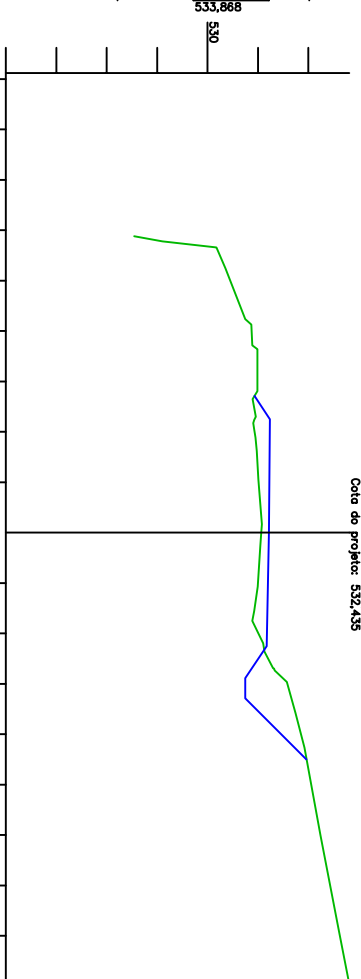
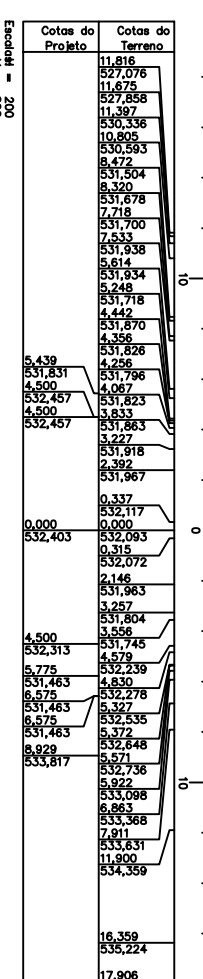
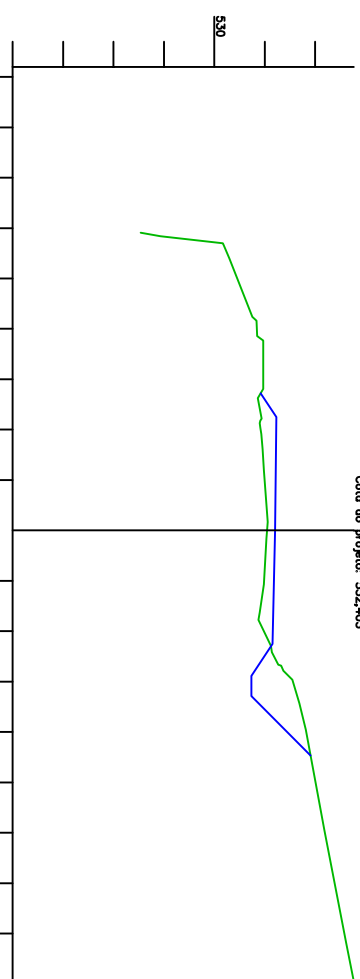
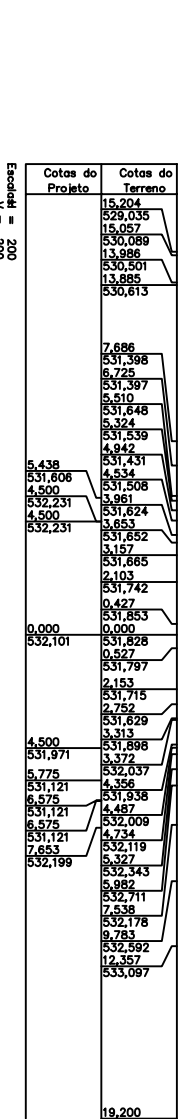
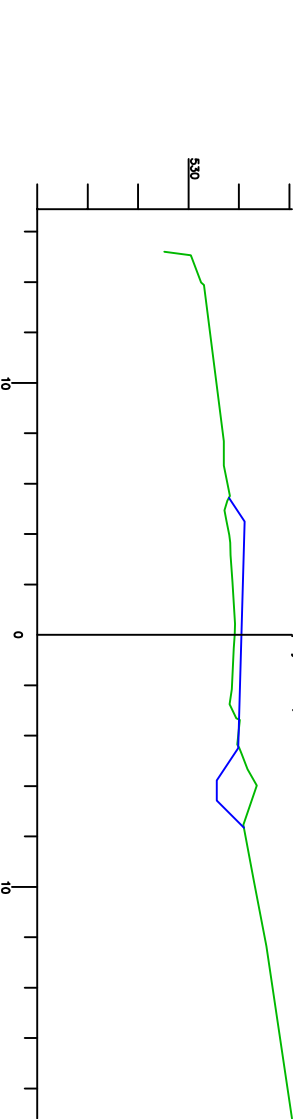
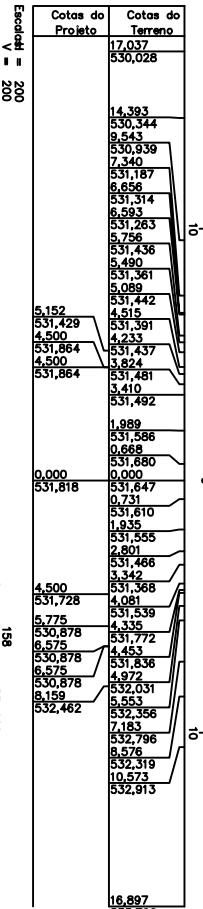
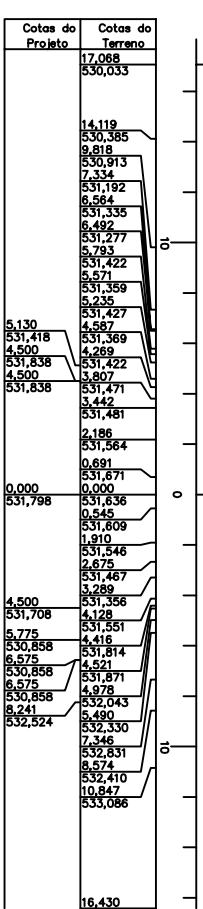
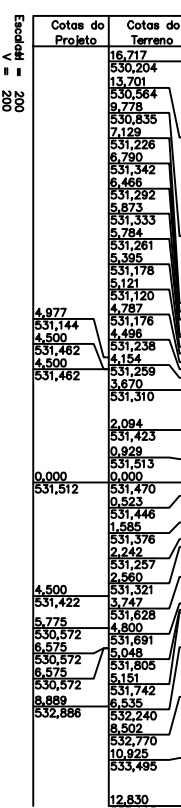
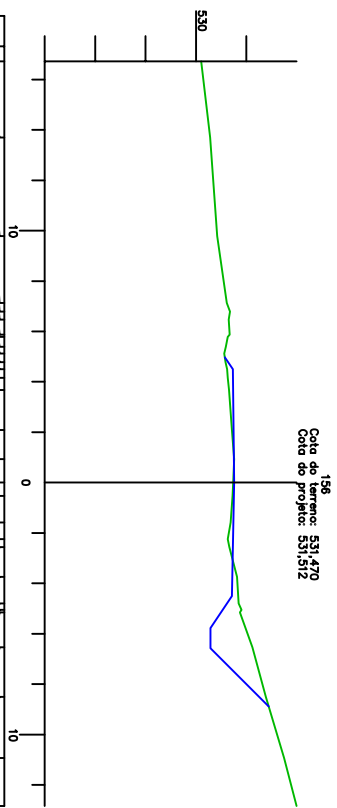
Prancha :  
69

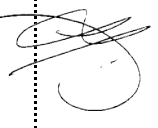
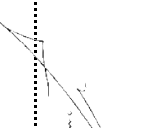
Seções Transversais

Resp. Técnico:

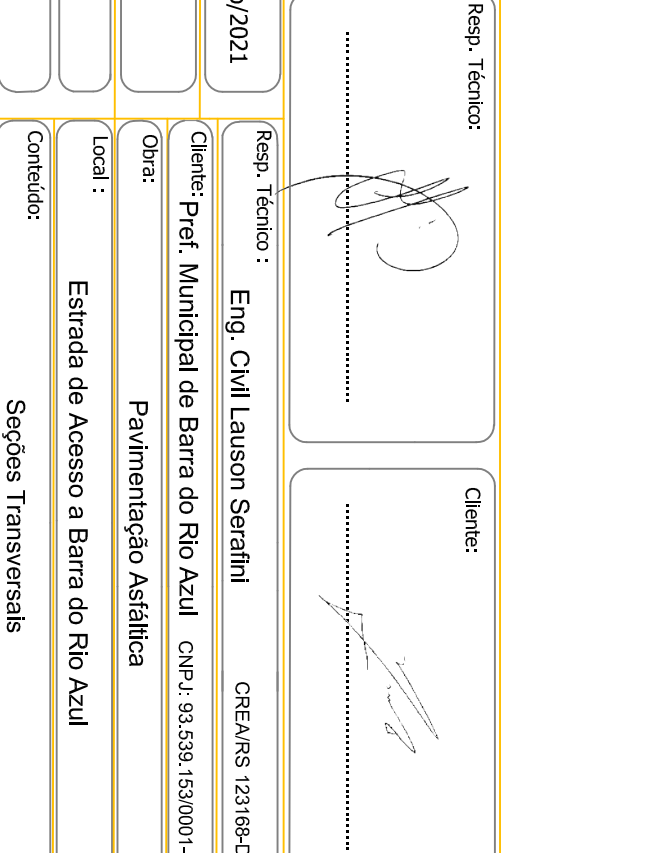
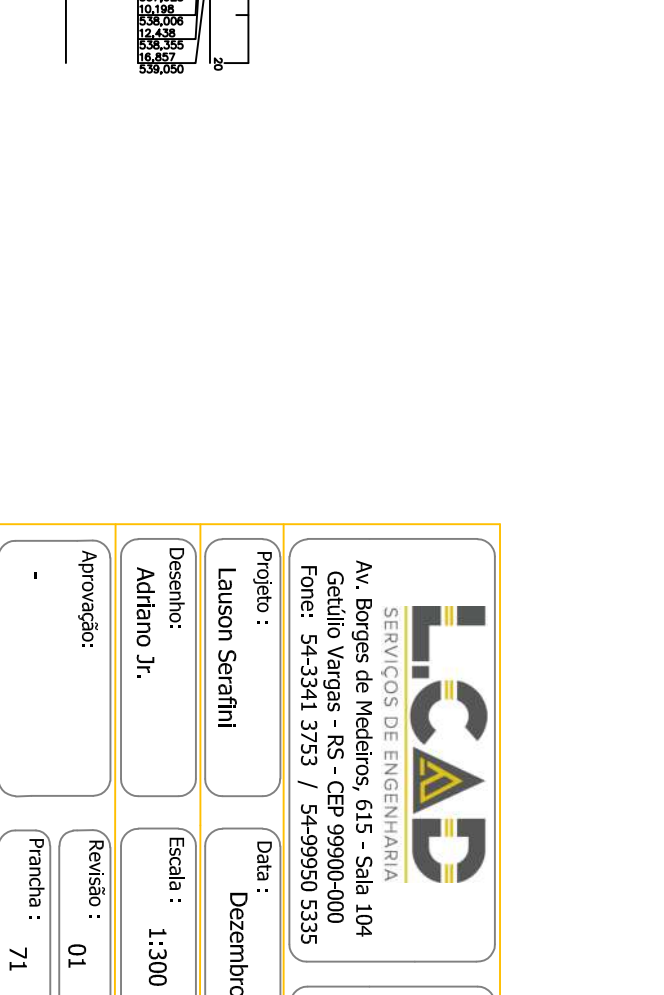
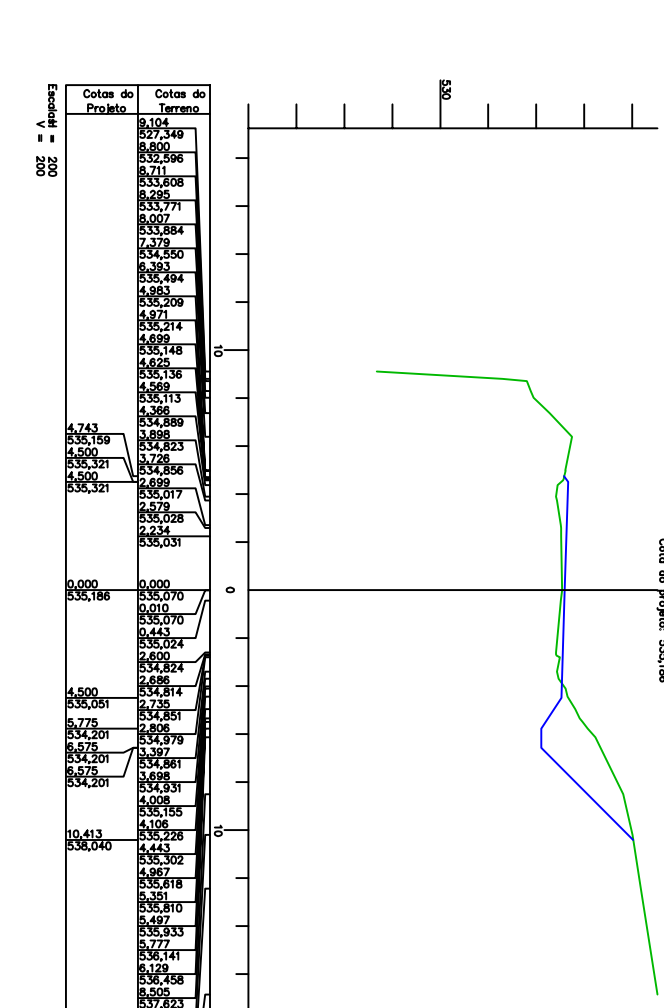
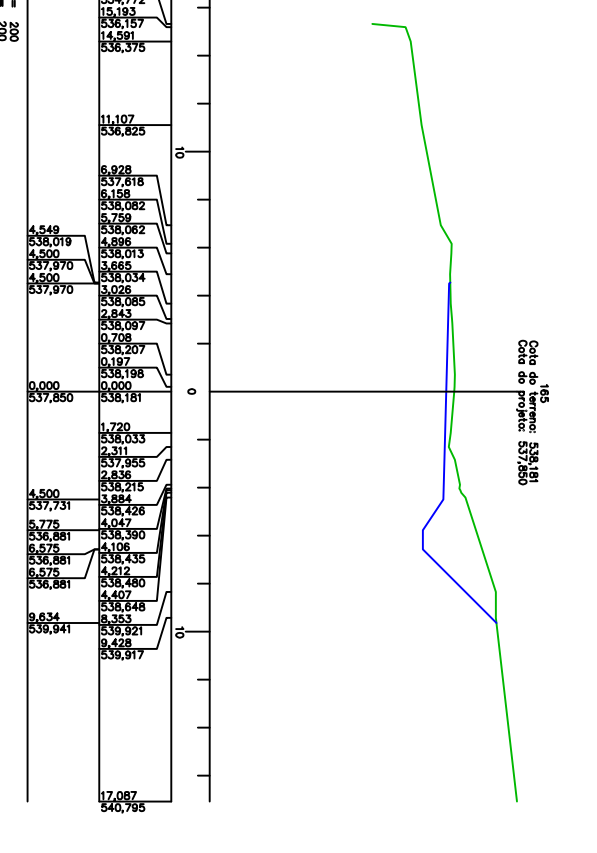
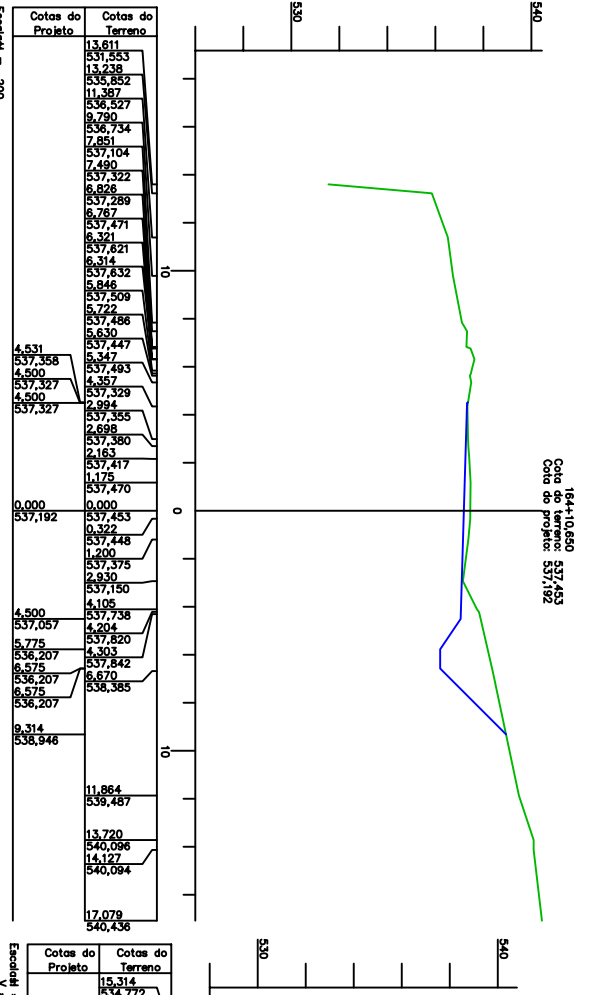
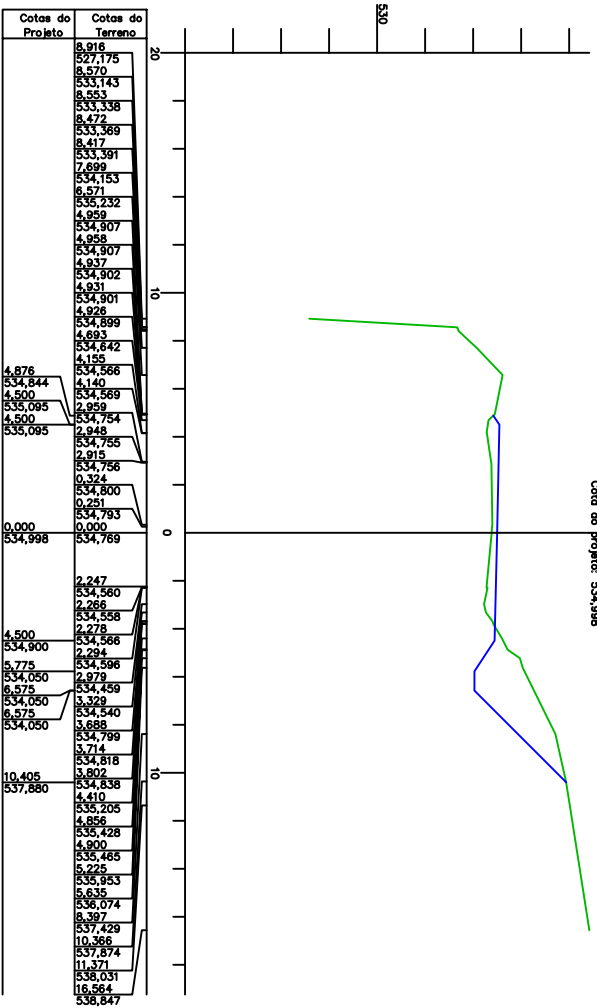
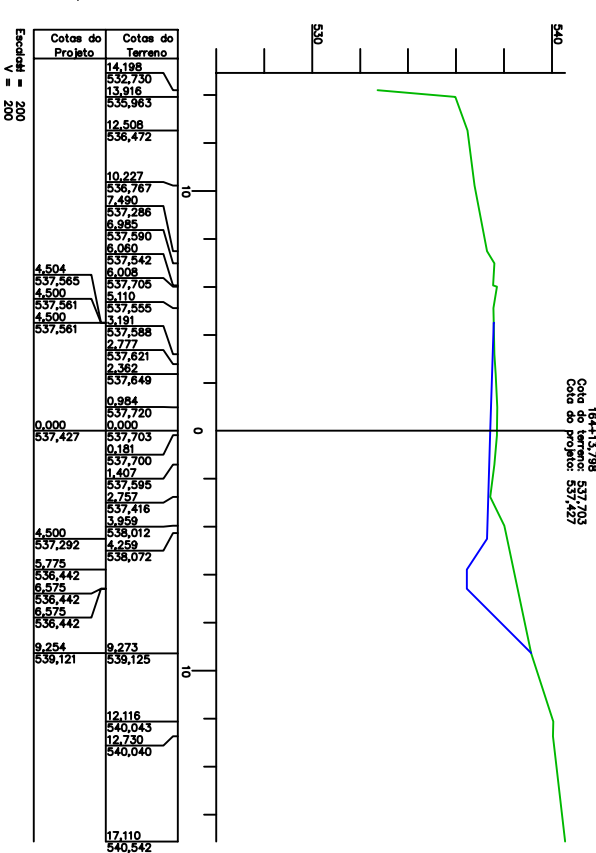
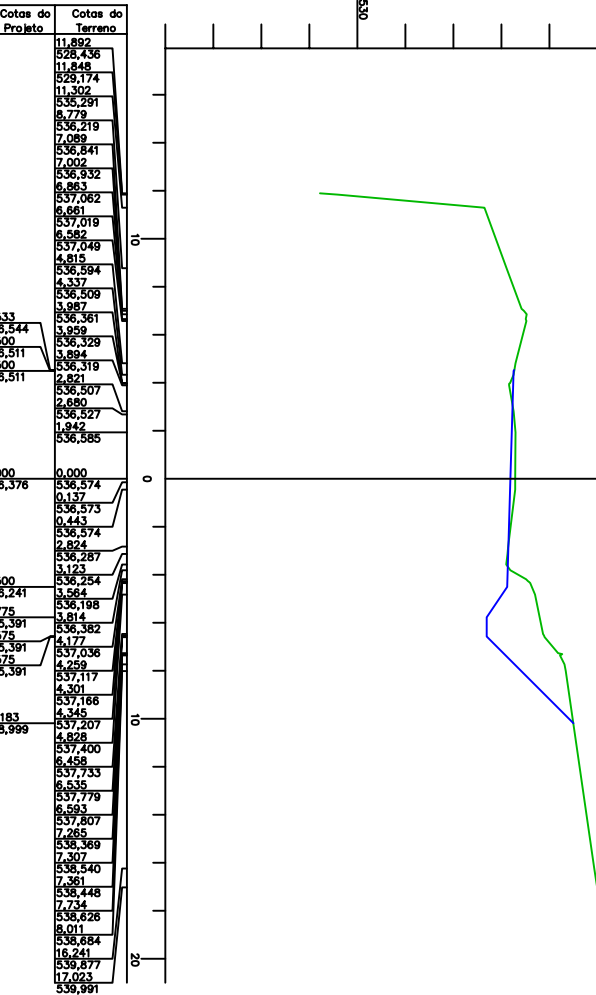
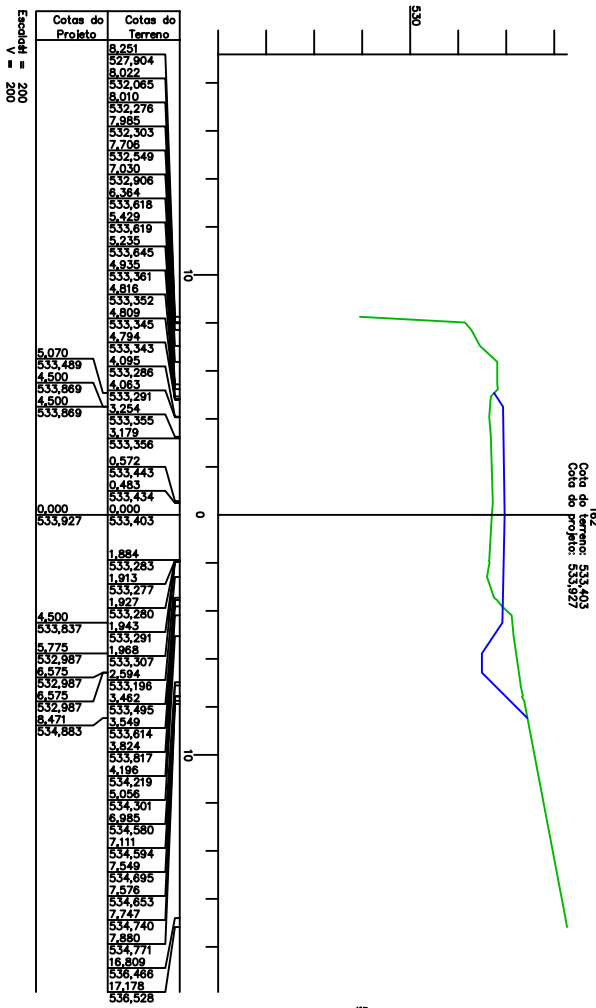
Cliente:



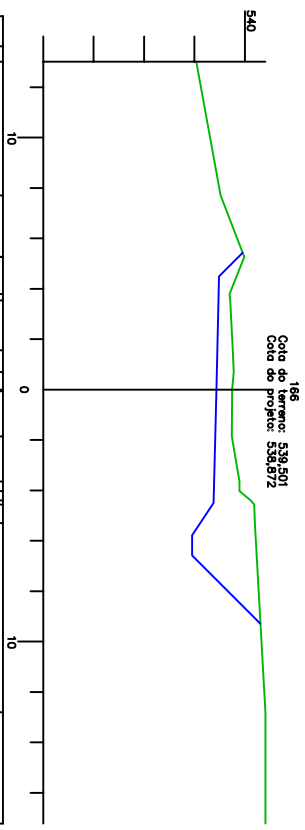


|                                                                                                                                                                                                                                      |  |                                                                                                       |  |                                                                                                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  | Resp. Técnico:<br> |  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         |  | Data :<br>Dezembro/2021                                                                               |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                               |  |
| Desenho :<br>Adriano Jr.                                                                                                                                                                                                             |  | Escala :<br>1:300                                                                                     |  | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92                       |  |
| Aprovação :<br>-                                                                                                                                                                                                                     |  | Revisão :<br>01                                                                                       |  | Obra: Pavimentação Asfáltica                                                                    |  |
| Prancha :<br>70                                                                                                                                                                                                                      |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |  | Conteúdo: Seções Transversais                                                                   |  |

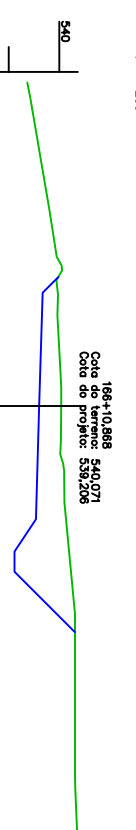




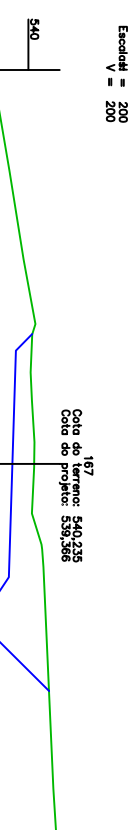
|                                                                                                                     |  |                         |  |                                                  |  |
|---------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|--------------------------------------------------|--|
|                                  |  | Resp. Técnico:          |  | Cliente:                                         |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  | .....                   |  | .....                                            |  |
| Projeto :<br>Lauson Serafini                                                                                        |  | Data :<br>Dezembro/2021 |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini    |  |
| Desenho :<br>Adriano Jr.                                                                                            |  | Escala :<br>1:300       |  | Cliente: Pref. Municipal de Barra do Rio Azul    |  |
| Aprovação :<br>-                                                                                                    |  | Revisão :<br>01         |  | Obra :<br>Pavimentação Asfáltica                 |  |
|                                                                                                                     |  | Prancha :<br>71         |  | Local :<br>Estrada de Acesso a Barra do Rio Azul |  |
|                                                                                                                     |  |                         |  | Seções Transversais                              |  |



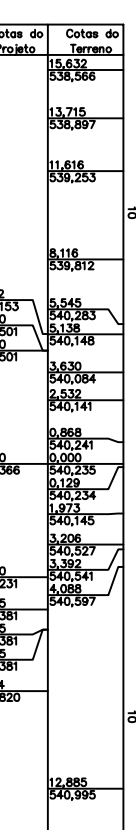
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 13,019           | 538,067          |
| 5,431            | 7,713            |
| 539,912          | 539,972          |
| 4,500            | 5,267            |
| 538,981          | 539,977          |
| 4,500            | 3,798            |
| 538,981          | 539,397          |
| 0,000            | 3,546            |
| 538,872          | 539,417          |
| 4,500            | 1,557            |
| 538,763          | 539,518          |
| 5,775            | 0,703            |
| 537,913          | 539,562          |
| 6,575            | 0,000            |
| 537,913          | 539,501          |
| 6,575            | 0,063            |
| 537,913          | 539,495          |
| 9,281            | 1,852            |
| 540,619          | 539,461          |
|                  | 3,651            |
|                  | 4,025            |
|                  | 539,783          |
|                  | 4,396            |
|                  | 540,234          |
|                  | 540,369          |
|                  | 5,302            |
|                  | 540,397          |
|                  | 12,786           |
|                  | 540,615          |
|                  | 17,227           |
|                  | 540,811          |



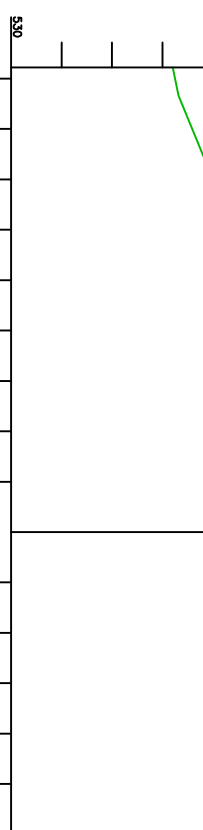
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 12,840           | 538,736          |
| 5,577            | 14,253           |
| 539,957          | 538,539          |
| 5,116            | 7,780            |
| 539,957          | 539,604          |
| 539,341          | 5,920            |
| 4,500            | 539,904          |
| 539,341          | 5,577            |
| 4,500            | 540,093          |
| 539,341          | 5,381            |
| 4,500            | 540,111          |
| 539,341          | 4,892            |
| 4,500            | 539,885          |
| 539,341          | 4,410            |
| 0,000            | 539,954          |
| 539,206          | 3,807            |
| 4,500            | 539,921          |
| 539,071          | 1,258            |
| 5,775            | 540,045          |
| 538,221          | 0,756            |
| 6,575            | 540,076          |
| 538,221          | 0,000            |
| 6,575            | 540,071          |
| 538,221          | 1,384            |
| 540,629          | 540,063          |
|                  | 1,914            |
|                  | 540,037          |
|                  | 2,285            |
|                  | 540,153          |
|                  | 2,406            |
|                  | 540,161          |
|                  | 540,195          |
|                  | 3,631            |
|                  | 540,209          |
|                  | 6,255            |
|                  | 540,629          |
|                  | 14,696           |
|                  | 540,626          |
|                  | 15,222           |
|                  | 540,632          |
|                  | 16,720           |
|                  | 540,703          |
|                  | 17,308           |
|                  | 540,741          |



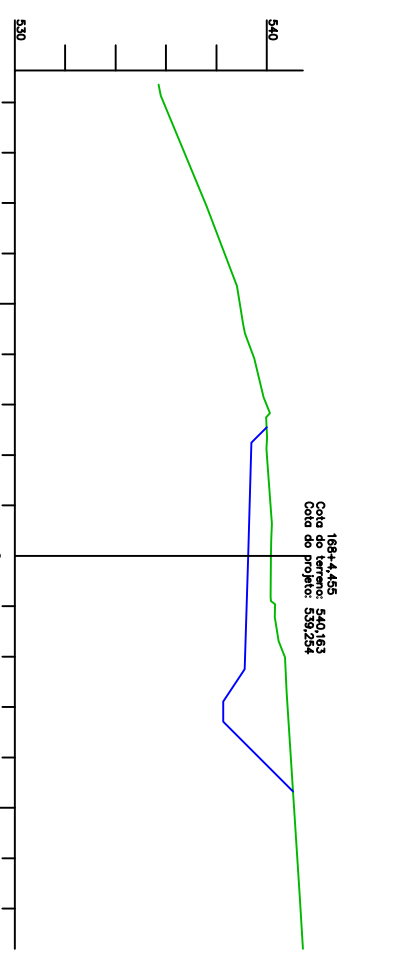
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 15,632           | 538,566          |
| 5,116            | 13,715           |
| 539,812          | 538,897          |
| 5,545            | 11,616           |
| 540,283          | 539,253          |
| 540,148          | 8,116            |
| 540,084          | 539,812          |
| 2,532            | 5,116            |
| 540,141          | 5,545            |
| 0,888            | 5,138            |
| 540,241          | 540,153          |
| 0,000            | 4,500            |
| 540,235          | 539,501          |
| 540,234          | 4,500            |
| 1,973            | 539,501          |
| 540,145          | 0,000            |
| 3,206            | 540,241          |
| 640,527          | 0,000            |
| 540,527          | 540,235          |
| 3,392            | 540,234          |
| 540,541          | 1,973            |
| 4,088            | 540,145          |
| 540,597          | 3,206            |
| 539,231          | 640,527          |
| 5,775            | 540,527          |
| 538,381          | 540,541          |
| 538,381          | 4,088            |
| 538,381          | 540,597          |
| 9,014            | 9,014            |
| 540,820          | 540,820          |
|                  | 12,885           |
|                  | 540,995          |
|                  | 16,943           |
|                  | 541,241          |



| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 18,436           | 538,410          |
| 5,134            | 538,640          |
| 540,102          | 14,108           |
| 539,468          | 537,959          |
| 539,468          | 11,765           |
| 539,468          | 538,848          |
| 539,468          | 8,477            |
| 539,468          | 539,375          |
| 539,468          | 7,651            |
| 539,468          | 539,544          |
| 539,468          | 7,016            |
| 539,468          | 539,783          |
| 539,468          | 6,018            |
| 539,468          | 540,018          |
| 539,468          | 5,610            |
| 539,468          | 540,181          |
| 539,468          | 5,503            |
| 539,468          | 540,081          |
| 539,468          | 4,500            |
| 539,468          | 540,081          |
| 539,468          | 4,500            |
| 539,468          | 540,050          |
| 539,468          | 4,044            |
| 539,468          | 540,119          |
| 539,468          | 2,918            |
| 539,468          | 540,119          |
| 539,468          | 1,153            |
| 539,468          | 540,250          |
| 539,468          | 0,000            |
| 539,468          | 540,195          |
| 539,468          | 0,135            |
| 539,468          | 540,189          |
| 539,468          | 1,784            |
| 539,468          | 540,172          |
| 539,468          | 2,103            |
| 539,468          | 540,193          |
| 539,468          | 2,340            |
| 539,468          | 540,507          |
| 539,468          | 2,712            |
| 539,468          | 540,504          |
| 539,468          | 3,401            |
| 539,468          | 540,615          |
| 539,468          | 3,874            |
| 539,468          | 540,793          |
| 539,468          | 8,466            |
| 539,468          | 540,930          |
| 539,468          | 9,338            |
| 539,468          | 541,711          |
| 539,468          | 12,291           |
| 539,468          | 541,298          |
| 539,468          | 15,883           |
| 539,468          | 541,522          |



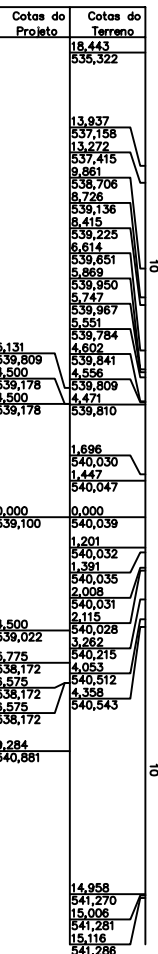
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 18,436           | 538,410          |
| 5,134            | 538,640          |
| 540,102          | 14,108           |
| 539,468          | 537,959          |
| 539,468          | 11,765           |
| 539,468          | 538,848          |
| 539,468          | 8,477            |
| 539,468          | 539,375          |
| 539,468          | 7,651            |
| 539,468          | 539,544          |
| 539,468          | 7,016            |
| 539,468          | 539,783          |
| 539,468          | 6,018            |
| 539,468          | 540,018          |
| 539,468          | 5,610            |
| 539,468          | 540,181          |
| 539,468          | 5,503            |
| 539,468          | 540,081          |
| 539,468          | 4,500            |
| 539,468          | 540,081          |
| 539,468          | 4,500            |
| 539,468          | 540,050          |
| 539,468          | 4,044            |
| 539,468          | 540,119          |
| 539,468          | 2,918            |
| 539,468          | 540,119          |
| 539,468          | 1,153            |
| 539,468          | 540,250          |
| 539,468          | 0,000            |
| 539,468          | 540,195          |
| 539,468          | 0,135            |
| 539,468          | 540,189          |
| 539,468          | 1,784            |
| 539,468          | 540,172          |
| 539,468          | 2,103            |
| 539,468          | 540,193          |
| 539,468          | 2,340            |
| 539,468          | 540,507          |
| 539,468          | 2,712            |
| 539,468          | 540,504          |
| 539,468          | 3,401            |
| 539,468          | 540,615          |
| 539,468          | 3,874            |
| 539,468          | 540,793          |
| 539,468          | 8,466            |
| 539,468          | 540,930          |
| 539,468          | 9,338            |
| 539,468          | 541,711          |
| 539,468          | 12,291           |
| 539,468          | 541,298          |
| 539,468          | 15,883           |
| 539,468          | 541,522          |



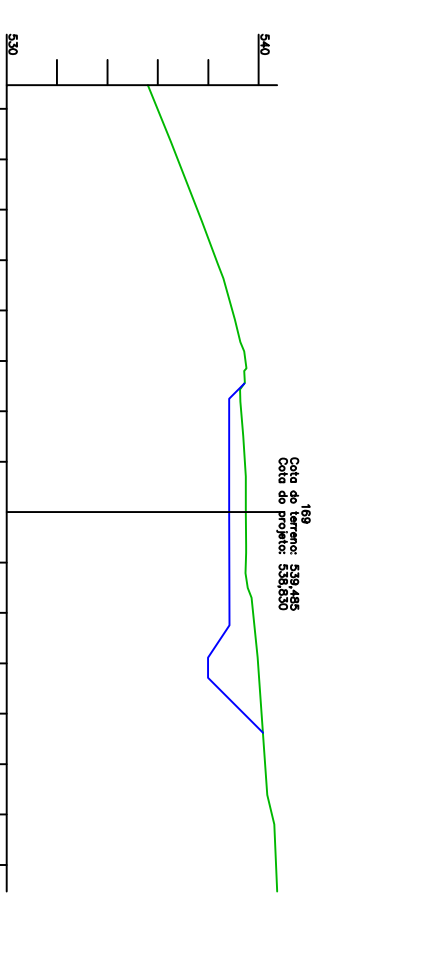
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 18,707           | 535,700          |
| 5,103            | 18,262           |
| 539,990          | 535,793          |
| 5,103            | 13,875           |
| 539,990          | 537,604          |
| 539,387          | 10,705           |
| 4,500            | 538,613          |
| 539,387          | 9,208            |
| 4,500            | 539,055          |
| 539,387          | 8,627            |
| 4,500            | 539,133          |
| 539,387          | 7,840            |
| 4,500            | 539,505          |
| 539,387          | 6,253            |
| 4,500            | 539,869          |
| 539,387          | 5,664            |
| 4,500            | 540,121          |
| 539,387          | 5,498            |
| 4,500            | 539,967          |
| 539,387          | 4,702            |
| 4,500            | 540,014          |
| 539,387          | 5,251            |
| 4,500            | 539,985          |
| 539,387          | 3,708            |
| 4,500            | 540,018          |
| 539,387          | 1,279            |
| 4,500            | 540,200          |
| 539,387          | 0,633            |
| 4,500            | 540,169          |
| 539,387          | 0,000            |
| 4,500            | 540,163          |
| 539,387          | 1,615            |
| 4,500            | 540,146          |
| 539,387          | 1,791            |
| 4,500            | 540,157          |
| 539,387          | 1,914            |
| 4,500            | 540,320          |
| 539,387          | 2,428            |
| 4,500            | 540,470          |
| 539,387          | 3,378            |
| 4,500            | 540,470          |
| 539,387          | 4,030            |
| 4,500            | 540,715          |
| 539,387          | 5,397            |
| 4,500            | 540,788          |
| 539,387          | 9,343            |
| 541,039          | 541,303          |
|                  | 13,503           |
|                  | 541,303          |
|                  | 15,593           |
|                  | 541,434          |



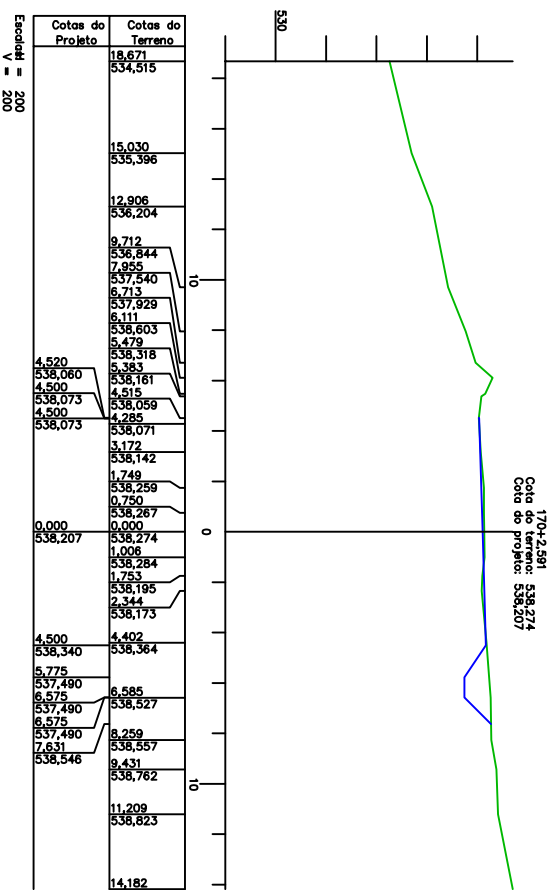
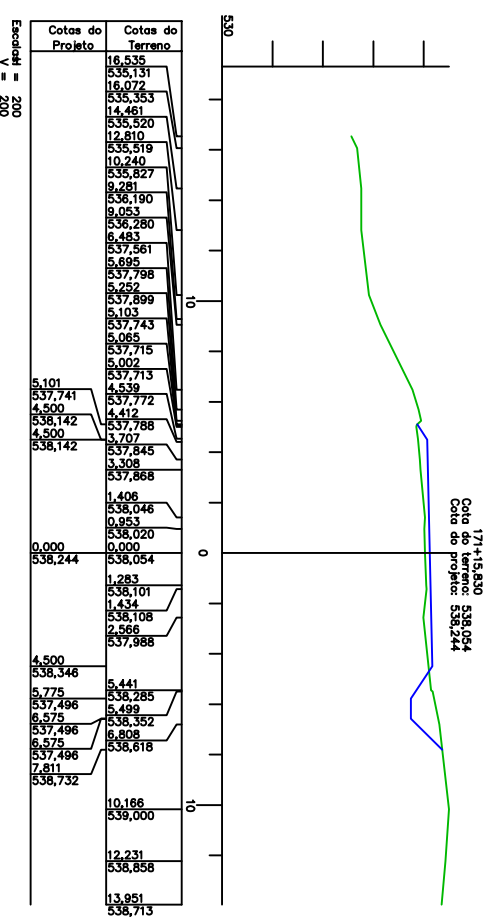
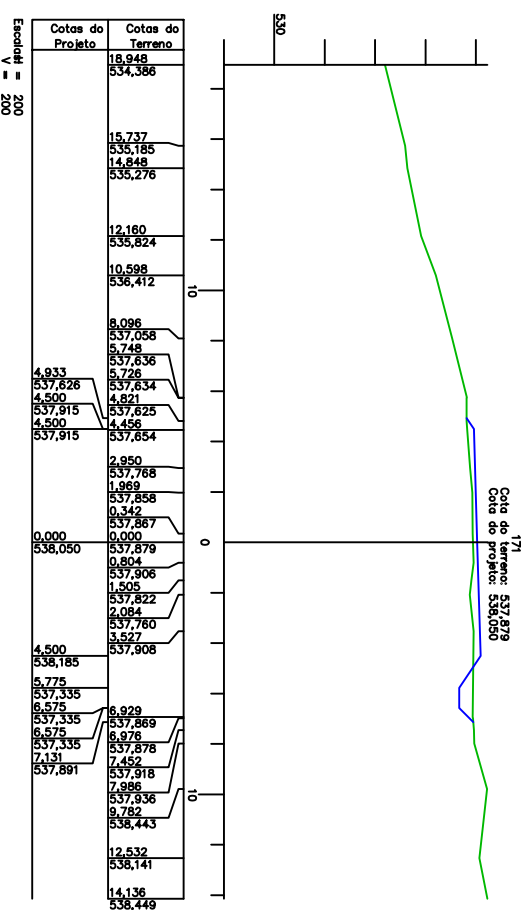
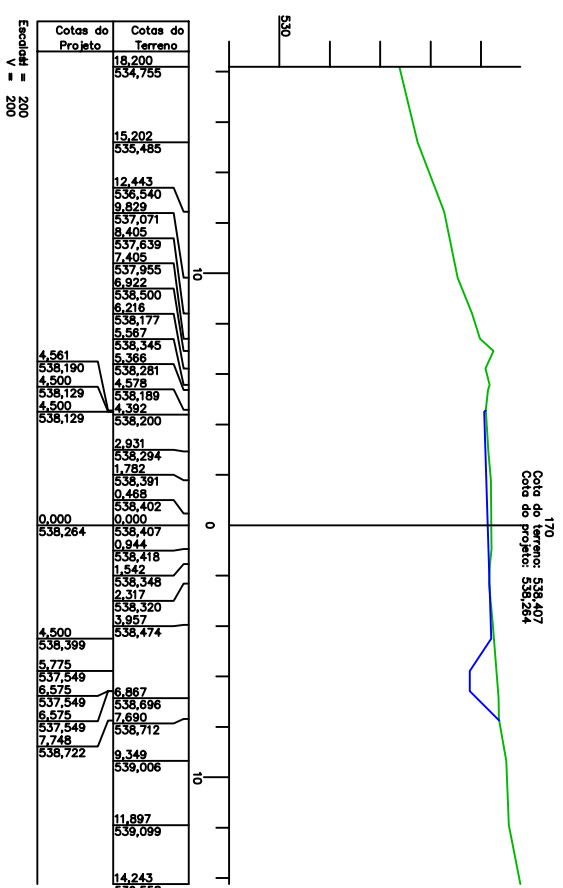
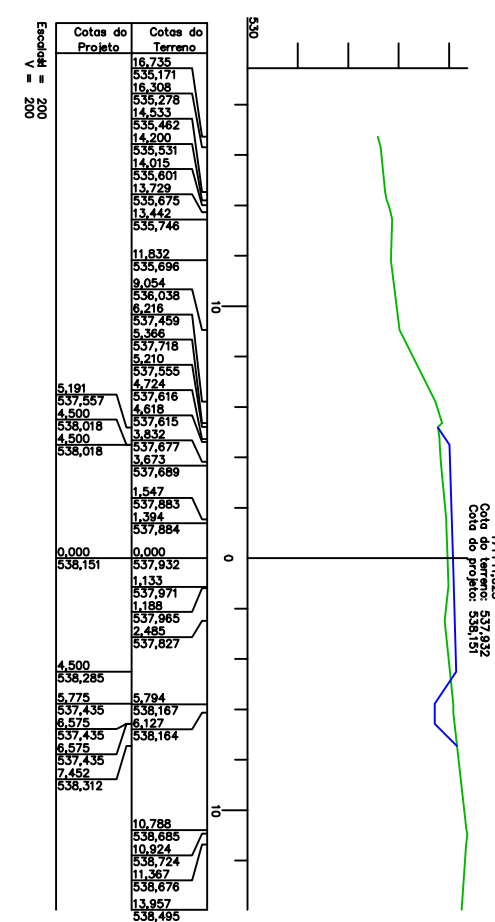
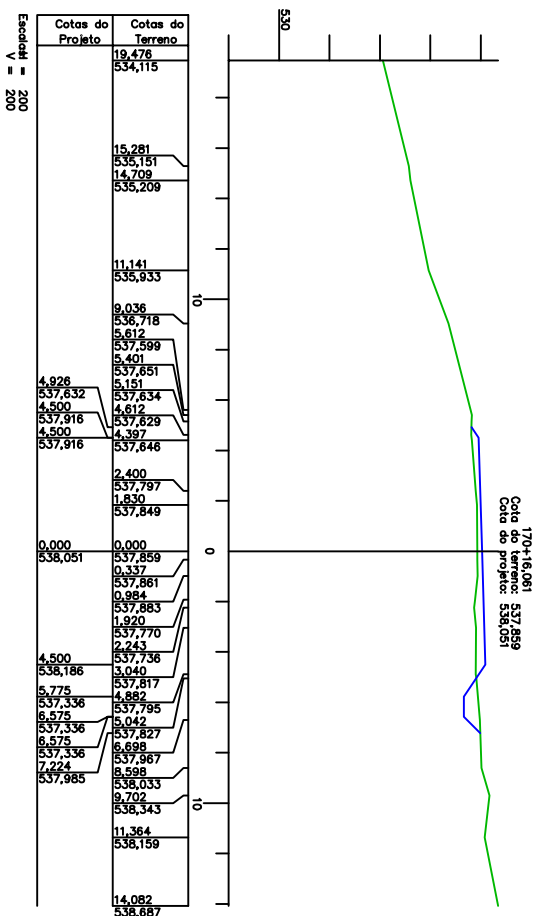
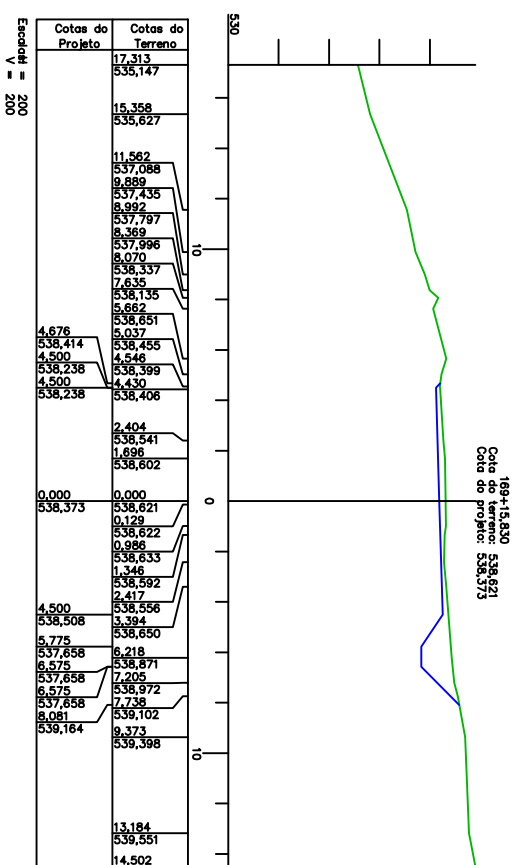
| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 18,443           | 535,322          |
| 5,131            | 13,937           |
| 539,809          | 537,158          |
| 4,500            | 13,272           |
| 539,809          | 537,415          |
| 4,500            | 9,861            |
| 539,809          | 538,706          |
| 4,500            | 8,726            |
| 539,809          | 538,136          |
| 4,500            | 8,415            |
| 539,809          | 539,225          |
| 4,500            | 6,614            |
| 539,809          | 539,651          |
| 4,500            | 5,869            |
| 539,809          | 539,950          |
| 4,500            | 5,747            |
| 539,809          | 539,967          |
| 4,500            | 5,551            |
| 539,809          | 539,784          |
| 4,500            | 4,602            |
| 539,809          | 539,841          |
| 4,500            | 4,556            |
| 539,809          | 539,809          |
| 4,500            | 4,471            |
| 539,809          | 539,810          |
| 4,500            | 1,696            |
| 539,809          | 540,030          |
| 4,500            | 1,447            |
| 539,809          | 540,047          |
| 4,500            | 0,000            |
| 539,809          | 540,039          |
| 4,500            | 1,201            |
| 539,809          | 540,032          |
| 4,500            | 1,391            |
| 539,809          | 540,035          |
| 4,500            | 2,008            |
| 539,809          | 540,031          |
| 4,500            | 2,111            |
| 539,809          | 540,028          |
| 4,500            | 3,262            |
| 539,809          | 540,215          |
| 4,500            | 4,053            |
| 539,809          | 540,512          |
| 4,500            | 4,358            |
| 539,809          | 540,543          |
| 4,500            | 9,284            |
| 539,809          | 540,881          |
| 4,500            | 14,958           |
| 539,809          | 541,270          |
| 4,500            | 15,006           |
| 539,809          | 541,281          |
| 4,500            | 15,116           |
| 539,809          | 541,286          |

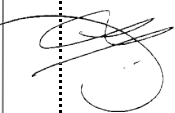
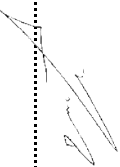


| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 17,111           | 535,229          |
| 5,137            | 535,657          |
| 539,022          | 11,359           |
| 5,775            | 537,202          |
| 538,172          | 8,695            |
| 6,575            | 537,510          |
| 538,172          | 9,093            |
| 6,575            | 537,829          |
| 538,172          | 8,545            |
| 6,575            | 538,004          |
| 538,172          | 8,283            |
| 6,575            | 538,304          |
| 538,172          | 7,801            |
| 6,575            | 538,126          |
| 538,172          | 5,661            |
| 6,575            | 538,714          |
| 538,172          | 4,445            |
| 6,575            | 538,491          |
| 538,172          | 4,518            |
| 6,575            | 538,442          |
| 538,172          | 4,417            |
| 6,575            | 538,448          |
| 538,172          | 2,274            |
| 6,575            | 538,593          |
| 538,172          | 9,657            |
| 6,575            | 538,646          |
| 538,172          | 0,000            |
| 6,575            | 538,664          |
| 538,172          | 0,000            |
| 6,575            | 538,664          |
| 538,172          | 1,017            |
| 6,575            | 538,678          |
| 538,172          | 1,329            |
| 6,575            | 538,642          |
| 538,172          | 2,460            |
| 6,575            | 538,605          |
| 538,172          | 3,301            |
| 6,575            | 538,686          |
| 538,172          | 5,721            |
| 6,575            | 538,676          |
| 538,172          | 7,213            |
| 6,575            | 538,029          |
| 538,172          | 8,025            |
| 6,575            | 539,229          |
| 538,172          | 9,401            |
| 6,575            | 539,478          |
| 538,172          | 13,476           |
| 6,575            | 539,645          |
| 538,172          | 14,580           |
| 6,575            | 539,863          |

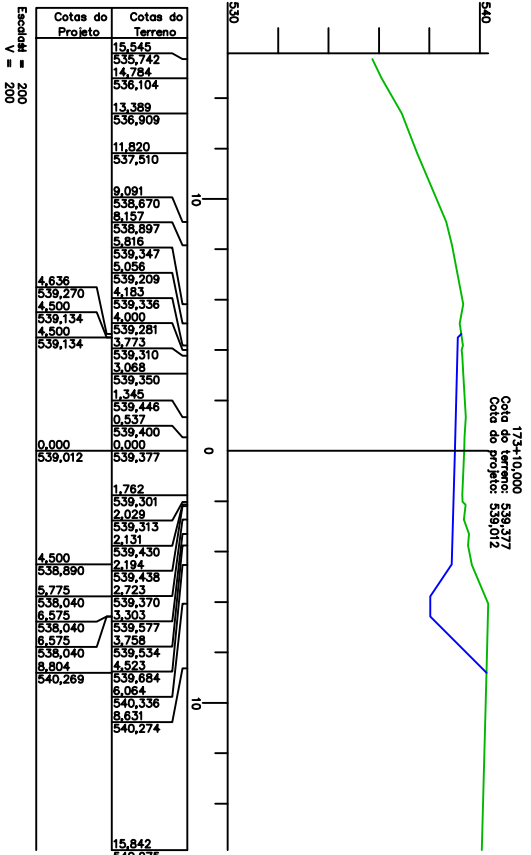
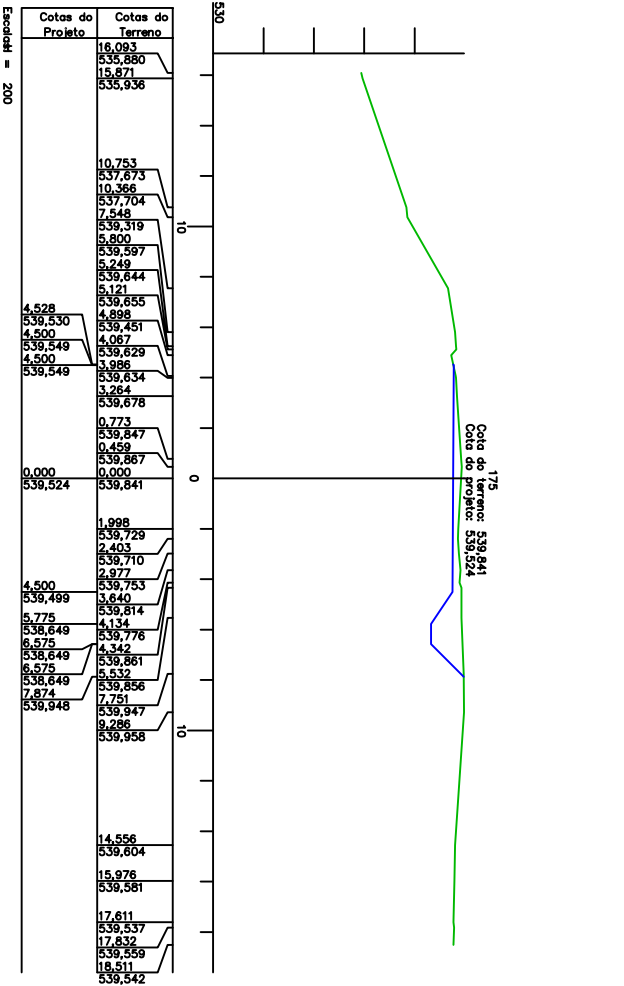
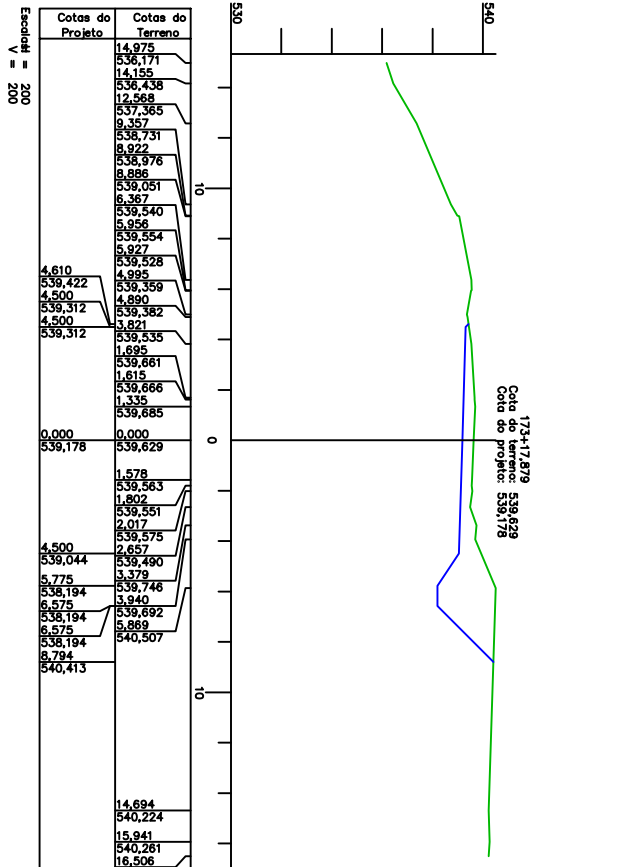
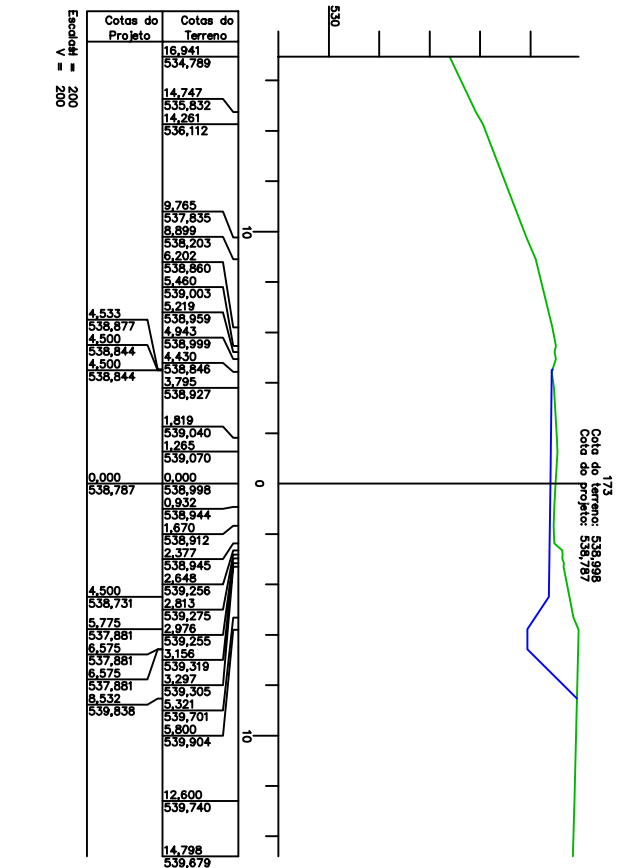
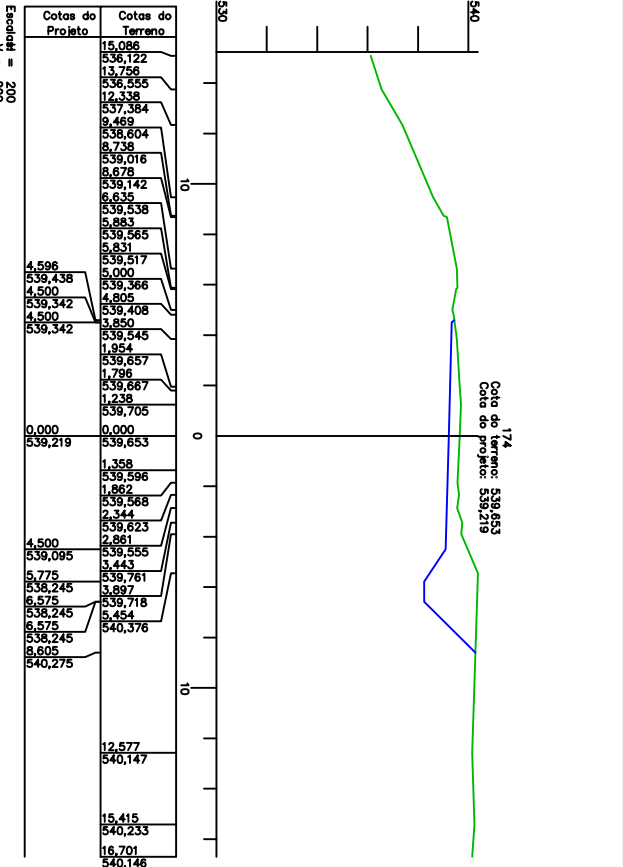
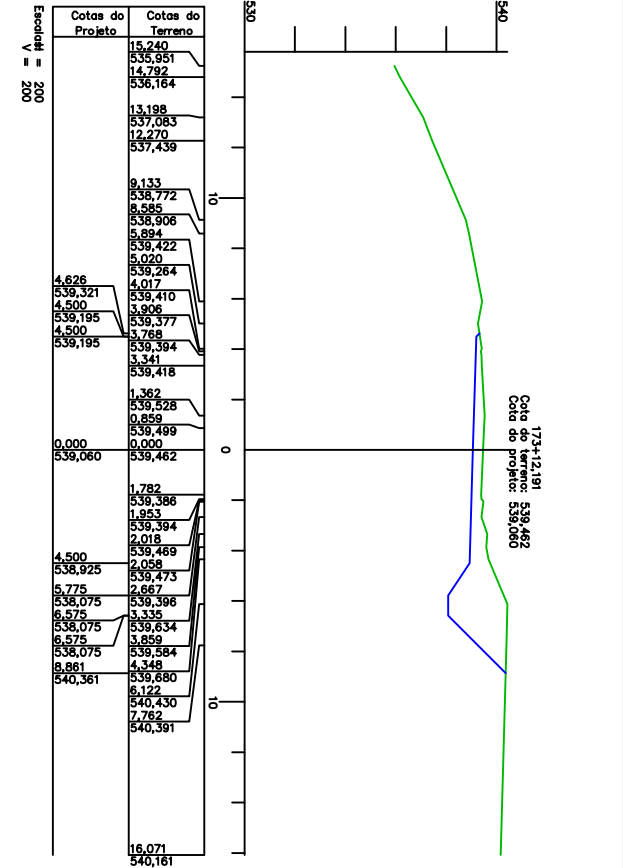
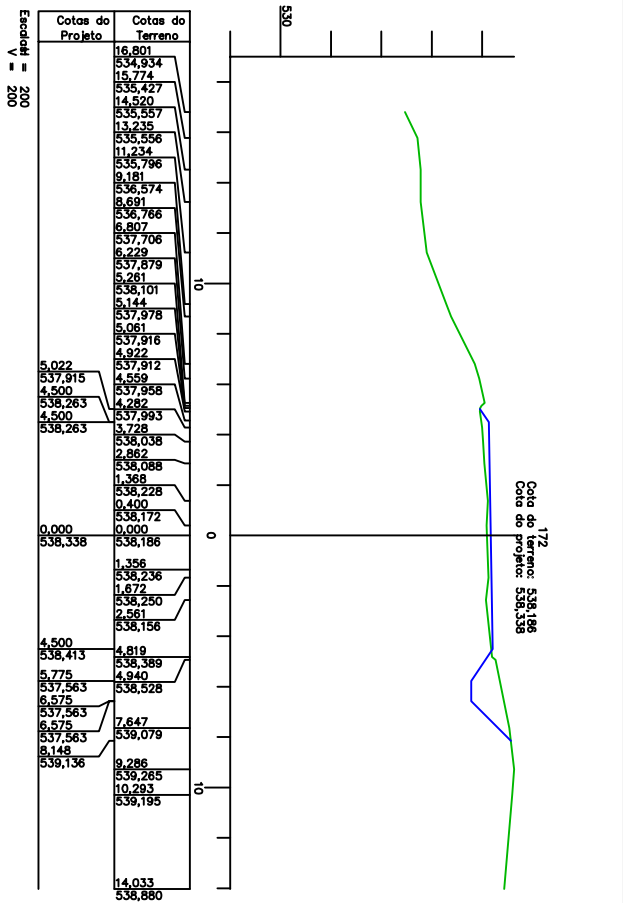


| Cotas do Projeto | Cotas do Terreno |
|------------------|------------------|
| 16,943           | 535,606          |
| 5,112            | 14,700           |
| 539,438          | 536,520          |
| 4,500            | 11,529           |
| 539,438          | 537,741          |
| 4,500            | 9,833            |
| 539,438          | 538,384          |
| 4,500            | 9,268            |
| 539,438          | 538,598          |
| 4,500            | 7,639            |
| 539,438          | 539,061          |
| 4,500            | 6,743            |
| 539,438          | 539,273          |
| 4,500            | 6,372            |
| 539,438          | 539,422          |
| 4,500            | 5,700            |
| 539,438          | 539,513          |
| 4,500            | 5,602            |
| 539,438          | 539,422          |
| 4,500            | 5,132            |
| 539,438          | 539,451          |
| 4,500            | 4,671            |
| 539,438          | 539,264          |
| 4,500            | 4,386            |
| 539,438          | 539,274          |
| 4,500            | 3,007            |
| 539,438          | 539,384          |
| 4,500            | 1,411            |
| 539,438          | 539,492          |
| 4,500            | 9,096            |
| 539,438          | 539,484          |
| 4,500            | 0,000            |
| 539,438          | 539,485          |
| 4,500            | 1,314            |
| 539,438          | 539,500          |
| 4,500            | 1,624            |
| 539,438          | 539,499          |
| 4,500            | 2,443            |
| 539,438          | 539,473          |
| 4,500            | 3,009            |
| 539,438          | 539,567          |
| 4,500            | 4,407            |
| 539,438          | 539,716          |
| 4,500            | 5,778</          |



|                                                                                                                     |                         |                                                                                     |  |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA       |                         | Resp. Técnico:                                                                      |  | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |  |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       |  | CREA/RS 123168-D                                                                    |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                       |  | CNPJ: 93.539.153/0001-92                                                            |  |
|                                                                                                                     |                         | Obra:<br>Pavimentação Asfáltica                                                     |  |                                                                                     |  |
| Aprovação:                                                                                                          | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |  |                                                                                     |  |
| -                                                                                                                   | Prancha :<br>73         | Conteúdo:<br>Seções Transversais                                                    |  |                                                                                     |  |







SERVIÇOS DE ENGENHARIA

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Resp. Técnico:

.....

Cliente:

.....

Projeto : Lauson Serafini

Data : Dezembro/2021

Desenho: Adriano Jr.

Escala : 1:300

Aprovação:

Revisão : 01

Prancha : 74

Resp. Técnico : Eng. Civil Lauson Serafini

CREA/RS 123168-D

Cliente: Pref. Municipal de Barra do Rio Azul

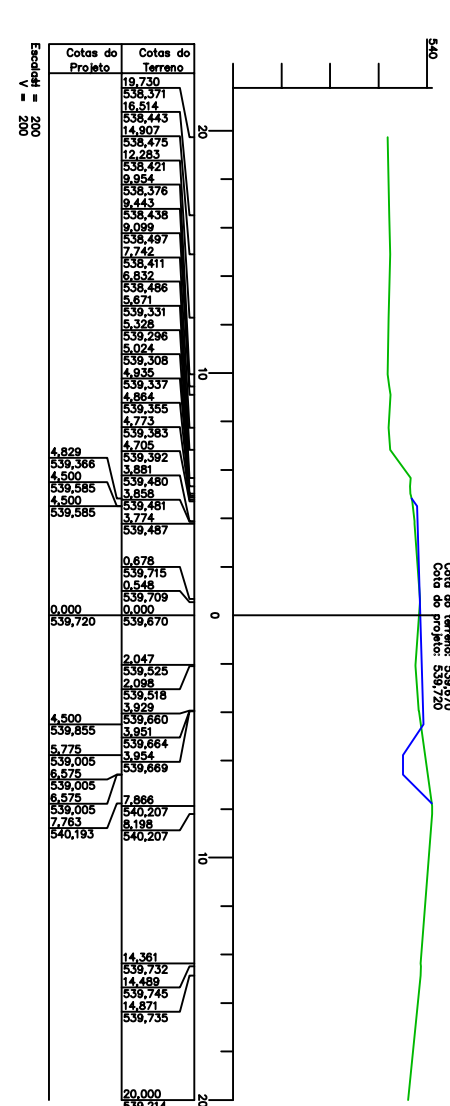
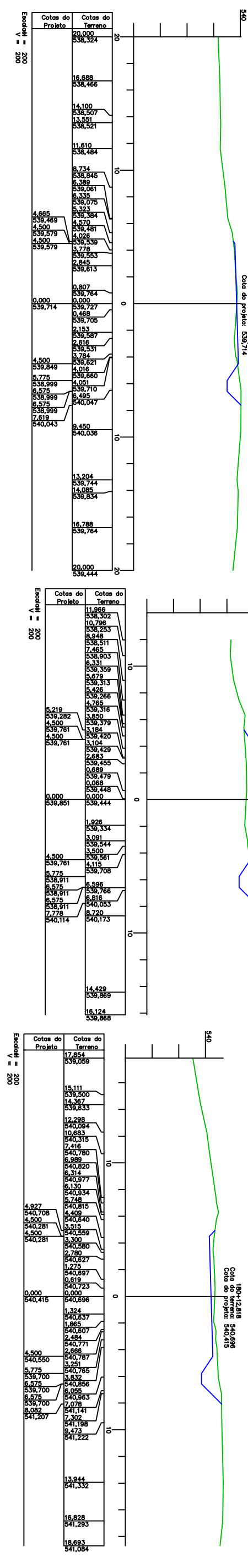
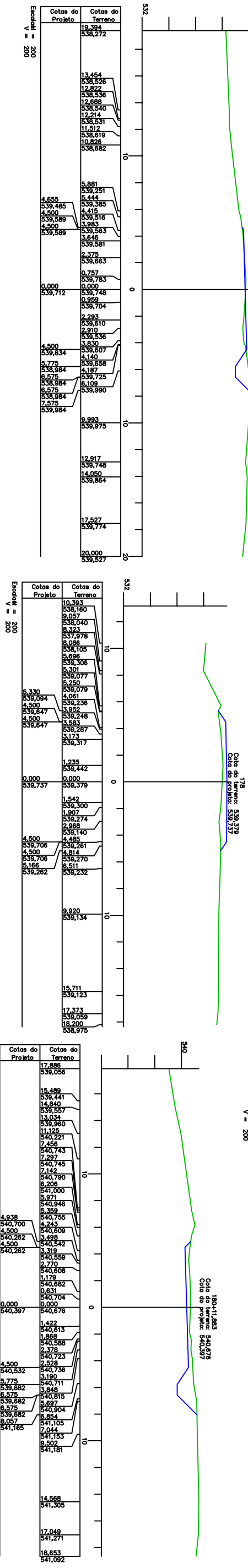
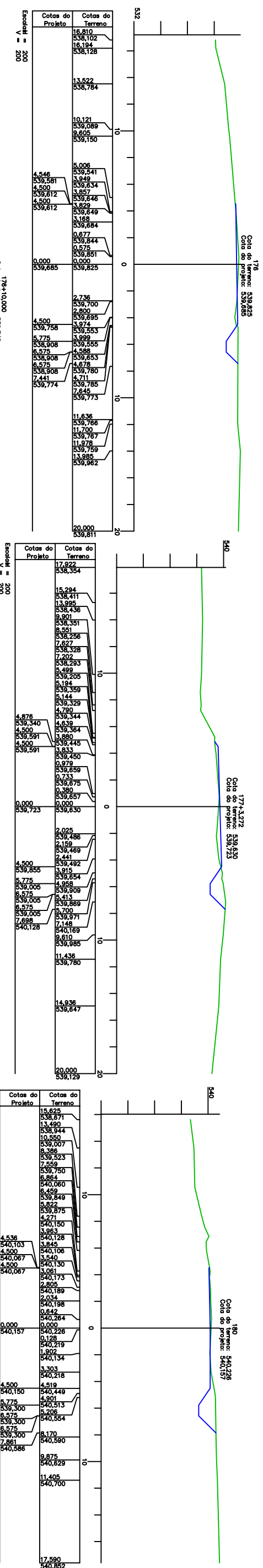
CNPJ: 93.539.153/0001-92

Obra: Pavimentação Asfáltica

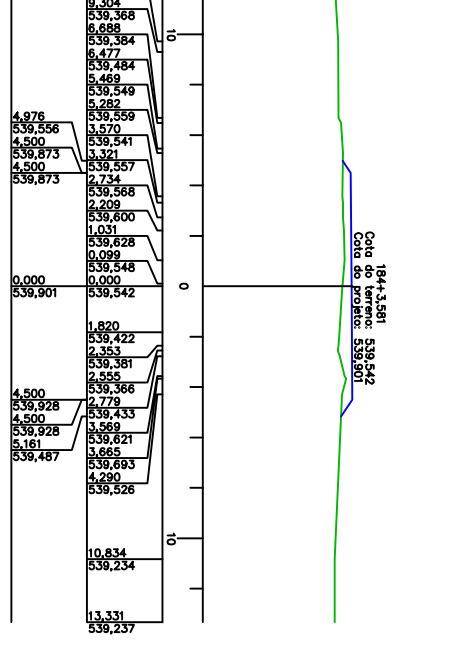
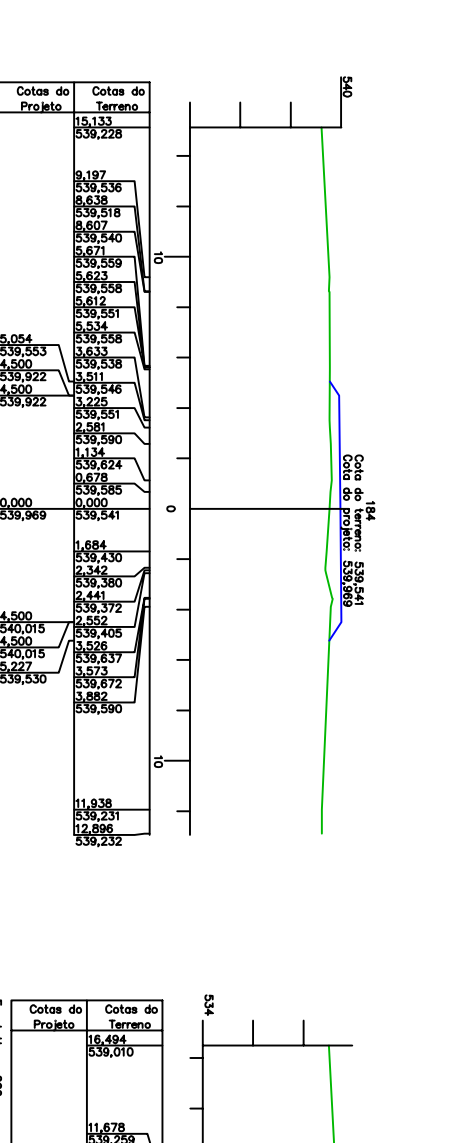
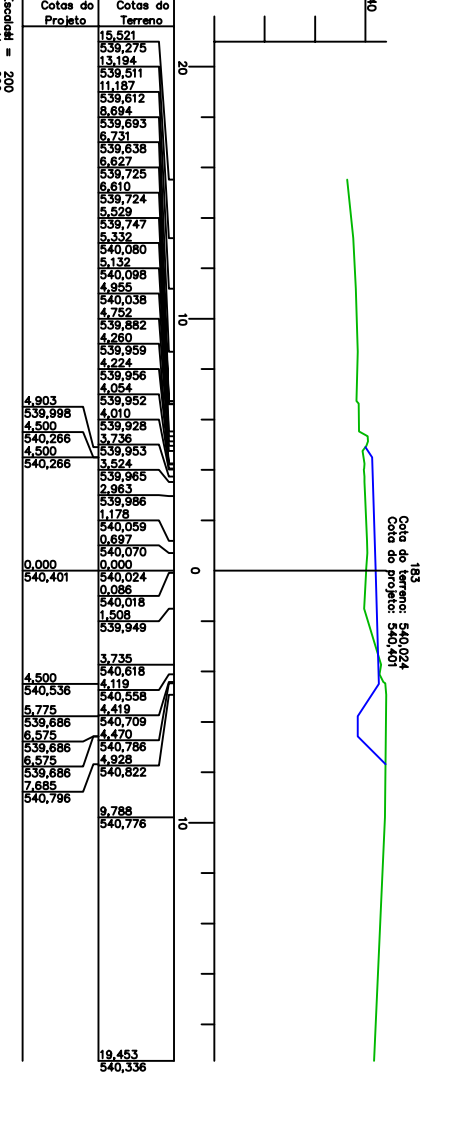
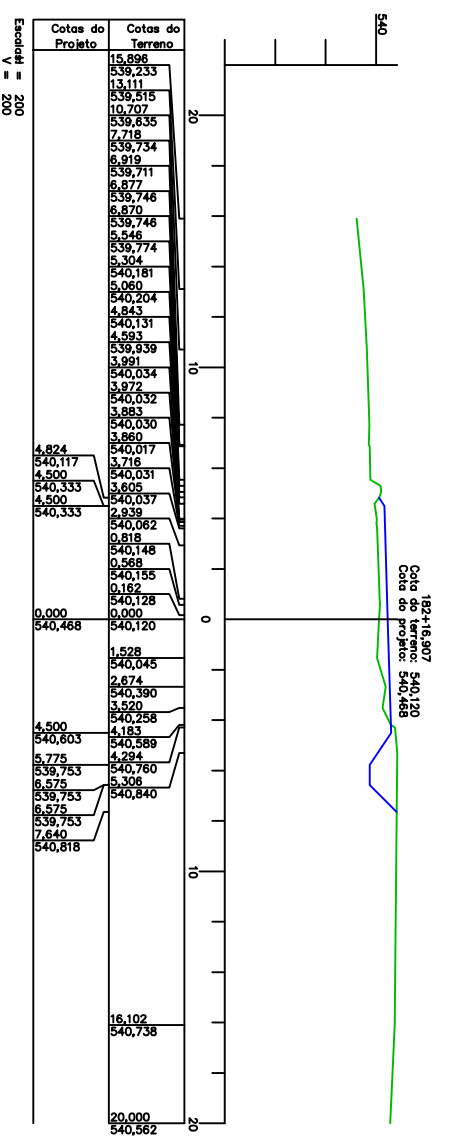
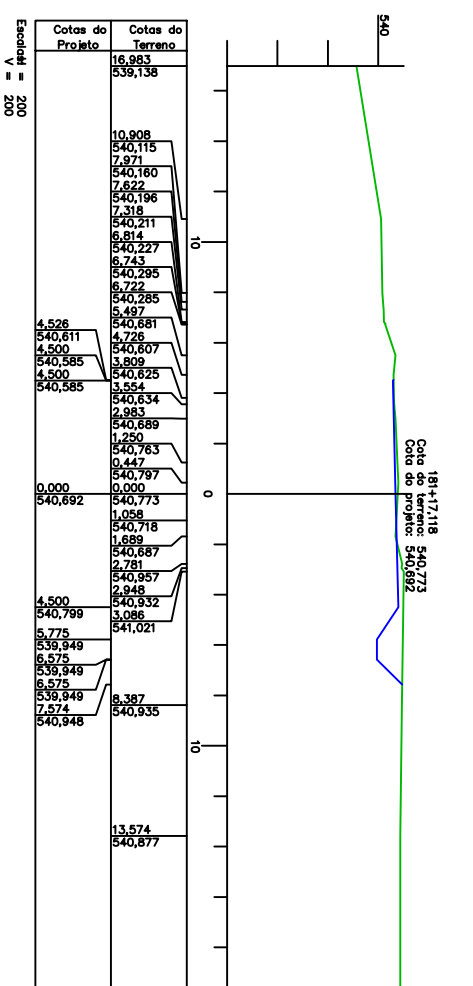
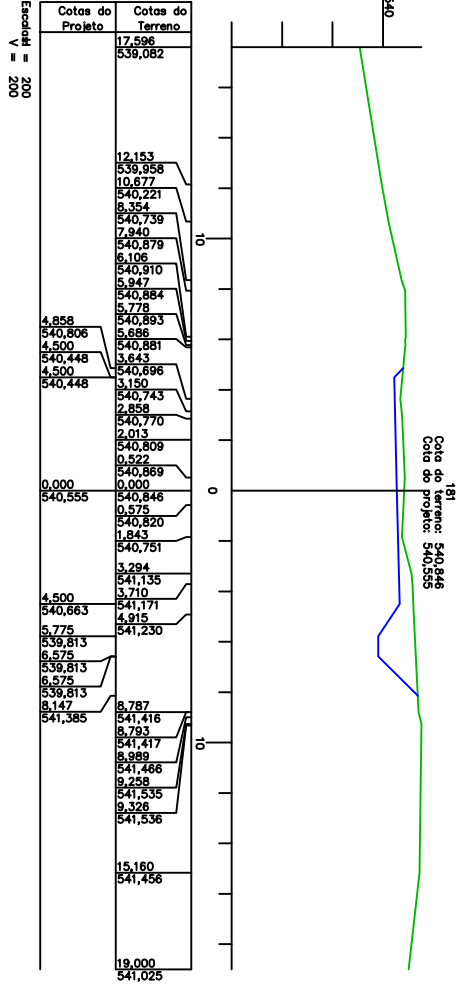
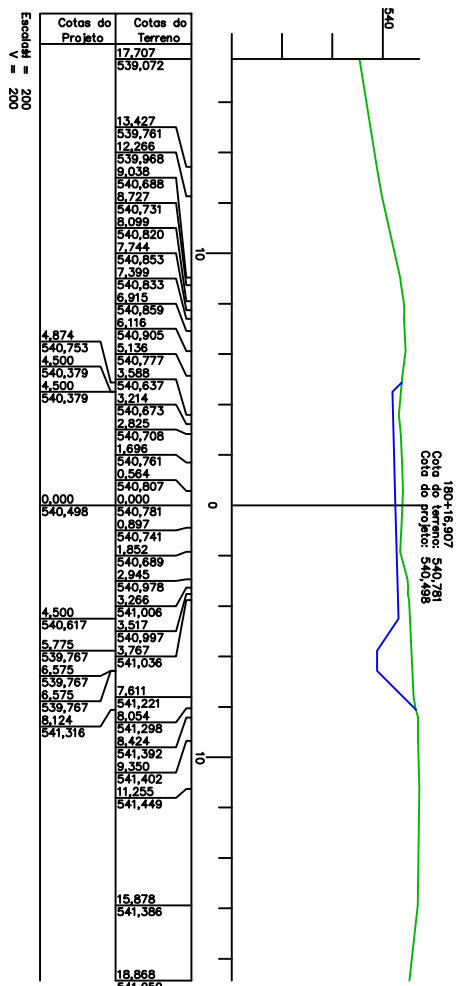
Local : Estrada de Acesso a Barra do Rio Azul

Conteúdo: Seções Transversais





|                                                                                                                                                                                                                                       |                         |                                                                                                                |                                       |                                                                                                          |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-999550 5335 |                         | Resp. Técnico:<br><br>..... |                                       | Cliente:<br><br>..... |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                          | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                                  | CREA/RS 123168-D                      |                                                                                                          |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                               | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                                                  | CNPJ: 93.539.153/0001-92              |                                                                                                          |  |
|                                                                                                                                                                                                                                       |                         | Obra:<br>Pavimentação Asfáltica                                                                                |                                       |                                                                                                          |  |
| Aprovação:                                                                                                                                                                                                                            | Revisão :<br>01         | Local :                                                                                                        | Estrada de Acesso a Barra do Rio Azul |                                                                                                          |  |
| -                                                                                                                                                                                                                                     | Prancha :<br>75         | Conteúdo:                                                                                                      | Seções Transversais                   |                                                                                                          |  |





SERVIÇOS DE ENGENHARIA

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Projeto :  
Lauson Serafini

Data :  
Dezembro/2021

Resp. Técnico:  
.....

Cliente:  
.....

Revisão :  
01

Prancha :  
76

Eng. Civil Lauson Serafini  
CREA/RS 123168-D

CNPJ: 93.539.153/0001-92

Obra:  
Pavimentação Asfáltica

Local :  
Estrada de Acesso a Barra do Rio Azul

Seções Transversais

Projeto :  
Lauson Serafini

Data :  
Dezembro/2021

Resp. Técnico:  
.....

Cliente:  
.....

Revisão :  
01

Prancha :  
76

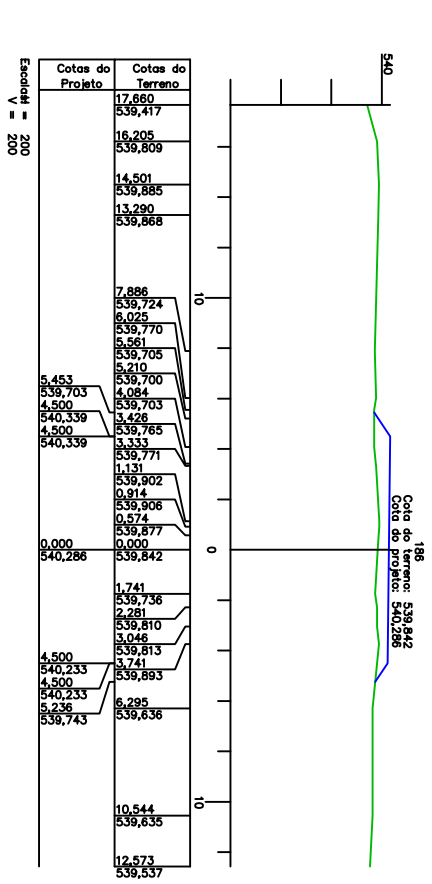
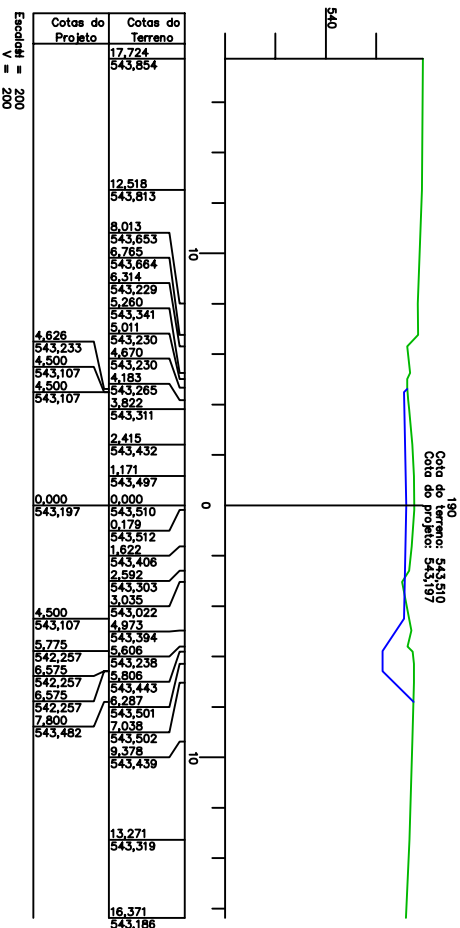
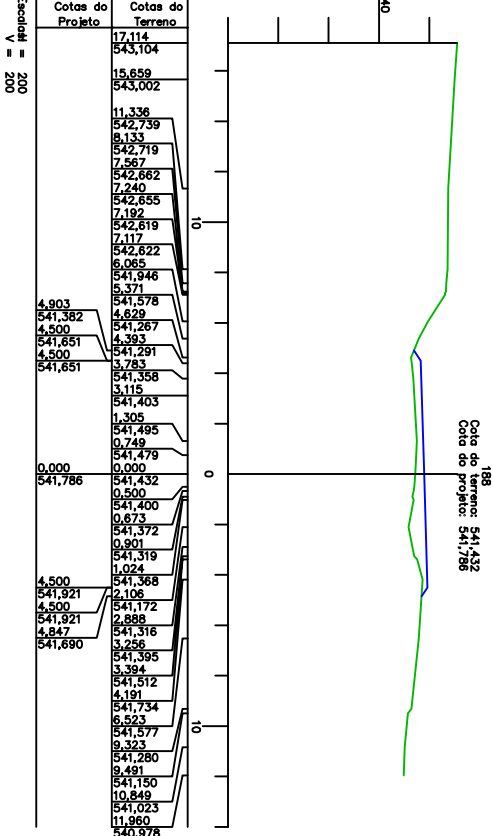
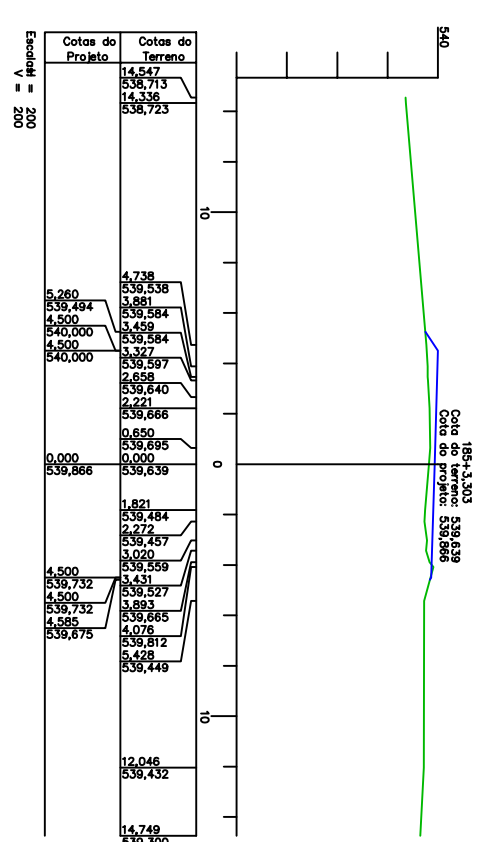
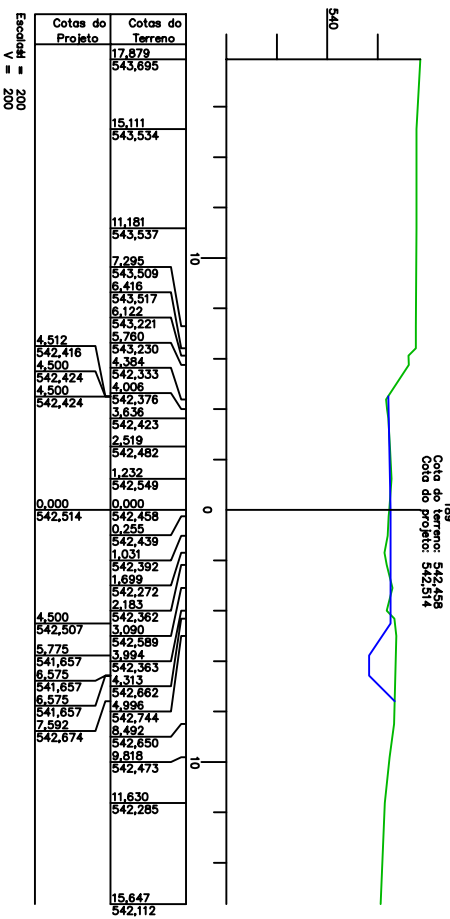
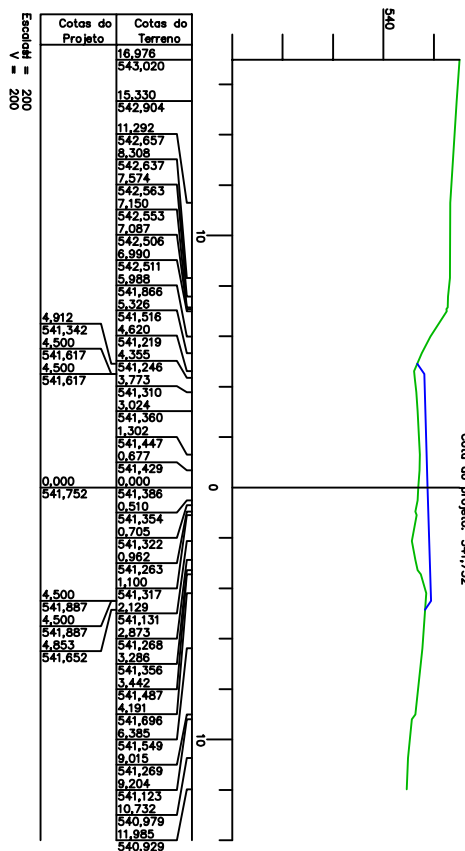
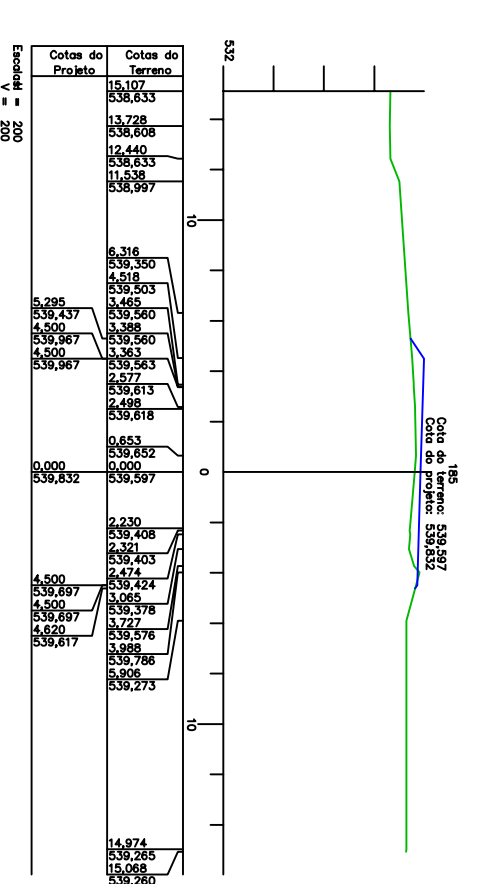
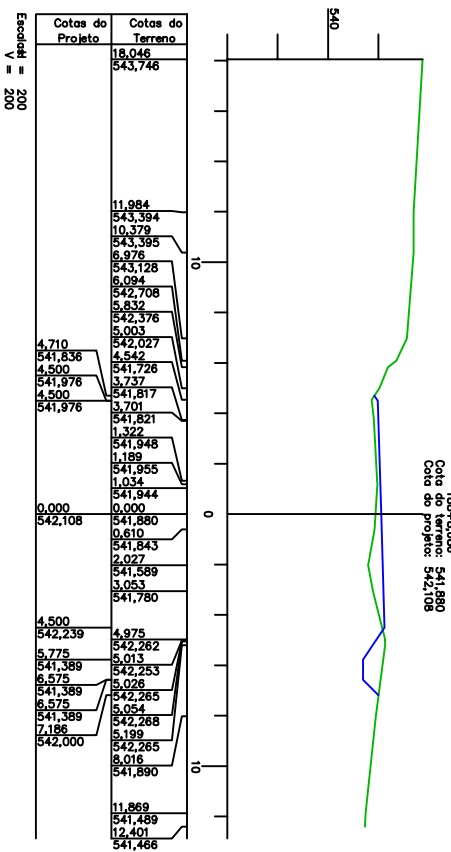
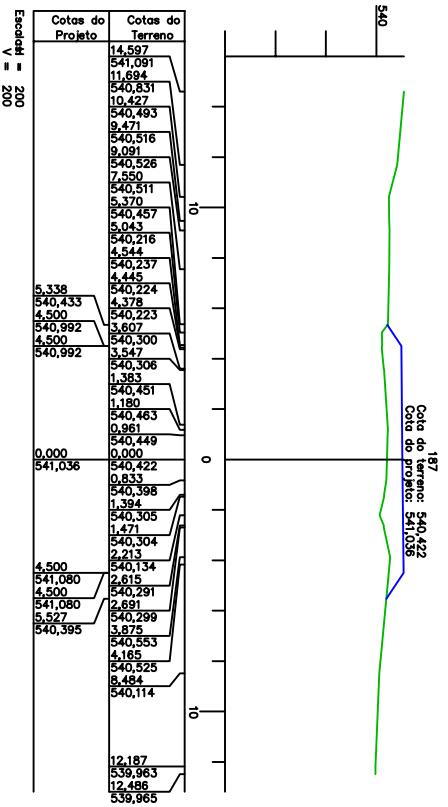
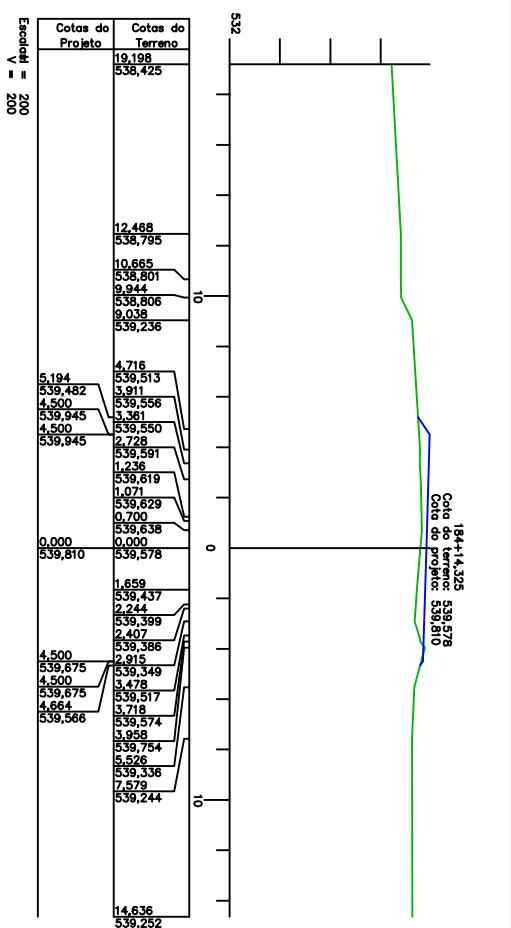
Eng. Civil Lauson Serafini  
CREA/RS 123168-D

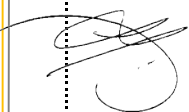
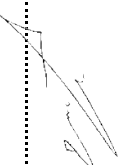
CNPJ: 93.539.153/0001-92

Obra:  
Pavimentação Asfáltica

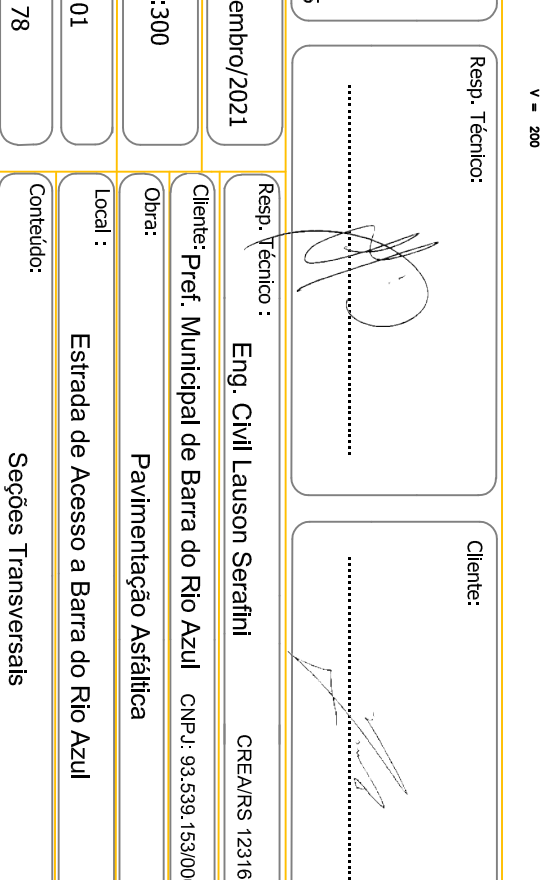
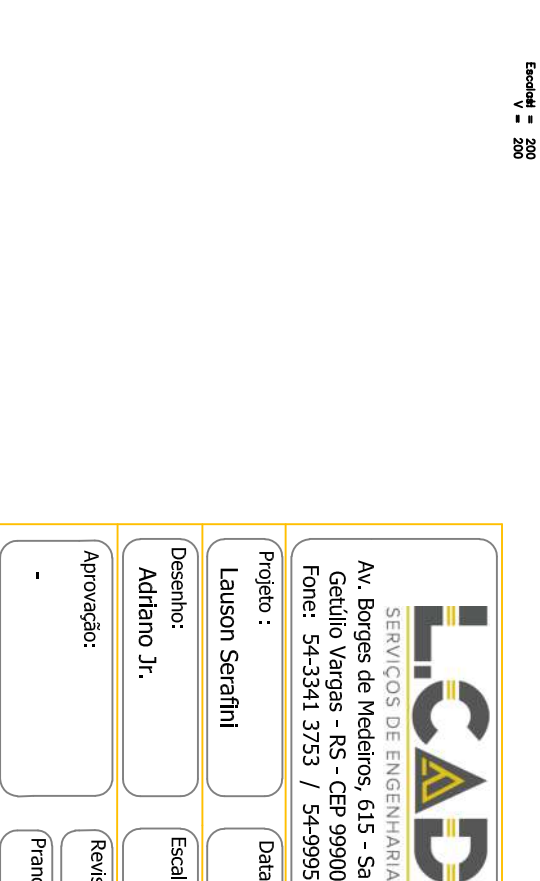
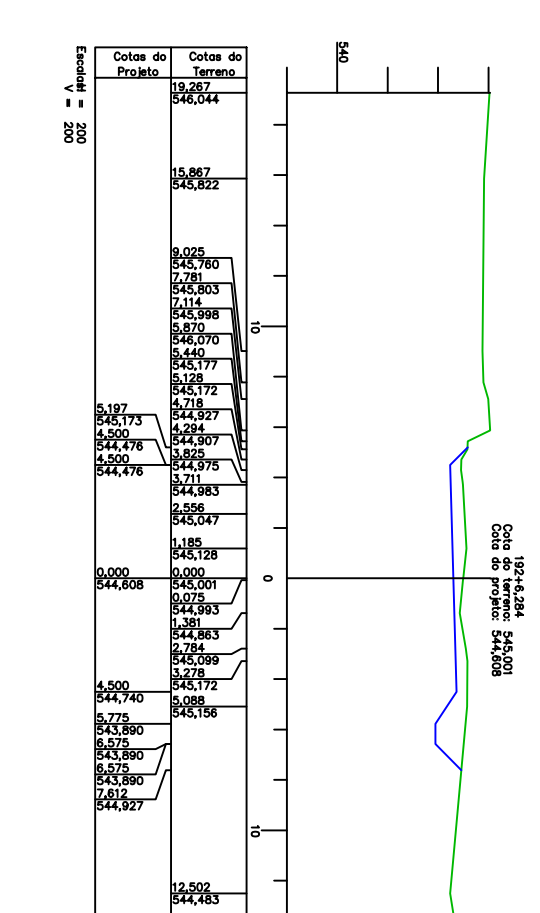
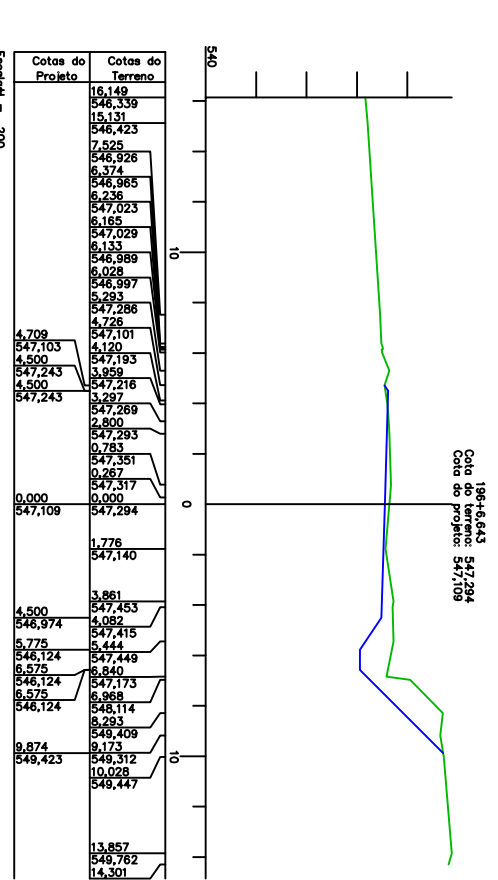
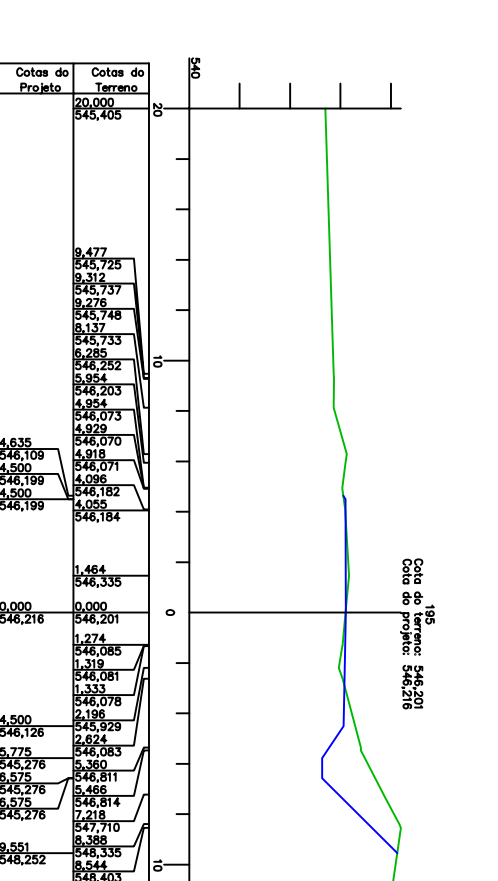
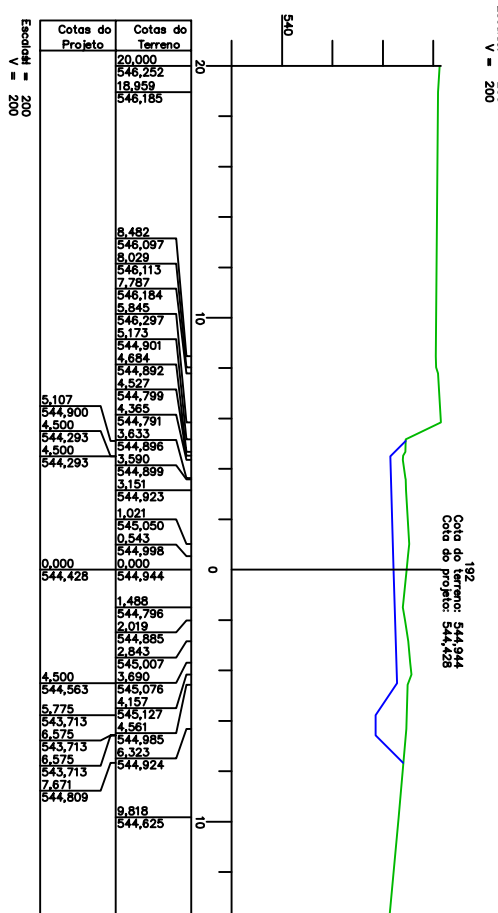
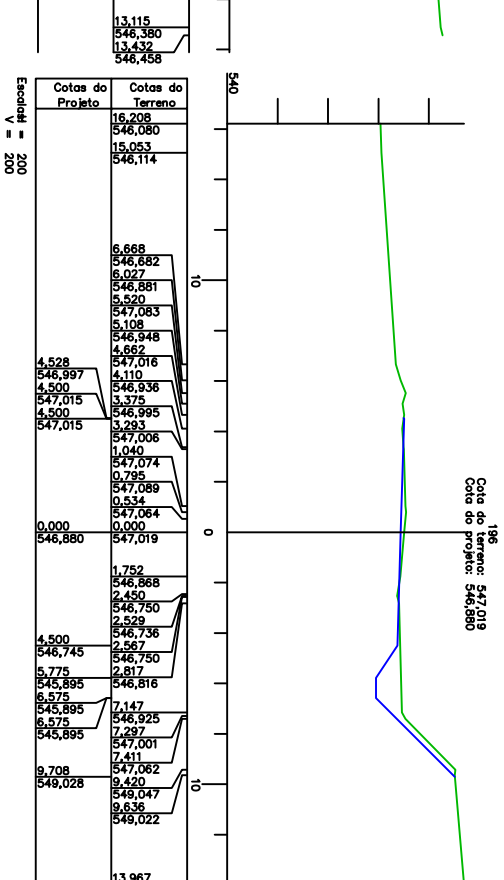
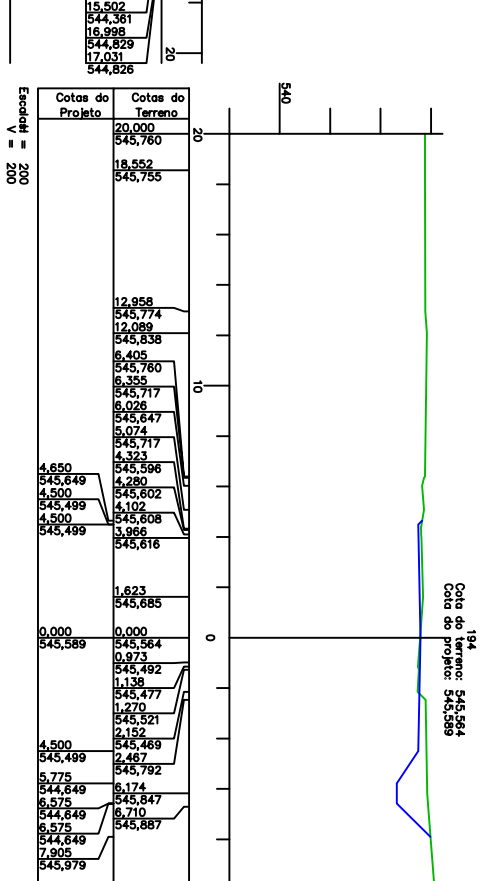
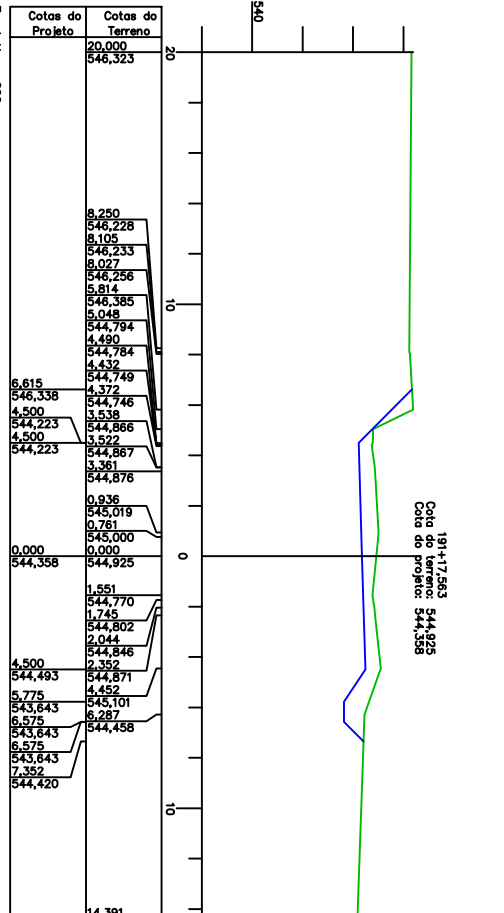
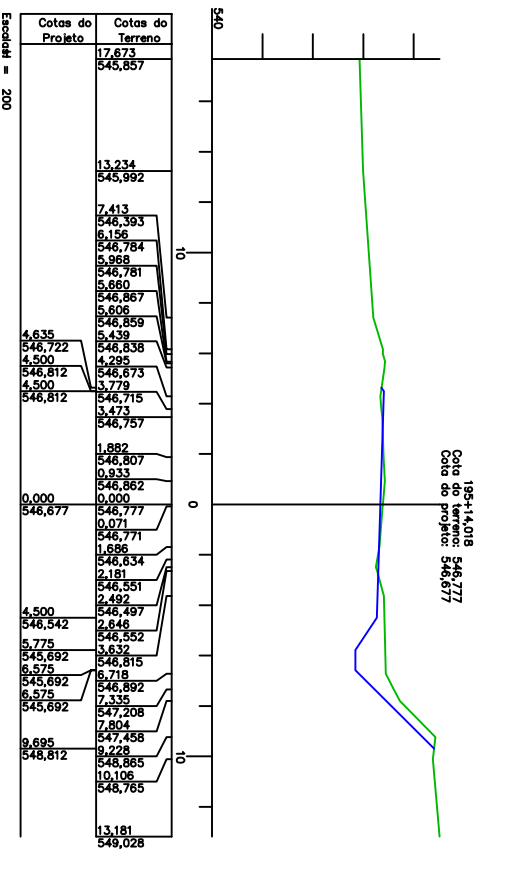
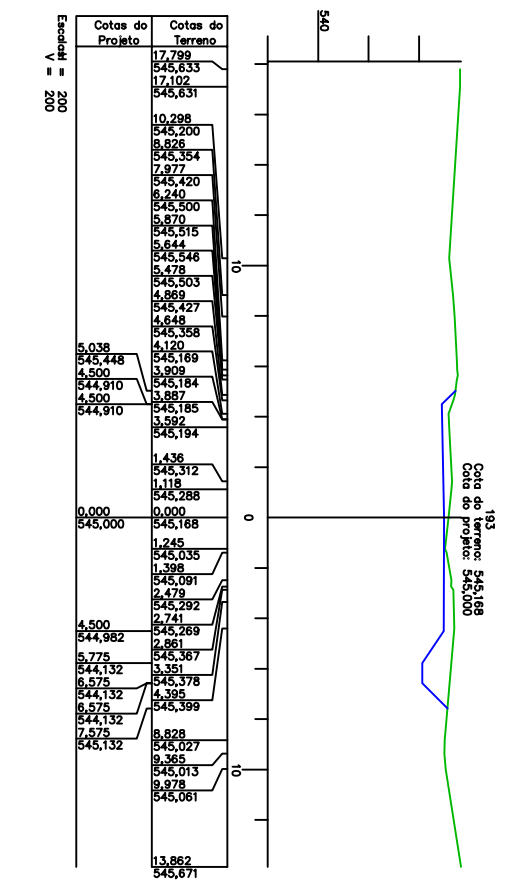
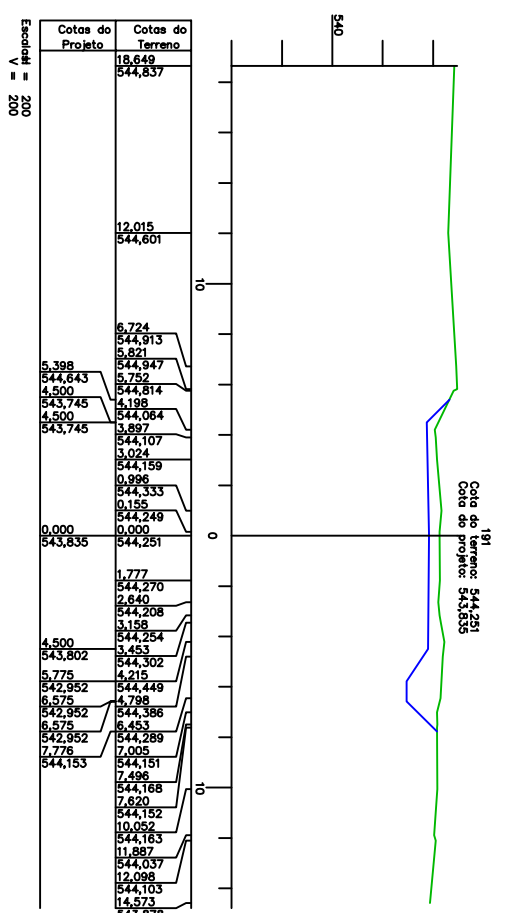
Local :  
Estrada de Acesso a Barra do Rio Azul

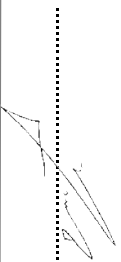
Seções Transversais



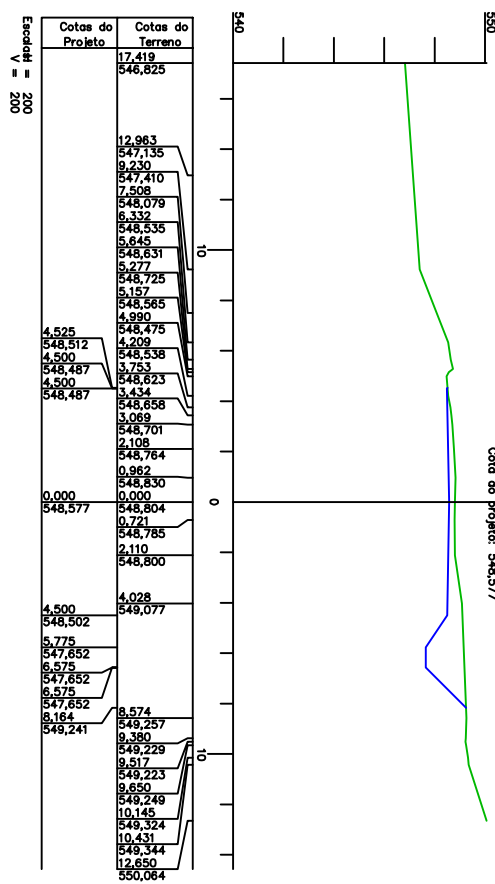
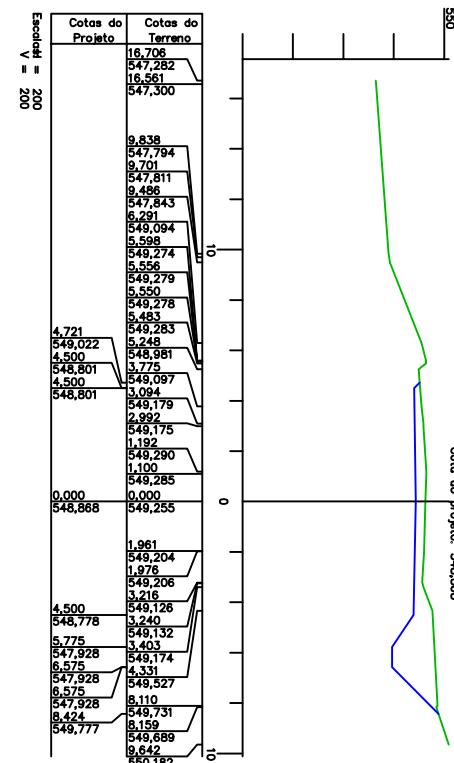
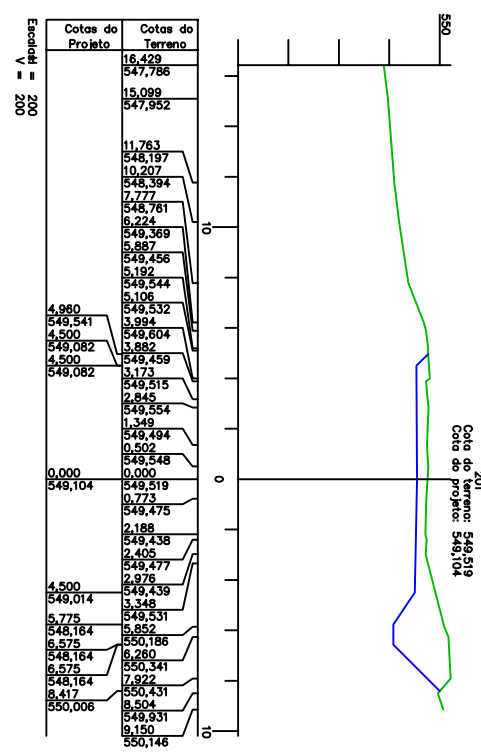
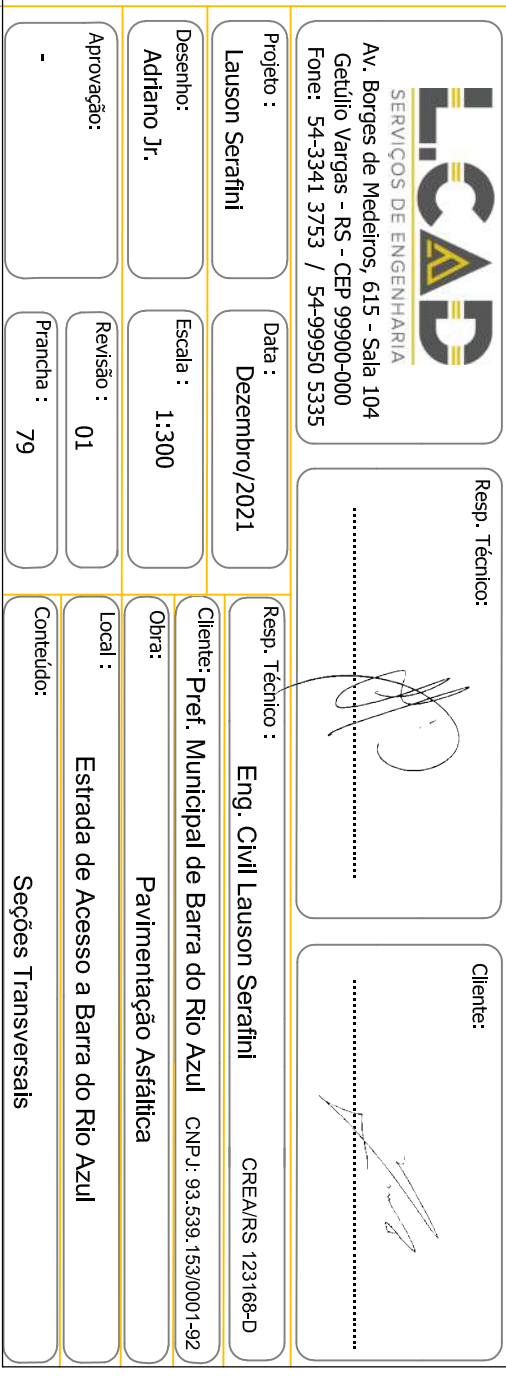
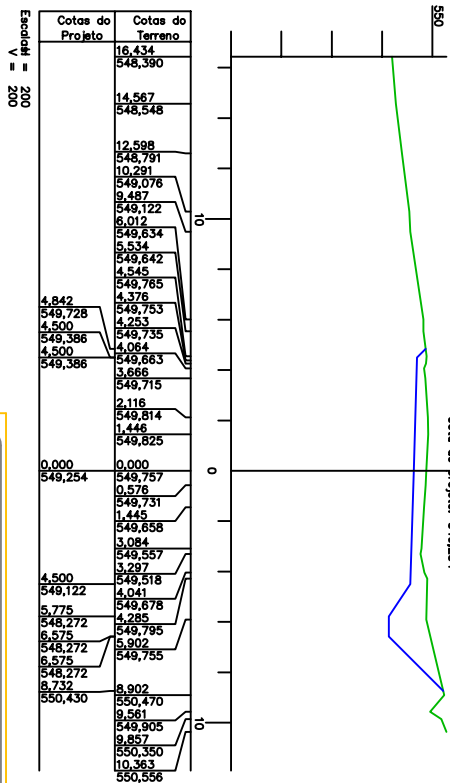
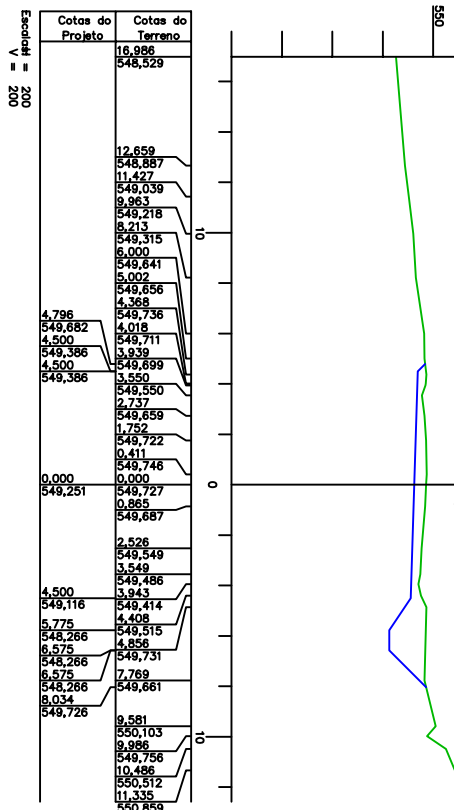
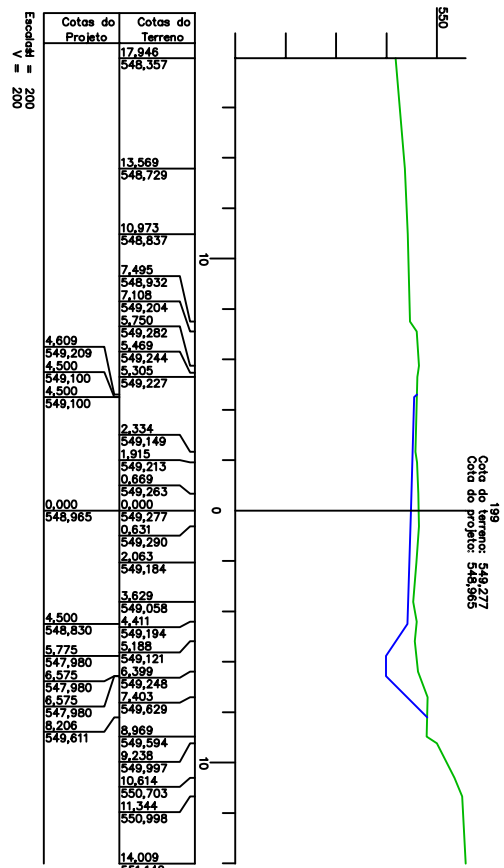
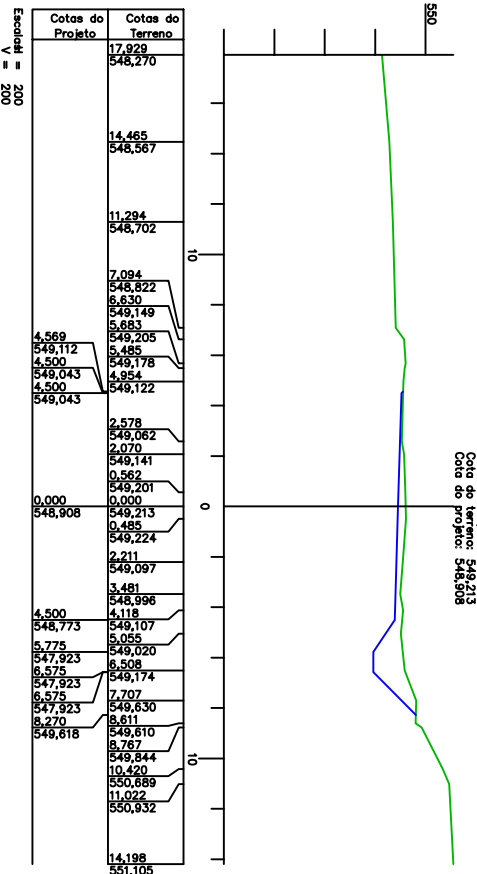
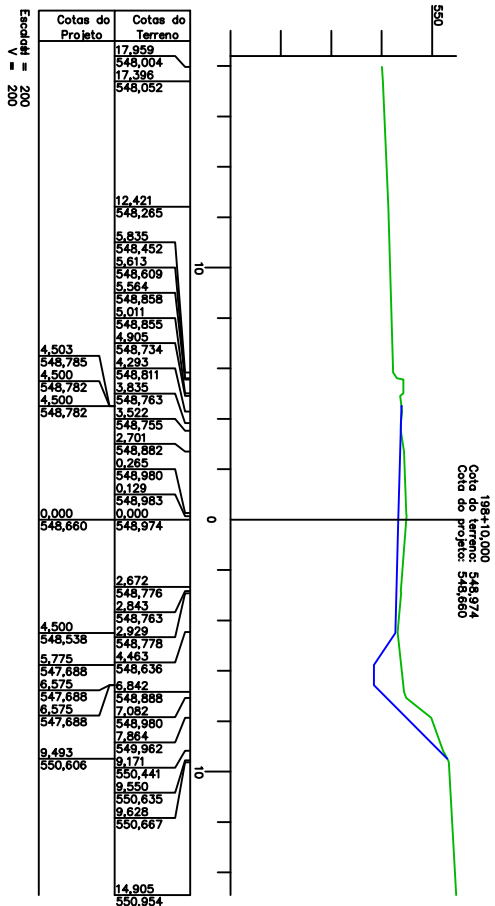
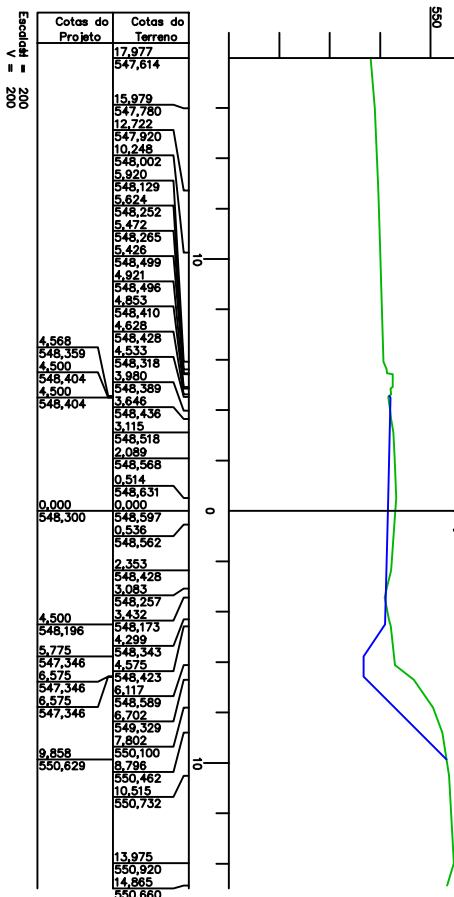
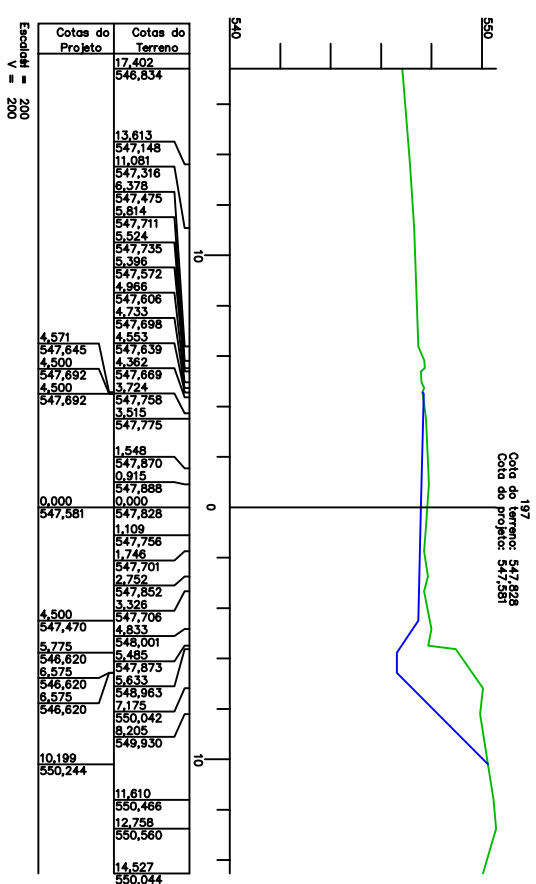
|                                                                                                                                                                                                                                                            |                         |                                                                                                       |                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <div><br/>SERVIÇOS DE ENGENHARIA</div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |                         | Resp. Técnico:<br> | Cliente:<br> |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                               | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D                                                                                |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                    | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92                                                                        |
|                                                                                                                                                                                                                                                            |                         | Obra:<br>Pavimentação Asfáltica                                                                       |                                                                                                 |
| Aprovação:<br>-                                                                                                                                                                                                                                            | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                                                                                                 |
|                                                                                                                                                                                                                                                            | Plancha :<br>77         | Conteúdo:<br>Seções Transversais                                                                      |                                                                                                 |

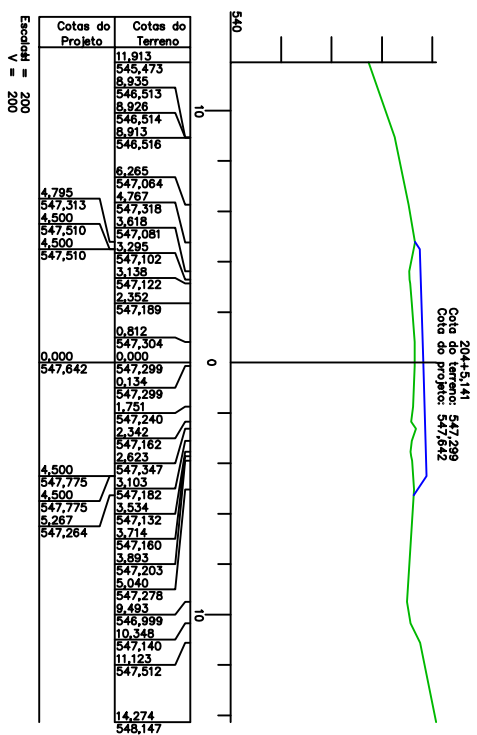
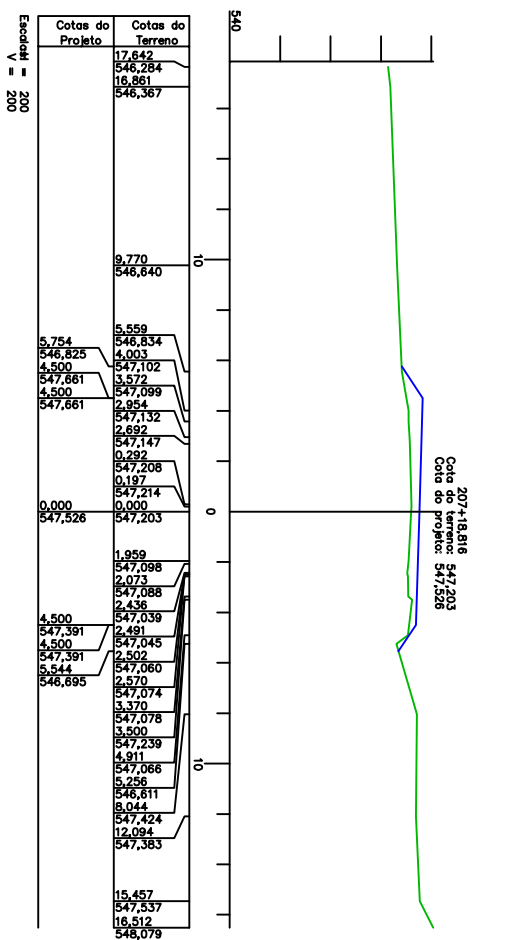
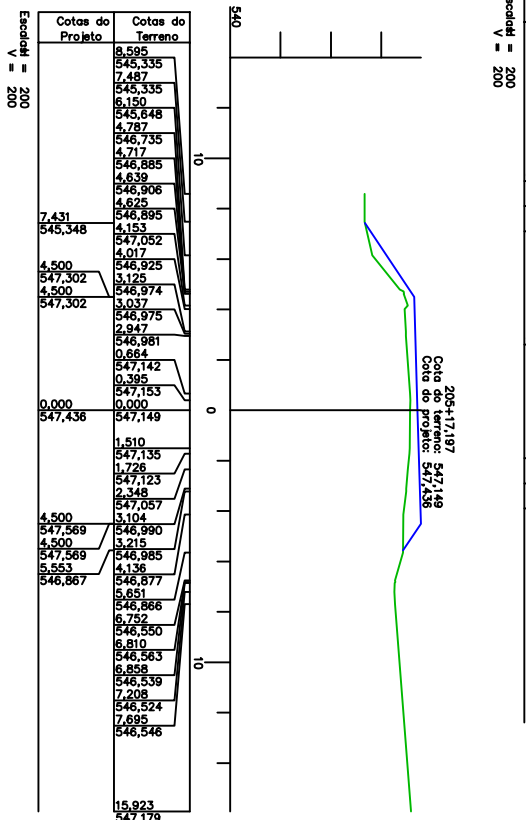
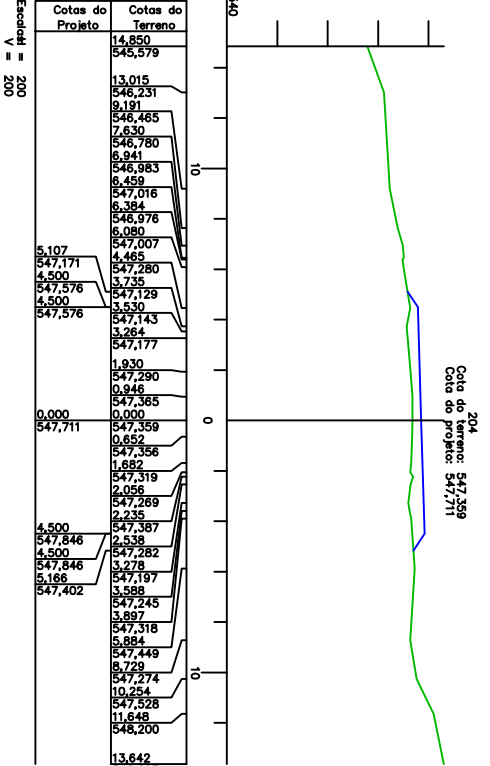
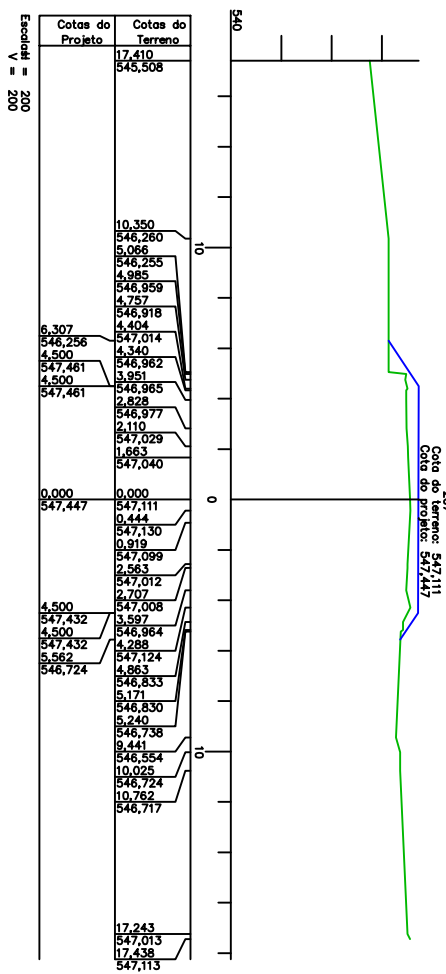
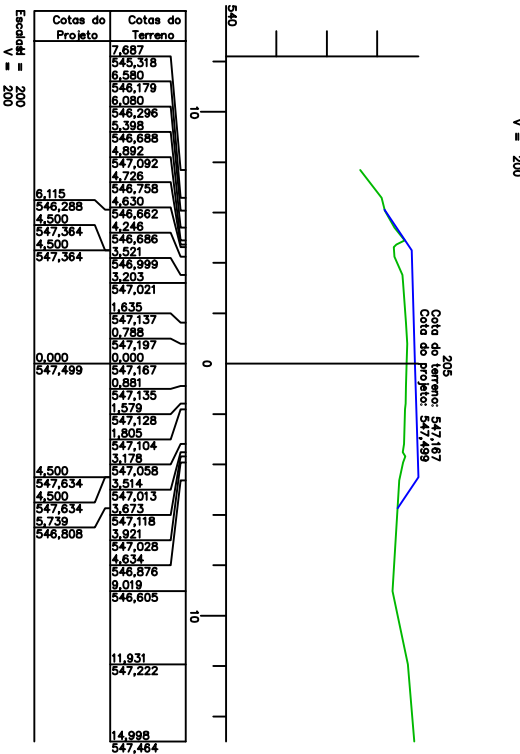
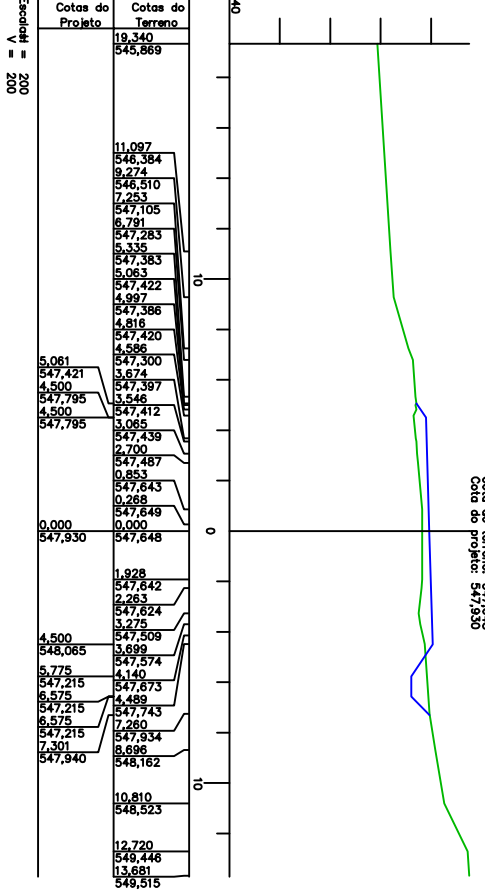
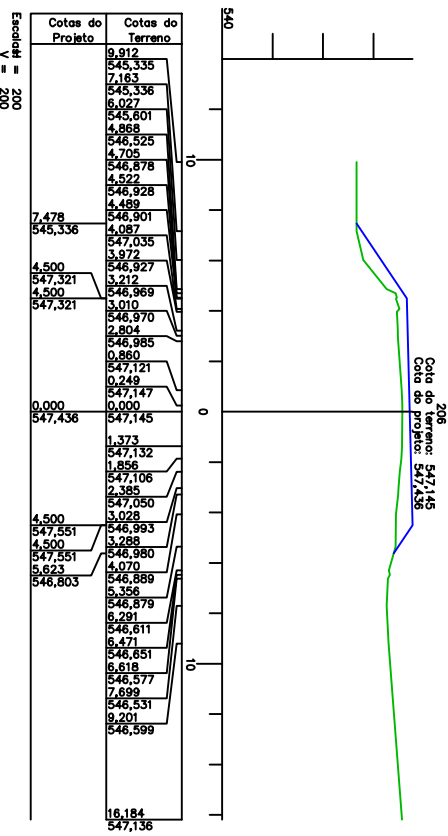
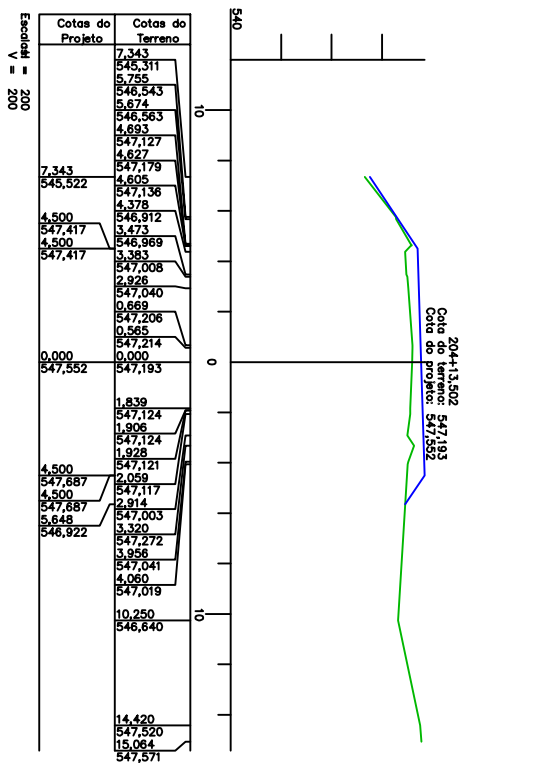
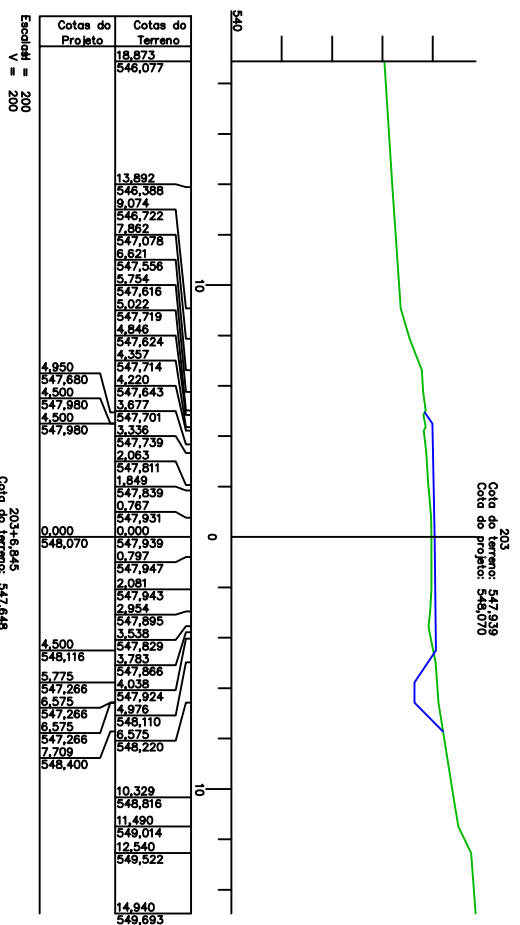


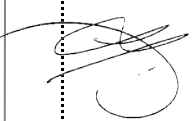
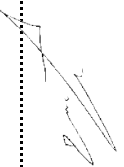


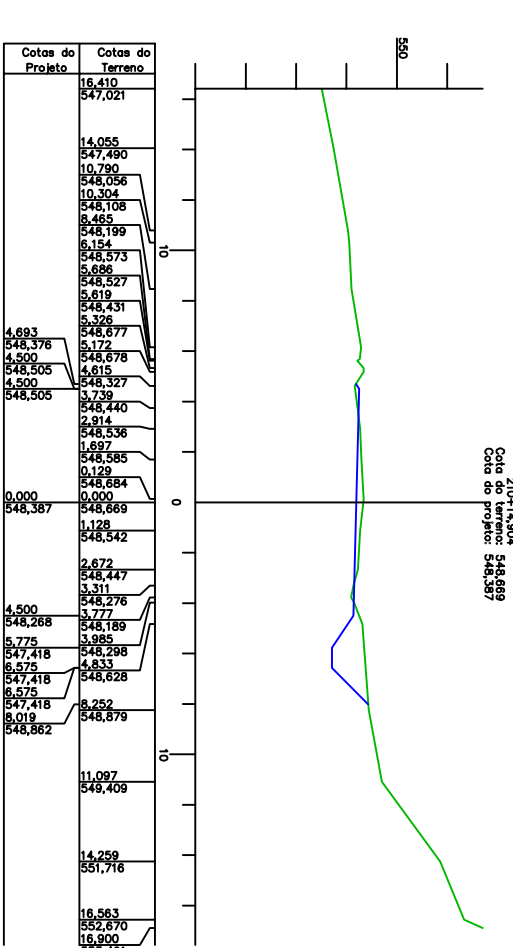
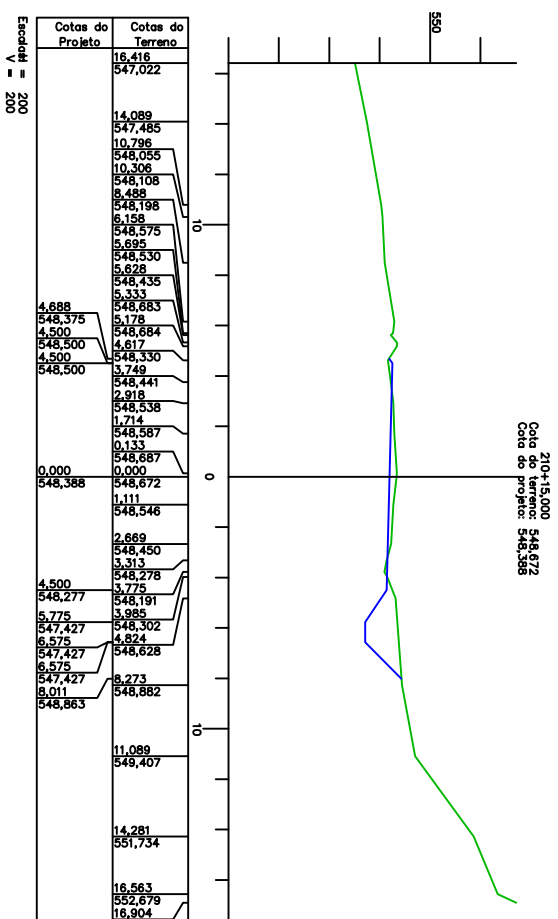
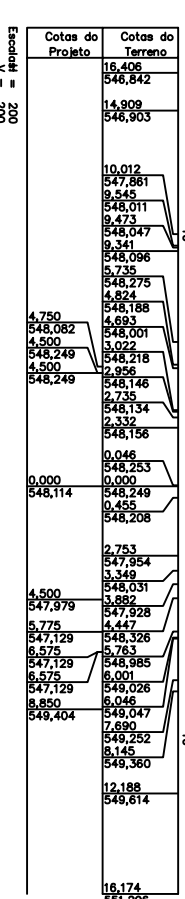
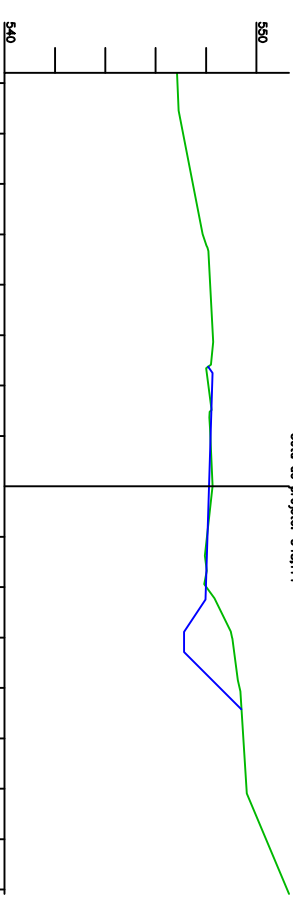
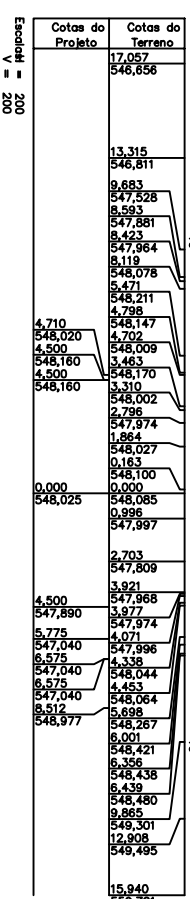
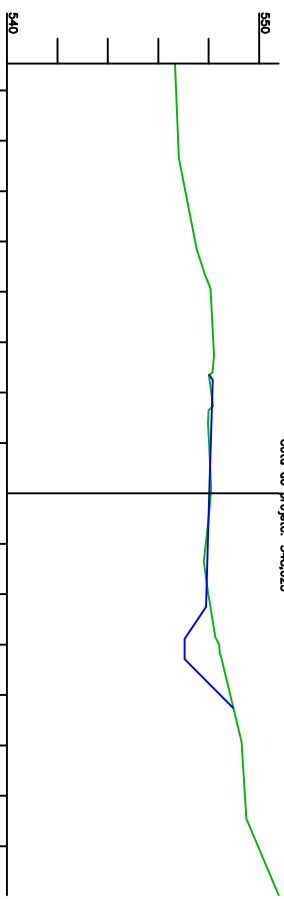
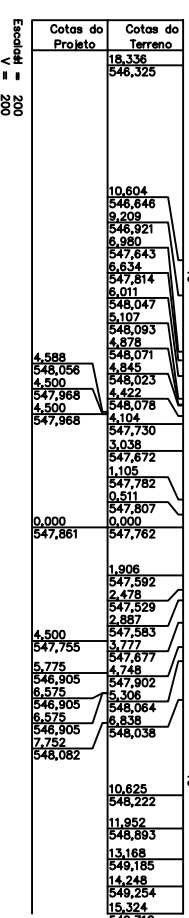
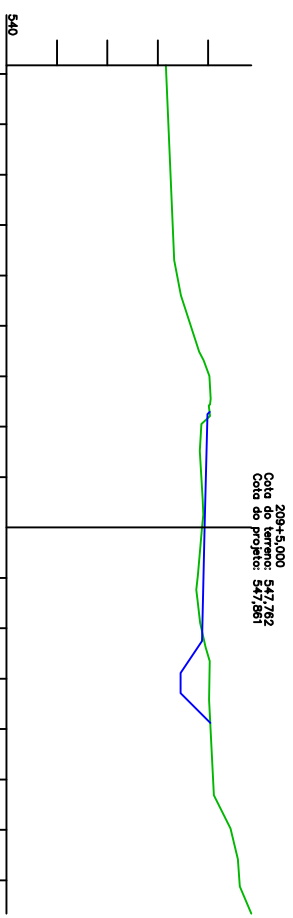
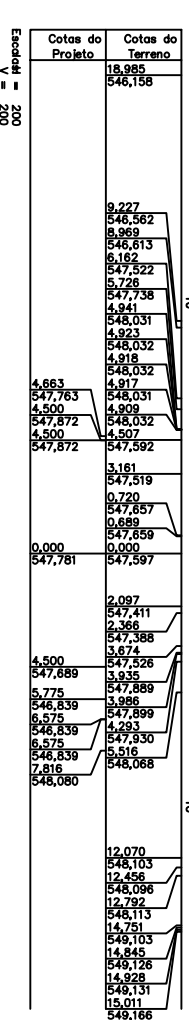
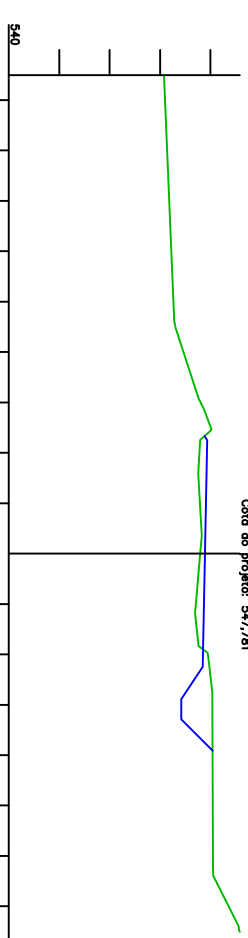
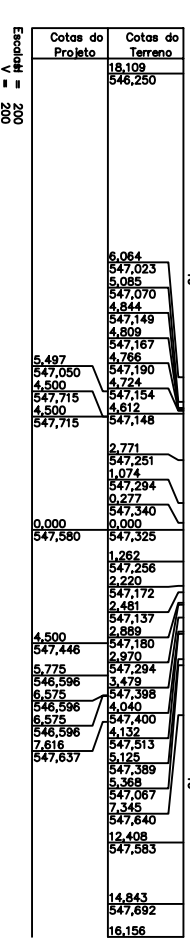
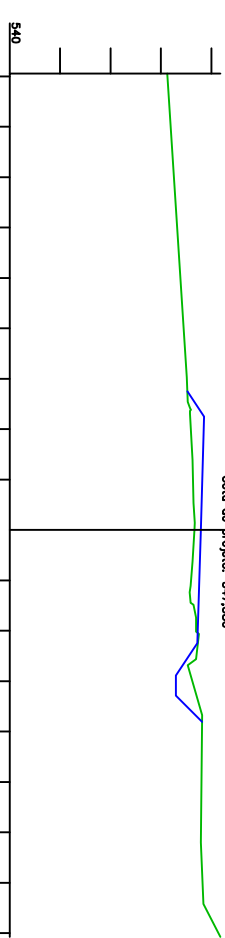
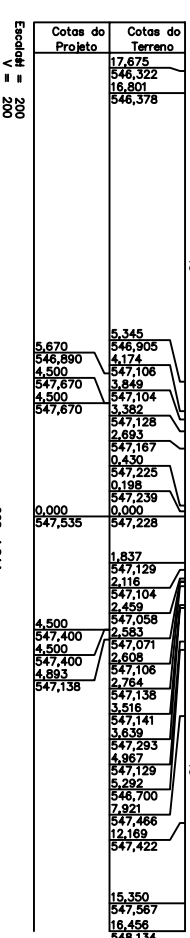
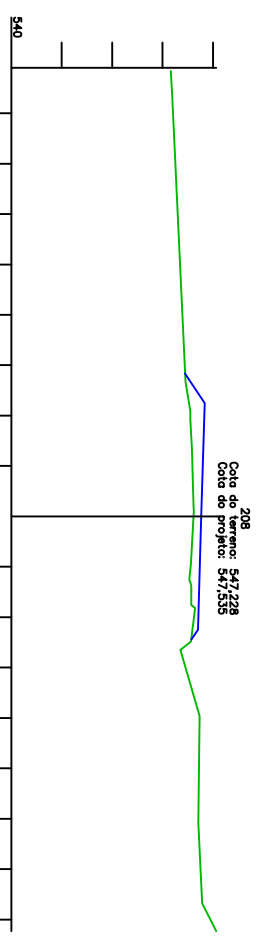
|                                                                                                                                                                                                                                      |                         |                                                                                                                    |                          |                                                                                                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br><br><br>..... |                          | Cliente:<br><br><br>..... |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                                      | CREA/RS 123166-D         |                                                                                                              |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                                                      | CNPJ: 93.539.153/0001-92 |                                                                                                              |  |
|                                                                                                                                                                                                                                      |                         | Obra: Pavimentação Asfáltica                                                                                       |                          |                                                                                                              |  |
| Aprovação:                                                                                                                                                                                                                           | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                                   |                          |                                                                                                              |  |
| -                                                                                                                                                                                                                                    | Prancha :<br>78         | Conteúdo:<br>Seções Transversais                                                                                   |                          |                                                                                                              |  |

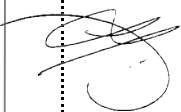
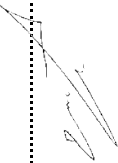




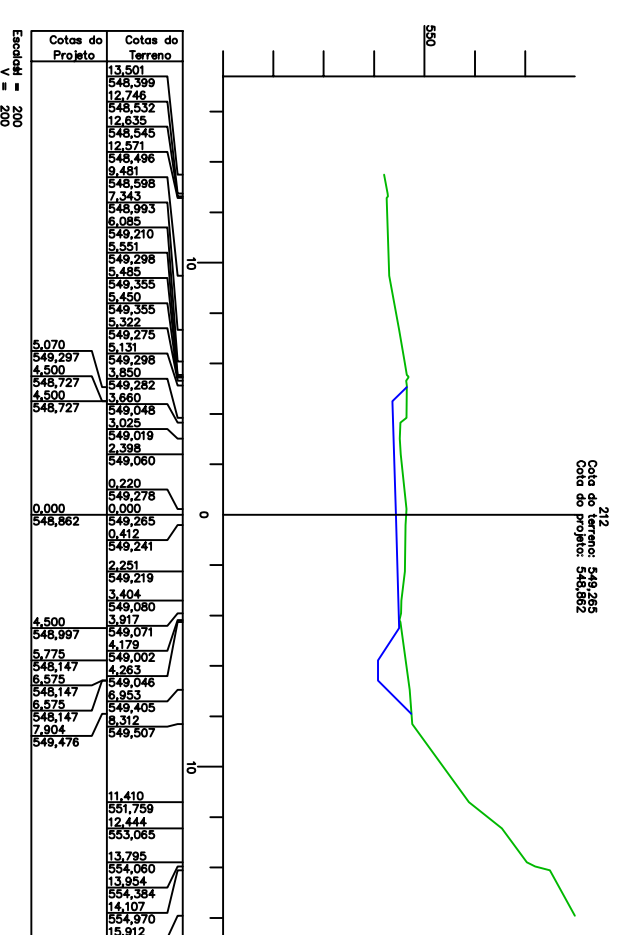
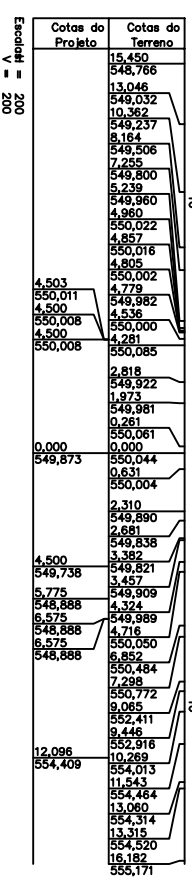
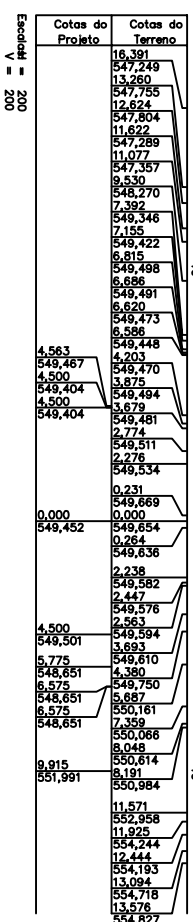
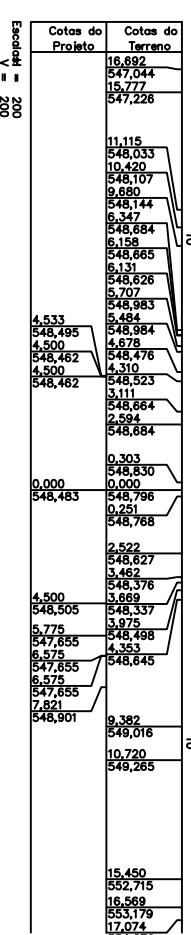
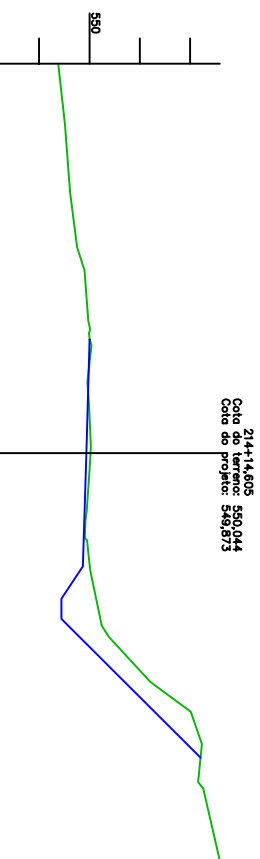
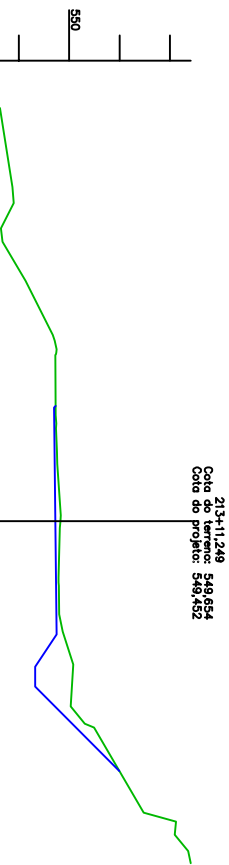
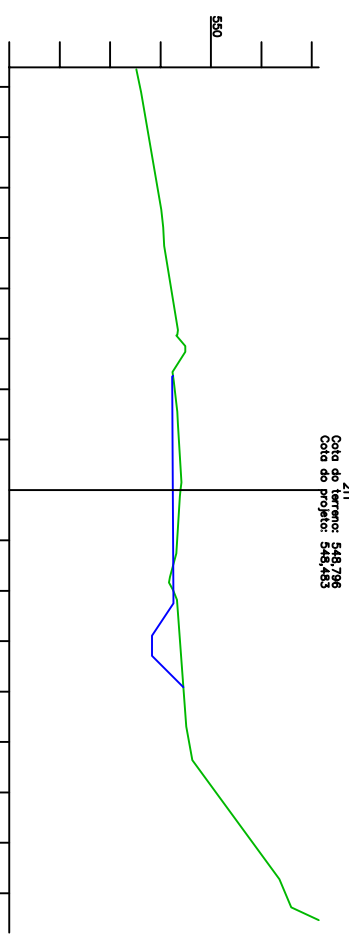
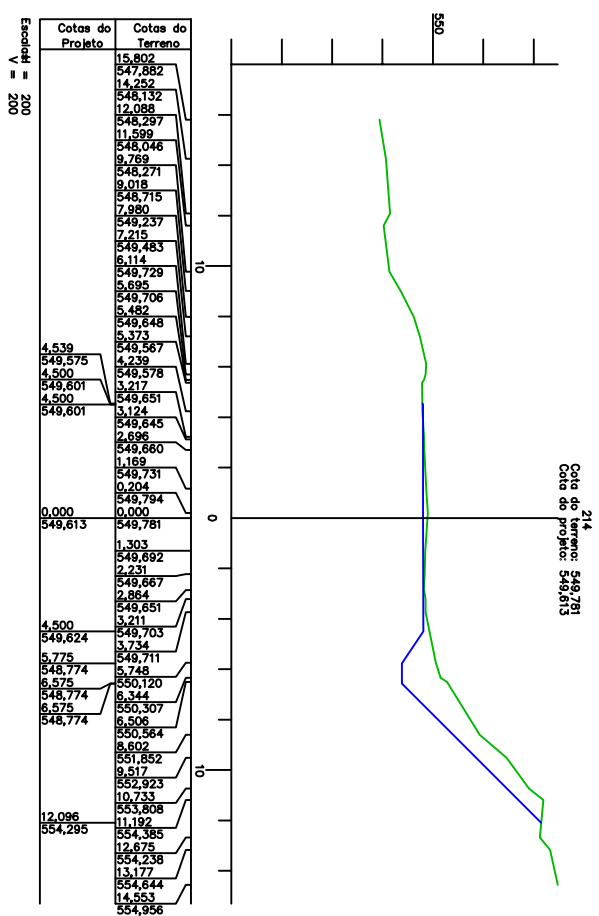
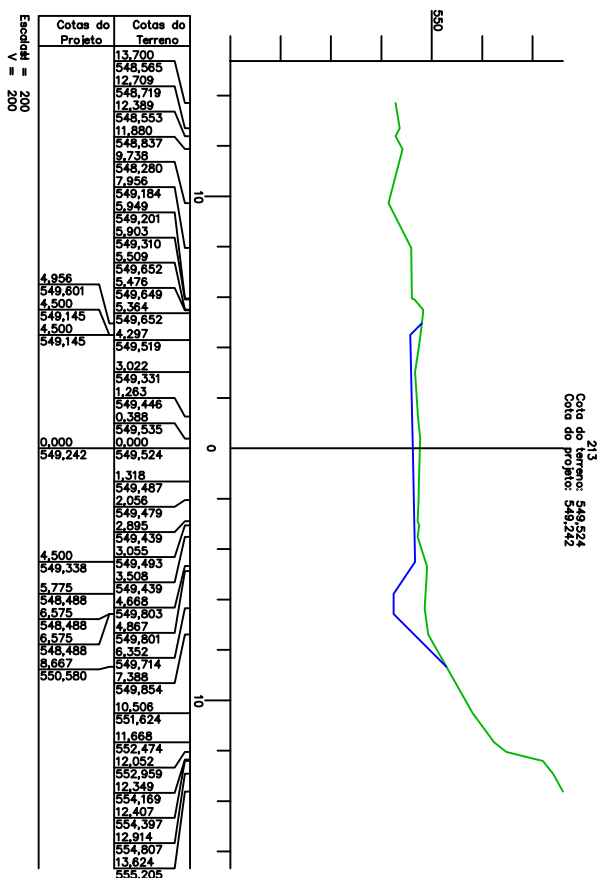
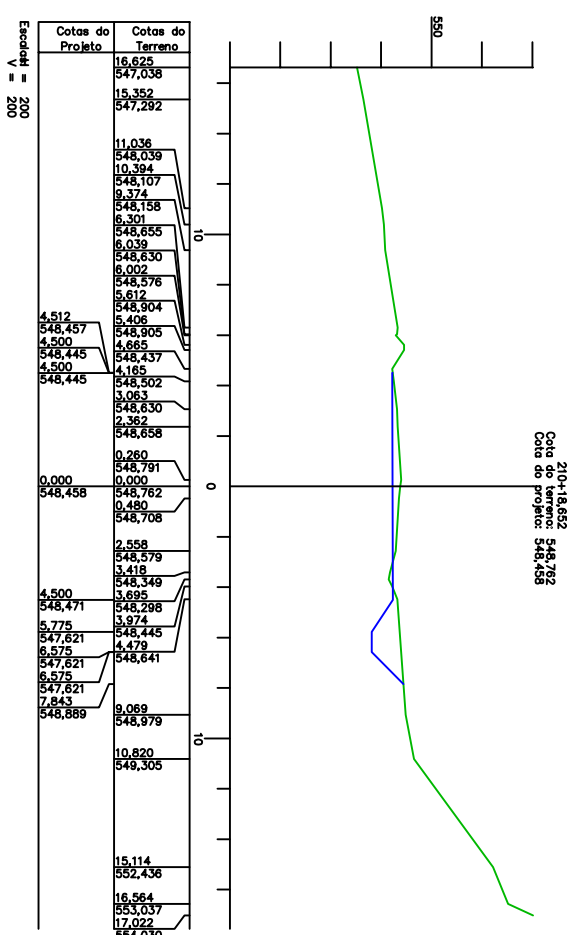


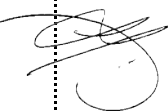
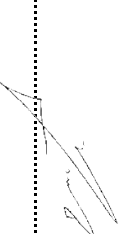
|                                                                                                                                                                                                                                               |                         |                                                                                                                |                          |                                                                                                          |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA<br>LACAD<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br><br>..... |                          | Cliente:<br><br>..... |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                  | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                                  | CREA/RS 123168-D         |                                                                                                          |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                       | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                                                  | CNPJ: 93.539.153/0001-92 |                                                                                                          |  |
|                                                                                                                                                                                                                                               |                         | Obra:<br>Pavimentação Asfáltica                                                                                |                          |                                                                                                          |  |
| Aprovação:                                                                                                                                                                                                                                    | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                               |                          |                                                                                                          |  |
| -                                                                                                                                                                                                                                             | Prancha :<br>80         | Conteúdo:<br>Seções Transversais                                                                               |                          |                                                                                                          |  |



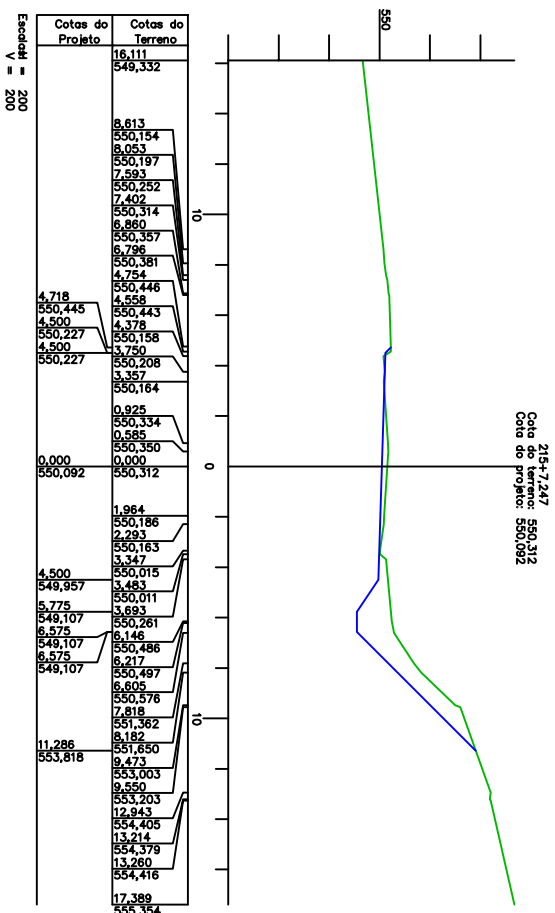
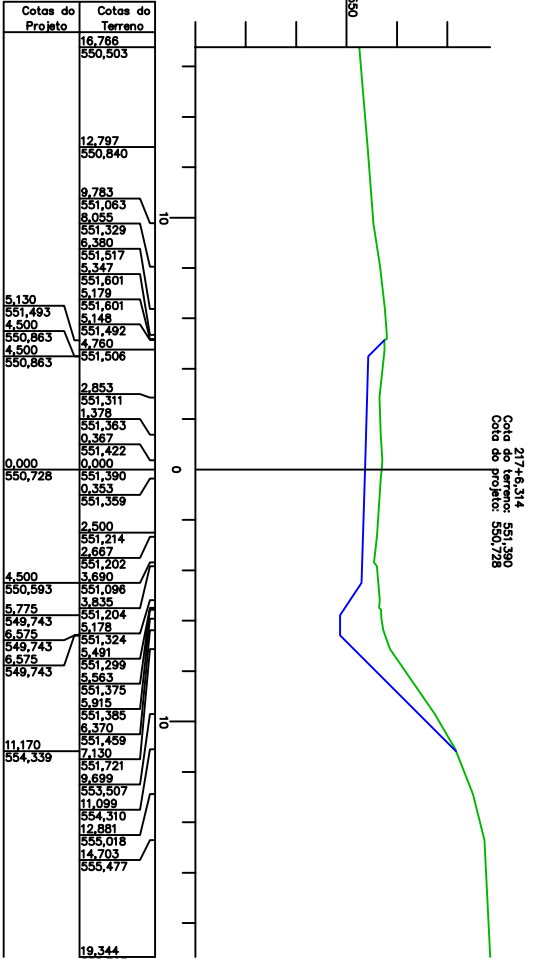
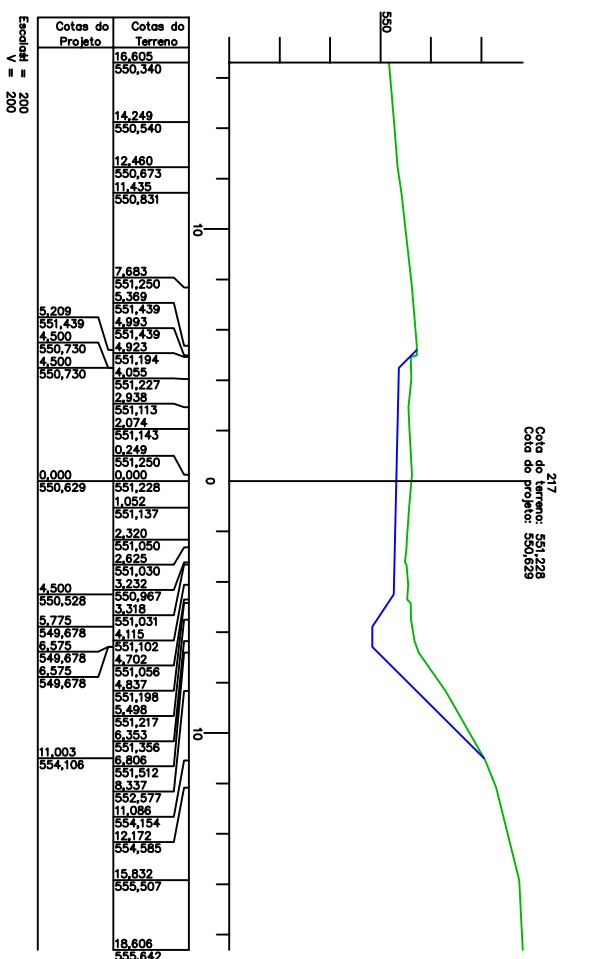
|                                                                                                                     |                         |                                                                                     |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>SERVIÇOS DE ENGENHARIA       |                         | Resp. Técnico:                                                                      | Cliente:                                                                            |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       | CREA/RS 123168-D                                                                    |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                       | CNPJ: 93.539.153/0001-92                                                            |
|                                                                                                                     |                         | Obra:<br>Pavimentação Asfáltica                                                     |                                                                                     |
| Aprovação:                                                                                                          | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |                                                                                     |
| -                                                                                                                   | Plancha :<br>81         | Conteúdo:<br>Seções Transversais                                                    |                                                                                     |

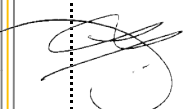
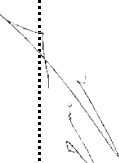


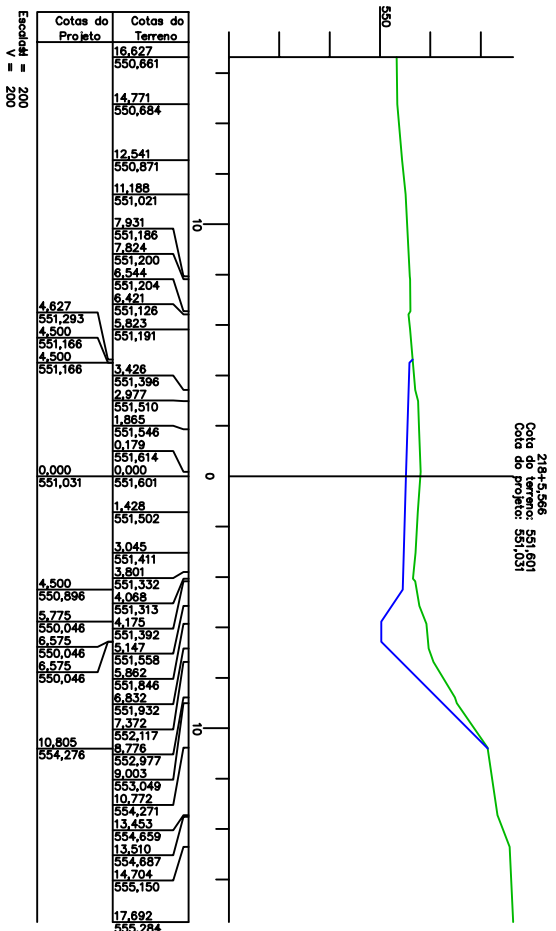
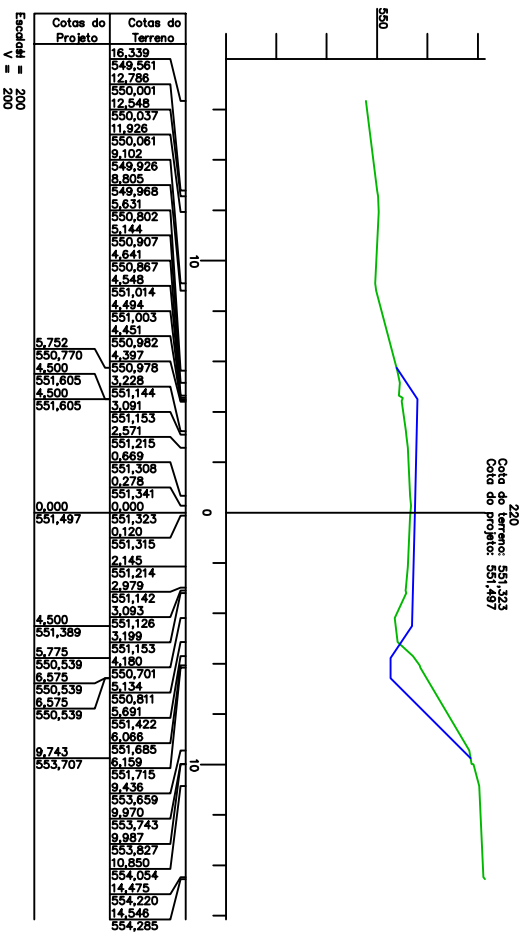
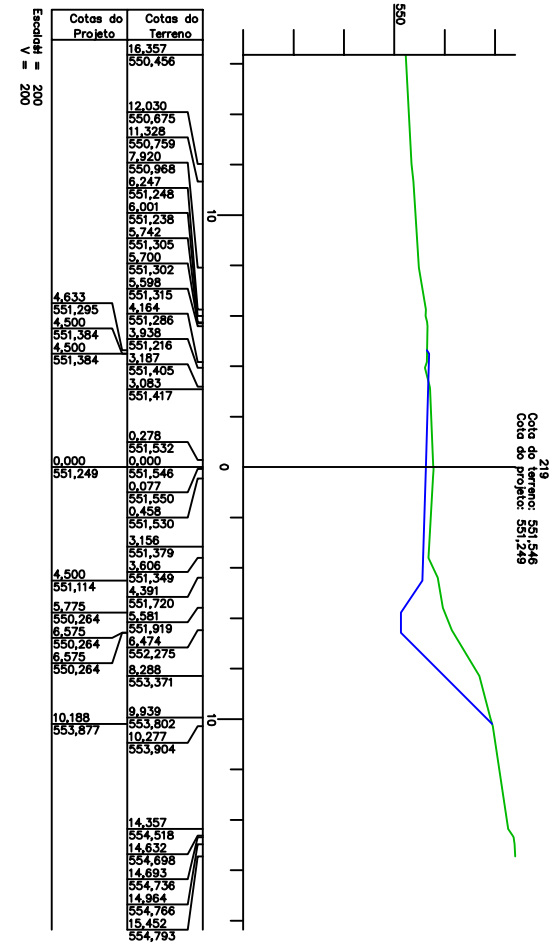
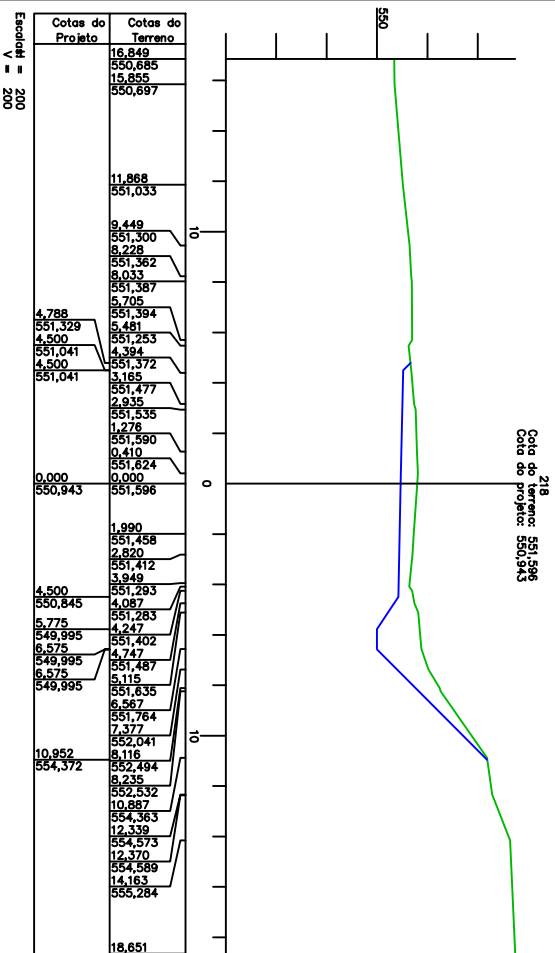
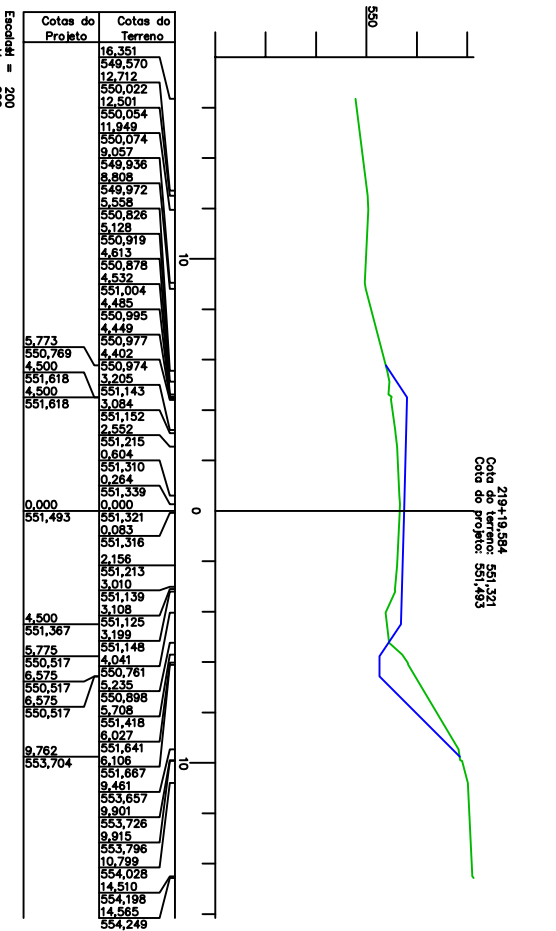
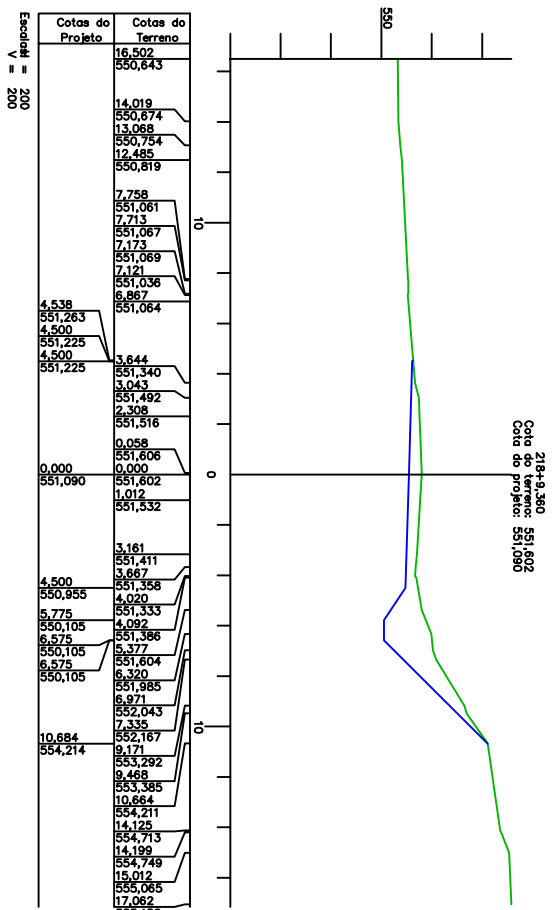
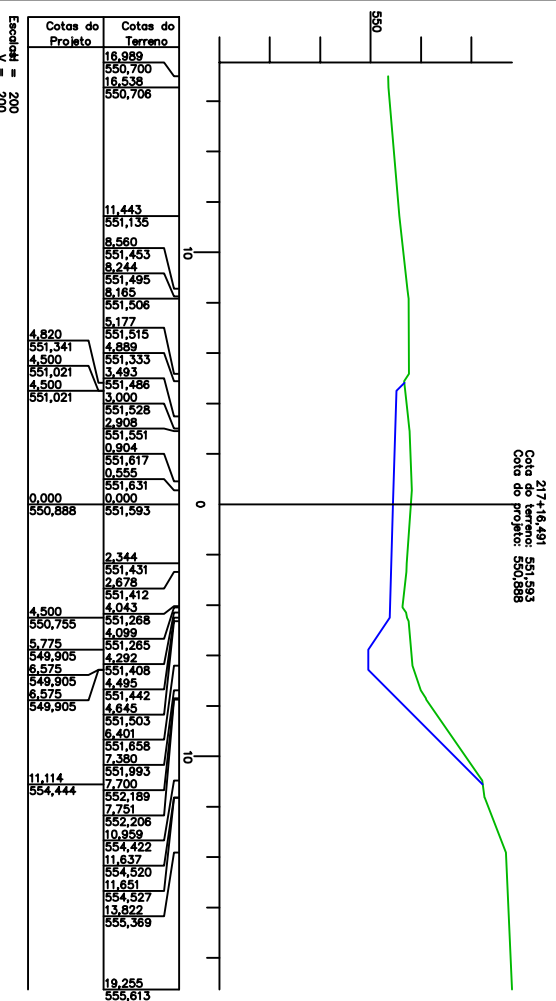


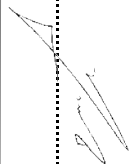
|                                                                                                                                                                                                                                                              |  |                                                                                                                             |  |                                                                                                                       |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|
| <div><p><b>SERVIÇOS DE ENGENHARIA</b><br/>Av. Borges de Medeiros, 615 - Sala 104<br/>Gelúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:<br/><br/>.....</div> |  | <div>Cliente:<br/><br/>.....</div> |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                     |  | <div>Data :<br/>Dezembro/2021</div>                                                                                         |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini<br/>CREA/RS 123168-D</div>                                        |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                          |  | <div>Escala :<br/>1:300</div>                                                                                               |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul<br/>CNPJ: 93.539.153/0001-92</div>                                 |  |
| <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                                                                                                                                                                  |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                                |  | <div>Seções Transversais</div>                                                                                        |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                                  |  | <div>Revisão :<br/>01</div>                                                                                                 |  | <div>Conteúdo:</div>                                                                                                  |  |
| <div>Prancha :<br/>82</div>                                                                                                                                                                                                                                  |  |                                                                                                                             |  |                                                                                                                       |  |

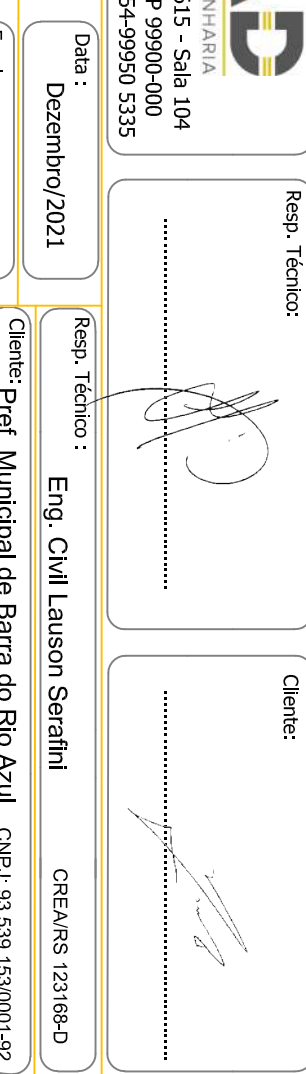
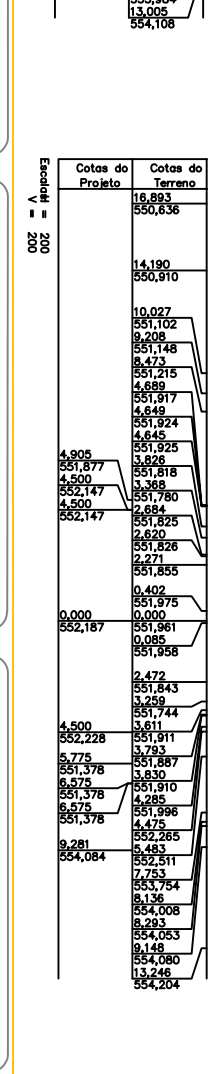
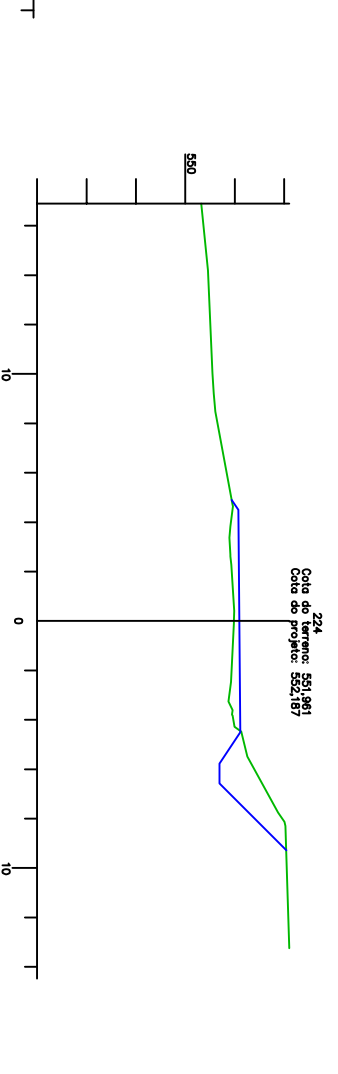
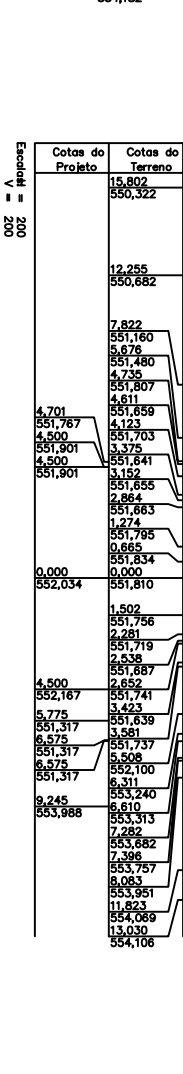
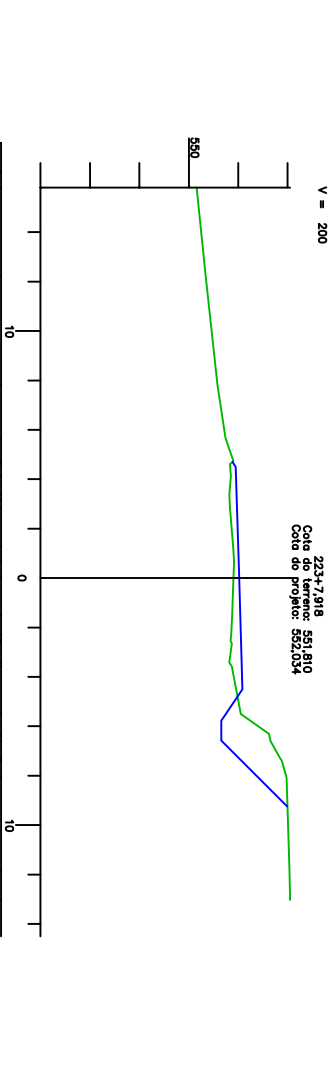
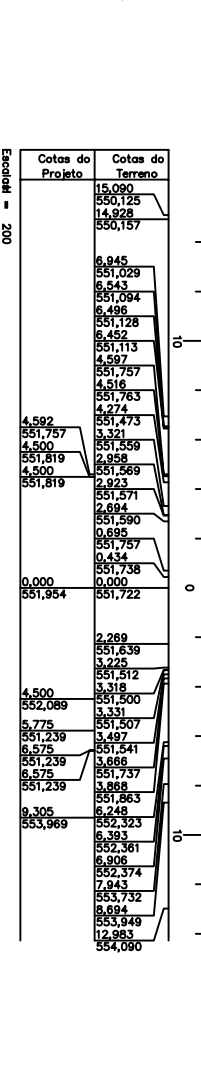
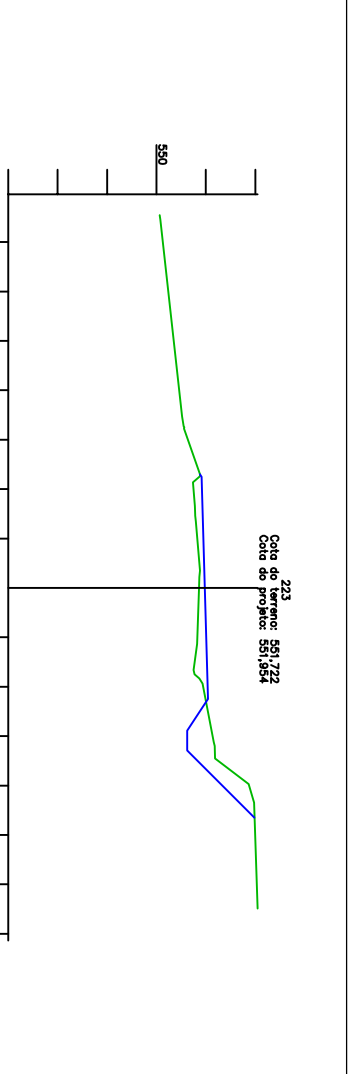
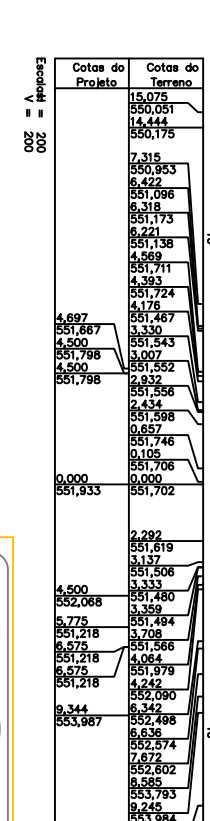
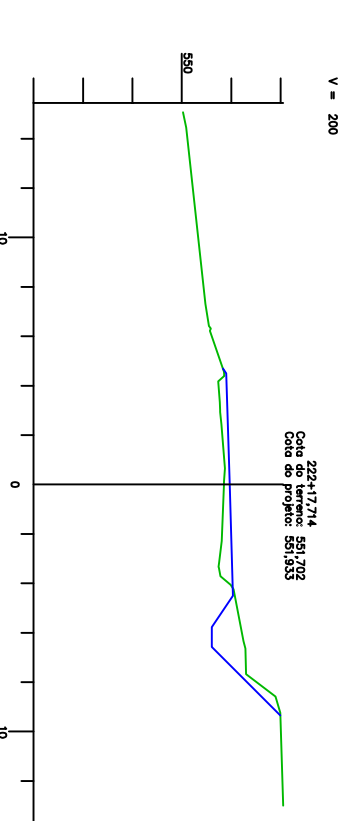
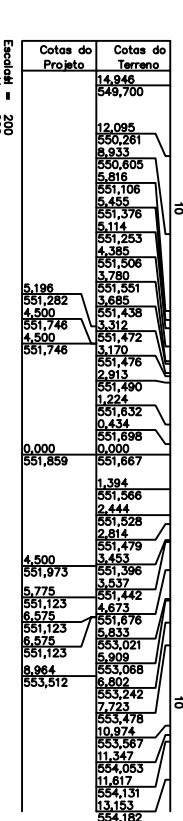
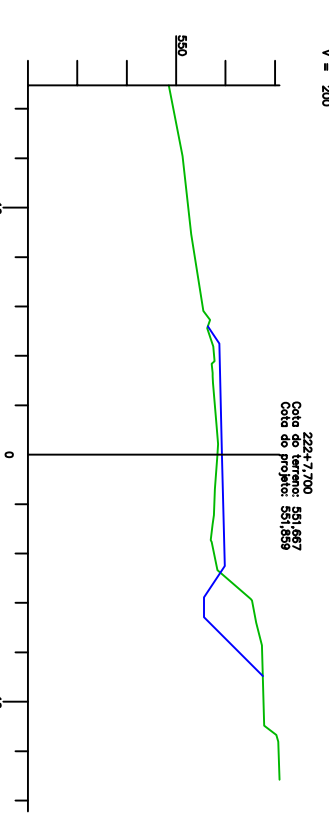
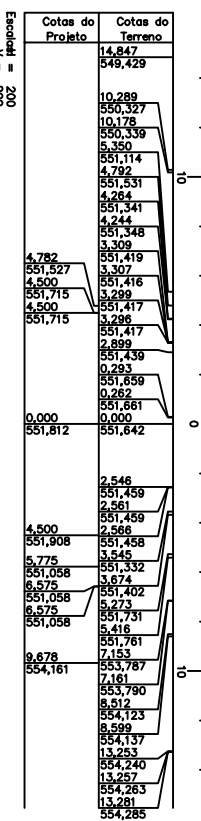
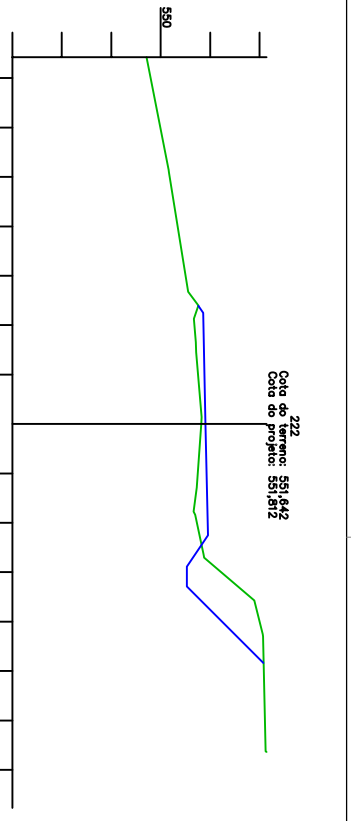
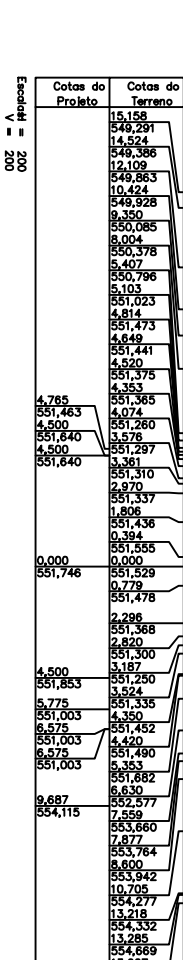
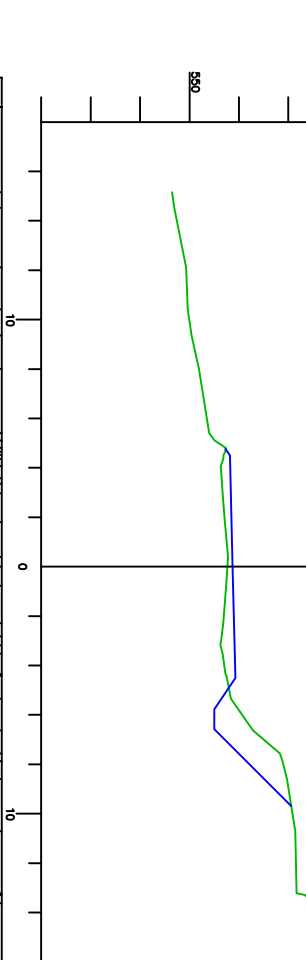
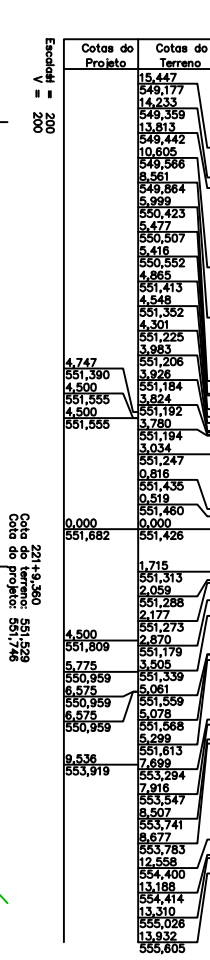
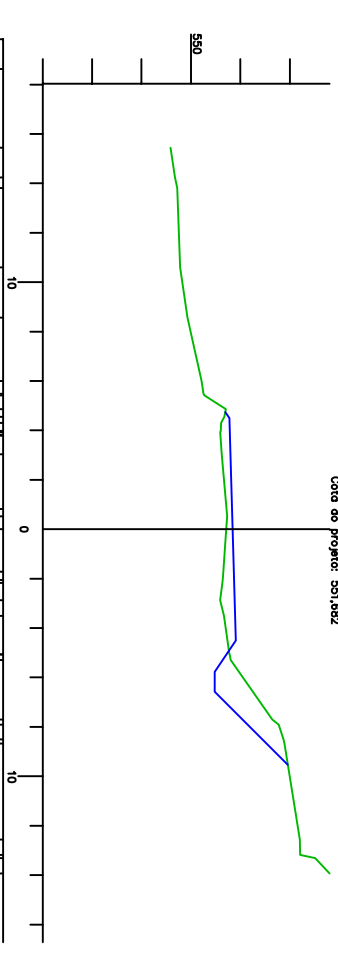
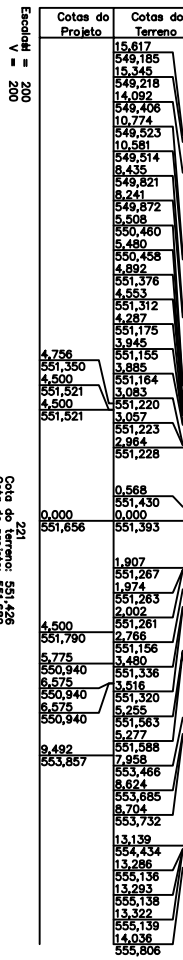
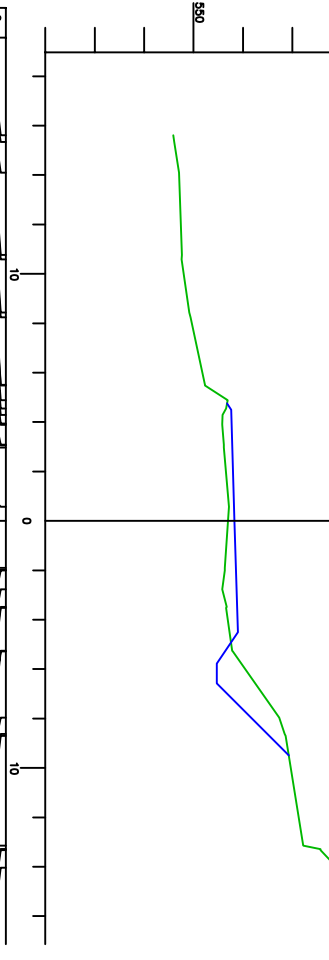
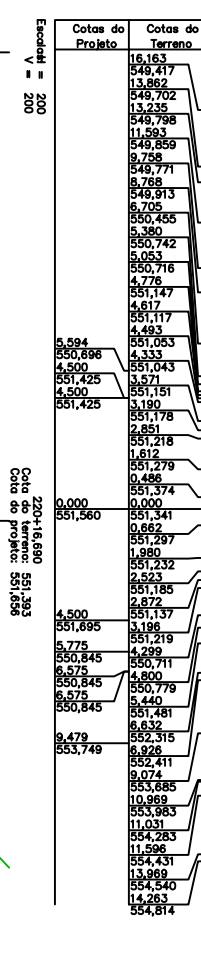
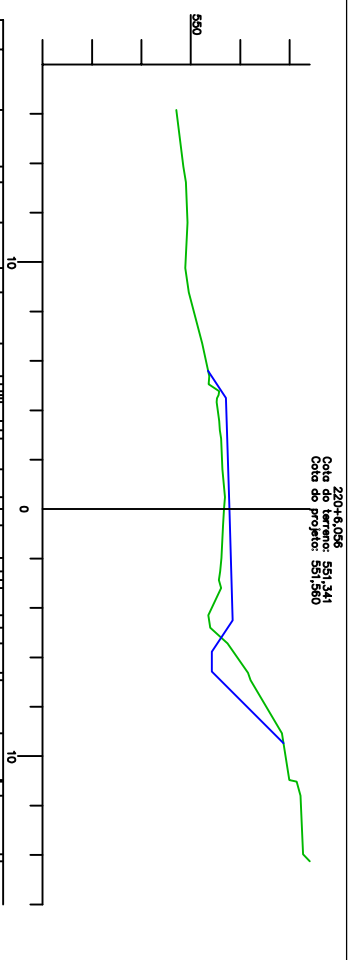


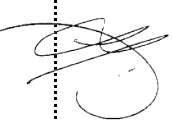
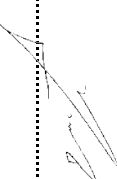


|                                                                                                                                                                                                                                                              |                         |                                                                                                       |                          |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------|
| <div><b>SERVIÇOS DE ENGENHARIA</b></div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |                         | Resp. Técnico:<br> |                          | Cliente:<br> |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                                 | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D         |                                                                                                 |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                      | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92 |                                                                                                 |
|                                                                                                                                                                                                                                                              |                         | Obra:<br>Pavimentação Asfáltica                                                                       |                          |                                                                                                 |
| Aprovação:<br>-                                                                                                                                                                                                                                              | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                          |                                                                                                 |
|                                                                                                                                                                                                                                                              | Prancha :<br>83         | Conteúdo:<br>Seções Transversais                                                                      |                          |                                                                                                 |

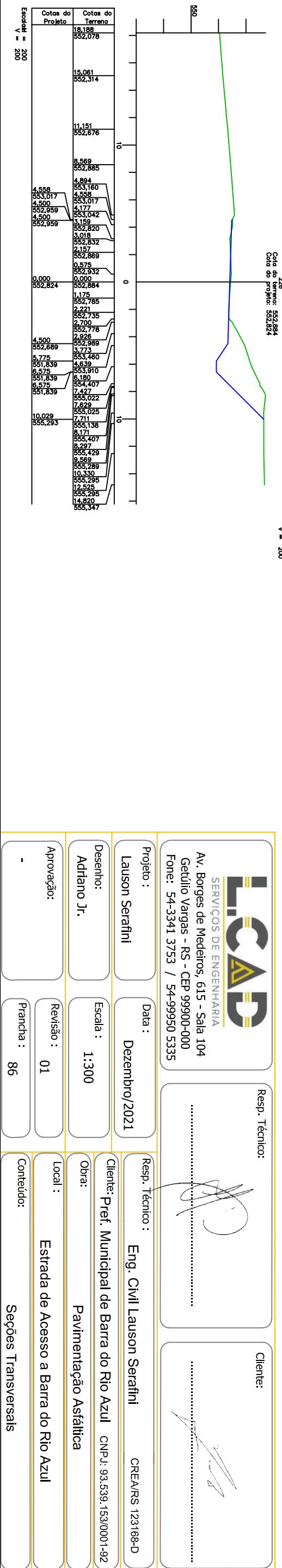
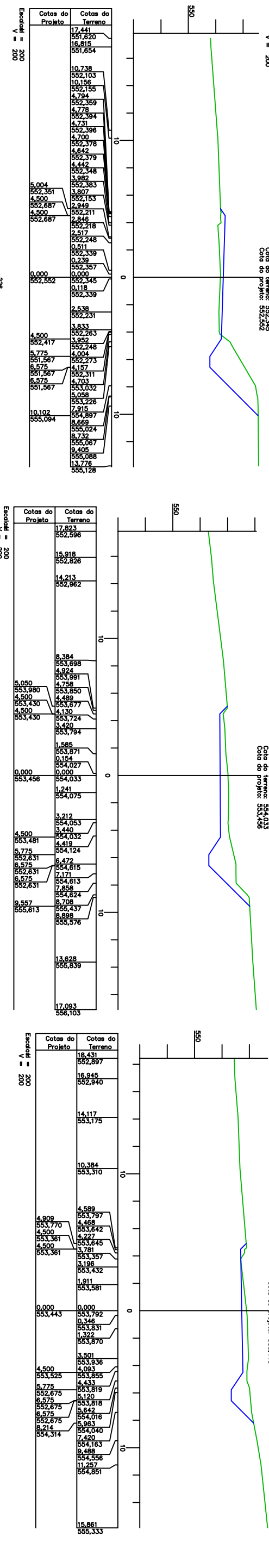
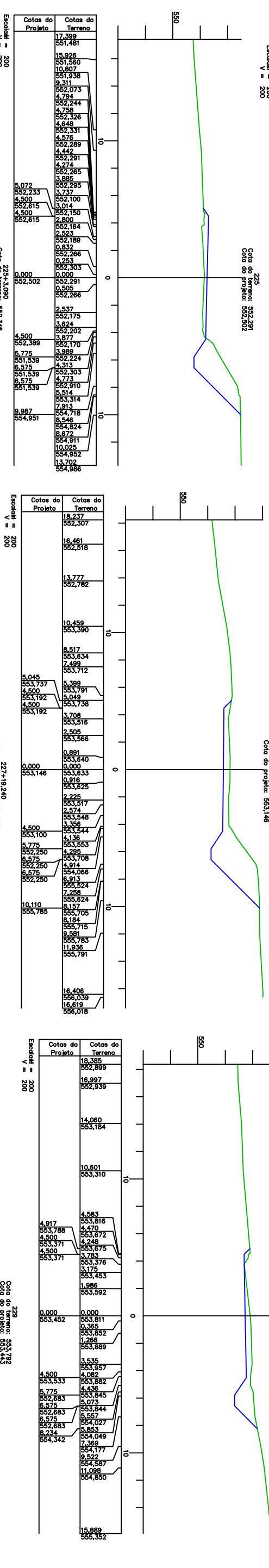
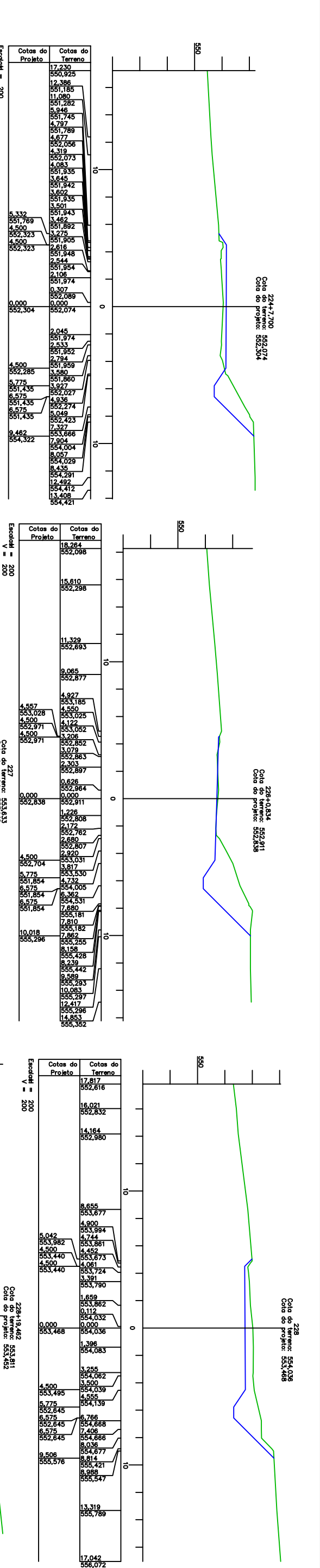


|                                                                                                                     |                         |                                                                                     |                                       |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA       |                         | Resp. Técnico:                                                                      |                                       | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |                                       |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       |                                       | CREA/RS 123168-D                                                                    |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>1:300       | Cliente: Pref. Municipal de Barra do Rio Azul                                       |                                       | CNPJ: 93.539.153/0001-92                                                            |  |
|                                                                                                                     |                         | Obra:                                                                               | Pavimentação Asfáltica                |                                                                                     |  |
| Aprovação:                                                                                                          | Revisão :<br>01         | Local :                                                                             | Estrada de Acesso a Barra do Rio Azul |                                                                                     |  |
| -                                                                                                                   | Plancha :<br>84         | Conteúdo:                                                                           | Seções Transversais                   |                                                                                     |  |

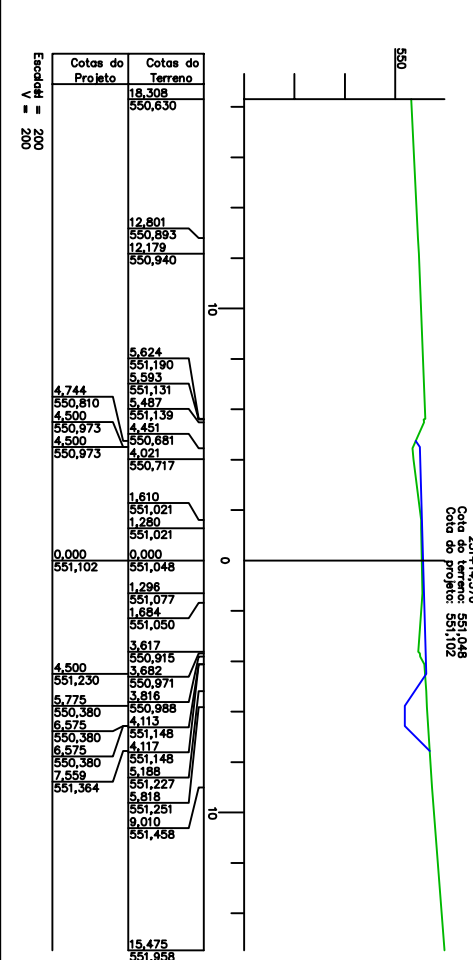
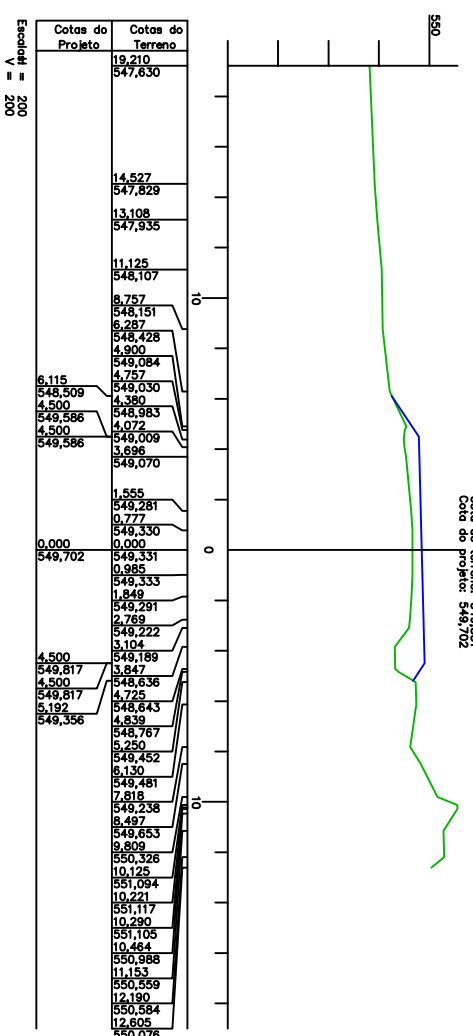
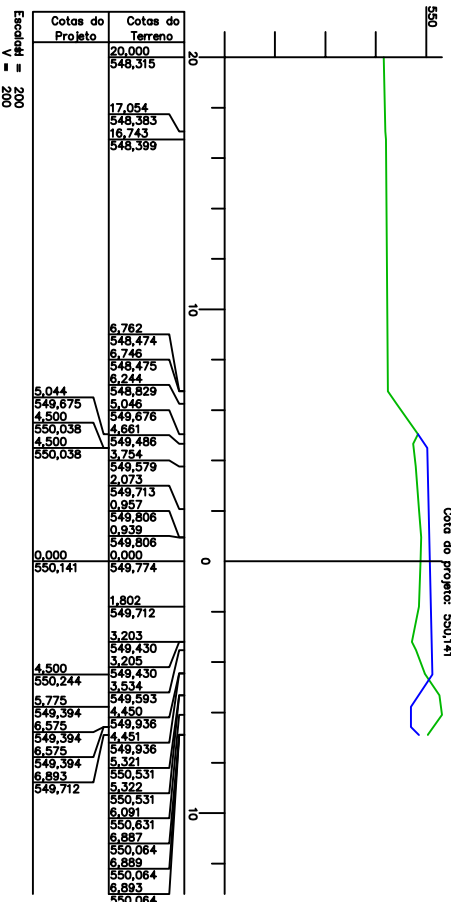
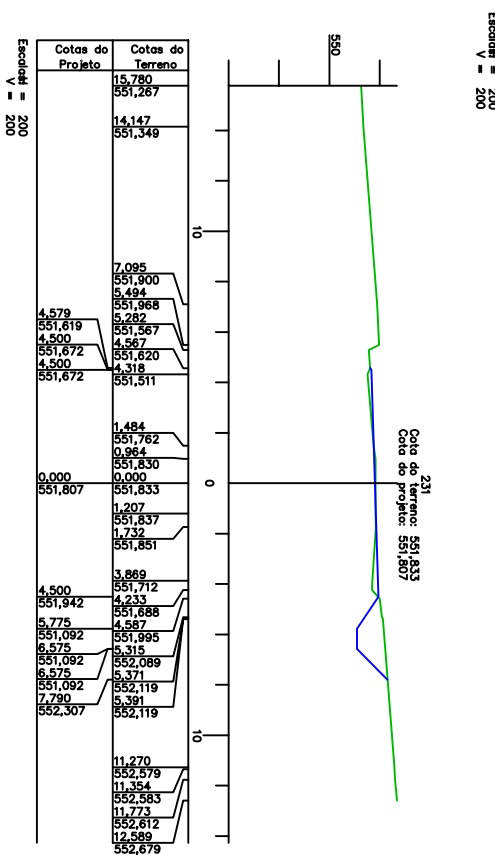
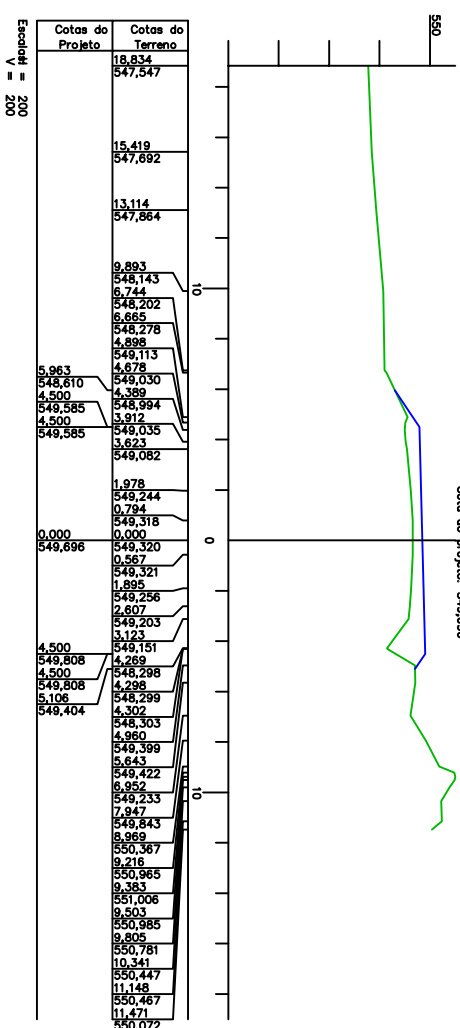
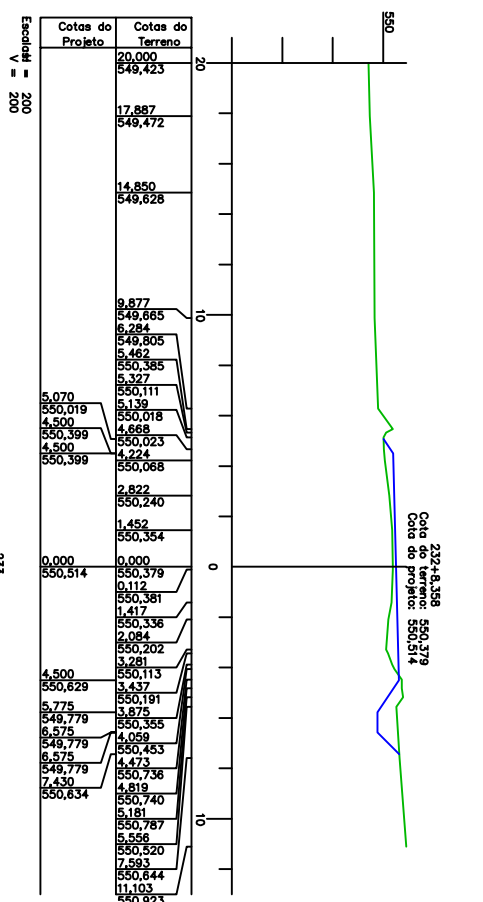
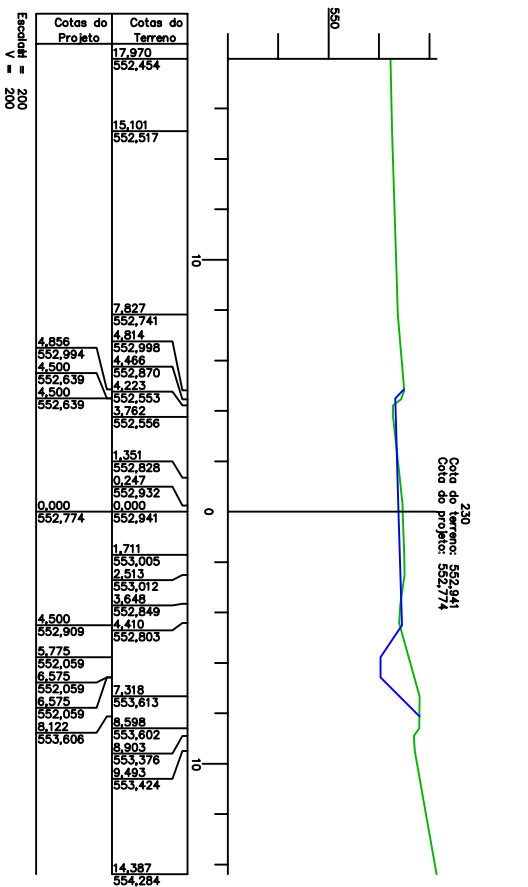
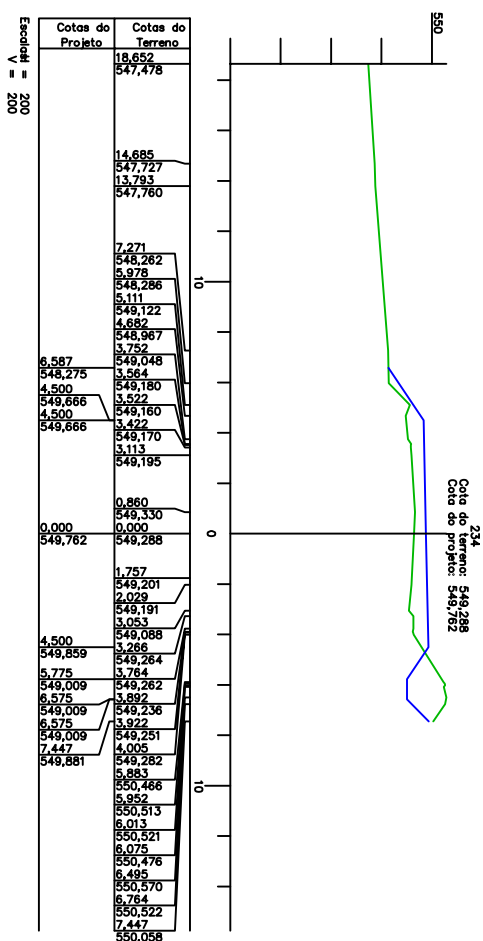
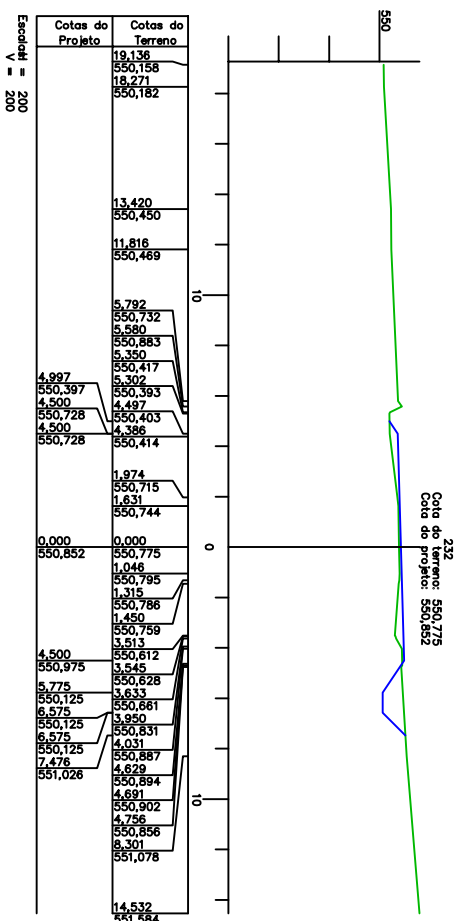
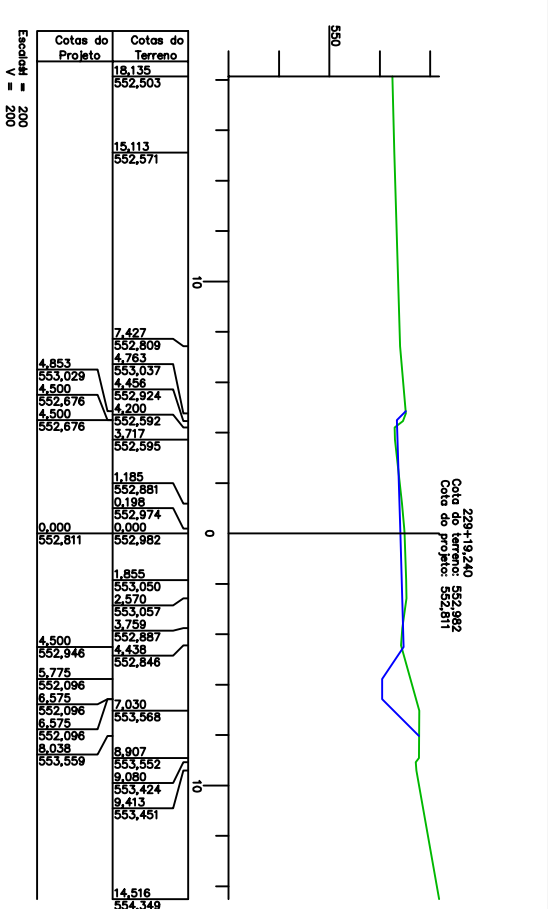


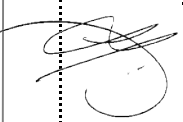
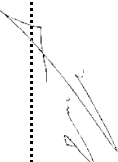
|                                                                                                                      |                                |                                                                                                                  |  |                                                                                                            |  |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <br><b>SERVIÇOS DE ENGENHARIA</b> |                                | <b>Resp. Técnico:</b><br><br> |  | <b>Cliente:</b><br><br> |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335  |                                |                                                                                                                  |  |                                                                                                            |  |
| <b>Projeto :</b><br>Lauson Serafini                                                                                  | <b>Data :</b><br>Dezembro/2021 | <b>Resp. Técnico :</b><br>Eng. Civil Lauson Serafini                                                             |  | CREA/RS 123168-D                                                                                           |  |
| <b>Desenho:</b><br>Adriano Jr.                                                                                       | <b>Escala :</b><br>1:300       | <b>Cliente:</b> Pref. Municipal de Barra do Rio Azul                                                             |  | CNP.J. 93.539.153/0001-92                                                                                  |  |
|                                                                                                                      |                                | <b>Obra:</b><br>Pavimentação Asfáltica                                                                           |  |                                                                                                            |  |
| <b>Aprovação:</b><br>-                                                                                               | <b>Revisão :</b><br>01         | <b>Local :</b><br>Estrada de Acesso a Barra do Rio Azul                                                          |  |                                                                                                            |  |
|                                                                                                                      | <b>Prancha :</b><br>85         | <b>Conteúdo:</b><br>Seções Transversais                                                                          |  |                                                                                                            |  |

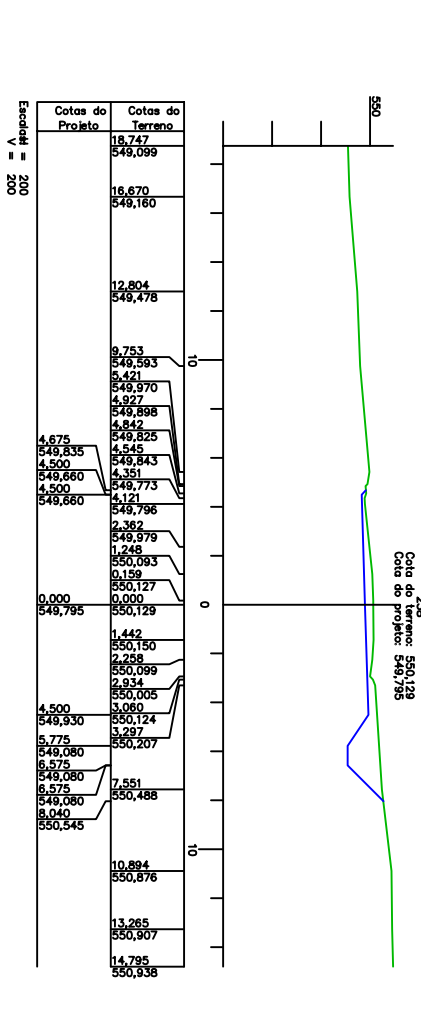
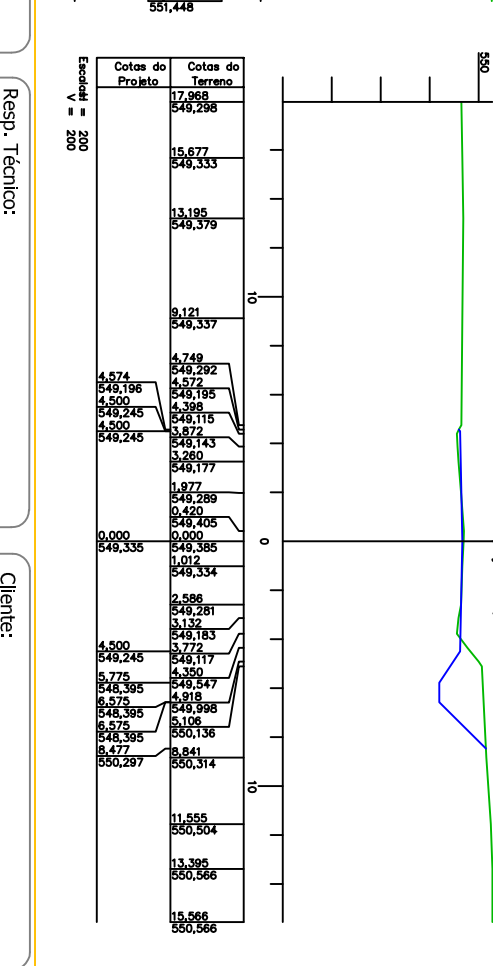
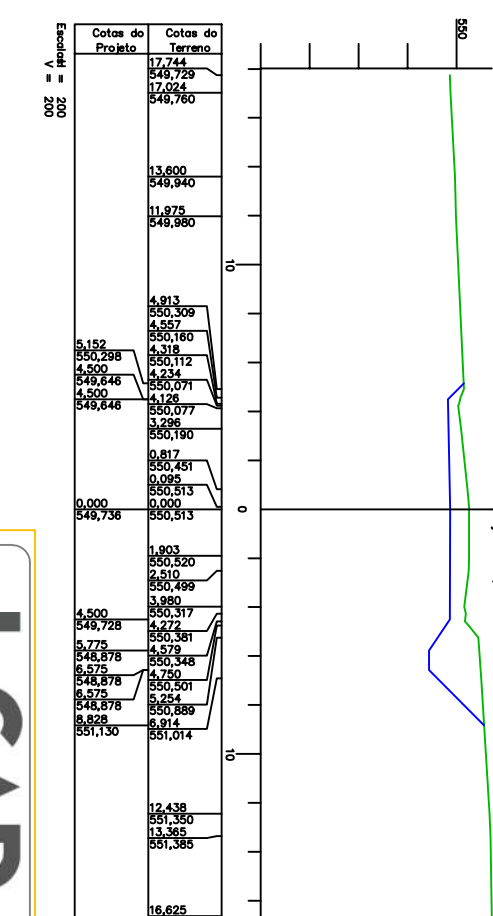
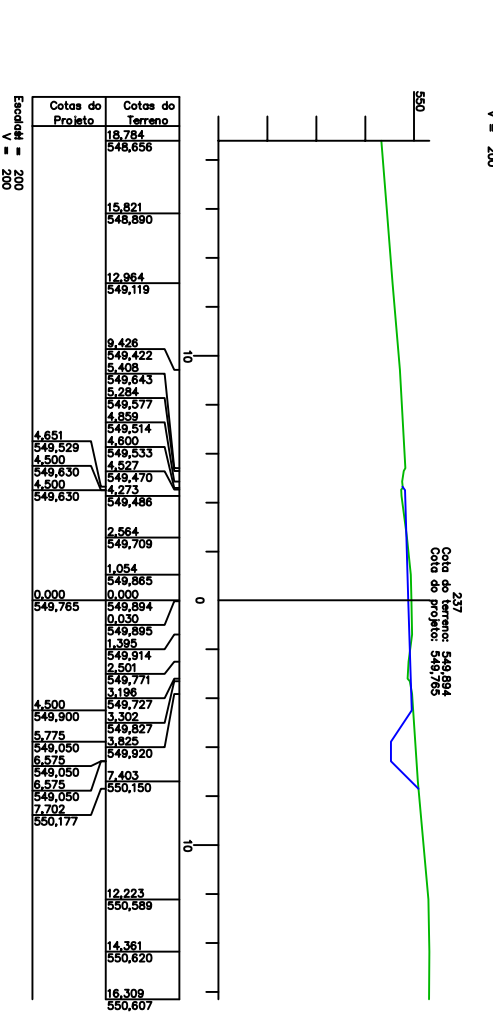
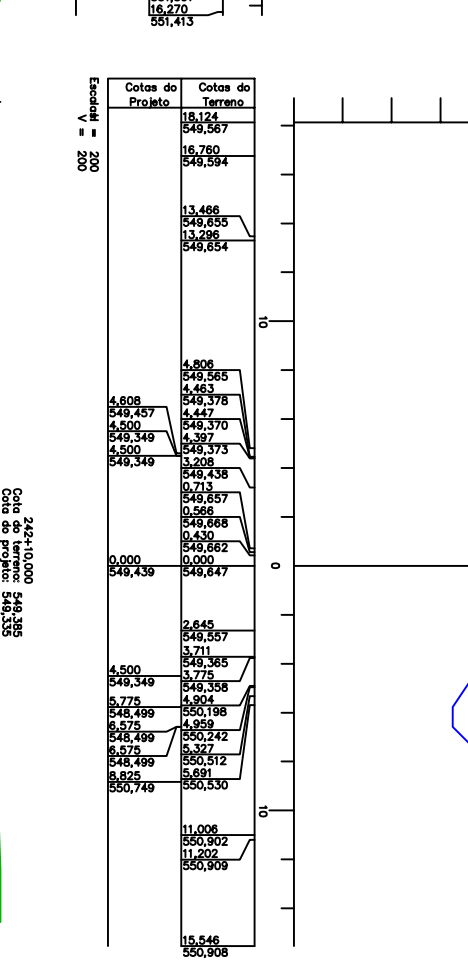
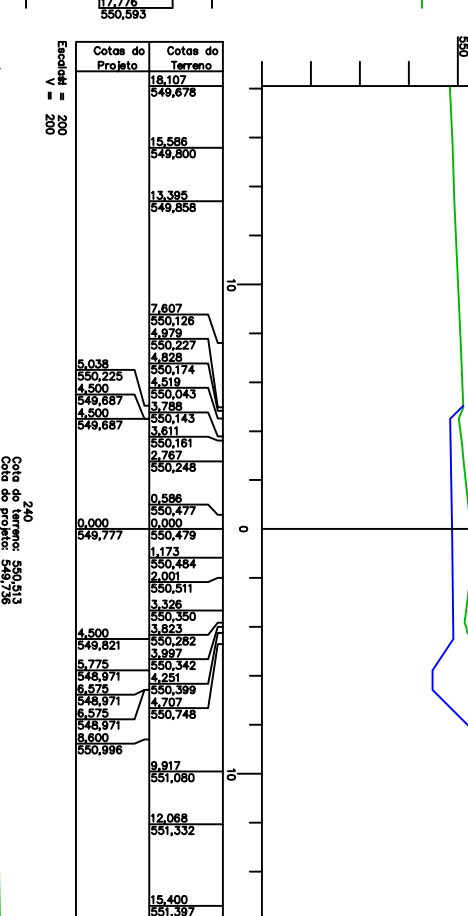
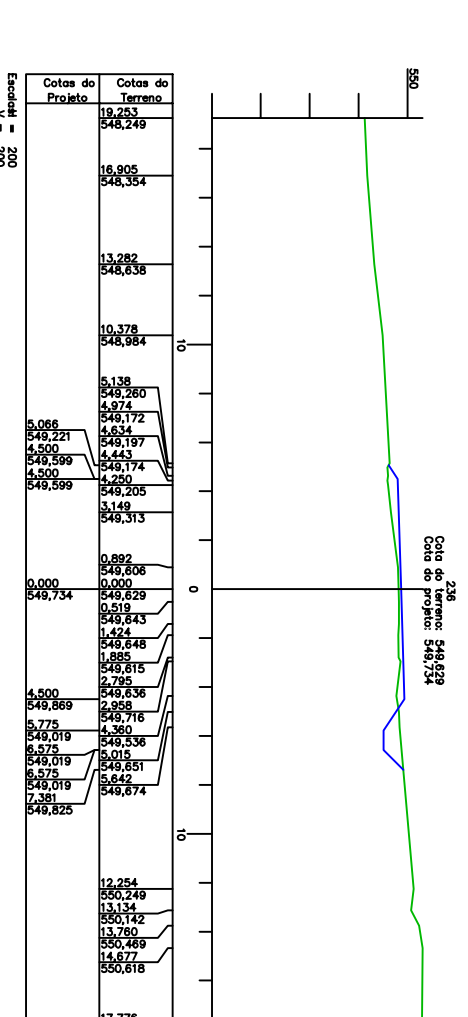
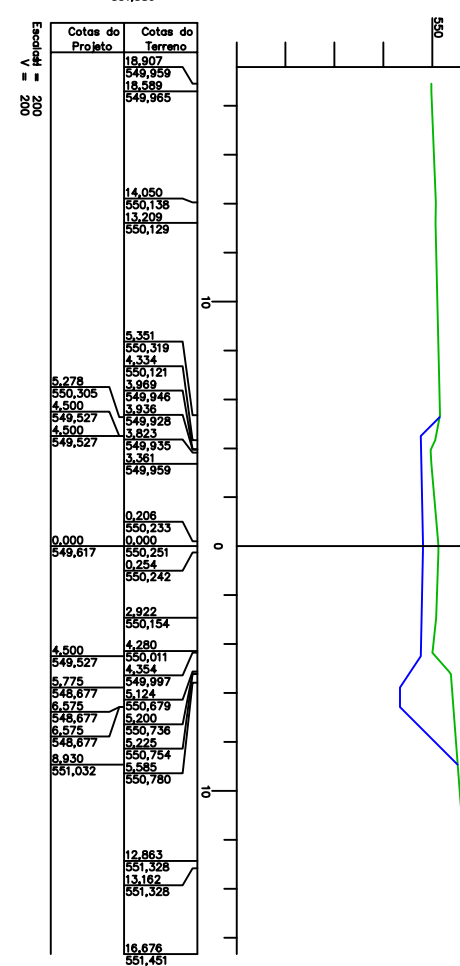
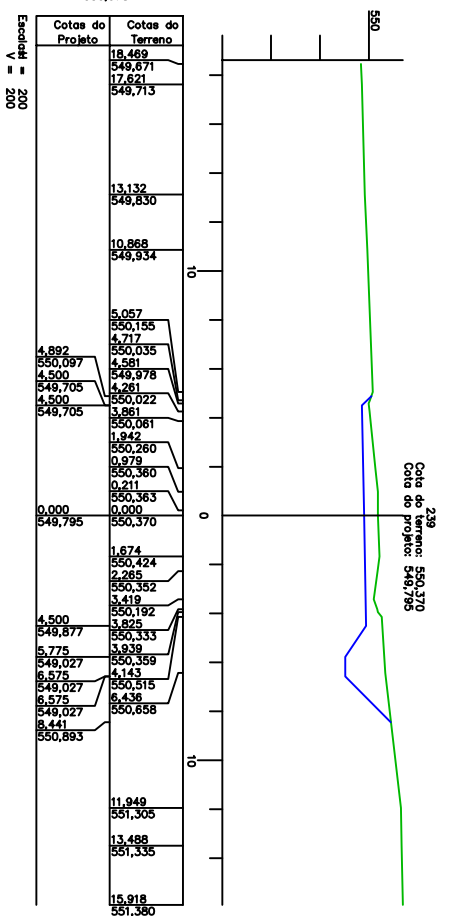
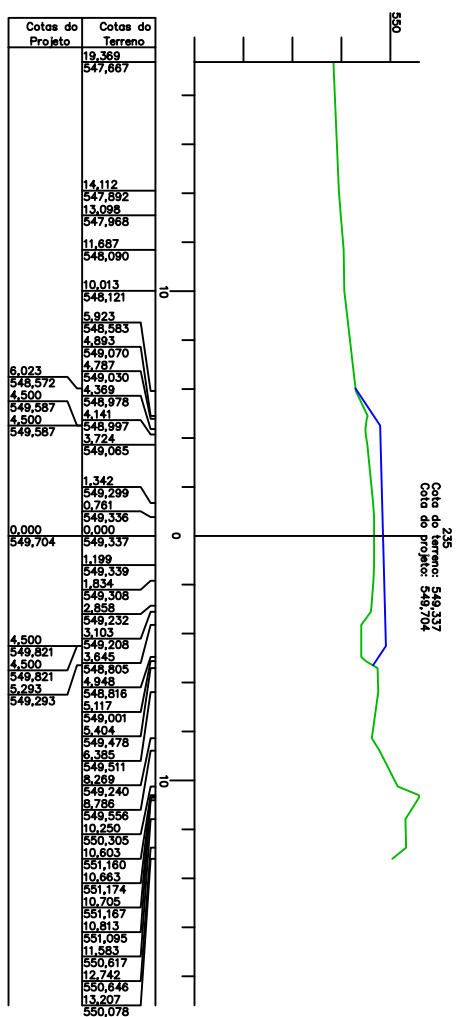


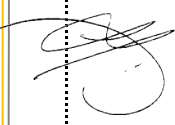
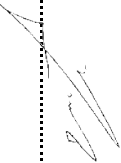






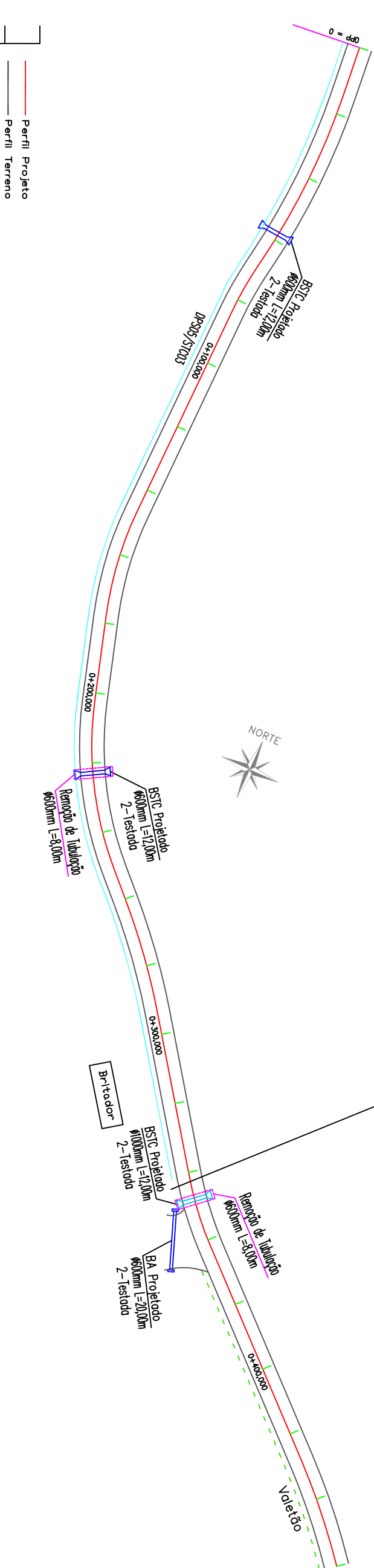
|                                                                                                                                                                                                                                               |  |                                                                                                                |  |                                                                                                          |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|--|
| <br>L.C.A.D. SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |  | Resp. Técnico:<br><br>..... |  | Cliente:<br><br>..... |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                  |  | Data :<br>Dezembro/2021                                                                                        |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini      CREA/RS 123168-D                                      |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                       |  | Escala :<br>1:300                                                                                              |  | Cliente: Pref. Municipal de Barra do Rio Azul      CNPJ: 93.539.153/0001-92                              |  |
| Aprovação:                                                                                                                                                                                                                                    |  | Revisão :<br>01                                                                                                |  | Obra:<br>Pavimentação Asfáltica                                                                          |  |
| -                                                                                                                                                                                                                                             |  | Prancha :<br>87                                                                                                |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                         |  |
| Conteúdo:<br>Seções Transversais                                                                                                                                                                                                              |  |                                                                                                                |  |                                                                                                          |  |



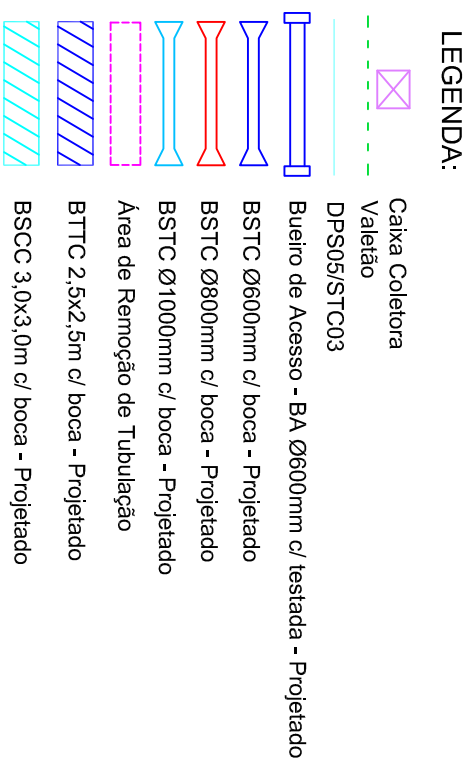
|                                                                                                                                                                                                                                                              |                                                  |                                                                                                       |  |                                                                                                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|
| <div><b>SERVIÇOS DE ENGENHARIA</b></div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |                                                  | Resp. Técnico:<br> |  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                                 | Data :<br>Dezembro/2021                          | .....                                                                                                 |  |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                      | Escala :<br>1:300                                | .....                                                                                                 |  |                                                                                                 |  |
| Aprovação:<br>-                                                                                                                                                                                                                                              | Revisão :<br>01                                  | .....                                                                                                 |  |                                                                                                 |  |
| Prancha :<br>88                                                                                                                                                                                                                                              | Local :<br>Estrada de Acesso a Barra do Rio Azul | Seções Transversais                                                                                   |  |                                                                                                 |  |

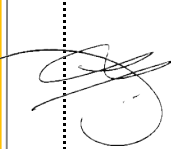




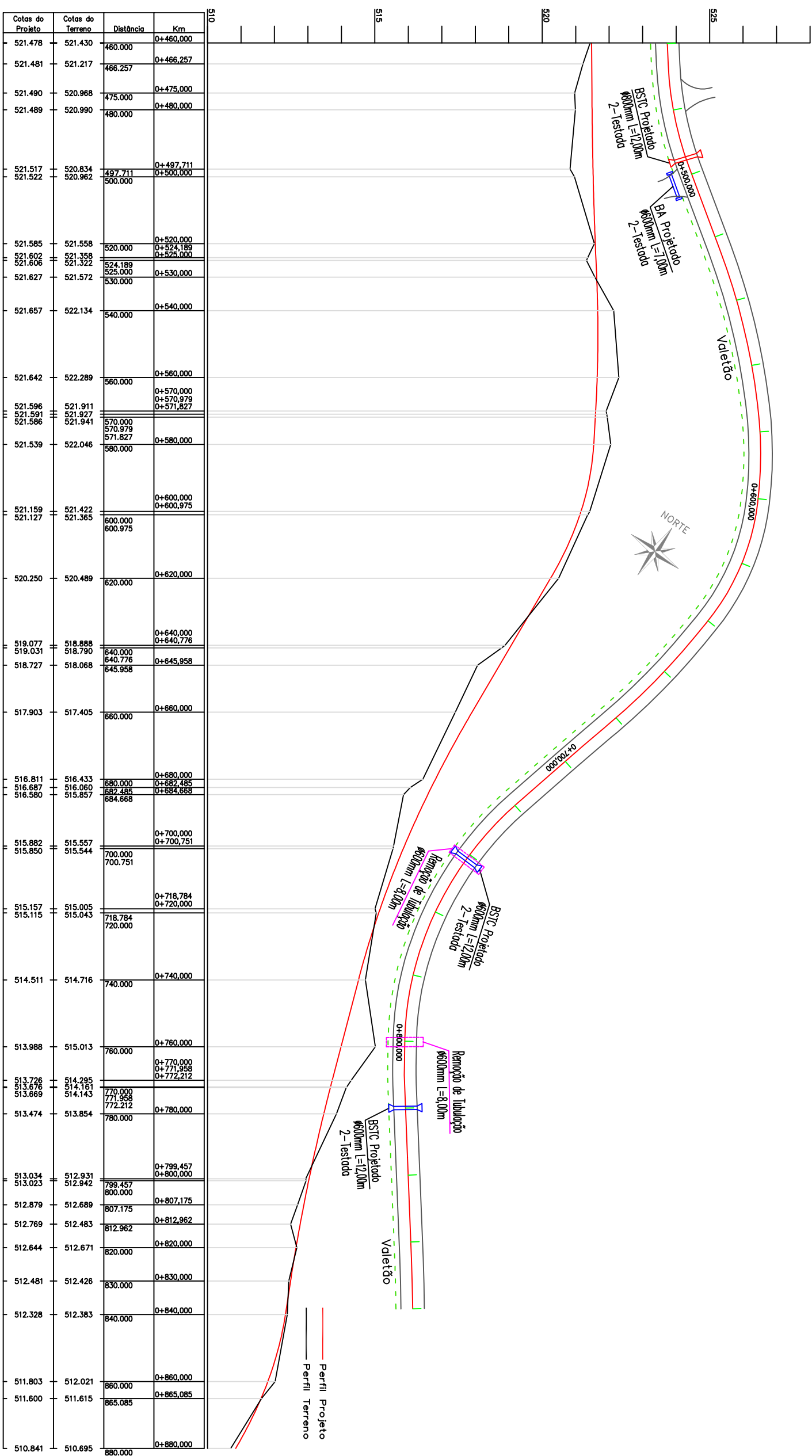


| Cotas do Projeto | Cotas do Terreno | Distância | Km        |
|------------------|------------------|-----------|-----------|
| 521.010          | 521.010          | 0,000     | 0         |
| 521.029          | 521.189          | 14,532    | 0+14,532  |
| 521.036          | 521.239          | 20,000    | 0+20,000  |
| 521.060          | 521.138          | 40,000    | 0+40,000  |
| 521.086          | 521.095          |           | 0+59,000  |
| 521.087          | 521.095          | 59,000    | 0+60,000  |
| 521.096          | 520.800          | 66,263    | 0+66,263  |
| 521.101          | 520.733          | 69,463    | 0+69,463  |
| 521.120          | 521.070          | 80,000    | 0+80,000  |
| 521.129          | 521.297          | 83,957    | 0+83,957  |
| 521.167          | 521.138          | 100,000   | 0+100,000 |
| 521.193          | 521.008          | 109,000   | 0+109,000 |
| 521.226          | 521.276          | 120,000   | 0+120,000 |
| 521.273          | 521.366          | 140,000   | 0+140,000 |
| 521.283          | 521.371          | 146,849   | 0+146,849 |
| 521.294          | 521.691          | 160,000   | 0+160,000 |
| 521.293          | 521.209          | 177,693   | 0+177,693 |
| 521.291          | 521.196          | 180,000   | 0+180,000 |
| 521.262          | 520.732          |           | 0+200,000 |
| 521.258          | 520.650          | 200,000   | 0+201,783 |
| 521.221          | 520.616          | 220,000   | 0+220,000 |
| 521.179          | 520.805          | 240,000   | 0+240,000 |
| 521.158          | 521.048          |           | 0+250,000 |
| 521.156          | 521.111          | 250,000   | 0+251,145 |
| 521.114          | 521.586          |           | 0+260,000 |
| 521.112          | 521.596          | 260,000   | 0+260,245 |
| 520.881          | 521.340          | 280,000   | 0+280,000 |
| 520.609          | 520.353          | 293,780   | 0+293,780 |
| 520.456          | 520.314          | 300,000   | 0+300,000 |
| 520.173          | 519.320          | 310,000   | 0+310,000 |
| 519.865          | 518.715          | 320,000   | 0+320,000 |
| 519.586          | 518.249          |           | 0+340,000 |
| 519.591          | 518.075          | 340,000   | 0+341,246 |
| 519.981          | 519.268          |           | 0+360,000 |
| 520.061          | 519.406          | 360,000   | 0+362,181 |
| 520.348          | 519.999          | 370,000   | 0+370,000 |
| 520.684          | 520.731          | 380,000   | 0+380,000 |
| 521.175          | 521.446          | 400,000   | 0+400,000 |
| 521.427          | 521.409          | 420,000   | 0+420,000 |
| 521.460          | 521.469          |           | 0+428,167 |
| 521.462          | 521.476          | 428,167   | 0+430,000 |
| 521.467          | 521.527          | 440,000   | 0+440,000 |
| 521.478          | 521.428          |           | 0+459,803 |
| 521.478          | 521.430          | 459,803   | 0+460,000 |



|                                                                                                                                                                                                                                                         |  |                                                                                                                             |  |                                                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|
| <div><p>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:<br/><br/>.....</div> |  | <div>Cliente:<br/><br/>.....</div> |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                |  | <div>Data :<br/>Dezembro/2021</div>                                                                                         |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini<br/>CREA/RS 123166-D</div>                                        |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                     |  | <div>Escala : H - 1:1300<br/>V - 1:130</div>                                                                                |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul CNPJ: 93.539.153/0001-92</div>                                     |  |
| <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                                                                                                                                                             |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                                |  | <div>Planta de Drenagem</div>                                                                                         |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                             |  | <div>Revisão :<br/>01</div>                                                                                                 |  | <div>Plancha :<br/>91</div>                                                                                           |  |





LEGENDA:



Caixa Coletora

## Valetão

DPS05/STC03

Bueiro de Acesso - BA Ø600mm c/ testada - Projetado

BSTC Ø600mm c/ boca - Projetado

BSTC Ø800mm c/ boca - Projetado

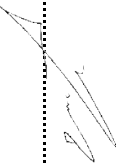
BSTC Ø1000mm c/ boca - Projetado

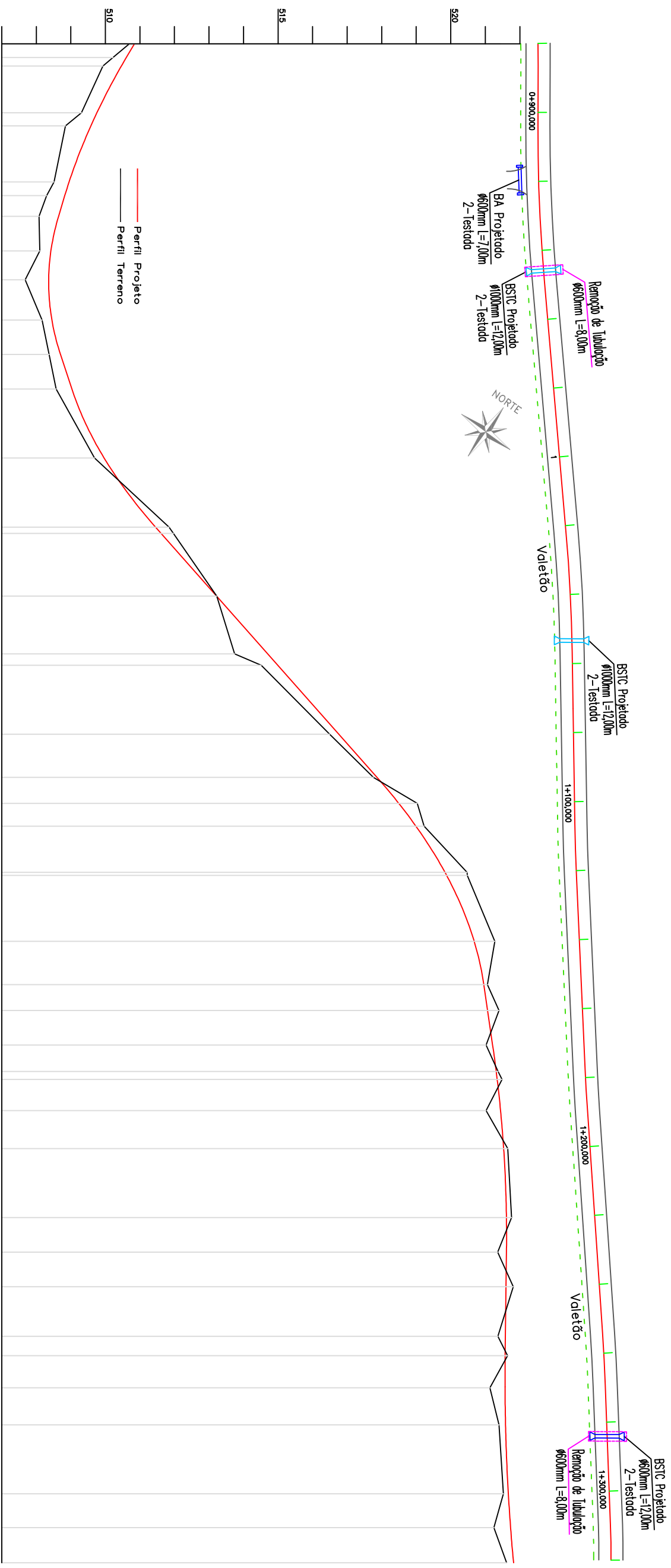
Área de Remoção de Tubulação

BTTc 2.5x2.5m c/ boca - Projeto

1000

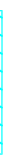
BSLC 3,UX3,Um c/ doca - Projetado

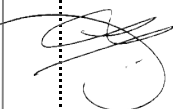
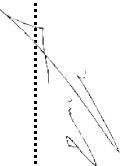
|                                                                                                                                                                                                                                      |                                  |                                                                                                       |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <br>SERVIÇOS DE ENGENHARIA<br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                  | Resp. Técnico:<br> | Cliente:<br> |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                         | Data :<br>Dezembro/2021          | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123166-D                                                                                |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                              | Escala : H - 1:1300<br>V - 1:130 | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92                                                                        |
| Aprovação:                                                                                                                                                                                                                           | Revisão :<br>01                  | Obra:<br>Pavimentação Asfáltica                                                                       |                                                                                                 |
| -                                                                                                                                                                                                                                    | Plancha :<br>92                  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                                                                                                 |
|                                                                                                                                                                                                                                      |                                  | Conteúdo:<br>Planta de Drenagem                                                                       |                                                                                                 |

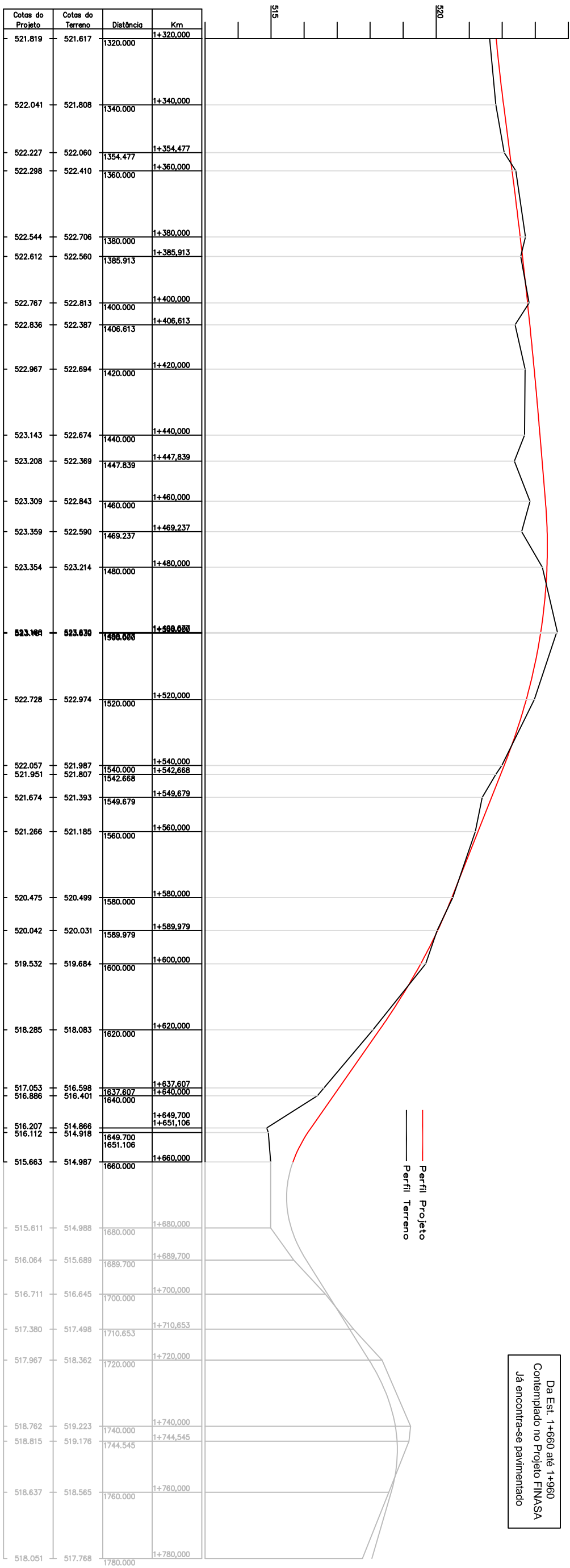
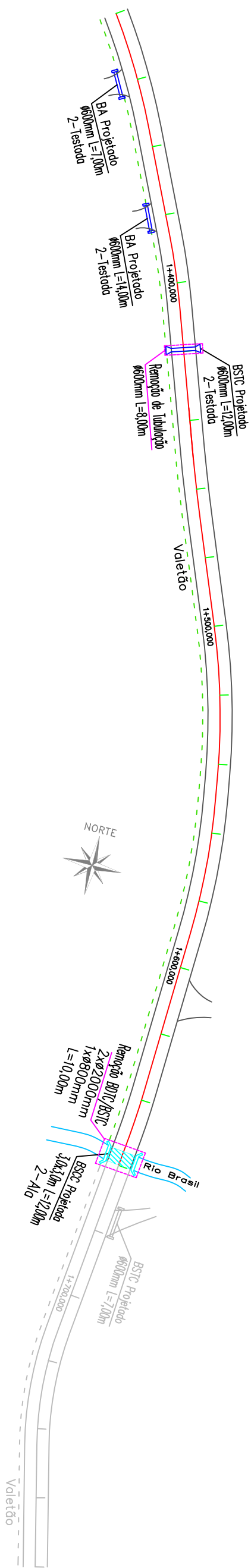


| Cotas do Projeto | Cotas do Terreno | Distância | Km        |
|------------------|------------------|-----------|-----------|
| 510.841          | 510.695          | 880.000   | 0+880,000 |
| 510.605          | 510.221          | 884.000   | 0+884,000 |
| 510.462          | 509.927          | 886.469   | 0+886,469 |
| 509.754          | 509.307          | 900.000   | 0+900,000 |
| 509.579          | 508.845          | 903.795   | 0+903,795 |
| 508.950          | 508.511          | 920.000   | 0+920,000 |
| 508.825          | 508.300          | 924.000   | 0+924,000 |
| 508.644          | 508.078          | 930.000   | 0+930,000 |
| 508.423          | 508.104          | 940.000   | 0+940,000 |
| 508.358          | 507.677          | 948.347   | 0+948,347 |
| 508.451          | 508.167          | 960.000   | 0+960,000 |
| 508.701          | 508.371          | 970.000   | 0+970,000 |
| 509.029          | 508.573          | 980.000   | 0+980,000 |
| 509.964          | 509.686          | 1000.000  | 1+20,000  |
| 511.455          | 511.843          |           | 1+21,819  |
| 511.616          | 511.972          | 1020.000  |           |
|                  |                  | 1021.819  |           |
| 513.223          | 513.226          | 1040.000  | 1+40,000  |
| 514.700          | 513.740          | 1056.704  | 1+56,704  |
| 514.992          | 514.510          | 1060.000  | 1+60,000  |
| 516.761          | 516.494          | 1080.000  | 1+80,000  |
| 517.866          | 517.761          | 1092.500  | 1+92,500  |
| 518.495          | 519.030          | 1100.000  | 1+100,000 |
| 518.991          | 519.230          | 1106.600  | 1+106,600 |
| 519.833          | 520.475          |           | 1+120,000 |
| 519.881          | 520.479          | 1120.000  | 1+120,900 |
|                  |                  | 1120.900  |           |
| 520.678          | 521.274          | 1140.000  | 1+140,000 |
| 520.957          | 521.060          | 1152.500  | 1+152,500 |
| 521.066          | 521.398          | 1160.000  | 1+160,000 |
| 521.212          | 521.021          | 1170.000  | 1+170,000 |
| 521.317          | 521.369          | 1177.691  | 1+177,691 |
| 521.345          | 521.486          | 1180.000  | 1+180,000 |
| 521.442          | 521.023          | 1189.000  | 1+189,000 |
| 521.531          | 521.650          | 1200.000  | 1+200,000 |
| 521.612          | 521.761          | 1220.000  | 1+220,000 |
| 521.613          | 521.357          | 1230.000  | 1+230,000 |
| 521.600          | 521.808          | 1240.000  | 1+240,000 |
| 521.583          | 521.363          | 1254.397  | 1+254,397 |
| 521.576          | 521.644          | 1260.000  | 1+260,000 |
| 521.572          | 521.131          | 1269.304  | 1+269,304 |
| 521.586          | 521.400          | 1280.000  | 1+280,000 |
| 521.667          | 521.526          | 1300.000  | 1+300,000 |
| 521.732          | 521.249          | 1309.775  | 1+309,775 |
| 521.819          | 521.617          | 1320.000  | 1+320,000 |

LEGENDA:

- |                                                                                   |                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------|
|  | Caixa Coletora                                      |
|  | Valeão                                              |
|  | DPS05/STC03                                         |
|  | Bueiro de Acesso - BA Ø600mm c/ testada - Projetado |
|  | BSTC Ø600mm c/ boca - Projetado                     |
|  | BSTC Ø800mm c/ boca - Projetado                     |
|  | BSTC Ø1000mm c/ boca - Projetado                    |
|  | Área de Remoção de Tubulação                        |
|  | BTTC 2,5x2,5m c/ boca - Projetado                   |
|  | BSCC 3,0x3,0m c/ boca - Projetado                   |

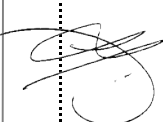
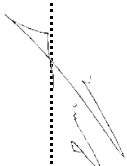
|                                                                                                                                                                                                                                                         |  |                                                                                                                             |  |                                                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|
| <div><p>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:<br/><br/>.....</div> |  | <div>Cliente:<br/><br/>.....</div> |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                |  | <div>Data :<br/>Dezembro/2021</div>                                                                                         |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini<br/>CREA/RS 123168-D</div>                                        |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                     |  | <div>Escala : H - 1:1300<br/>V - 1:130</div>                                                                                |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul<br/>CNPJ: 93.539.153/0001-92</div>                                 |  |
| <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                                                                                                                                                             |  | <div>Revisão :<br/>01</div>                                                                                                 |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                          |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                             |  | <div>Prancha :<br/>93</div>                                                                                                 |  | <div>Conteúdo:<br/>Planta de Drenagem</div>                                                                           |  |



| Cotas do Projeto | Cotas do Terreno | Distância | Km        |
|------------------|------------------|-----------|-----------|
| 521.819          | 521.617          | 1320.000  | 1+320,000 |
| 522.041          | 521.808          | 1340.000  | 1+340,000 |
| 522.227          | 522.060          | 1354.477  | 1+354,477 |
| 522.298          | 522.410          | 1360.000  | 1+360,000 |
| 522.544          | 522.708          | 1380.000  | 1+380,000 |
| 522.612          | 522.560          | 1385.913  | 1+385,913 |
| 522.767          | 522.813          | 1400.000  | 1+400,000 |
| 522.836          | 522.387          | 1406.613  | 1+406,613 |
| 522.967          | 522.694          | 1420.000  | 1+420,000 |
| 523.143          | 522.674          | 1440.000  | 1+440,000 |
| 523.208          | 522.369          | 1447.839  | 1+447,839 |
| 523.309          | 522.843          | 1460.000  | 1+460,000 |
| 523.359          | 522.590          | 1469.237  | 1+469,237 |
| 523.354          | 523.214          | 1480.000  | 1+480,000 |
| 523.368          | 523.630          | 1500.000  | 1+498,630 |
| 522.728          | 522.974          | 1520.000  | 1+520,000 |
| 522.057          | 521.987          | 1540.000  | 1+540,000 |
| 521.951          | 521.807          | 1542.668  | 1+542,668 |
| 521.674          | 521.393          | 1549.679  | 1+549,679 |
| 521.266          | 521.185          | 1560.000  | 1+560,000 |
| 520.475          | 520.499          | 1580.000  | 1+580,000 |
| 520.042          | 520.031          | 1589.979  | 1+589,979 |
| 519.532          | 519.684          | 1600.000  | 1+600,000 |
| 518.285          | 518.083          | 1620.000  | 1+620,000 |
| 517.053          | 516.598          | 1637.607  | 1+637,607 |
| 516.886          | 516.401          | 1640.000  | 1+640,000 |
| 516.207          | 514.866          | 1649.700  | 1+649,700 |
| 516.112          | 514.918          | 1651.106  | 1+651,106 |
| 515.663          | 514.987          | 1660.000  | 1+660,000 |
| 515.611          | 514.988          | 1680.000  | 1+680,000 |
| 516.064          | 515.689          | 1689.700  | 1+689,700 |
| 516.711          | 516.645          | 1700.000  | 1+700,000 |
| 517.380          | 517.498          | 1710.653  | 1+710,653 |
| 517.967          | 518.362          | 1720.000  | 1+720,000 |
| 518.762          | 519.223          | 1740.000  | 1+740,000 |
| 518.815          | 519.176          | 1744.545  | 1+744,545 |
| 518.637          | 518.565          | 1760.000  | 1+760,000 |
| 518.051          | 517.768          | 1780.000  | 1+780,000 |

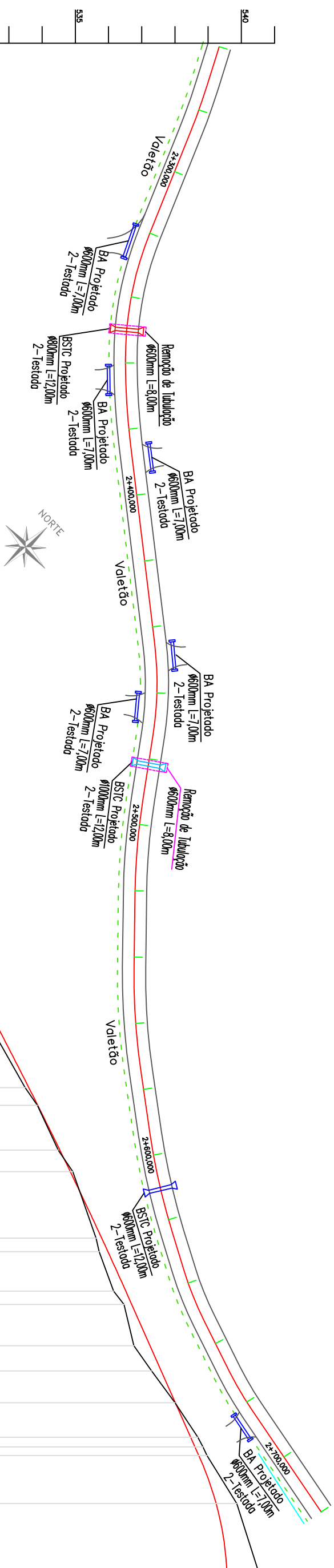
LEGENDA:

- |                                                                                   |                                                      |
|-----------------------------------------------------------------------------------|------------------------------------------------------|
|  | Caixa Coletora                                       |
|  | Valetão                                              |
|  | DPS05/STC03                                          |
|  | Bueiro de Acesso - BA Ø600mm c/ testada - Projetoado |
|  | BSTD Ø600mm c/ boca - Projetoado                     |
|  | BSTD Ø800mm c/ boca - Projetoado                     |
|  | BSTD Ø1000mm c/ boca - Projetoado                    |
|  | Área de Remoção de Tubulação                         |
|  | BTTC 2,5x2,5m c/ boca - Projetoado                   |
|  | BSCC 3,0x3,0m c/ boca - Projetoado                   |

|                                                                                                                                                                                                                                                         |  |                                                                                                                   |  |                                                                                                             |  |                                                              |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------|--|
| <div><p>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:<br/></div> |  | <div>Cliente:<br/></div> |  |                                                              |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                |  | <div>Data :<br/>Dezembro/2021</div>                                                                               |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini</div>                                                   |  | <div>CREA/RS 123168-D</div>                                  |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                     |  | <div>Escala : H - 1:1300<br/>V - 1:130</div>                                                                      |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul</div>                                                    |  | <div>CNPJ: 93.539.153/0001-92</div>                          |  |
| <div>Obra:</div>                                                                                                                                                                                                                                        |  | <div>Local :</div>                                                                                                |  | <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                 |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div> |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                             |  | <div>Revisão :<br/>01</div>                                                                                       |  | <div>Plancha :<br/>94</div>                                                                                 |  | <div>Conteúdo:<br/>Planta de Drenagem</div>                  |  |







| Cotas do Projeto                         | Cotas do Terreno                         | Distância                                    | Km                                               |
|------------------------------------------|------------------------------------------|----------------------------------------------|--------------------------------------------------|
| 526.430                                  | 526.024                                  | 2260.000                                     | 2+260,000                                        |
| 526.284                                  | 525.890                                  | 2272.027                                     | 2+272,027                                        |
| 526.191                                  | 526.055                                  | 2280.000                                     | 2+280,000                                        |
| 526.101                                  | 525.867                                  | 2287,848                                     | 2+287,848                                        |
| 525.968                                  | 525.935                                  | 2300.000                                     | 2+300,000                                        |
| 525.762<br>525.759                       | 525.370<br>525.353                       | 2320.000<br>2320.343                         | 2+320,000<br>2+320,343                           |
| 525.573                                  | 524.866                                  | 2340.000                                     | 2+340,000                                        |
| 525.448<br>525.412<br>525.407<br>525.405 | 524.618<br>524.844<br>524.855<br>524.855 | 2353.760<br>2358.828<br>2360.000<br>2360.390 | 2+353,760<br>2+358,828<br>2+360,000<br>2+360,390 |
| 525.487<br>525.538                       | 525.184<br>525.176                       | 2380.000<br>2383.765                         | 2+380,000<br>2+383,765                           |
| 525.889                                  | 525.736                                  | 2400.000                                     | 2+400,000                                        |
| 526.353                                  | 526.009                                  | 2413.760                                     | 2+413,760                                        |
| 526.598                                  | 526.210                                  | 2420.000                                     | 2+420,000                                        |
| 527.382                                  | 526.782                                  | 2440.000                                     | 2+440,000                                        |
| 527.586                                  | 526.928                                  | 2445.189                                     | 2+445,189                                        |
| 528.167                                  | 527.674                                  | 2460.000                                     | 2+460,000                                        |
| 528.673                                  | 527.953                                  | 2472.581                                     | 2+472,581                                        |
| 528.983                                  | 528.353                                  | 2480.000                                     | 2+480,000                                        |
| 529.532                                  | 528.584                                  | 2492.651                                     | 2+492,651                                        |
| 529.863                                  | 529.235                                  | 2500.000                                     | 2+500,000                                        |
| 530.805<br>530.851                       | 530.571<br>530.655                       | 2520.000<br>2520.940                         | 2+520,000<br>2+520,940                           |
| 531.812<br>531.971                       | 531.589<br>531.674                       | 2540.000<br>2539.980<br>2543.069             | 2+540,000<br>2+539,980<br>2+543,069              |
| 532.849                                  | 532.659                                  | 2560.000                                     | 2+560,000                                        |
| 533.600                                  | 533.490                                  | 2574.656                                     | 2+574,656                                        |
| 533.868                                  | 533.858                                  | 2580.000                                     | 2+580,000                                        |
| 534.534                                  | 534.486                                  | 2593.476                                     | 2+593,476                                        |
| 534.850                                  | 534.925                                  | 2600.000                                     | 2+600,000                                        |
| 535.794                                  | 535.625                                  | 2620.000                                     | 2+620,000                                        |
| 535.983                                  | 535.716                                  | 2624.109                                     | 2+624,109                                        |
| 536.520<br>536.700                       | 536.155<br>536.466                       | 2635.972<br>2640.000                         | 2+635,972<br>2+640,000                           |
| 537.251                                  | 536.766                                  | 2652.423                                     | 2+652,423                                        |
| 537.587                                  | 537.296                                  | 2660.000                                     | 2+660,000                                        |
| 538.014                                  | 538.002                                  | 2669.609                                     | 2+669,609                                        |
| 538.475<br>538.606<br>538.719            | 538.691<br>538.842<br>538.962            | 2680.000<br>2682.944<br>2685.500             | 2+680,000<br>2+682,944<br>2+685,500              |
| 539.240                                  | 539.863                                  | 2700.000                                     | 2+700,000                                        |
| 539.355                                  | 539.863                                  |                                              | 2+720,000                                        |

LEGENDA:

Caixa Coletora  
Valetão

DPS05/STC03

Bueiro de Acesso - BA Ø600mm c/ testada - Projetado

BSTC Ø600mm c/ boca - Projetado

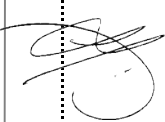
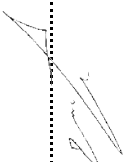
BSTC Ø800mm c/ boca - Projetado

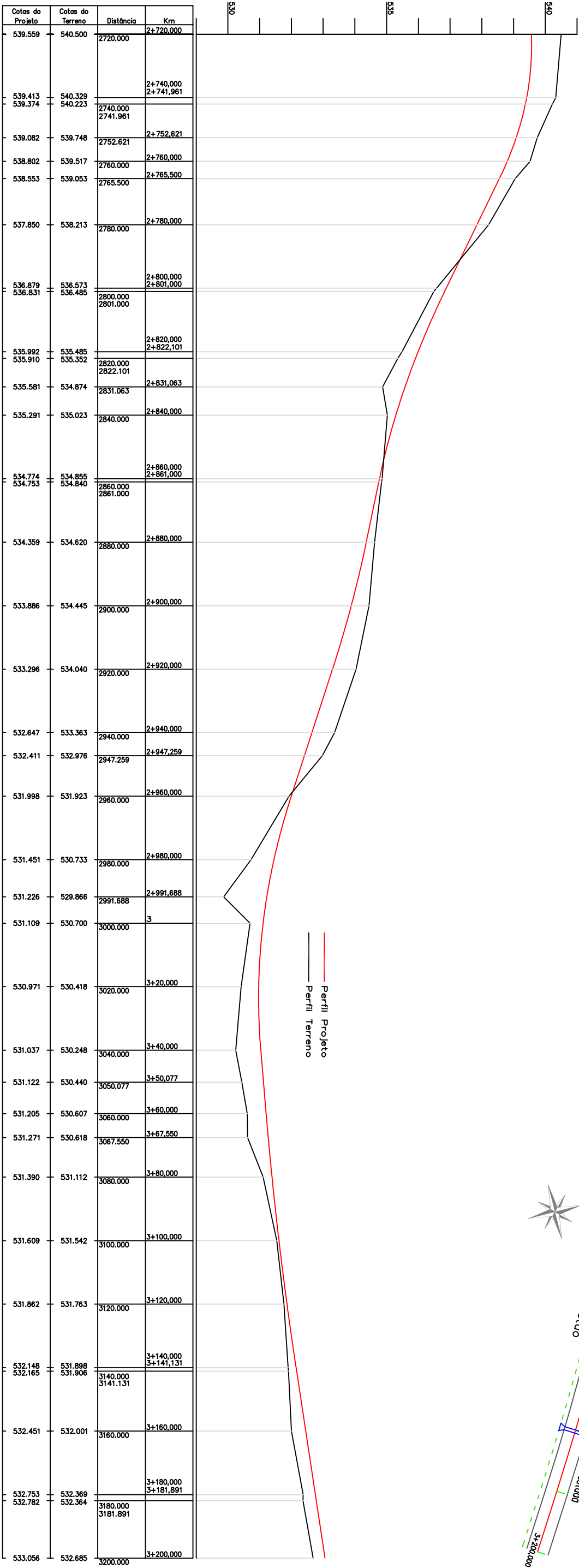
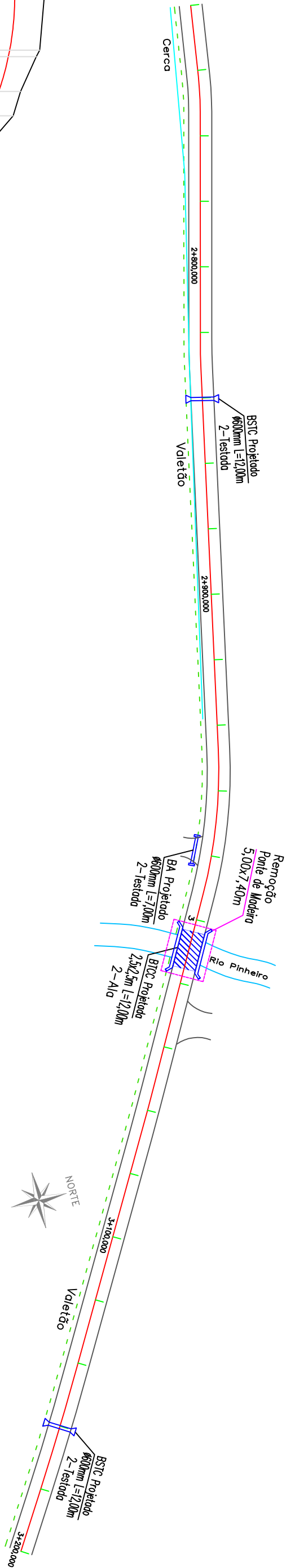
BSTC Ø1000mm c/ boca - Projetado

Área de Remoção de Tubulação

BTTC 2,5x2,5m c/ boca - Projetado

BSCC 3 0x3 0m c/ hacc - Driatada

|                                                                                                                     |                                  |                                                                                     |  |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA       |                                  | Resp. Técnico:                                                                      |  | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Gêtúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                                  |  |  |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021          | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       |  | CREA/RS 123168-D                                                                    |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala : H - 1:1300<br>V - 1:130 | Cliente: Pref. Municipal de Barra do Rio Azul                                       |  | CNPJ: 93.539.153/0001-92                                                            |  |
|                                                                                                                     |                                  | Obra:<br>Pavimentação Asfáltica                                                     |  |                                                                                     |  |
| Aprovação:                                                                                                          | Revisão :<br>01                  | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |  |                                                                                     |  |
| -                                                                                                                   | Prancha :<br>96                  | Conteúdo:<br>Planta de Drenagem                                                     |  |                                                                                     |  |



LEGENDA:

Caixa Coletora

Valeão

DPS05/STC03

Bueiro de Acesso - BA Ø600mm c/ testada - Projetado

BSTC Ø600mm c/ boca - Projetado

BSTC Ø800mm c/ boca - Projetado

BSTC Ø1000mm c/ boca - Projetado

Área de Remoção de Tubulação

BTC 2,5x2,5m c/ boca - Projetado

BSCC 3,0x3,0m c/ boca - Projetado

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Resp. Técnico:

.....

Cliente:

.....

Projeto :  
Lauson Serafini

Data :  
Dezembro/2021

Resp. Técnico :  
Eng. Civil Lauson Serafini  
CREA/RS 123168-D

Desenho:  
Adriano Jr.

Escala :  
H - 1:1300  
V - 1:130

Cliente: Pref. Municipal de Barra do Rio Azul  
CNPJ: 93.539.153/0001-92

Aprovação:  
-

Revisão :  
01

Obra:  
Pavimentação Asfáltica

Prancha :  
97

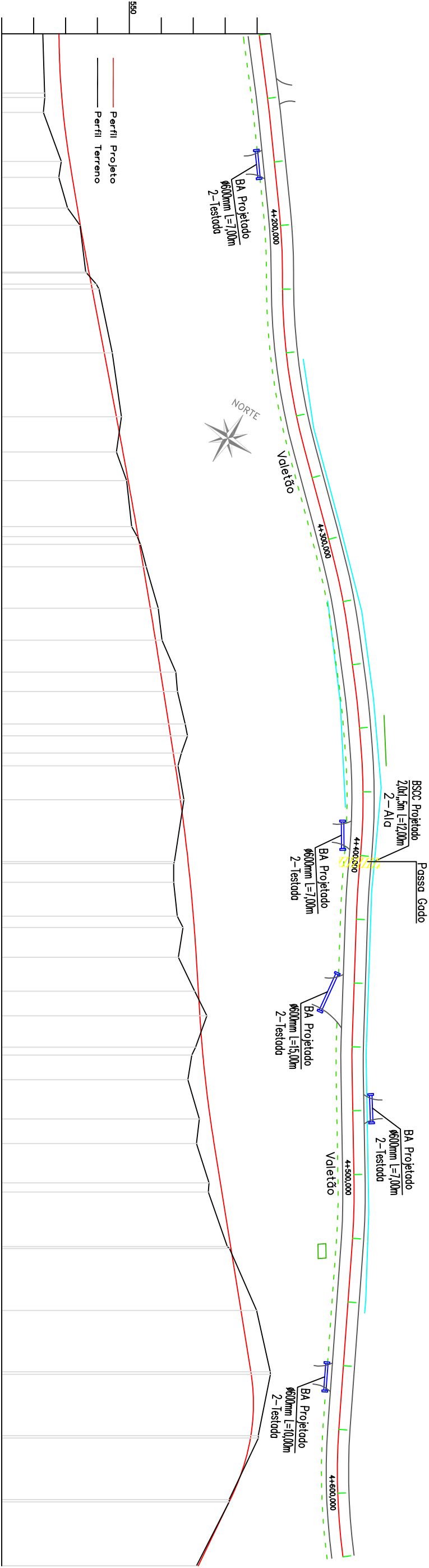
Local :  
Estrada de Acesso a Barra do Rio Azul

Conteúdo:  
Planta de Drenagem









|                                          |                                          | Distância                                    | Km                                  |
|------------------------------------------|------------------------------------------|----------------------------------------------|-------------------------------------|
| Cotas do Projeto                         | Cotas do Terreno                         |                                              |                                     |
| 547.796                                  | 547.287                                  | 4140.000                                     | 4+140,000                           |
|                                          |                                          |                                              | 4+158,597<br>4+160,000              |
| 547.873<br>547.884<br>547.927            | 547.343<br>547.348<br>547.306            | 4158.597<br>4180.000<br>4164.625             | 4+164,625                           |
|                                          |                                          |                                              | 4+180,000                           |
| 548.130                                  | 547.867                                  | 4180.000                                     | 4+185,000                           |
| 548.210                                  | 547.788                                  | 4185.000                                     |                                     |
|                                          |                                          |                                              | 4+194,632                           |
| 548.370                                  | 548.064                                  | 4194.632                                     | 4+200,000                           |
| 548.463                                  | 548.453                                  | 4200.000                                     |                                     |
|                                          |                                          |                                              | 4+214,685<br>4+215,000              |
| 548.731<br>548.737<br>548.803<br>548.832 | 548.630<br>548.658<br>548.962<br>549.048 | 4214.685<br>4215.000<br>4218.434<br>4220.000 | 4+218,434<br>4+220,000              |
|                                          |                                          |                                              | 4+240,000                           |
| 549.211                                  | 549.467                                  | 4240.000                                     |                                     |
|                                          |                                          |                                              | 4+260,000                           |
| 549.591                                  | 549.753                                  | 4260.000                                     |                                     |
| 549.797                                  | 549.594                                  | 4271.029                                     | 4+271,029                           |
| 549.962                                  | 549.914                                  | 4280.000                                     |                                     |
|                                          |                                          |                                              | 4+294,388<br>4+297,546<br>4+300,000 |
| 550.219<br>550.274<br>550.317            | 550.073<br>550.246<br>550.349            | 4294.388<br>4297.546<br>4300.000             |                                     |
|                                          |                                          |                                              | 4+307,026                           |
| 550.437                                  | 550.528                                  | 4307.026                                     |                                     |
|                                          |                                          |                                              | 4+320,000                           |
| 550.655                                  | 550.905                                  | 4320.000                                     |                                     |
|                                          |                                          |                                              | 4+330,031                           |
| 550.819                                  | 551.023                                  | 4330.031                                     |                                     |
|                                          |                                          |                                              | 4+340,000                           |
| 550.978                                  | 551.456                                  | 4340.000                                     |                                     |
| 551.074                                  | 551.505                                  | 4346.094                                     | 4+346,094                           |
|                                          |                                          |                                              | 4+356,273                           |
| 551.234                                  | 551.748                                  | 4356.273                                     | 4+360,000                           |
| 551.292                                  | 551.819                                  | 4360.000                                     |                                     |
| 551.376                                  | 551.631                                  | 4365.351                                     | 4+365,351                           |
| 551.439                                  | 551.524                                  | 4369.360                                     | 4+369,360                           |
|                                          |                                          |                                              | 4+380,000                           |
| 551.598                                  | 551.706                                  | 4380.000                                     |                                     |
|                                          |                                          |                                              | 4+399,361<br>4+400,000              |
| 551.839<br>551.846                       | 551.411<br>551.385                       | 4399.361<br>4400.000                         | 4+405,841                           |
| 551.907                                  | 551.387                                  | 4405.841                                     |                                     |
|                                          |                                          |                                              | 4+416,466<br>4+420,000              |
| 552.003<br>552.031                       | 551.500<br>551.679                       | 4416.466<br>4420.000                         |                                     |
|                                          |                                          |                                              | 4+429,360                           |
| 552.095                                  | 551.531                                  | 4429.360                                     |                                     |
|                                          |                                          |                                              | 4+440,000                           |
| 552.161                                  | 552.044                                  | 4440.000                                     |                                     |
| 552.208                                  | 552.425                                  | 4447.700                                     | 4+447,700                           |
|                                          |                                          |                                              | 4+457,493<br>4+460,000              |
| 552.280<br>552.303                       | 552.072<br>551.954                       | 4457.493<br>4460.000                         |                                     |
|                                          |                                          |                                              | 4+467,702                           |
| 552.381                                  | 551.831                                  | 4467.702                                     |                                     |
|                                          |                                          |                                              | 4+480,000                           |
| 552.536                                  | 552.191                                  | 4480.000                                     |                                     |
|                                          |                                          |                                              | 4+487,700                           |
| 552.653                                  | 552.098                                  | 4487.700                                     |                                     |
|                                          |                                          |                                              | 4+500,000<br>4+502,871              |
| 552.851<br>552.897                       | 552.495<br>552.472                       | 4500.000<br>4502.871                         |                                     |
|                                          |                                          |                                              | 4+520,000<br>4+520,616              |
| 553.173<br>553.183                       | 553.069<br>553.136                       | 4520.000<br>4520.616                         |                                     |
|                                          |                                          |                                              | 4+540,000                           |
| 553.495                                  | 553.984                                  | 4540.000                                     |                                     |
|                                          |                                          |                                              | 4+558,240<br>4+580,000              |
| 553.805<br>553.792                       | 554.419<br>554.042                       | 4588.240<br>4579.243<br>4580.000             |                                     |
|                                          |                                          |                                              | 4+599,240<br>4+600,000              |
| 553.160<br>553.123                       | 553.126<br>553.123                       | 4599.240<br>4600.000                         |                                     |
|                                          |                                          |                                              | 4+620,000                           |
| 552.156                                  | 552.101                                  | 4620.000                                     |                                     |

LEGENDA:

-  Caixa Coletora
-  Valetão
-  DPS05/STC03
-  Bueiro de Acesso - BA Ø600mm c/ testada - Projetado
-  BSTC Ø600mm c/ boca - Projetado
-  BSTC Ø800mm c/ boca - Projetado
-  BSTC Ø1000mm c/ boca - Projetado
-  Área de Remoção de Tubulação
-  BTTC 2,5x2,5m c/ boca - Projetado
-  BSCC 3,0x3,0m c/ boca - Projetado



SERVIÇOS DE ENGENHARIA

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Resp. Técnico:



Cliente:



Projeto : Lauson Serafini

Data : Dezembro/2021

Desenho: Adriano Jr.

Escala : H - 1:1300  
V - 1:130

Aprovação:

Revisão : 01

Prancha : 100

Resp. Técnico : Eng. Civil Lauson Serafini

CREA/RS 123168-D

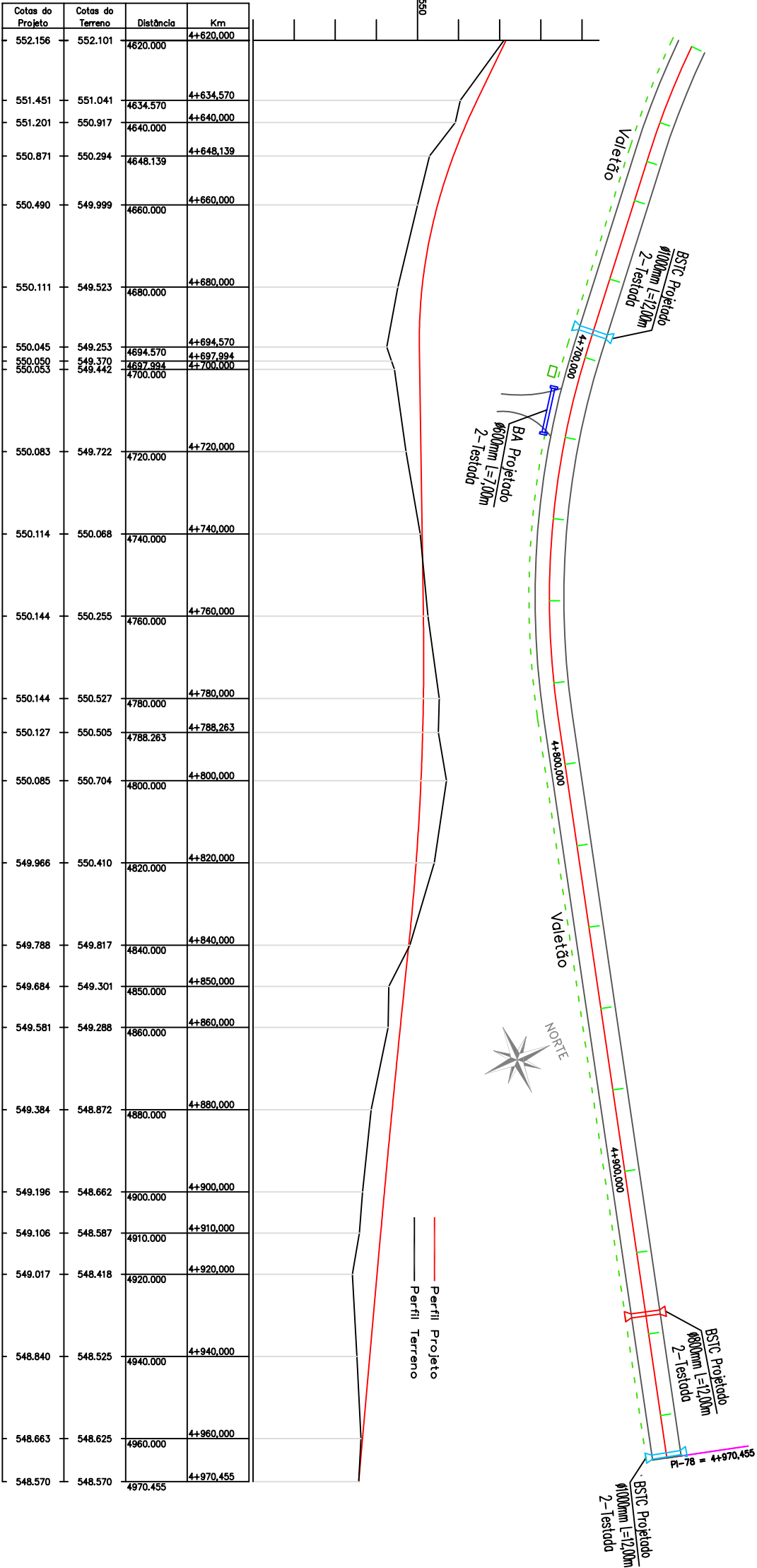
Cliente: Pref. Municipal de Barra do Rio Azul

CNPJ: 93.539.153/0001-92

Obra: Pavimentação Asfáltica

Local : Estrada de Acesso a Barra do Rio Azul

Conteúdo: Planta de Drenagem



LEGENDA:

Caixa Coletora

Valeto

DPS05/STC03

Bueiro de Acesso - BA Ø600mm c/ testada - Projetado

BSTC Ø600mm c/ boca - Projetado

BSTC Ø800mm c/ boca - Projetado

BSTC Ø1000mm c/ boca - Projetado

Área de Remoção de Tubulação

BTC 2,5x2,5m c/ boca - Projetado

BSCC 3,0x3,0m c/ boca - Projetado

Av. Borges de Medeiros, 615 - Sala 104  
Getúlio Vargas - RS - CEP 99900-000  
Fone: 54-3341 3753 / 54-99950 5335

Projeto :  
Lauson Serafini

Data :  
Dezembro/2021

Resp. Técnico:

Eng. Civil Lauson Serafini  
CREA/RS 123168-D

Desenho:  
Adriano Jr.

Escala :  
H - 1:1300  
V - 1:130

Resp. Técnico:  
Eng. Civil Lauson Serafini  
CREA/RS 123168-D

CNPJ: 93.539.153/0001-92

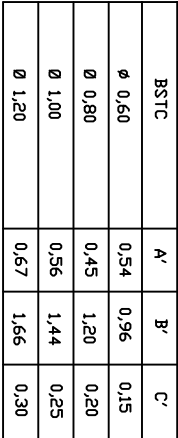
Aprovação:  
-

Revisão :  
01

Prancha :  
101

Local :  
Estrada de Acesso a Barra do Rio Azul

Conteúdo:  
Planta de Drenagem



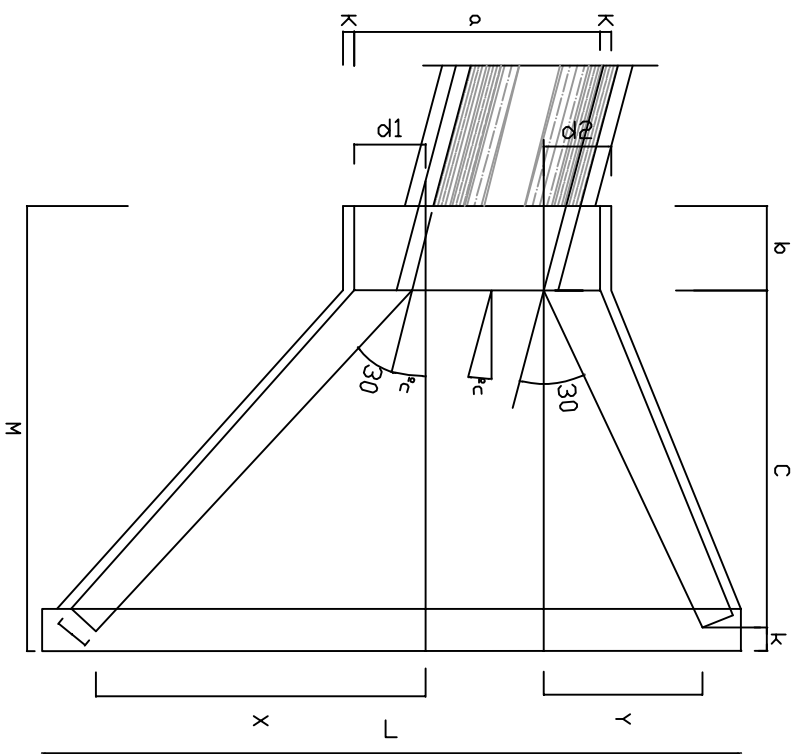
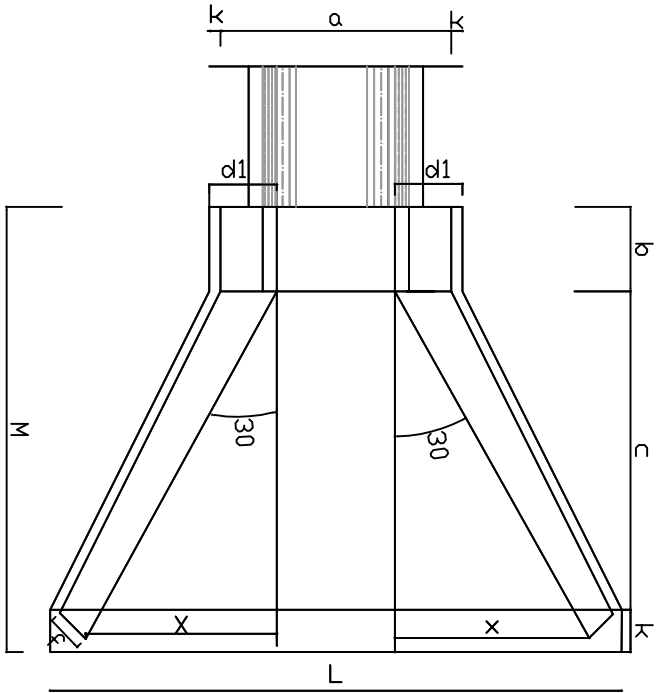
| ESC. | a    | b    | c    | d1   | d2   | e    | f    | g    | h    | k    | m    | n    | p    | X    | Y     | L    | M    |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|
| 0°   | 1,10 | 0,20 | 1,25 | 0,25 | 0,25 | 0,15 | 0,10 | 0,30 | 0,98 | 0,10 | 0,20 | 0,30 | 0,25 | 0,72 | 0,72  | 2,39 | 1,55 |
| 5°   | 1,11 |      |      | 0,26 | 0,24 |      |      |      |      |      |      |      |      | 0,88 | 0,58  | 2,41 |      |
| 10°  | 1,12 |      |      | 0,26 | 0,23 |      |      |      |      |      |      |      |      | 1,05 | 0,45  | 2,45 |      |
| 15°  | 1,15 |      |      | 0,31 | 0,22 |      |      |      |      |      |      |      |      | 1,25 | 0,34  | 2,59 |      |
| 20°  | 1,20 |      |      | 0,34 | 0,22 |      |      |      |      |      |      |      |      | 1,49 | 0,22  | 2,68 |      |
| 25°  | 1,25 |      |      | 0,38 | 0,22 |      |      |      |      |      |      |      |      | 1,76 | 0,10  | 2,77 |      |
| 30°  | 1,34 |      |      | 0,43 | 0,22 |      |      |      |      |      |      |      |      | 2,16 | 0,00  | 3,16 |      |
| 35°  | 1,46 |      |      | 0,51 | 0,22 |      |      |      |      |      |      |      |      | 2,68 | -0,10 | 3,69 |      |
| 40°  | 1,63 |      |      | 0,63 | 0,22 |      |      |      |      |      |      |      |      | 3,43 | -0,22 | 4,26 |      |
| 45°  | 1,91 |      |      | 0,84 | 0,22 |      |      |      |      |      |      |      |      | 4,66 | -0,34 | 5,41 |      |

BSTC 0.80

| ESC. | a    | b    | c    | d1   | d2   | e    | f    | g    | h    | k    | m    | n    | p    | X    | Y     | L    | M    |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|
| 0°   | 1.40 | 0.25 | 1.45 | 0.30 | 0.30 | 0.20 | 0.15 | 0.30 | 1.20 | 0.10 | 0.25 | 0.35 | 0.30 | 0.84 | 0.84  | 2.92 | 1.80 |
| 5°   | 1.41 |      |      | 0.32 | 0.29 |      |      |      |      |      |      |      |      | 1.02 | 0.68  | 2.94 |      |
| 10°  | 1.44 |      |      | 0.34 | 0.28 |      |      |      |      |      |      |      |      | 1.22 | 0.53  | 2.99 |      |
| 15°  | 1.47 |      |      | 0.37 | 0.27 |      |      |      |      |      |      |      |      | 1.45 | 0.39  | 3.09 |      |
| 20°  | 1.51 |      |      | 0.40 | 0.26 |      |      |      |      |      |      |      |      | 1.73 | 0.26  | 3.25 |      |
| 25°  | 1.60 |      |      | 0.43 | 0.26 |      |      |      |      |      |      |      |      | 2.07 | 0.13  | 3.48 |      |
| 30°  | 1.70 |      |      | 0.52 | 0.26 |      |      |      |      |      |      |      |      | 2.51 | 0.00  | 3.81 |      |
| 35°  | 1.85 |      |      | 0.61 | 0.26 |      |      |      |      |      |      |      |      | 3.11 | -0.13 | 4.31 |      |
| 40°  | 2.06 |      |      | 0.76 | 0.26 |      |      |      |      |      |      |      |      | 3.98 | -0.26 | 5.09 |      |
| 45°  | 2.40 |      |      | 1.00 | 0.26 |      |      |      |      |      |      |      |      | 5.41 | -0.39 | 6.45 |      |

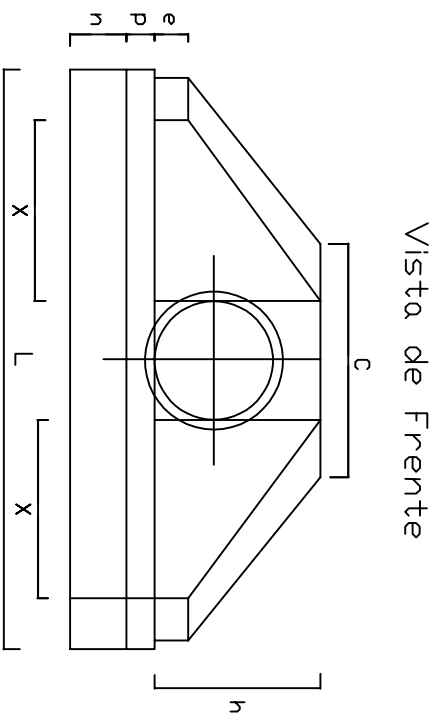
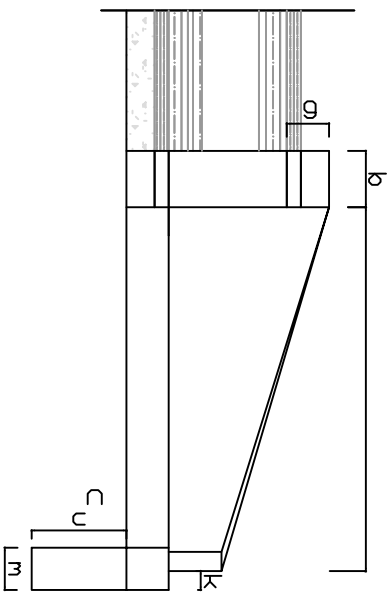
BSTC 1.00

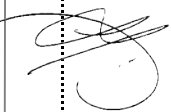
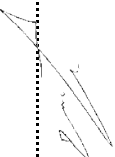
| ESC. | a    | b    | c    | d1   | d2   | e    | f    | g    | h    | k    | m    | n    | p    | x    | y     | L    | M    |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|
| 0*   | 1.70 | 0.30 | 1.65 | 0.35 | 0.35 | 0.25 | 0.20 | 0.30 | 1.42 | 0.10 | 0.30 | 0.40 | 0.35 | 0.95 | 0.95  | 3.42 | 2.05 |
| 5*   | 1.72 |      |      | 0.37 | 0.34 |      |      |      |      |      |      |      |      | 1.16 | 0.77  | 3.46 |      |
| 10*  | 1.75 |      |      | 0.40 | 0.33 |      |      |      |      |      |      |      |      | 1.38 | 0.80  | 3.51 |      |
| 15*  | 1.79 |      |      | 0.43 | 0.32 |      |      |      |      |      |      |      |      | 1.65 | 0.44  | 3.63 |      |
| 20*  | 1.85 |      |      | 0.47 | 0.31 |      |      |      |      |      |      |      |      | 1.97 | 0.29  | 3.82 |      |
| 25*  | 1.93 |      |      | 0.53 | 0.30 |      |      |      |      |      |      |      |      | 2.36 | 0.15  | 4.09 |      |
| 30*  | 2.07 |      |      | 0.61 | 0.30 |      |      |      |      |      |      |      |      | 2.56 | 0.00  | 4.47 |      |
| 35*  | 2.24 |      |      | 0.72 | 0.30 |      |      |      |      |      |      |      |      | 3.54 | -0.15 | 5.04 |      |
| 40*  | 2.51 |      |      | 0.88 | 0.31 |      |      |      |      |      |      |      |      | 4.53 | -0.29 | 5.94 |      |
| 45*  | 2.91 |      |      | 1.17 | 0.32 |      |      |      |      |      |      |      |      | 5.16 | -0.44 | 7.50 |      |



## Bueiros Normais

Bueiros Escansos



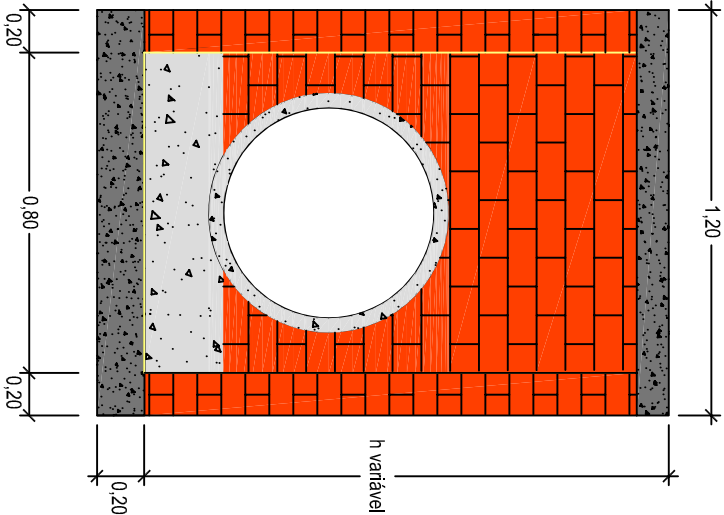
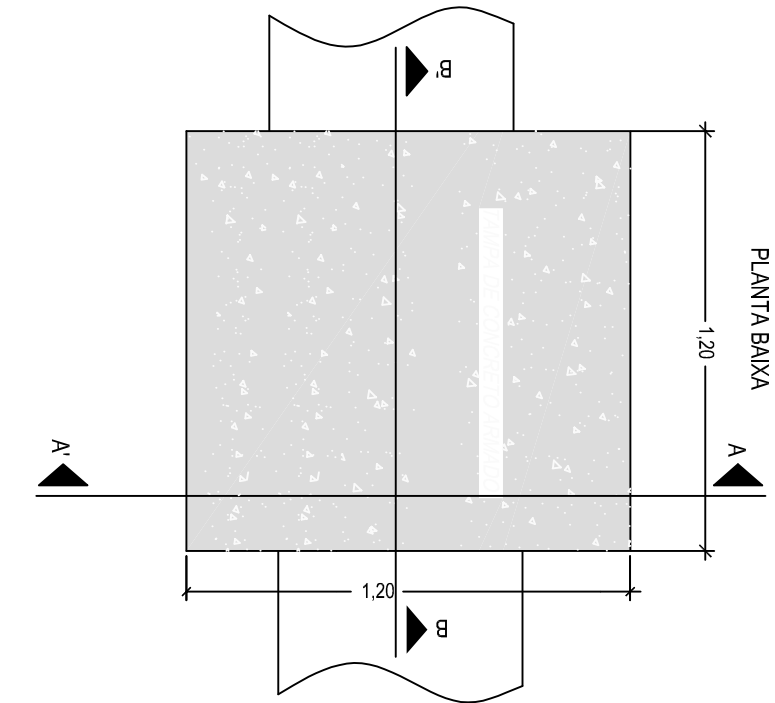
|                                                                                                                                                                                                                                                         |  |                                                                                                                                           |  |                                                                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><p>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:</div> <div></div> <div>.....</div> |  | <div>Cliente:</div> <div></div> <div>.....</div> |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                |  | <div>Data :<br/>Dezembro/2021</div>                                                                                                       |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini</div> <div>CREA/RS 123168-D</div>                                               |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                     |  | <div>Escala :<br/>sem escala</div>                                                                                                        |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul</div> <div>CNPJ: 93.539.153/0001-92</div>                                        |  |
| <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                                                                                                                                                             |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                                              |  | <div>Conteúdo:<br/>Detalhamento Dispositivos de Drenagem</div>                                                                      |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                             |  | <div>Revisão :<br/>01</div>                                                                                                               |  | <div>Prancha :<br/>102</div>                                                                                                        |  |

CAIXA COLETORA

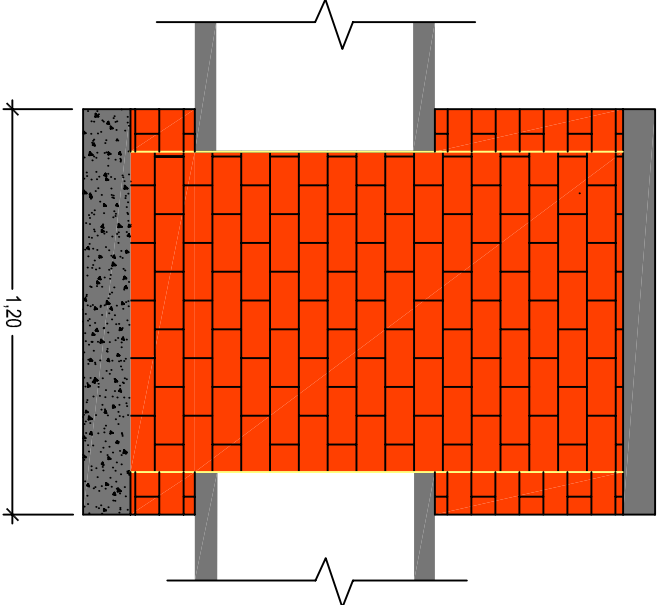
ALVENARIA DE TIJOLOS DE 20cm - COM BASE

S/ ESCALA

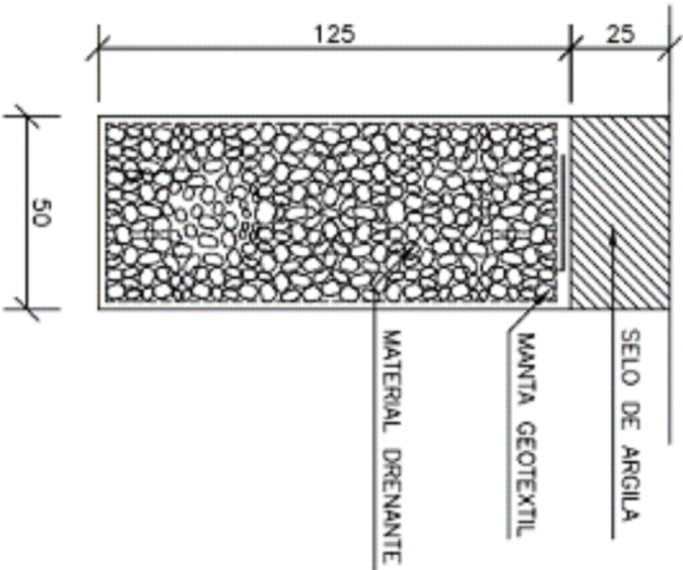
SEÇÃO AA'



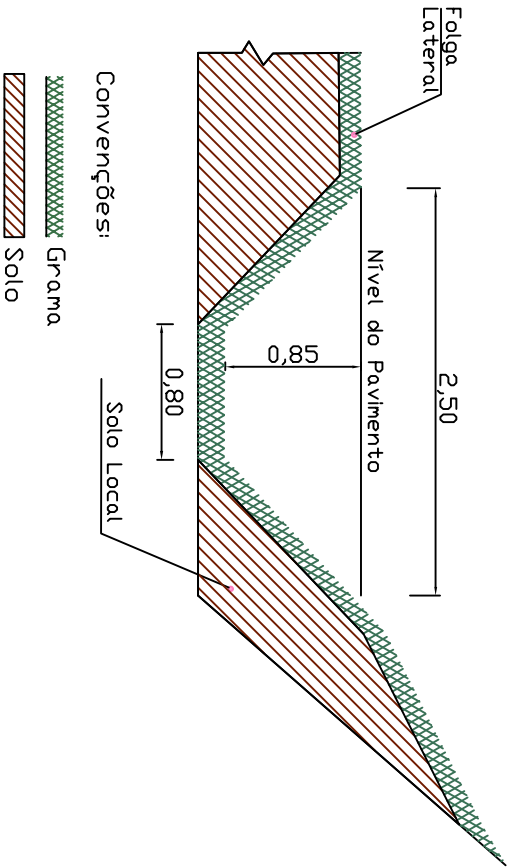
SEÇÃO BB'



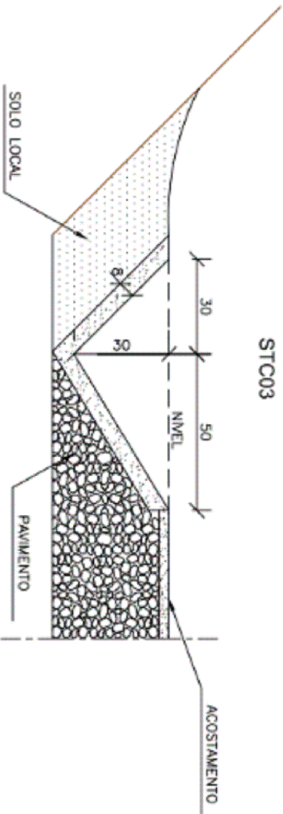
DPS 05  
(DRENO CEGO)



Sarjeta Trapezoidal de Grama - Valetão  
(sem escala)



STC03



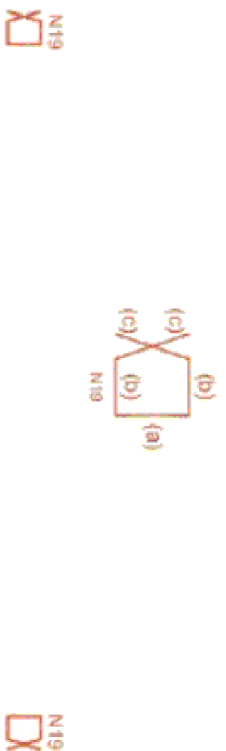
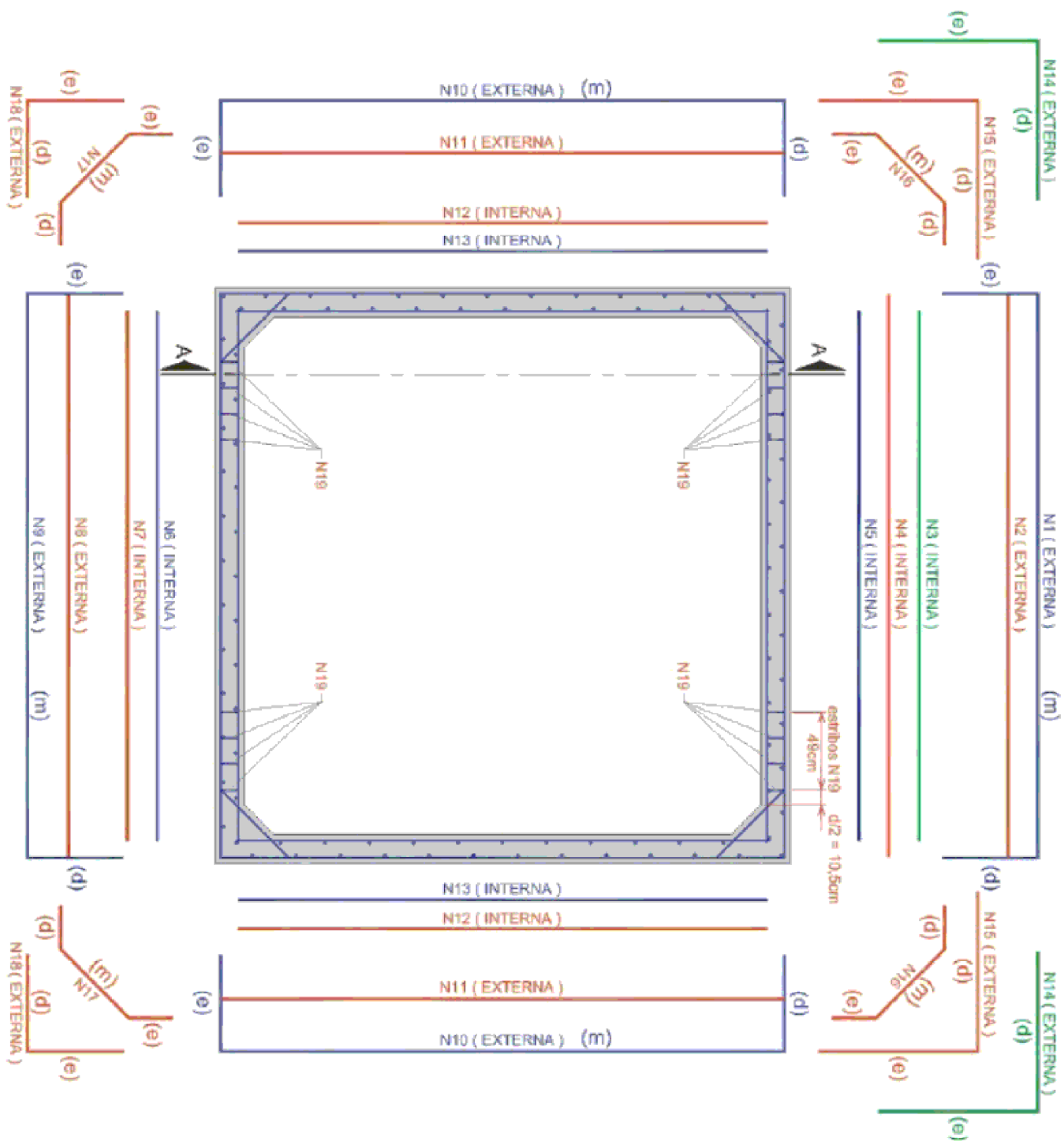
| CONSUMOS MÉDIOS                 |            |
|---------------------------------|------------|
| CONCRETO fck > 15MPa            | 0,075m³/m  |
| GUIA DE MADEIRA (2,5cm x 8,0cm) | 0,56m/m    |
| ARGAMASSA ASFÁLTICA             | 0,14kg/m   |
| ESCVAÇÃO EM SOLO (EVENTUAL)     | < 0,17m³/m |
| SOLO LOCAL (EVENTUAL)           | < 0,20m³/m |

| DISCRIMINAÇÃO             | UNID | CONSUMOS MÉDIOS |        |        |        |        |        |        |        |
|---------------------------|------|-----------------|--------|--------|--------|--------|--------|--------|--------|
|                           |      | DPS 01          | DPS 02 | DPS 03 | DPS 04 | DPS 05 | DPS 06 | DPS 07 | DPS 08 |
| ESCVAÇÃO CLASSIFICA       | m²/m | 0,75            | 0,75   | 0,90   | 0,90   | 0,75   | 0,75   | 0,75   | 0,75   |
| MATERIAL FILTRANTE        | m²/m | 0,59            | 0,69   | 0,59   | 0,71   | -      | -      | -      | -      |
| MATERIAL DRENANTE         | m²/m | -               | -      | -      | 0,62   | 0,75   | 0,56   | 0,69   | -      |
| MATERIAL DE PROTEÇÃO      | m²/m | -               | 0,13   | 0,13   | -      | -      | -      | -      | -      |
| SELO DE ARGILA            | m²/m | 0,10            | -      | 0,12   | -      | 0,13   | -      | 0,13   | -      |
| TUBO DE PVC FURADO Ø=15cm | m /m | 1,00            | 1,00   | -      | -      | -      | -      | -      | -      |
| TUBO DE CONCRETO Ø=15cm   | m /m | -               | -      | 1,00   | 1,00   | -      | 1,00   | 1,00   | 1,00   |
| MANTA GEOTEXTIL           | m²/m | -               | -      | -      | -      | 3,70   | 4,30   | 3,70   | 4,30   |
| FORMA DE MADEIRA          | m³/m | -               | -      | 0,56   | 0,59   | -      | -      | -      | -      |

|                                                                                                                     |                         |                                                 |                                                  |          |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------|--------------------------------------------------|----------|--|
|                                                                                                                     |                         | Resp. Técnico:                                  |                                                  | Cliente: |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |                                                 |                                                  |          |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini   | CREA/RS 123169-D                                 |          |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>sem escala  | Cliente: Pref. Municipal de Barra do Rio Azul   | CNPJ: 93.539.153/0001-92                         |          |  |
| Aprovação:                                                                                                          | Revisão :<br>01         | Obra: Pavimentação Asfáltica                    | Local :<br>Estrada de Acesso a Barra do Rio Azul |          |  |
| -                                                                                                                   | Prancha :<br>103        | Conteúdo: Detalhamento Dispositivos de Drenagem |                                                  |          |  |



SEÇÃO TRANSVERSAL INTERNA 3,00 x 3,00 - TIPO VI

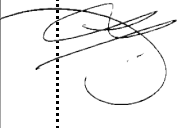
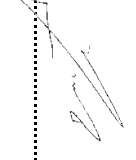


CORTE A-A

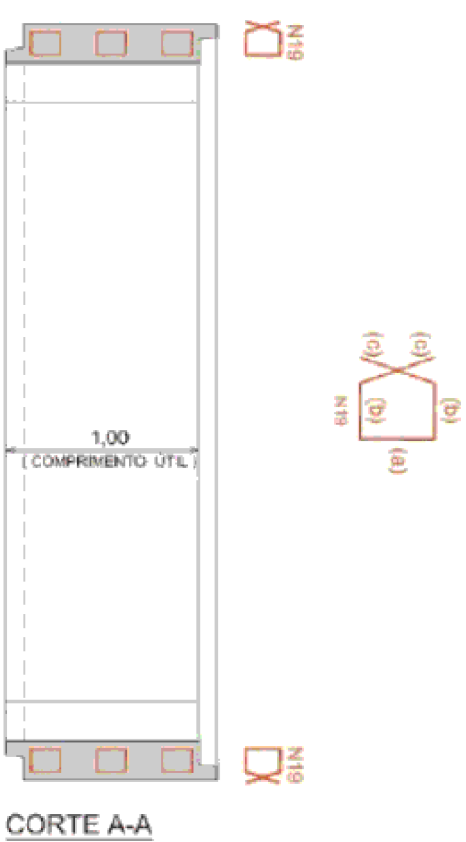
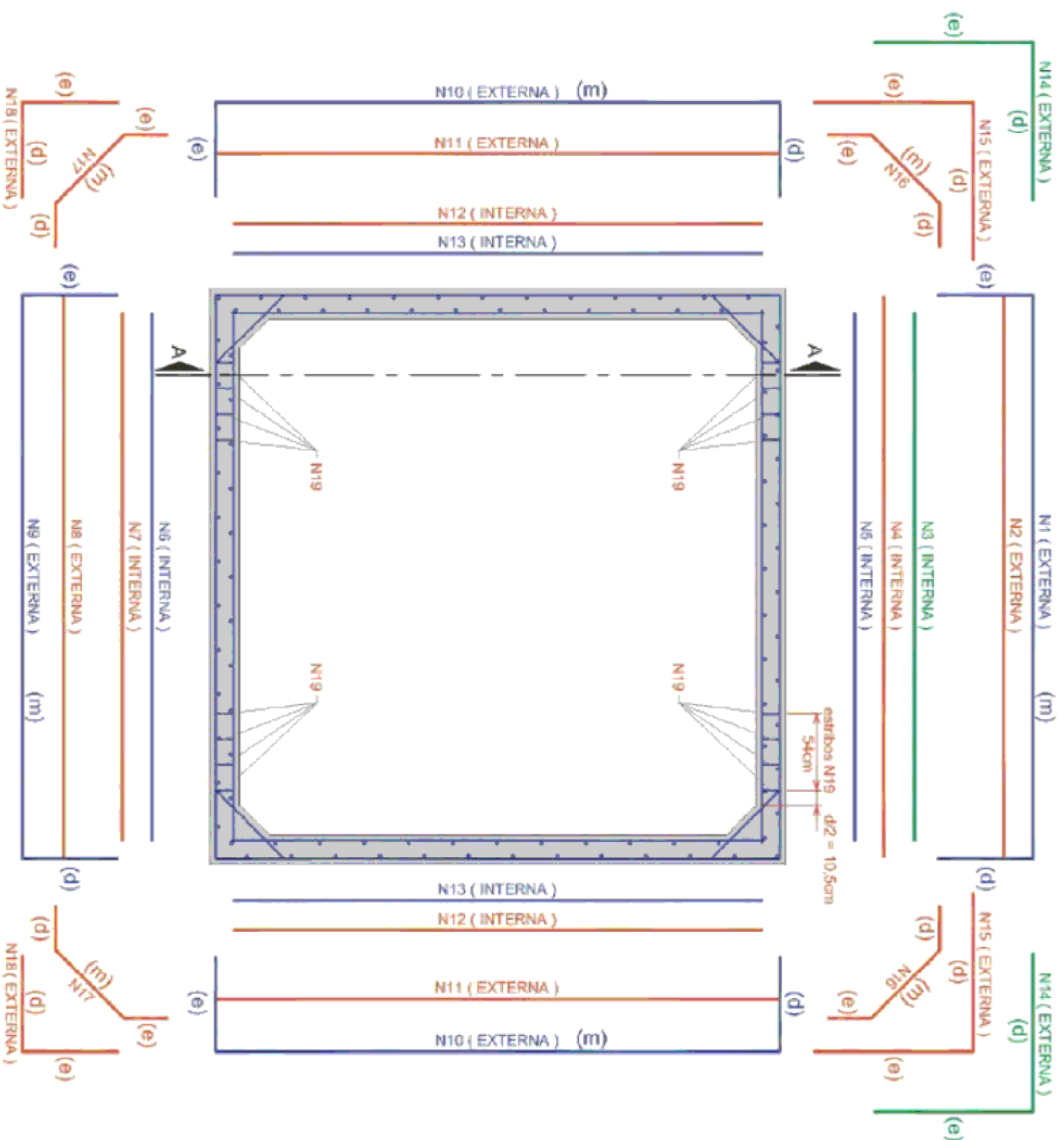
| COMPRIMENTO DAS TELAS |              |             |  |
|-----------------------|--------------|-------------|--|
| c1e = 170cm           | c1m = 342cm  | c1d = 170cm |  |
|                       | c5m = 309cm  |             |  |
|                       | c6m = 309cm  |             |  |
| c9e = 135cm           | c9m = 342cm  | c9d = 135cm |  |
| c10e = 80cm           | c10m = 342cm | c10d = 80cm |  |
|                       | c13m = 309cm |             |  |

| COMPRIMENTO DAS BARRAS |              |               |  |
|------------------------|--------------|---------------|--|
|                        | c2m = 342cm  |               |  |
|                        | c4m = 342cm  |               |  |
|                        | c7m = 309cm  |               |  |
|                        | c8m = 342cm  |               |  |
|                        | c11m = 342cm |               |  |
|                        | c12m = 309cm |               |  |
| c15e = 171cm           | c15d = 80cm  |               |  |
| c16e = 35cm            | c16d = 35cm  |               |  |
| c17e = 35cm            | c17d = 35cm  |               |  |
| c18e = 136cm           | c18d = 80cm  |               |  |
| c18a = 15cm            | c19b = 17cm  | c19c = 10,5cm |  |

( 5 fadadas de 3N19 )

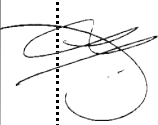
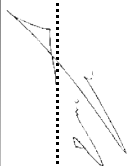
|                                                                                                                                                                                                            |                         |                                                                                                       |                                                  |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br> |                                                  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D                                 |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    | Escala :<br>sem escala  | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92                         |                                                                                                 |  |
| Aprovação:                                                                                                                                                                                                 | Revisão :<br>01         | Obra: Pavimentação Asfáltica                                                                          | Local :<br>Estrada de Acesso a Barra do Rio Azul |                                                                                                 |  |
| -                                                                                                                                                                                                          | Prancha :<br>104        | Conteúdo: Detalhamento Dispositivos de Drenagem - BSCC                                                |                                                  |                                                                                                 |  |

SEÇÃO TRANSVERSAL INTERNA 2,50 x 2,50 - TIPO VI



| COMPRIMENTO DAS TELAS |              |             |
|-----------------------|--------------|-------------|
| c1e = 110cm           | c1m = 292cm  | c1d = 110cm |
|                       | c5m = 256cm  |             |
|                       | c8m = 259cm  |             |
| c9e = 70cm            | c9m = 292cm  | c9d = 70cm  |
| c10e = 70cm           | c10m = 292cm | c10d = 70cm |
|                       | c13m = 259cm |             |

| COMPRIMENTO DAS BARRAS |               |
|------------------------|---------------|
| c2m = 292cm            |               |
| c4m = 292cm            |               |
| c7m = 259cm            |               |
| c8m = 292cm            |               |
| c11m = 292cm           |               |
| c12m = 259cm           |               |
| c15e = 114cm           | c15d = 70cm   |
| c16e = 35cm            | c16d = 35cm   |
| c17e = 35cm            | c17d = 35cm   |
| c18e = 70,5cm          | c18d = 70,5cm |
| c19a = 15cm            | c19b = 17cm   |
|                        | c19e = 10,5cm |

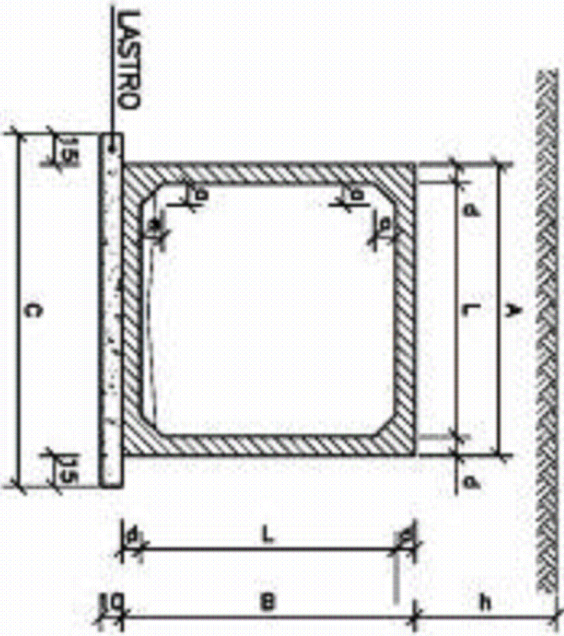
|                                                                                                                                                                                                                                                            |                         |                                                                                                       |  |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|
| <div><br/>SERVIÇOS DE ENGENHARIA</div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |                         | Resp. Técnico:<br> |  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                               | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D                                     |  |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                    | Escala :<br>sem escala  | Cliente: Pref. Municipal de Barra do Rio Azul    CNPJ: 93.539.153/0001-92                             |  |                                                                                                 |  |
|                                                                                                                                                                                                                                                            |                         | Obra:<br>Pavimentação Asfáltica                                                                       |  |                                                                                                 |  |
| Aprovação:                                                                                                                                                                                                                                                 | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |  |                                                                                                 |  |
| -                                                                                                                                                                                                                                                          | Prancha :<br>105        | Conteúdo:<br>Detalhamento Dispositivos de Drenagem - BTCC                                             |  |                                                                                                 |  |



## SEÇÃO TRANSVERSAL



## SEÇÃO PARA DETALHAMENTO DAS DIMENSÕES E DOS QUANTITATIVOS DE MATERIAIS

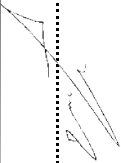


| 100 ≤ h ≤ 250             |      |    |       |      |
|---------------------------|------|----|-------|------|
| f <sub>s</sub> ≥ 0,10 Mpa |      |    |       |      |
| Nº                        | Φ    | Q  | COMP. | ESP. |
| 1                         | 6,3  | 20 | 84    | c/20 |
| 2                         |      |    |       |      |
| 3                         |      |    |       |      |
| 4                         | 10,0 | 8  | 225   | c/13 |
| 5                         |      |    |       |      |
| 6                         | 16,0 | 8  | corr. |      |
| 7                         | 10,0 | 9  | 225   | c/11 |
| 8                         | 6,3  | 72 | corr. | c/20 |
| 9                         | 10,0 | 6  | 385   | c/34 |
| 10                        | 10,0 | 12 | 220   | c/34 |
| 11                        | 6,3  | 10 | 225   | c/20 |
| 12                        |      |    |       |      |
| 13                        |      |    |       |      |
| 14                        |      |    |       |      |

| RESUMO |       |           |
|--------|-------|-----------|
| $\phi$ | kg/m  | PESO (kg) |
| 6,3    | 0,245 | 27,269    |
| 10,0   | 0,617 | 54,142    |
| 16,0   | 1,578 | 12,624    |
| TOTAL  |       | 94,034    |

| SEÇÃO L = 250                     |                | 0 ≤ h ≤ 100 |        |         | 100 ≤ h ≤ 250 |        |         |
|-----------------------------------|----------------|-------------|--------|---------|---------------|--------|---------|
| f <sub>te</sub> ≥ MP <sub>a</sub> |                | 0,10        | 0,21   | 0,21    | 0,11          | 0,21   | 0,21    |
| MEDIDAS                           | UNID.          | SIMPLES     | DÚPL.O | TRÍPL.O | SIMPLES       | DÚPL.O | TRÍPL.O |
| A                                 | cm             | 290         | 545    | 810     | 290           | 545    | 810     |
| B                                 | cm             | 290         | 280    | 280     | 290           | 280    | 280     |
| C                                 | cm             | 320         | 575    | 840     | 320           | 575    | 840     |
| d                                 | cm             | 15          | 15     | 15      | 15            | 15     | 15      |
| b                                 | cm             | ----        | 45     | 45      | ----          | 45     | 45      |
| d                                 | cm             | 20          | 15     | 15      | 20            | 15     | 15      |
| LASTRO                            | m <sup>2</sup> | 0,32        | 0,58   | 0,84    | 0,32          | 0,58   | 0,84    |
| FORMA                             | m <sup>2</sup> | 13,20       | 20,00  | 27,20   | 13,20         | 20,00  | 27,20   |
| CONCRETO                          | m <sup>3</sup> | 2,21        | 2,94   | 4,25    | 2,21          | 2,94   | 4,25    |
| REVESTIMENTO                      | m <sup>3</sup> | 0,13        | 0,25   | 0,38    | 0,13          | 0,25   | 0,38    |

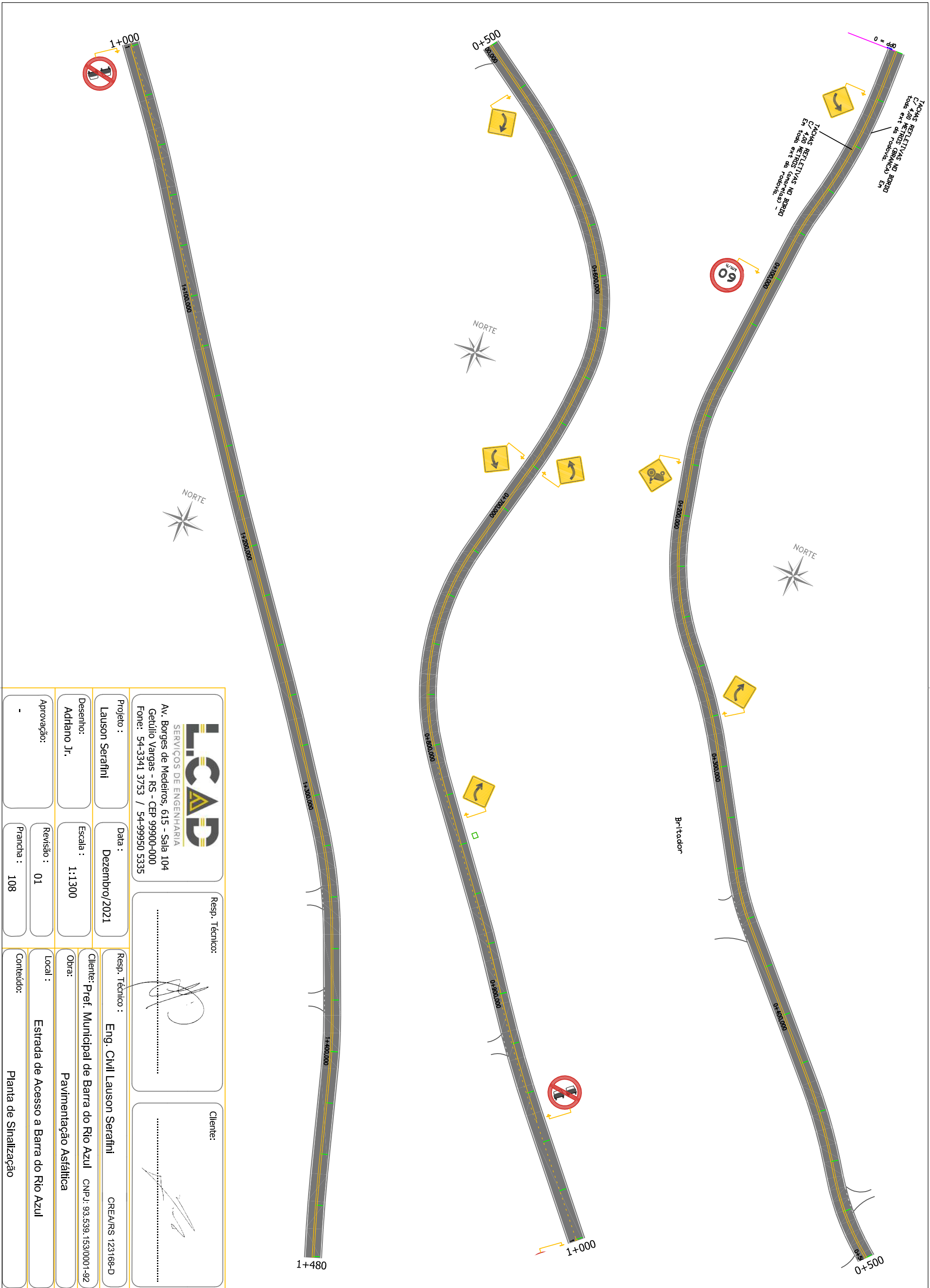
| SEÇÃO L = 300 |       | 0 ≤ h ≤ 100 |       |        | 100 ≤ h ≤ 250 |       |        |
|---------------|-------|-------------|-------|--------|---------------|-------|--------|
| h ≥ MPa       |       | 0,12        | 0,21  | 0,21   | 0,12          | 0,21  | 0,21   |
| MEDIDAS       | UNID. | SIMPLES     | DUPLO | TRIPLO | SIMPLES       | DUPLO | TRIPLO |
| A             | cm    | 350         | 660   | 980    | 350           | 660   | 980    |
| B             | cm    | 350         | 340   | 340    | 350           | 340   | 340    |
| C             | cm    | 380         | 690   | 1010   | 380           | 690   | 1010   |
| d             | cm    | 15          | 15    | 15     | 15            | 15    | 15     |
| b             | cm    | ---         | 45    | 45     | ---           | 45    | 45     |
| d             | cm    | 25          | 20    | 20     | 25            | 20    | 20     |
| LASTRO        | m²    | 0,38        | 0,69  | 1,01   | 0,38          | 0,69  | 1,01   |
| FORMA         | m²    | 15,90       | 24,20 | 32,90  | 15,90         | 24,20 | 32,90  |
| CONCRETO      | m³    | 3,30        | 4,62  | 6,64   | 3,30          | 4,62  | 6,64   |
| REVESTIMENTO  | m²    | 0,15        | 0,30  | 0,45   | 0,15          | 0,30  | 0,45   |

|                                                                                                                                                                                                                                                         |  |                                                                                                                          |  |                                                                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|
| <div><p>SERVIÇOS DE ENGENHARIA</p><p>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</p></div> |  | <div>Resp. Técnico:</div> <div></div> |  | <div>Cliente:</div> <div></div> |  |
| <div>Projeto :<br/>Lauson Serafini</div>                                                                                                                                                                                                                |  | <div>Data :<br/>Dezembro/2021</div>                                                                                      |  | <div>Resp. Técnico :<br/>Eng. Civil Lauson Serafini</div> <div>CREA/RS 123168-D</div>                              |  |
| <div>Desenho:<br/>Adriano Jr.</div>                                                                                                                                                                                                                     |  | <div>Escala :<br/>sem escala</div>                                                                                       |  | <div>Cliente: Pref. Municipal de Barra do Rio Azul    CNPJ: 93.539.153/0001-92</div>                               |  |
| <div>Obra:<br/>Pavimentação Asfáltica</div>                                                                                                                                                                                                             |  | <div>Local :<br/>Estrada de Acesso a Barra do Rio Azul</div>                                                             |  |                                                                                                                    |  |
| <div>Revisão :<br/>01</div>                                                                                                                                                                                                                             |  | <div>Plancha :<br/>106</div>                                                                                             |  | <div>Conteúdo:<br/>Detalhamento Dispositivos de Drenagem - BSCC 2,00x1,50m</div>                                   |  |
| <div>Aprovação:<br/>-</div>                                                                                                                                                                                                                             |  |                                                                                                                          |  |                                                                                                                    |  |

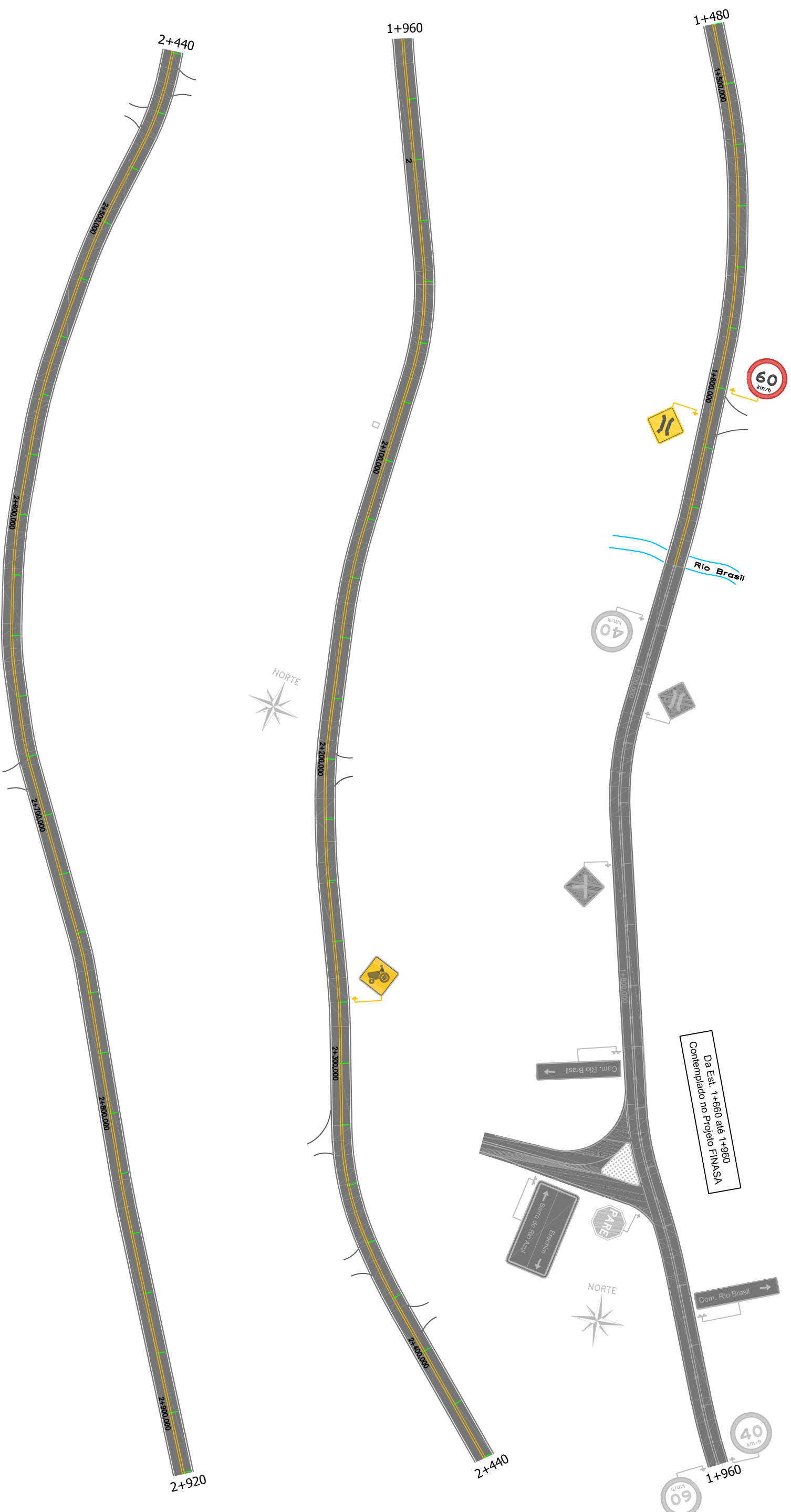


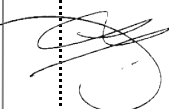
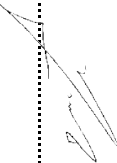


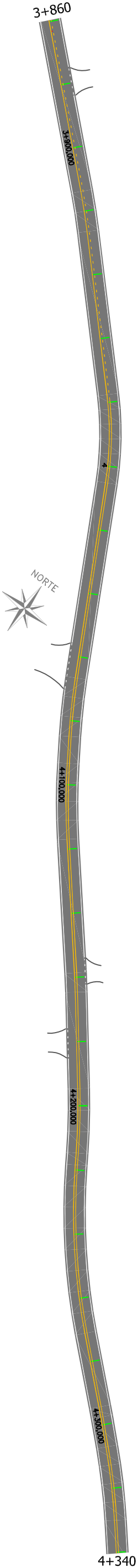
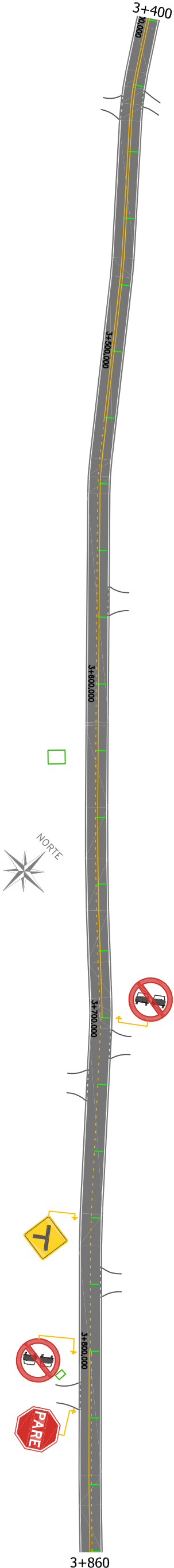
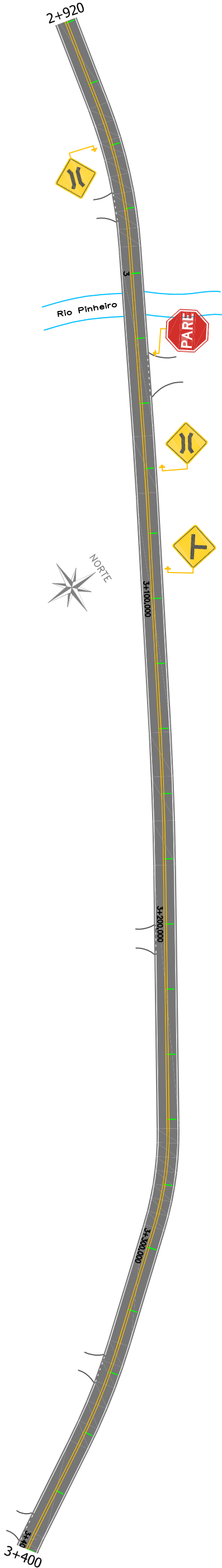


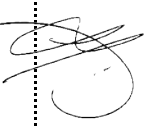
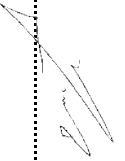


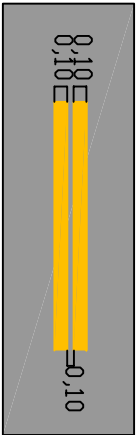
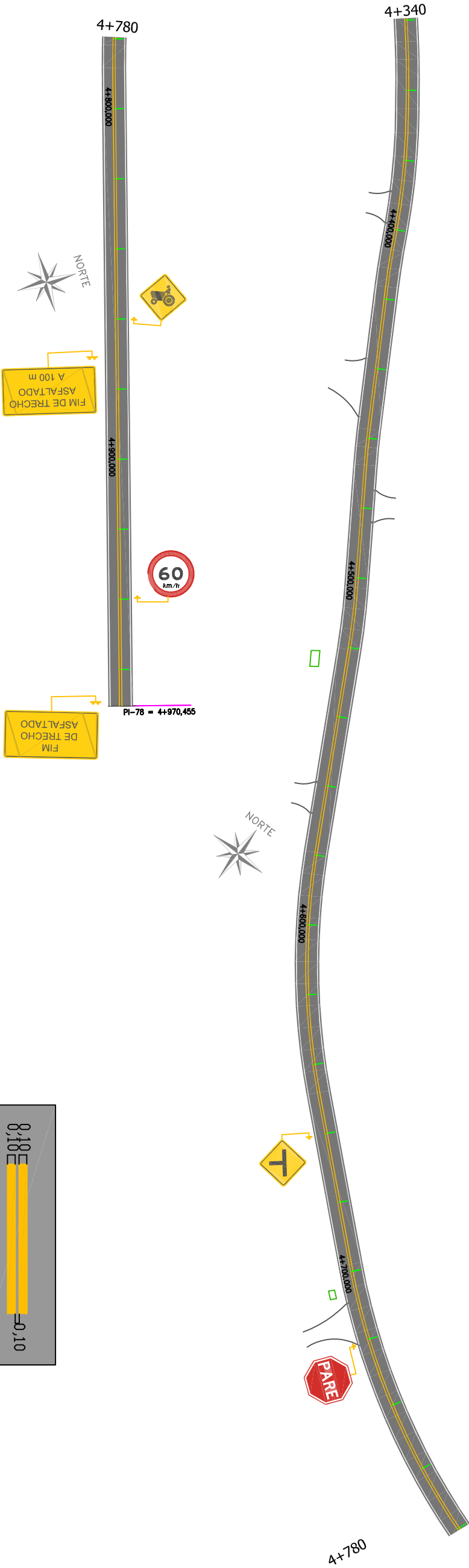
|                                                                                                                                                                                                                                          |  |                         |  |                                                                           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|---------------------------------------------------------------------------|--|
| <div><div><div>L</div><div>C</div><div>A</div><div>D</div></div><div>SERVIÇOS DE ENGENHARIA</div></div> <div>Av. Borges de Medeiros, 615 - Sala 104<br/>Getúlio Vargas - RS - CEP 99900-000<br/>Fone: 54-3341 3753 / 54-99950 5335</div> |  | Resp. Técnico:          |  | Cliente:                                                                  |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                             |  | Data :<br>Dezembro/2021 |  | Resp. Técnico :<br>Eng. Civil Lauson Serafini<br>CREA/RS 123168-D         |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                  |  | Escala :<br>1:1300      |  | Cliente: Pref. Municipal de Barra do Rio Azul<br>CNPJ: 93.539.153/0001-92 |  |
| Aprovação:                                                                                                                                                                                                                               |  | Revisão :<br>01         |  | Obra:<br>Pavimentação Asfáltica                                           |  |
| -                                                                                                                                                                                                                                        |  | Plancha :<br>108        |  | Local :<br>Estrada de Acesso a Barra do Rio Azul                          |  |
|                                                                                                                                                                                                                                          |  |                         |  | Conteúdo:<br>Planta de Sinalização                                        |  |



|                                                                                                                     |                         |                                                                                     |  |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA       |                         | Resp. Técnico:                                                                      |  | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |  |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini      CREA/RS 123168-D                 |  |                                                                                     |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>1:1300      | Cliente: Pref. Municipal de Barra do Rio Azul      CNPJ: 93.539.153/0001-92         |  |                                                                                     |  |
|                                                                                                                     |                         | Obra:      Pavimentação Asfáltica                                                   |  |                                                                                     |  |
| Aprovação:                                                                                                          | Revisão :<br>01         | Local :      Estrada de Acesso a Barra do Rio Azul                                  |  |                                                                                     |  |
| -                                                                                                                   | Prancha :<br>109        | Conteúdo:      Planta de Sinalização                                                |  |                                                                                     |  |



|                                                                                                                                                                                                            |                         |                                                                                                       |                          |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br> |                          | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               | Data :<br>Dezenbro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         | CREA/RS 123168-D         |                                                                                                 |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    | Escala :<br>1:1300      | Cliente: Pref. Municipal de Barra do Rio Azul                                                         | CNPJ: 93.539.153/0001-92 |                                                                                                 |  |
| Aprovação:<br>-                                                                                                                                                                                            | Revisão :<br>01         | Obra:<br>Pavimentação Asfáltica                                                                       |                          |                                                                                                 |  |
| Prancha :<br>110                                                                                                                                                                                           |                         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |                          |                                                                                                 |  |
|                                                                                                                                                                                                            |                         | Conteúdo:<br>Planta de Sinalização                                                                    |                          |                                                                                                 |  |



DETALHE DA PINTURA CONTÍNUA DO EIXO DA PISTA

DETALHE DA TACHA

DETALHE DO TACHÃO

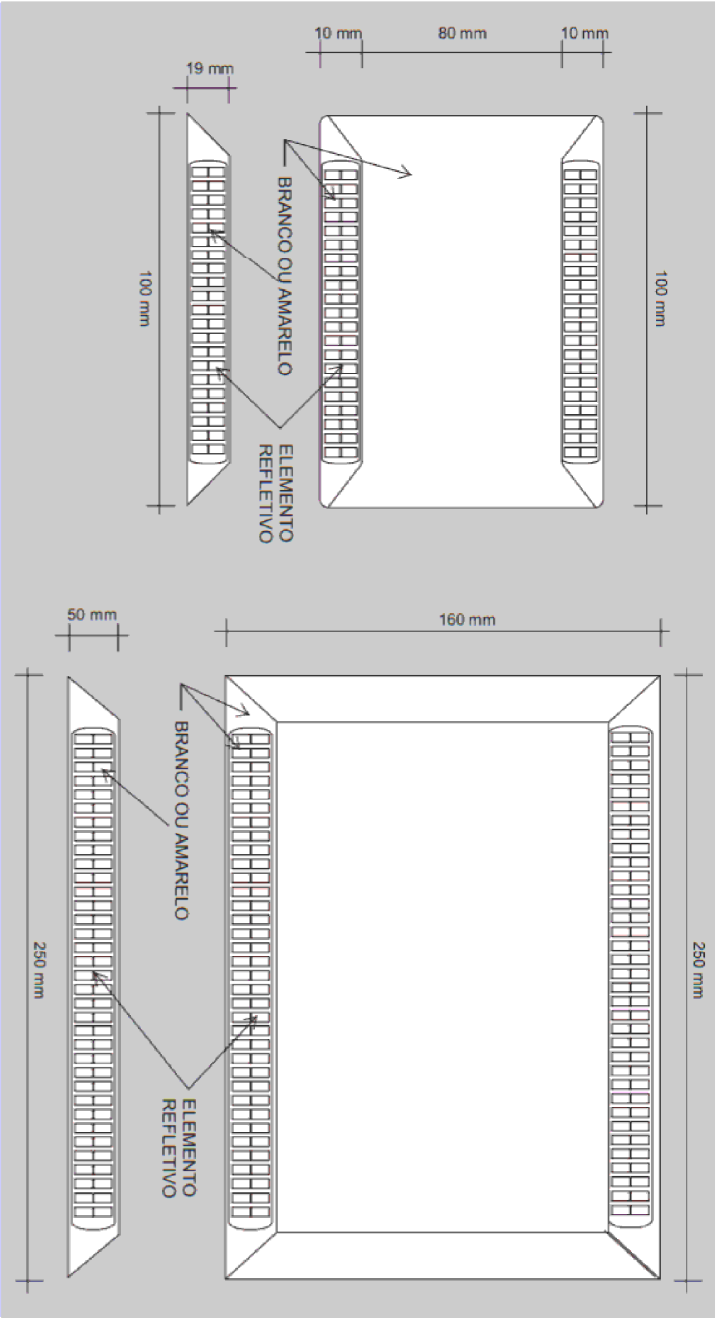
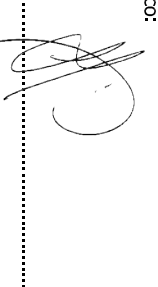
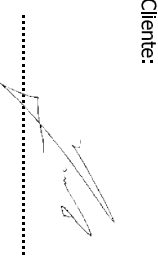


Tabela 23 – Dimensões recomendadas para LCO

| VELOCIDADE<br>V<br>(km/h) | CADÊNCIA<br>t : e | TRAÇO<br>t<br>(m) | ESPAÇAMENTO<br>e<br>(m) |
|---------------------------|-------------------|-------------------|-------------------------|
| V ≤ 60                    | 1 : 1             | 1,00              | 1,00                    |
| V > 60                    | 1 : 1             | 2,00              | 2,00                    |

|                                                                                                                                                                                                            |                         |                                                                                                       |  |                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|
| <br>Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         | Resp. Técnico:<br> |  | Cliente:<br> |  |
| Projeto :<br>Lauson Serafini                                                                                                                                                                               | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                                         |  | CREA/RS 123168-D                                                                                |  |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                    | Escala :<br>1:1300      | Cliente: Pref. Municipal de Barra do Rio Azul                                                         |  | CNPJ: 93.539.153/0001-92                                                                        |  |
| Aprovação:<br>-                                                                                                                                                                                            | Revisão :<br>01         | Obra:<br>Pavimentação Asfáltica                                                                       |  |                                                                                                 |  |
| Prancha :<br>111                                                                                                                                                                                           |                         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                                      |  |                                                                                                 |  |
|                                                                                                                                                                                                            |                         | Conteúdo:<br>Planta de Sinalização                                                                    |  |                                                                                                 |  |





| LINHA TRACEJADA DE BORDO (4,00 X 8,00m - CAD 1:2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |     |              |           |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|--------------|-----------|------|
| MODELO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | INÍCIO | FIM | EXTENSÃO (m) | ÁREA (m²) | LADO |
| <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div>&lt;/</div></div> |        |     |              |           |      |

| LINHA TRACEJADA DE EIXO (4,00 X 8,00m - CAD 1:2)                                                         |        |     |              |           |       |          |
|----------------------------------------------------------------------------------------------------------|--------|-----|--------------|-----------|-------|----------|
| MODELO                                                                                                   | INÍCIO | FIM | EXTENSÃO (m) | ÁREA (m²) | LADO  |          |
| <br>LARGURA (m)<br>0,12 | 0+800  | A   | 0+950        | 150,00    | 9,00  | Direito  |
|                                                                                                          | 3+520  | A   | 3+700        | 180,00    | 10,80 | Direito  |
|                                                                                                          | 1+000  | A   | 1+120        | 120,00    | 7,20  | Esquerdo |
|                                                                                                          | 3+800  | A   | 3+980        | 180,00    | 10,80 | Esquerdo |
|                                                                                                          | 0+950  | A   | 1+000        | 50,00     | 3,00  | Centro   |
|                                                                                                          | 3+700  | A   | 3+800        | 100,00    | 6,00  | Centro   |
|                                                                                                          |        |     |              | 46,80     |       |          |

| LINHA CONTÍNUA DE EIXO                                                                                   |        |     |              |           |          |          |
|----------------------------------------------------------------------------------------------------------|--------|-----|--------------|-----------|----------|----------|
| MODELO                                                                                                   | INÍCIO | FIM | EXTENSÃO (m) | ÁREA (m²) | LADO     |          |
| <br>LARGURA (m)<br>0,12 | 0+000  | A   | 0+800        | 800,00    | 96,00    | Direito  |
|                                                                                                          | 1+000  | A   | 1+660        | 660,00    | 79,20    | Direito  |
|                                                                                                          | 1+960  | A   | 3+520        | 1560,00   | 187,20   | Direito  |
|                                                                                                          | 3+800  | A   | 4+970        | 1170,00   | 140,40   | Direito  |
|                                                                                                          | 0+000  | A   | 0+950        | 950,00    | 114,00   | Esquerdo |
|                                                                                                          | 1+120  | A   | 1+660        | 540,00    | 64,80    | Esquerdo |
|                                                                                                          | 1+960  | A   | 3+700        | 1740,00   | 208,8000 | Esquerdo |
|                                                                                                          | 3+980  | A   | 4+970        | 990,00    | 118,80   | Esquerdo |
|                                                                                                          |        |     |              | 1009,20   |          |          |

| LINHA CONTÍNUA DE BORDO |        |       |              |           |          |          |
|-------------------------|--------|-------|--------------|-----------|----------|----------|
| MODELO                  | INÍCIO | FIM   | EXTENSÃO (m) | ÁREA (m²) | LADO     |          |
| LARGURA (m)<br>0,15     | 0+000  | A     | 0+350        | 350       | 52,500   | Direito  |
|                         | 0+370  | A     | 0+495        | 125       | 18,750   | Direito  |
|                         | 0+505  | A     | 0+915        | 410       | 61,500   | Direito  |
|                         | 0+925  | A     | 1+335        | 410       | 61,500   | Direito  |
|                         | 1+345  | A     | 1+375        | 30        | 4,500    | Direito  |
|                         | 1+385  | A     | 1+660        | 275       | 41,250   | Direito  |
|                         | 1+960  | A     | 2+320        | 360       | 54,000   | Direito  |
|                         | 2+330  | A     | 2+360        | 30        | 4,500    | Direito  |
|                         | 2+370  | A     | 2+460        | 90        | 13,500   | Direito  |
|                         | 2+470  | A     | 2+680        | 210       | 31,500   | Direito  |
|                         | 2+690  | A     | 2+975        | 285       | 42,750   | Direito  |
|                         | 2+985  | A     | 3+200        | 215       | 32,250   | Direito  |
|                         | 3+210  | A     | 3+335        | 125       | 18,750   | Direito  |
|                         | 3+345  | A     | 3+390        | 45        | 6,750    | Direito  |
|                         | 3+400  | A     | 3+420        | 20        | 3,000    | Direito  |
|                         | 3+430  | A     | 3+715        | 285       | 42,750   | Direito  |
|                         | 3+725  | A     | 3+810        | 85        | 12,750   | Direito  |
|                         | 3+820  | A     | 4+060        | 240       | 36,000   | Direito  |
|                         | 4+075  | A     | 4+175        | 100       | 15,000   | Direito  |
|                         | 4+185  | A     | 4+390        | 205       | 30,750   | Direito  |
|                         | 4+400  | A     | 4+440        | 40        | 6,000    | Direito  |
|                         | 4+455  | A     | 4+560        | 105       | 15,750   | Direito  |
|                         | 4+570  | A     | 4+705        | 135       | 20,250   | Direito  |
|                         | 4+720  | A     | 4+970        | 250       | 37,500   | Direito  |
|                         | 0+000  | A     | 0+470        | 470       | 70,500   | Esquerdo |
|                         | 0+480  | A     | 1+600        | 1120      | 168,000  | Esquerdo |
|                         | 1+615  | A     | 1+660        | 45        | 6,750    | Esquerdo |
|                         | 1+960  | A     | 2+200        | 240       | 36,000   | Esquerdo |
| 2+210                   | A      | 2+385 | 175          | 26,250    | Esquerdo |          |
| 2+395                   | A      | 2+445 | 50           | 7,500     | Esquerdo |          |
| 2+455                   | A      | 3+025 | 570          | 85,500    | Esquerdo |          |
| 3+040                   | A      | 3+420 | 380          | 57,000    | Esquerdo |          |
| 3+430                   | A      | 3+570 | 140          | 21,000    | Esquerdo |          |
| 3+580                   | A      | 3+700 | 120          | 18,000    | Esquerdo |          |
| 3+710                   | A      | 3+775 | 65           | 9,750     | Esquerdo |          |
| 3+785                   | A      | 3+875 | 90           | 13,500    | Esquerdo |          |
| 3+885                   | A      | 4+150 | 265          | 39,750    | Esquerdo |          |
| 4+160                   | A      | 4+475 | 315          | 47,250    | Esquerdo |          |
|                         |        |       |              | 1270,500  |          |          |

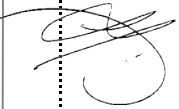
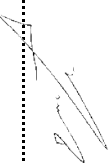
|                                                                                                                     |                         |                                                                                     |                           |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------|--|
| <br>SERVIÇOS DE ENGENHARIA       |                         | Resp. Técnico:                                                                      |                           | Cliente:                                                                            |  |
| Av. Borges de Medeiros, 615 - Sala 104<br>Getúlio Vargas - RS - CEP 99900-000<br>Fone: 54-3341 3753 / 54-99950 5335 |                         |  |                           |  |  |
| Projeto :<br>Lauson Serafini                                                                                        | Data :<br>Dezembro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini                                       |                           | CREA/RS 123166-D                                                                    |  |
| Desenho:<br>Adriano Jr.                                                                                             | Escala :<br>sem escala  | Cliente: Pref. Municipal de Barra do Rio Azul                                       | CNP.J: 93.539.153/0001-92 |                                                                                     |  |
|                                                                                                                     |                         | Obra:<br>Pavimentação Asfáltica                                                     |                           |                                                                                     |  |
| Aprovação:                                                                                                          | Revisão :<br>01         | Local :<br>Estrada de Acesso a Barra do Rio Azul                                    |                           |                                                                                     |  |
| -                                                                                                                   | Prancha :<br>113        | Conteúdo:<br>Nota de Serviço - Sinalização Horizontal                               |                           |                                                                                     |  |

IMAGEM DE SATÉLITE:

Cidade de Barra do Rio Azul/Trecho de acesso a Barra do Rio Azul/Britador Municipal

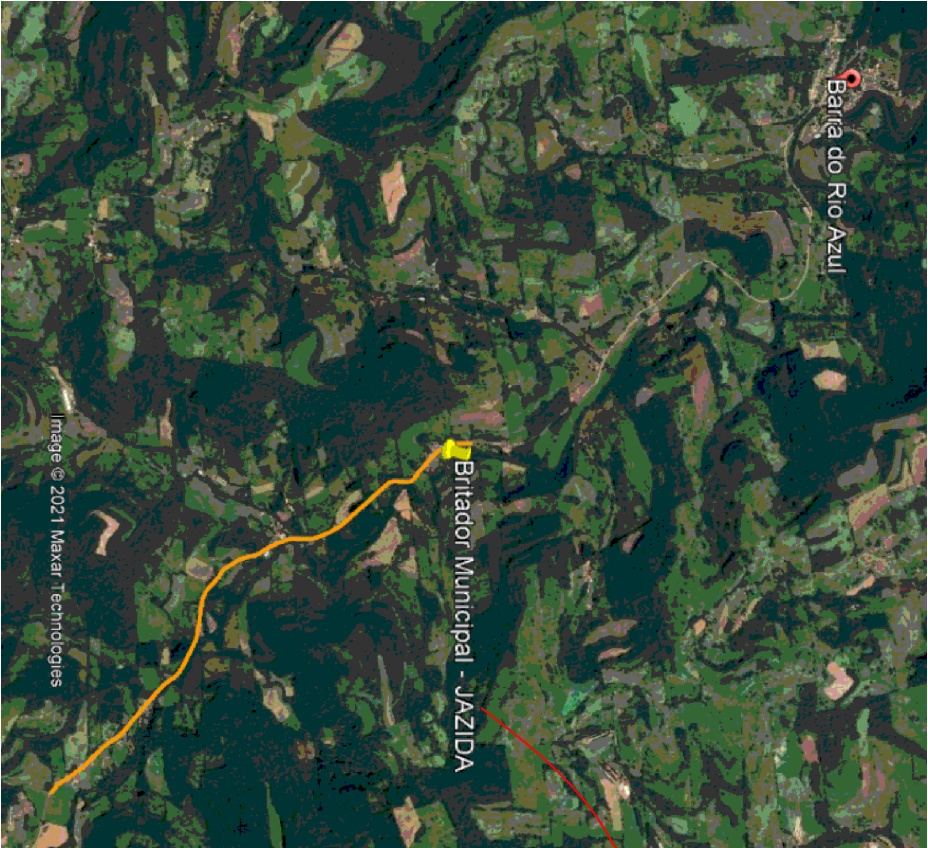


IMAGEM DE SATÉLITE:

Britador Municipal (Jazida 01)

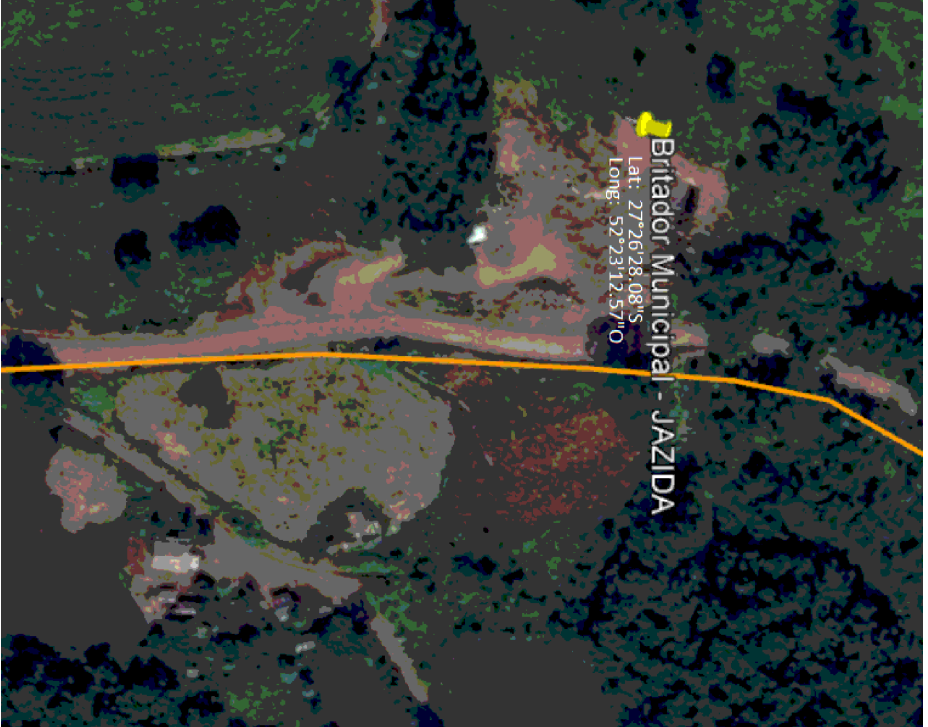
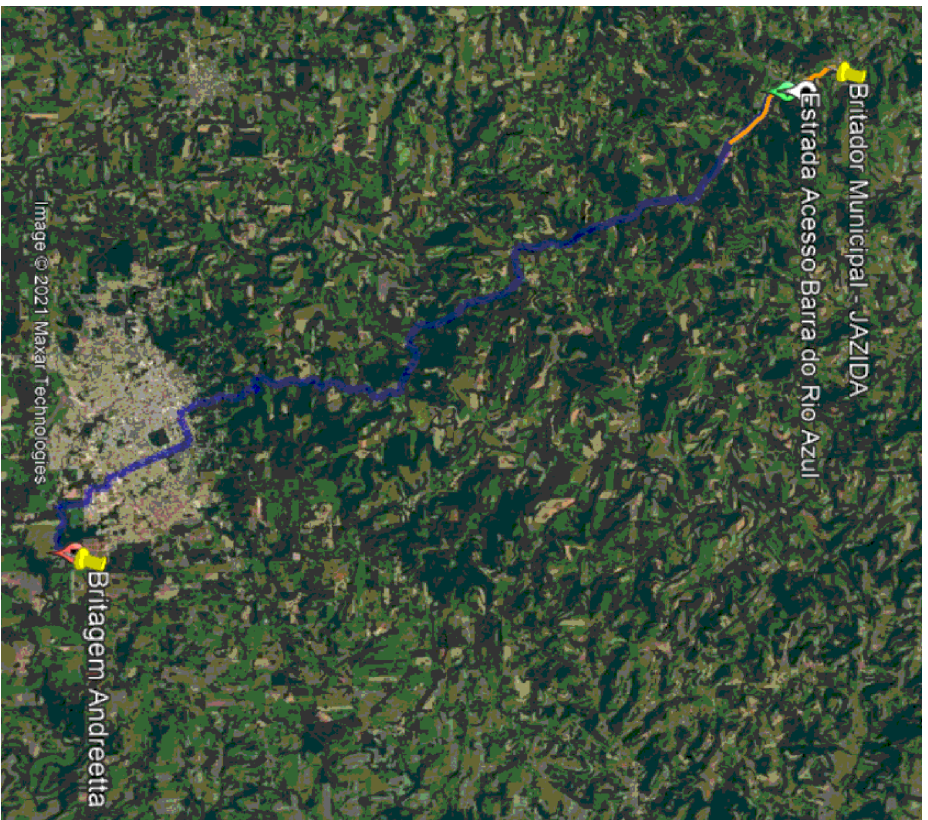


IMAGEM DE SATÉLITE:

Obra/Brigagem Andreeita



DMT=5,0KM (Revestimento Primário)

DMT=26,7KM (Pavimentada)  
DMT=12,3KM (Revestimento Primário)

OBS.: A DMT dos locais de boca-fora será de 5,0km, e estarão localizados em diversos pontos do Município, onde houver necessidade de aterro de terrenos.

|                                                                                                                                                                                                                                                                                                                                                                    |                         |                                                  |                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------|---------------------------------------------|
| <div><div><div><div><div></div><div>LOCAD</div></div><div>SERVIÇOS DE ENGENHARIA</div><div>Av. Borges de Medeiros, 615 - Sala 104</div><div>Getúlio Vargas - RS - CEP 99900-000</div><div>Fone: 54-3341 3753 / 54-99950 5335</div></div><div><div>Resp. Técnico:</div><div><div></div></div></div><div><div>Cliente:</div><div><div></div></div></div></div></div> |                         |                                                  |                                             |
| Projeto :<br>Lauson Serafini                                                                                                                                                                                                                                                                                                                                       | Data :<br>Dezenbro/2021 | Resp. Técnico :<br>Eng. Civil Lauson Serafini    | CREA/RS 123168-D                            |
| Desenho:<br>Adriano Jr.                                                                                                                                                                                                                                                                                                                                            | Escala :<br>sem escala  | Cliente: Pref. Municipal de Barra do Rio Azul    | CNPJ: 93.539.153/0001-92                    |
| Aprovação:                                                                                                                                                                                                                                                                                                                                                         | Revisão :<br>01         | Obra: Pavimentação Asfáltica                     |                                             |
| -                                                                                                                                                                                                                                                                                                                                                                  | Prancha :<br>114        | Local :<br>Estrada de Acesso a Barra do Rio Azul | Conteúdo:<br>Mapa DMT e Indicação da Jazida |