# **Каталог координат зоны размещения газопровода**

| Названия пунктов (номера точек ) | Угол поворота | Дирекцион- ный угол | Расстояние  (м) | X ( м ) | Y ( м ) |
| --- | --- | --- | --- | --- | --- |
| 1 | 298 07 53 |  |  | 509847.51 | 2317861.48 |
| 2 | 183 18 41 | 241 52 07 | 37.79 | 509829.69 | 2317828.15 |
| 3 | 159 59 07 | 238 33 26 | 67.69 | 509794.38 | 2317770.40 |
| 4 | 187 41 56 | 258 34 19 | 57.08 | 509783.07 | 2317714.45 |
| 5 | 193 25 49 | 250 52 23 | 40.59 | 509769.77 | 2317676.10 |
| 6 | 192 04 59 | 237 26 34 | 106.76 | 509712.32 | 2317586.12 |
| 7 | 087 09 56 | 225 21 35 | 120.54 | 509627.62 | 2317500.35 |
| 8 | 182 06 25 | 318 11 39 | 26.78 | 509647.58 | 2317482.50 |
| 9 | 181 33 43 | 316 05 14 | 46.96 | 509681.41 | 2317449.93 |
| 10 | 179 46 46 | 314 31 31 | 158.72 | 509792.71 | 2317336.77 |
| 11 | 182 46 44 | 314 44 44 | 81.24 | 509849.90 | 2317279.07 |
| 12 | 178 19 53 | 311 58 00 | 60.13 | 509890.11 | 2317234.36 |
| 13 | 181 53 40 | 313 38 07 | 46.91 | 509922.48 | 2317200.41 |
| 14 | 193 52 02 | 311 44 27 | 24.38 | 509938.71 | 2317182.22 |
| 15 | 182 49 32 | 297 52 25 | 15.08 | 509945.76 | 2317168.89 |
| 16 | 173 17 15 | 295 02 53 | 27.71 | 509957.49 | 2317143.79 |
| 17 | 160 12 30 | 301 45 38 | 20.35 | 509968.20 | 2317126.49 |
| 18 | 181 54 27 | 321 33 08 | 74.67 | 510026.68 | 2317080.06 |
| 19 | 181 44 29 | 319 38 41 | 135.61 | 510130.02 | 2316992.25 |
| 20 | 187 08 25 | 317 54 12 | 12.84 | 510139.55 | 2316983.64 |
| 21 | 189 20 52 | 310 45 47 | 54.17 | 510174.92 | 2316942.61 |
| 22 | 176 32 30 | 301 24 55 | 103.83 | 510229.04 | 2316854.00 |
| 23 | 158 09 39 | 304 52 25 | 63.38 | 510265.28 | 2316802.00 |
| 24 | 156 41 50 | 326 42 46 | 26.82 | 510287.70 | 2316787.28 |
| 25 | 157 20 05 | 350 00 56 | 23.99 | 510311.33 | 2316783.12 |
| 26 | 236 45 31 | 012 40 51 | 26.15 | 510336.84 | 2316788.86 |
| 27 | 192 23 32 | 315 55 21 | 15.81 | 510348.20 | 2316777.86 |
| 28 | 185 23 57 | 303 31 49 | 28.84 | 510364.13 | 2316753.82 |
| 29 | 170 28 41 | 298 07 52 | 68.40 | 510396.38 | 2316693.50 |
| 30 | 171 20 11 | 307 39 11 | 39.65 | 510420.60 | 2316662.11 |
| 31 | 140 11 29 | 316 19 01 | 61.53 | 510465.10 | 2316619.61 |
| 32 | 215 41 39 | 356 07 32 | 36.55 | 510501.57 | 2316617.14 |
| 33 | 170 27 43 | 320 25 52 | 31.60 | 510525.93 | 2316597.01 |
| 34 | 214 33 12 | 329 58 09 | 40.76 | 510561.22 | 2316576.61 |
| 35 | 197 21 38 | 295 24 57 | 138.70 | 510620.75 | 2316451.33 |
| 36 | 208 57 53 | 278 03 19 | 12.99 | 510622.57 | 2316438.47 |
| 37 | 192 54 43 | 249 05 26 | 30.54 | 510611.67 | 2316409.94 |
| 38 | 103 55 47 | 236 10 43 | 56.86 | 510580.02 | 2316362.70 |
| 39 | 190 27 24 | 312 14 56 | 54.36 | 510616.57 | 2316322.46 |
| 40 | 198 41 10 | 301 47 32 | 51.00 | 510643.44 | 2316279.11 |
| 41 | 169 05 58 | 283 06 22 | 11.95 | 510646.15 | 2316267.47 |
| 42 | 217 22 22 | 294 00 23 | 79.34 | 510678.43 | 2316194.99 |
| 43 | 096 35 55 | 256 38 01 | 62.85 | 510663.90 | 2316133.84 |
| 44 | 270 11 21 | 340 02 06 | 10.78 | 510674.03 | 2316130.16 |
| 45 | 269 49 44 | 249 50 45 | 2.00 | 510673.34 | 2316128.28 |
| 46 | 084 03 11 | 160 01 01 | 10.53 | 510663.44 | 2316131.88 |
| 47 | 269 18 11 | 255 57 50 | 0.12 | 510663.41 | 2316131.76 |
| 48 | 270 01 07 | 166 39 39 | 1.99 | 510661.47 | 2316132.22 |
| 49 | 142 37 44 | 076 38 32 | 64.32 | 510676.33 | 2316194.80 |
| 50 | 190 57 12 | 114 00 48 | 78.85 | 510644.24 | 2316266.83 |
| 51 | 161 16 16 | 103 03 36 | 11.82 | 510641.57 | 2316278.34 |
| 52 | 169 32 14 | 121 47 20 | 50.49 | 510614.97 | 2316321.26 |
| 53 | 256 04 12 | 132 15 06 | 55.74 | 510577.49 | 2316362.52 |
| 54 | 167 06 16 | 056 10 54 | 58.20 | 510609.88 | 2316410.87 |
| 55 | 151 00 01 | 069 04 37 | 29.79 | 510620.52 | 2316438.70 |
| 56 | 162 39 40 | 098 04 37 | 12.17 | 510618.81 | 2316450.75 |
| 57 | 145 26 27 | 115 24 56 | 137.77 | 510559.68 | 2316575.19 |
| 58 | 189 33 06 | 149 58 29 | 40.31 | 510524.78 | 2316595.36 |
| 59 | 144 17 21 | 140 25 23 | 31.12 | 510500.79 | 2316615.19 |
| 60 | 219 49 21 | 176 08 02 | 36.63 | 510464.24 | 2316617.66 |
| 61 | 188 39 41 | 136 18 41 | 62.41 | 510419.11 | 2316660.77 |
| 62 | 189 30 47 | 127 38 60 | 39.96 | 510394.70 | 2316692.41 |
| 63 | 174 36 50 | 118 08 13 | 68.47 | 510362.41 | 2316752.79 |
| 64 | 167 36 04 | 123 31 23 | 28.54 | 510346.65 | 2316776.58 |
| 65 | 123 14 39 | 135 55 18 | 14.50 | 510336.23 | 2316786.67 |
| 66 | 202 39 37 | 192 40 40 | 25.47 | 510311.38 | 2316781.08 |
| 67 | 203 18 17 | 170 01 03 | 24.81 | 510286.95 | 2316785.38 |
| 68 | 201 50 15 | 146 42 46 | 27.62 | 510263.86 | 2316800.54 |
| 69 | 183 27 44 | 124 52 30 | 63.83 | 510227.36 | 2316852.91 |
| 70 | 170 38 31 | 121 24 46 | 103.72 | 510173.30 | 2316941.43 |
| 71 | 172 53 44 | 130 46 15 | 53.89 | 510138.11 | 2316982.24 |
| 72 | 178 13 41 | 137 52 31 | 12.69 | 510128.70 | 2316990.75 |
| 73 | 178 06 24 | 139 38 50 | 135.54 | 510025.41 | 2317078.51 |
| 74 | 199 45 36 | 141 32 26 | 74.99 | 509966.69 | 2317125.15 |
| 75 | 186 43 44 | 121 46 50 | 20.81 | 509955.73 | 2317142.84 |
| 76 | 177 09 09 | 115 03 06 | 27.77 | 509943.97 | 2317168.00 |
| 77 | 166 09 47 | 117 53 57 | 14.79 | 509937.05 | 2317181.07 |
| 78 | 178 06 04 | 131 44 10 | 24.09 | 509921.01 | 2317199.05 |
| 79 | 181 40 09 | 133 38 07 | 46.91 | 509888.64 | 2317233.00 |
| 80 | 177 13 14 | 131 57 57 | 60.12 | 509848.44 | 2317277.70 |
| 81 | 180 13 13 | 134 44 44 | 81.20 | 509791.28 | 2317335.37 |
| 82 | 178 26 11 | 134 31 31 | 158.69 | 509680.00 | 2317448.51 |
| 83 | 177 53 56 | 136 05 19 | 46.89 | 509646.22 | 2317481.03 |
| 84 | 272 49 57 | 138 11 24 | 28.85 | 509624.72 | 2317500.26 |
| 85 | 167 54 46 | 045 21 27 | 122.43 | 509710.75 | 2317587.37 |
| 86 | 166 34 23 | 057 26 40 | 106.32 | 509767.96 | 2317676.98 |
| 87 | 172 17 49 | 070 52 17 | 40.22 | 509781.14 | 2317714.98 |
| 88 | 200 00 39 | 078 34 28 | 57.30 | 509792.49 | 2317771.14 |
| 89 | 176 41 52 | 058 33 49 | 67.99 | 509827.95 | 2317829.15 |
| 90 | 269 50 15 | 061 51 57 | 37.73 | 509845.74 | 2317862.42 |
| 91 | 152 01 42 | 332 01 42 | 2.00 | 509847.51 | 2317861.48 |
| 1 |  |  | 0.00 | 509847.51 | 2317861.48 |

Площадь: 4591 кв.м.

# **Каталог координат охранной зоны газопровода**

| Названия пунктов (номера точек ) | Угол поворота | Дирекцион- ный угол | Расстояние  (м) | X ( м ) | Y ( м ) |
| --- | --- | --- | --- | --- | --- |
| 92 | 089 59 48 |  |  | 509837.81 | 2317866.66 |
| 93 | 183 18 17 | 241 51 43 | 37.47 | 509820.14 | 2317833.62 |
| 94 | 159 58 44 | 238 33 26 | 69.32 | 509783.98 | 2317774.48 |
| 95 | 187 42 48 | 258 34 42 | 58.27 | 509772.44 | 2317717.36 |
| 96 | 193 25 06 | 250 51 54 | 38.56 | 509759.80 | 2317680.93 |
| 97 | 192 05 27 | 237 26 48 | 104.30 | 509703.68 | 2317593.02 |
| 98 | 087 10 04 | 225 21 21 | 130.94 | 509611.67 | 2317499.86 |
| 99 | 182 06 04 | 318 11 17 | 38.14 | 509640.10 | 2317474.43 |
| 100 | 181 33 34 | 316 05 13 | 46.60 | 509673.67 | 2317442.11 |
| 101 | 179 46 57 | 314 31 39 | 158.59 | 509784.88 | 2317329.05 |
| 102 | 182 46 37 | 314 44 42 | 81.00 | 509841.90 | 2317271.52 |
| 103 | 178 20 31 | 311 58 05 | 60.03 | 509882.04 | 2317226.89 |
| 104 | 181 53 18 | 313 37 34 | 46.89 | 509914.39 | 2317192.95 |
| 105 | 193 51 37 | 311 44 15 | 22.86 | 509929.61 | 2317175.89 |
| 106 | 182 49 07 | 297 52 39 | 13.47 | 509935.91 | 2317163.98 |
| 107 | 173 17 50 | 295 03 32 | 28.07 | 509947.80 | 2317138.55 |
| 108 | 160 12 34 | 301 45 41 | 22.91 | 509959.86 | 2317119.07 |
| 109 | 181 54 26 | 321 33 08 | 76.41 | 510019.70 | 2317071.56 |
| 110 | 181 46 15 | 319 38 42 | 135.25 | 510122.77 | 2316983.98 |
| 111 | 187 05 57 | 317 52 27 | 11.99 | 510131.66 | 2316975.94 |
| 112 | 189 21 47 | 310 46 30 | 52.60 | 510166.01 | 2316936.11 |
| 113 | 176 32 20 | 301 24 43 | 103.26 | 510219.83 | 2316847.98 |
| 114 | 158 09 39 | 304 52 23 | 65.83 | 510257.47 | 2316793.97 |
| 115 | 156 41 15 | 326 42 44 | 31.21 | 510283.56 | 2316776.84 |
| 116 | 157 22 16 | 350 01 29 | 28.46 | 510311.59 | 2316771.91 |
| 117 | 236 43 08 | 012 39 13 | 22.41 | 510333.46 | 2316776.82 |
| 118 | 192 24 10 | 315 56 05 | 8.67 | 510339.69 | 2316770.79 |
| 119 | 185 24 08 | 303 31 55 | 27.14 | 510354.68 | 2316748.17 |
| 120 | 170 28 46 | 298 07 47 | 68.78 | 510387.11 | 2316687.51 |
| 121 | 171 20 15 | 307 39 02 | 41.40 | 510412.40 | 2316654.73 |
| 122 | 140 11 16 | 316 18 46 | 66.35 | 510460.38 | 2316608.90 |
| 123 | 215 40 39 | 356 07 31 | 36.99 | 510497.29 | 2316606.40 |
| 124 | 170 29 50 | 320 26 51 | 28.97 | 510519.63 | 2316587.95 |
| 125 | 214 31 57 | 329 57 02 | 38.26 | 510552.75 | 2316568.79 |
| 126 | 197 20 43 | 295 25 05 | 133.59 | 510610.09 | 2316448.13 |
| 127 | 208 58 52 | 278 04 22 | 8.47 | 510611.28 | 2316439.74 |
| 128 | 192 55 04 | 249 05 30 | 26.45 | 510601.84 | 2316415.03 |
| 129 | 103 55 39 | 236 10 26 | 64.22 | 510566.09 | 2316361.68 |
| 130 | 190 27 10 | 312 14 47 | 61.96 | 510607.75 | 2316315.81 |
| 131 | 198 43 34 | 301 47 37 | 48.19 | 510633.14 | 2316274.85 |
| 132 | 169 03 12 | 283 04 03 | 11.19 | 510635.67 | 2316263.95 |
| 133 | 217 22 28 | 294 00 51 | 76.67 | 510666.87 | 2316193.92 |
| 134 | 181 48 45 | 256 38 22 | 61.28 | 510652.71 | 2316134.30 |
| 135 | 179 55 27 | 254 49 38 | 1.22 | 510652.39 | 2316133.12 |
| 136 | 094 08 55 | 254 54 10 | 6.68 | 510650.65 | 2316126.67 |
| 137 | 090 43 13 | 340 45 15 | 20.78 | 510670.27 | 2316119.82 |
| 138 | 089 58 54 | 070 02 02 | 20.00 | 510677.10 | 2316138.62 |
| 139 | 263 24 59 | 160 03 09 | 2.76 | 510674.51 | 2316139.56 |
| 140 | 142 37 27 | 076 38 09 | 57.89 | 510687.89 | 2316195.88 |
| 141 | 190 54 53 | 114 00 42 | 81.51 | 510654.72 | 2316270.34 |
| 142 | 161 18 54 | 103 05 49 | 12.58 | 510651.87 | 2316282.59 |
| 143 | 169 31 05 | 121 46 56 | 53.31 | 510623.79 | 2316327.91 |
| 144 | 256 05 08 | 132 15 51 | 48.15 | 510591.41 | 2316363.54 |
| 145 | 167 05 28 | 056 10 43 | 50.84 | 510619.71 | 2316405.78 |
| 146 | 151 03 51 | 069 05 15 | 33.87 | 510631.80 | 2316437.42 |
| 147 | 162 36 28 | 098 01 24 | 16.69 | 510629.47 | 2316453.95 |
| 148 | 145 26 51 | 115 24 55 | 142.88 | 510568.15 | 2316583.00 |
| 149 | 189 31 56 | 149 58 05 | 42.82 | 510531.08 | 2316604.43 |
| 150 | 144 19 02 | 140 26 09 | 33.74 | 510505.07 | 2316625.92 |
| 151 | 219 48 11 | 176 07 07 | 36.19 | 510468.96 | 2316628.37 |
| 152 | 188 39 46 | 136 18 56 | 57.59 | 510427.31 | 2316668.15 |
| 153 | 189 31 19 | 127 39 10 | 38.21 | 510403.97 | 2316698.40 |
| 154 | 174 35 36 | 118 07 51 | 68.08 | 510371.87 | 2316758.44 |
| 155 | 167 37 14 | 123 32 16 | 30.25 | 510355.16 | 2316783.65 |
| 156 | 123 14 29 | 135 55 02 | 21.65 | 510339.61 | 2316798.71 |
| 157 | 202 38 52 | 192 40 32 | 29.21 | 510311.11 | 2316792.30 |
| 158 | 203 18 52 | 170 01 41 | 20.33 | 510291.09 | 2316795.82 |
| 159 | 201 50 24 | 146 42 49 | 23.23 | 510271.67 | 2316808.57 |
| 160 | 183 27 37 | 124 52 24 | 61.37 | 510236.58 | 2316858.92 |
| 161 | 170 38 46 | 121 24 47 | 104.30 | 510182.22 | 2316947.93 |
| 162 | 172 51 52 | 130 46 02 | 55.47 | 510146.00 | 2316989.94 |
| 163 | 178 15 30 | 137 54 10 | 13.54 | 510135.95 | 2316999.02 |
| 164 | 178 05 56 | 139 38 39 | 135.89 | 510032.40 | 2317087.01 |
| 165 | 199 45 47 | 141 32 43 | 73.26 | 509975.03 | 2317132.57 |
| 166 | 186 43 57 | 121 46 57 | 18.25 | 509965.42 | 2317148.08 |
| 167 | 177 10 21 | 115 02 59 | 27.40 | 509953.82 | 2317172.90 |
| 168 | 166 07 16 | 117 52 38 | 16.40 | 509946.15 | 2317187.40 |
| 169 | 178 07 44 | 131 45 22 | 25.62 | 509929.09 | 2317206.51 |
| 170 | 181 39 23 | 133 37 38 | 46.93 | 509896.71 | 2317240.48 |
| 171 | 177 13 47 | 131 58 15 | 60.22 | 509856.44 | 2317285.25 |
| 172 | 180 12 57 | 134 44 29 | 81.45 | 509799.11 | 2317343.10 |
| 173 | 178 26 42 | 134 31 32 | 158.82 | 509687.74 | 2317456.33 |
| 174 | 177 52 58 | 136 04 50 | 47.24 | 509653.71 | 2317489.10 |
| 175 | 272 50 36 | 138 11 52 | 17.49 | 509640.67 | 2317500.76 |
| 176 | 167 54 17 | 045 21 16 | 112.04 | 509719.40 | 2317580.47 |
| 177 | 166 35 01 | 057 26 59 | 108.76 | 509777.92 | 2317672.15 |
| 178 | 172 17 54 | 070 51 58 | 42.25 | 509791.77 | 2317712.07 |
| 179 | 200 00 14 | 078 34 04 | 56.10 | 509802.89 | 2317767.06 |
| 180 | 176 41 54 | 058 33 50 | 66.36 | 509837.50 | 2317823.68 |
| 181 | 090 00 26 | 061 51 56 | 38.05 | 509855.44 | 2317857.23 |
| 92 |  | 151 51 30 | 19.99 | 509837.81 | 2317866.66 |

Площадь: 45910 кв.м.

Исполнил: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Трофимова М.А.

(должность, фамилия, инициалы)

Проверил \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Шахтарина Е.С.

(должность, фамилия, инициалы)

Дата: 22.09.2014