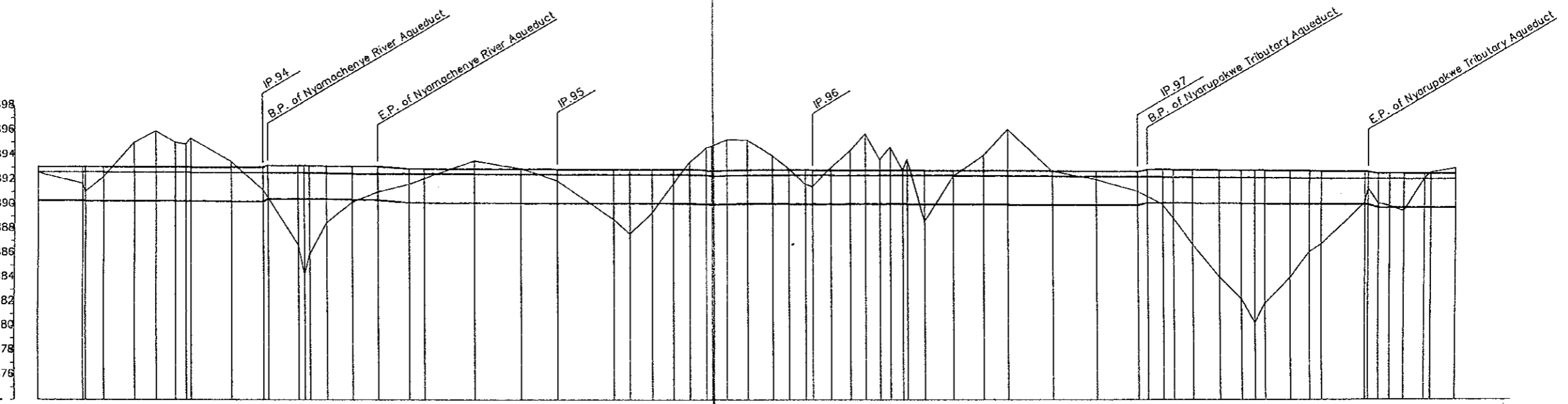


Typical Cross Section



| CANAL TYPE | HL=722.00 m T-L-7 | | 227.00 Aqueduct | | HL=1,605.00 m T-L-7 Q=14.373 m ³ /s | | HL=1,605.00 m | | 450.00 Aqueduct | | HL=1,546.00 m T-L-7 | |
|--------------------------|----------------------|----------|--------------------|----------|---|----------|---------------|----------|--------------------|----------|------------------------|----------|
| CANAL BANK ELEVATION | 893.042 | 893.022 | 893.014 | 893.000 | 892.991 | 892.982 | 892.976 | 892.956 | 892.944 | 892.922 | 892.915 | 892.899 |
| WATER SURFACE ELEVATION | 892.622 | 892.602 | 892.594 | 892.580 | 892.571 | 892.562 | 892.556 | 892.536 | 892.524 | 892.502 | 892.495 | 892.479 |
| CANAL BASE ELEVATION | 890.292 | 890.272 | 890.264 | 890.250 | 890.241 | 890.232 | 890.226 | 890.206 | 890.194 | 890.172 | 890.165 | 890.149 |
| GROUND SURFACE ELEVATION | 892.569 | 891.606 | 892.199 | 894.991 | 895.917 | 895.020 | 895.595 | 893.452 | 890.560 | 896.827 | 895.624 | 892.583 |
| REDUCED DISTANCE | 50543.00 | 50637.00 | 50679.00 | 50743.00 | 50788.00 | 50828.00 | 50893.00 | 50943.00 | 51030.00 | 51096.00 | 51163.00 | 51250.00 |
| DISTANCE | 26.00 | 83.00 | 38.00 | 64.00 | 45.00 | 40.00 | 74.00 | 84.00 | 87.00 | 77.00 | 70.00 | 87.00 |
| STATION No. | 50+543 | 50+626 | 50+679 | 50+743 | 50+788 | 50+828 | 50+902 | 50+986 | 51+073 | 51+150 | 51+220 | 51+307 |

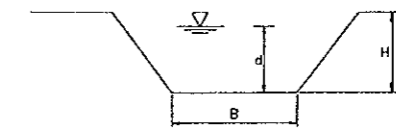
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
MAIN IRRIGATION CANAL
PROFILE OF LEFT MAIN CANAL (18/35)
(STA. No.50+543 – STA. No.53+479 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3018 |
|------|---------------|-------------|------|

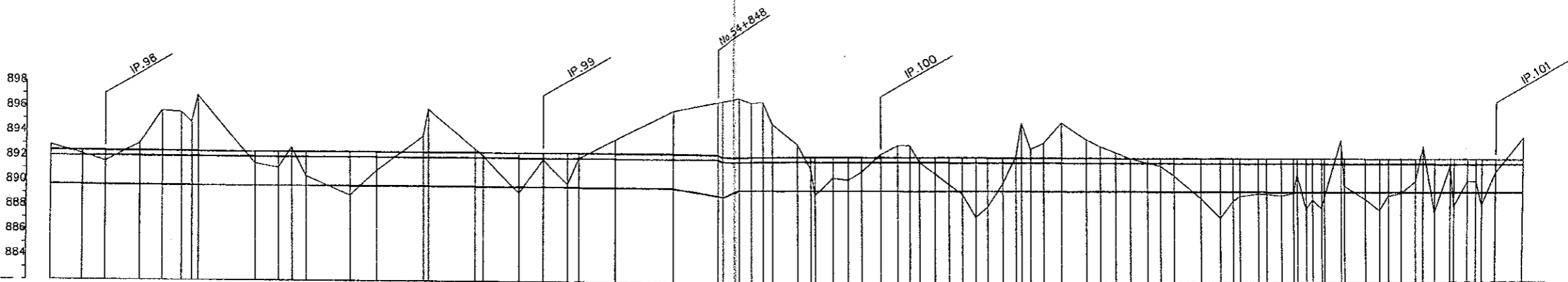
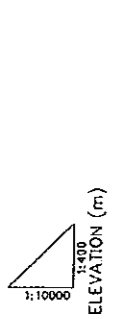
JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : L-T-7
 B = :3900
 H = :2750
 d = :2330

Canal Type : L-T-8
 B = :3900
 H = :2700
 d = :2297

Typical Cross Section



| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION | CANAL TYPE | |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|---------------|----------------------------|
| | | | | | | | HL=1,546.00 m | HL=4,531.00 m |
| 53+479 | 50.00 | 53479.00 | 892.883 | 889.689 | 892.019 | 892.439 | T-L-7 | Q=14.373 m ³ /s |
| 53+544 | 65.00 | 53544.00 | 892.181 | 889.681 | 892.011 | 892.431 | | |
| 53+591 | 47.00 | 53591.00 | 891.585 | 889.675 | 892.005 | 892.425 | | |
| 53+659 | 66.00 | 53659.00 | 893.010 | 889.666 | 891.998 | 892.418 | | |
| 53+705 | 48.00 | 53705.00 | 895.674 | 889.660 | 891.990 | 892.410 | | |
| 53+744 | 38.00 | 53744.00 | 895.549 | 889.655 | 891.985 | 892.405 | | |
| 53+778 | 71.88 | 53778.00 | 896.888 | 889.651 | 891.981 | 892.401 | | |
| 53+895 | 117.00 | 53895.00 | 891.464 | 889.636 | 891.966 | 892.386 | | |
| 53+944 | 49.00 | 53944.00 | 891.106 | 889.630 | 891.960 | 892.380 | | |
| 53+973 | 29.00 | 53973.00 | 892.726 | 889.627 | 891.957 | 892.377 | | |
| 54+001 | 28.00 | 54001.00 | 890.448 | 889.623 | 891.953 | 892.373 | | |
| 54+090 | 89.00 | 54090.00 | 888.868 | 889.612 | 891.942 | 892.362 | | |
| 54+144 | 54.00 | 54144.00 | 890.881 | 889.605 | 891.935 | 892.355 | | |
| 54+259 | 96.00 | 54259.00 | 893.666 | 889.592 | 891.922 | 892.342 | | |
| 54+315 | 16.00 | 54315.00 | 892.622 | 889.590 | 891.910 | 892.330 | | |
| 54+361 | 20.00 | 54361.00 | 892.062 | 889.588 | 891.908 | 892.328 | | |
| 54+433 | 72.00 | 54433.00 | 889.098 | 889.569 | 891.899 | 892.319 | | |
| 54+481 | 48.00 | 54481.00 | 891.798 | 889.563 | 891.893 | 892.313 | | |
| 54+530 | 49.00 | 54530.00 | 889.833 | 889.556 | 891.886 | 892.306 | | |
| 54+552 | 22.00 | 54552.00 | 891.902 | 889.554 | 891.884 | 892.304 | | |
| 54+625 | 73.00 | 54625.00 | 893.420 | 889.545 | 891.875 | 892.295 | | |
| 54+744 | 119.00 | 54744.00 | 895.719 | 889.530 | 891.860 | 892.280 | | |
| 54+836 | 92.00 | 54836.00 | 895.450 | 889.523 | 891.853 | 892.273 | | |
| 54+892 | 44.00 | 54892.00 | 896.650 | 889.519 | 891.849 | 892.269 | | |
| 54+919 | 27.00 | 54919.00 | 896.460 | 889.518 | 891.848 | 892.268 | | |
| 54+944 | 25.00 | 54944.00 | 895.518 | 889.518 | 891.848 | 892.268 | | |
| 54+964 | 20.00 | 54964.00 | 894.760 | 889.518 | 891.848 | 892.268 | | |
| 55+014 | 50.00 | 55014.00 | 893.110 | 889.517 | 891.847 | 892.267 | | |
| 55+060 | 60.00 | 55060.00 | 893.150 | 889.517 | 891.847 | 892.267 | | |
| 55+087 | 37.00 | 55087.00 | 890.410 | 889.516 | 891.846 | 892.266 | | |
| 55+117 | 30.00 | 55117.00 | 890.250 | 889.515 | 891.845 | 892.265 | | |
| 55+144 | 27.00 | 55144.00 | 890.894 | 889.515 | 891.845 | 892.265 | | |
| 55+182 | 36.00 | 55182.00 | 892.317 | 889.515 | 891.845 | 892.265 | | |
| 55+217 | 35.00 | 55217.00 | 893.020 | 889.515 | 891.845 | 892.265 | | |
| 55+241 | 24.00 | 55241.00 | 893.030 | 889.515 | 891.845 | 892.265 | | |
| 55+260 | 19.00 | 55260.00 | 891.680 | 889.515 | 891.845 | 892.265 | | |
| 55+290 | 30.00 | 55290.00 | 890.780 | 889.515 | 891.845 | 892.265 | | |
| 55+317 | 27.00 | 55317.00 | 889.890 | 889.515 | 891.845 | 892.265 | | |
| 55+344 | 27.00 | 55344.00 | 889.148 | 889.515 | 891.845 | 892.265 | | |
| 55+370 | 26.00 | 55370.00 | 887.270 | 889.515 | 891.845 | 892.265 | | |
| 55+394 | 24.00 | 55394.00 | 888.090 | 889.515 | 891.845 | 892.265 | | |
| 55+424 | 30.00 | 55424.00 | 889.970 | 889.515 | 891.845 | 892.265 | | |
| 55+482 | 77.00 | 55482.00 | 894.670 | 889.515 | 891.845 | 892.265 | | |
| 55+481 | 19.00 | 55481.00 | 892.740 | 889.515 | 891.845 | 892.265 | | |
| 55+508 | 27.00 | 55508.00 | 893.210 | 889.514 | 891.844 | 892.264 | | |
| 55+544 | 36.00 | 55544.00 | 894.849 | 889.510 | 891.840 | 892.260 | | |
| 55+595 | 51.00 | 55595.00 | 893.520 | 889.503 | 891.833 | 892.253 | | |
| 55+623 | 28.00 | 55623.00 | 892.970 | 889.499 | 891.829 | 892.249 | | |
| 55+653 | 30.00 | 55653.00 | 892.480 | 889.496 | 891.826 | 892.246 | | |
| 55+682 | 28.00 | 55682.00 | 891.980 | 889.492 | 891.822 | 892.242 | | |
| 55+717 | 35.00 | 55717.00 | 891.630 | 889.487 | 891.817 | 892.237 | | |
| 55+744 | 27.00 | 55744.00 | 891.401 | 889.484 | 891.814 | 892.234 | | |
| 55+771 | 27.00 | 55771.00 | 890.620 | 889.480 | 891.810 | 892.230 | | |
| 55+825 | 54.00 | 55825.00 | 888.820 | 889.473 | 891.803 | 892.223 | | |
| 55+865 | 40.00 | 55865.00 | 887.120 | 889.468 | 891.798 | 892.218 | | |
| 55+882 | 47.00 | 55882.00 | 886.580 | 889.465 | 891.795 | 892.215 | | |
| 55+944 | 38.00 | 55944.00 | 889.137 | 889.458 | 891.788 | 892.208 | | |
| 55+981 | 17.00 | 55981.00 | 889.090 | 889.455 | 891.785 | 892.205 | | |
| 55+991 | 30.00 | 55991.00 | 889.970 | 889.452 | 891.782 | 892.202 | | |
| 56+017 | 26.00 | 56017.00 | 889.150 | 889.448 | 891.778 | 892.198 | | |
| 56+055 | 19.00 | 56055.00 | 887.730 | 889.445 | 891.775 | 892.195 | | |
| 56+079 | 18.00 | 56079.00 | 887.180 | 889.442 | 891.772 | 892.192 | | |
| 56+116 | 73.80 | 56116.00 | 888.780 | 889.438 | 891.768 | 892.188 | | |
| 56+161 | 42.00 | 56161.00 | 888.680 | 889.433 | 891.763 | 892.183 | | |
| 56+190 | 28.00 | 56190.00 | 887.900 | 889.428 | 891.758 | 892.178 | | |
| 56+208 | 18.00 | 56208.00 | 886.330 | 889.424 | 891.754 | 892.174 | | |
| 56+233 | 25.00 | 56233.00 | 889.170 | 889.420 | 891.750 | 892.170 | | |
| 56+256 | 78.00 | 56256.00 | 892.340 | 889.416 | 891.746 | 892.166 | | |
| 56+301 | 23.00 | 56301.00 | 887.600 | 889.411 | 891.741 | 892.161 | | |
| 56+336 | 70.00 | 56336.00 | 888.790 | 889.406 | 891.736 | 892.156 | | |
| 56+366 | 27.00 | 56366.00 | 890.110 | 889.403 | 891.733 | 892.153 | | |
| 56+385 | 12.00 | 56385.00 | 886.250 | 889.400 | 891.730 | 892.150 | | |
| 56+423 | 28.00 | 56423.00 | 890.825 | 889.396 | 891.726 | 892.146 | | |
| 56+478 | 55.00 | 56478.00 | 893.630 | 889.388 | 891.718 | 892.138 | | |

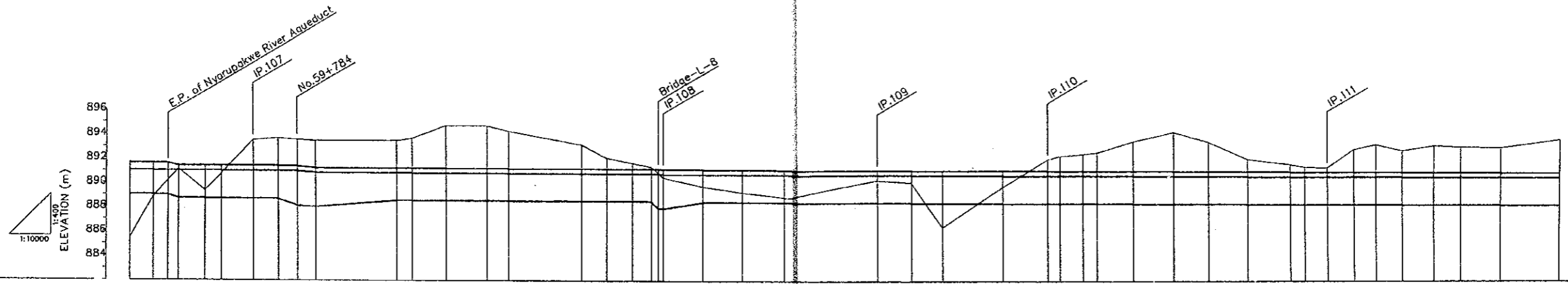
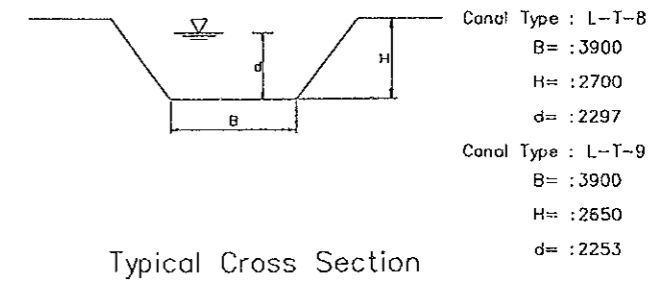
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (19/35)
 (STA. No.53+479 - STA. No.56+478 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3019 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



| CANAL TYPE | HL=268.00 m T-L-8 Q=13.739 m ³ /s | | HL=709.00 m T-L-9 Q=12.978 m ³ /s | | HL=3,357.00 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|----------|---|----------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| CANAL BANK ELEVATION | 891.695 | 891.629 | 891.195 | 891.191 | 891.181 | 891.145 | 891.138 | 891.131 | 891.129 | 891.122 | 891.013 | 890.997 | 890.985 | 890.982 | 890.976 | 890.972 | 890.952 | 890.942 | 890.932 | 890.920 | 890.917 | 890.910 | 890.903 | 890.898 | 890.891 | 890.882 | 890.875 | 890.865 | 890.850 | | | | | | | | | | | | | | | | |
| WATER SURFACE ELEVATION | 891.065 | 891.029 | 890.788 | 890.794 | 890.784 | 890.748 | 890.741 | 890.734 | 890.729 | 890.722 | 890.616 | 890.600 | 890.588 | 890.585 | 890.579 | 890.575 | 890.565 | 890.555 | 890.545 | 890.535 | 890.523 | 890.520 | 890.513 | 890.506 | 890.501 | 890.494 | 890.485 | 890.478 | 890.468 | 890.453 | | | | | | | | | | | | | | | |
| CANAL BASE ELEVATION | 888.065 | 888.029 | 888.545 | 888.541 | 888.531 | 888.495 | 888.488 | 888.481 | 888.474 | 888.467 | 888.363 | 888.347 | 888.335 | 888.332 | 888.326 | 888.322 | 888.312 | 888.302 | 888.292 | 888.282 | 888.270 | 888.267 | 888.260 | 888.253 | 888.248 | 888.241 | 888.232 | 888.225 | 888.215 | 888.200 | | | | | | | | | | | | | | | |
| GROUND SURFACE ELEVATION | 885.400 | 888.840 | 893.460 | 893.640 | 894.690 | 893.130 | 892.060 | 891.620 | 891.350 | 891.350 | 886.380 | 889.690 | 891.930 | 892.210 | 892.370 | 892.510 | 893.420 | 894.170 | 893.380 | 891.990 | 891.550 | 891.360 | 891.290 | 892.810 | 893.200 | 892.710 | 893.080 | 892.980 | 892.930 | 893.570 | | | | | | | | | | | | | | | |
| REDUCED DISTANCE | 59438.00 | 59486.00 | 59993.00 | 60025.00 | 60095.00 | 60180.00 | 60225.00 | 60373.00 | 60425.00 | 60478.00 | 60518.00 | 60543.00 | 60707.00 | 60795.00 | 61018.00 | 61089.00 | 61153.00 | 61277.00 | 61370.00 | 61396.00 | 61443.00 | 61472.00 | 61548.00 | 61630.00 | 61702.00 | 61785.00 | 61872.00 | 61902.00 | 61950.00 | 62004.00 | 62049.00 | 62102.00 | 62166.00 | 62222.00 | 62302.00 | 62421.00 | | | | | | | | | |
| DISTANCE | 4.00 | 48.00 | 30.00 | 21.00 | 54.00 | 34.00 | 66.00 | 52.00 | 41.00 | 39.00 | 170.00 | 32.00 | 70.00 | 85.00 | 45.00 | 148.00 | 52.00 | 53.00 | 40.00 | 47.00 | 29.00 | 76.00 | 82.00 | 72.00 | 83.00 | 87.00 | 30.00 | 48.00 | 54.00 | 45.00 | 53.00 | 64.00 | 56.00 | 80.00 | 119.00 | | | | | | | | | | |
| STATION No. | 59+438 | 59+486 | 59+516 | 59+537 | 59+591 | 59+625 | 59+691 | 59+743 | 59+784 | 59+823 | 59+993 | 60+025 | 60+095 | 60+180 | 60+225 | 60+373 | 60+425 | 60+478 | 60+518 | 60+543 | 60+625 | 60+707 | 60+795 | 61+018 | 61+089 | 61+153 | 61+277 | 61+370 | 61+396 | 61+443 | 61+472 | 61+548 | 61+630 | 61+702 | 61+785 | 61+872 | 61+902 | 61+950 | 62+004 | 62+049 | 62+102 | 62+166 | 62+222 | 62+302 | 62+421 |

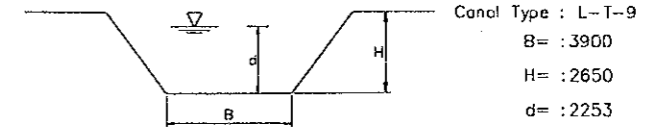
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

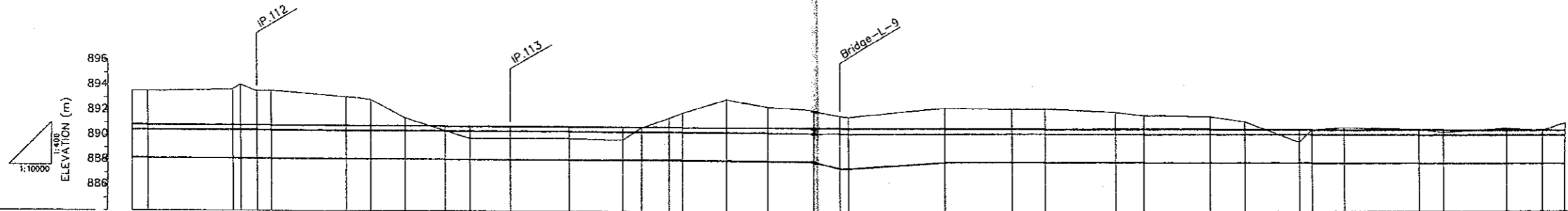
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (21/35)
 (STA. No.59+438 - STA. No.62+421 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3021 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY

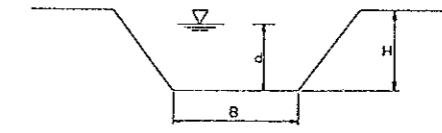


Typical Cross Section



| CANAL TYPE | HL = 3,357.00 m | | | | | | | | | | | | | | | HL = 2,305.00 m | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| CANAL BANK ELEVATION | 890.850 | 890.846 | 890.824 | 890.821 | 890.817 | 890.813 | 890.794 | 890.787 | 890.778 | 890.768 | 890.762 | 890.751 | 890.736 | 890.722 | 890.717 | 890.710 | 890.708 | 890.695 | 890.684 | 890.690 | 890.689 | 890.689 | 890.684 | 890.604 | 890.586 | 890.578 | 890.559 | 890.552 | 890.535 | 890.526 | 890.512 | 890.508 | 890.480 | 890.474 | 890.457 | 890.448 | 890.442 | |
| WATER SURFACE ELEVATION | 890.453 | 890.449 | 890.427 | 890.424 | 890.420 | 890.416 | 890.387 | 890.390 | 890.381 | 890.371 | 890.365 | 890.354 | 890.339 | 890.325 | 890.320 | 890.313 | 890.309 | 890.298 | 890.287 | 890.253 | 890.252 | 890.232 | 890.232 | 890.207 | 890.189 | 890.181 | 890.182 | 890.155 | 890.138 | 890.129 | 890.115 | 890.111 | 890.103 | 890.083 | 890.077 | 890.060 | 890.051 | 890.045 |
| CANAL BASE ELEVATION | 888.200 | 888.196 | 888.174 | 888.171 | 888.167 | 888.163 | 888.144 | 888.137 | 888.128 | 888.118 | 888.112 | 888.101 | 888.086 | 888.072 | 888.067 | 888.060 | 888.056 | 888.045 | 888.034 | 887.490 | 887.489 | 887.449 | 887.449 | 887.954 | 887.936 | 887.928 | 887.909 | 887.902 | 887.885 | 887.876 | 887.862 | 887.858 | 887.824 | 887.807 | 887.798 | 887.792 | 887.792 | 887.792 |
| GROUND SURFACE ELEVATION | 893.570 | 893.570 | 893.700 | 894.080 | 893.560 | 893.590 | 893.110 | 892.900 | 891.420 | 890.420 | 889.810 | 889.830 | 889.810 | 889.700 | 890.690 | 891.420 | 891.850 | 892.950 | 892.360 | 891.872 | 891.550 | 892.280 | 892.280 | 892.280 | 892.180 | 892.230 | 891.920 | 891.660 | 891.570 | 891.180 | 889.540 | 890.530 | 890.290 | 890.550 | 890.460 | 891.050 | 890.460 | 891.050 |
| REDUCED DISTANCE | 62421.00 | 62452.00 | 62622.00 | 62635.00 | 62673.00 | 62702.00 | 62852.00 | 62962.00 | 62972.00 | 63052.00 | 63102.00 | 63185.00 | 63302.00 | 63409.00 | 63447.00 | 63502.00 | 63528.00 | 63619.00 | 63702.00 | 63889.00 | 63907.00 | 64102.00 | 64102.00 | 64236.00 | 64302.00 | 64445.00 | 64502.00 | 64634.00 | 64702.00 | 64811.00 | 64837.00 | 64902.00 | 65053.00 | 65102.00 | 65231.00 | 65302.00 | 65346.00 | |
| DISTANCE | 119.00 | 31.00 | 170.00 | 17.00 | 34.00 | 29.00 | 150.00 | 50.00 | 70.00 | 90.00 | 50.00 | 83.00 | 117.00 | 107.00 | 36.00 | 55.00 | 27.00 | 90.00 | 83.00 | 60.00 | 18.00 | 195.00 | 134.00 | 66.00 | 143.00 | 57.00 | 132.00 | 68.00 | 109.00 | 26.00 | 65.00 | 151.00 | 49.00 | 129.00 | 71.00 | 44.00 | | |
| STATION No. | 62+421 | 62+452 | 62+622 | 62+639 | 62+673 | 62+702 | 62+852 | 62+902 | 62+972 | 63+052 | 63+102 | 63+185 | 63+302 | 63+409 | 63+447 | 63+502 | 63+528 | 63+619 | 63+702 | 63+889 | 63+907 | 64+102 | 64+236 | 64+302 | 64+445 | 64+502 | 64+634 | 64+702 | 64+811 | 64+837 | 64+902 | 65+053 | 65+102 | 65+231 | 65+302 | 65+346 | | |

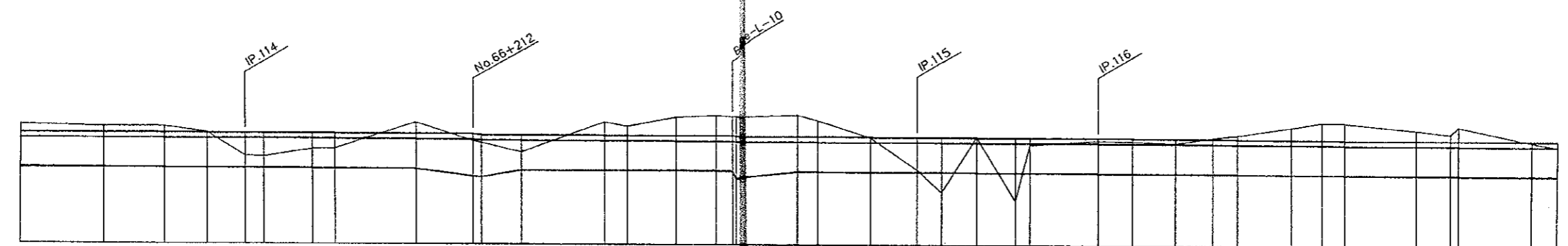
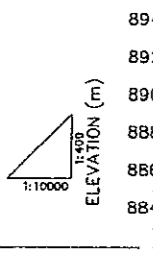
| | | | |
|--|---------------|-------------|------|
| REPUBLIC OF ZIMBABWE | | | |
| FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN AGRICULTURAL DEVELOPMENT PROJECT | | | |
| TITLE OF DRAWING MAIN IRRIGATION CANAL PROFILE OF LEFT MAIN CANAL (22/35) (STA. No.62+421 - STA. No.65+346 m) | | | |
| Date | Oct. 30, 2000 | Drawing No. | 3022 |
| JAPAN INTERNATIONAL COOPERATION AGENCY | | | |



Canal Type : L-T-9
 B = : 3900
 H = : 2650
 d = : 2253

Canal Type : L-T-10
 B = : 3900
 H = : 2650
 d = : 2248

Typical Cross Section



| CANAL TYPE | HL=2,305.00 m T-L-9 Q=12.978 m ³ /s | | | | | | | | | | HL=473.00 m T-L-10 Q=12.927 m ³ /s | | | | | | | | | | HL=2,710.00 m | | | | | | | | | | | | | | | | |
|--------------------------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| CANAL BANK ELEVATION | 890.442 | 890.422 | 890.407 | 890.396 | 890.387 | 890.382 | 890.370 | 890.365 | 890.344 | 890.288 | 890.255 | 890.235 | 890.230 | 890.218 | 890.208 | 890.204 | 890.194 | 890.154 | 890.149 | 890.137 | 890.125 | 890.119 | 890.111 | 890.101 | 890.097 | 890.081 | 890.072 | 890.062 | 890.032 | 890.025 | 890.019 | 890.002 | 889.994 | 889.984 | 889.974 | 889.968 | |
| WATER SURFACE ELEVATION | 890.045 | 890.025 | 890.010 | 889.999 | 889.990 | 889.985 | 889.973 | 889.968 | 889.947 | 889.883 | 889.853 | 889.833 | 889.828 | 889.815 | 889.806 | 889.802 | 889.792 | 889.752 | 889.747 | 889.735 | 889.723 | 889.717 | 889.709 | 889.699 | 889.695 | 889.685 | 889.670 | 889.660 | 889.630 | 889.623 | 889.617 | 889.600 | 889.592 | 889.582 | 889.572 | 889.566 | |
| CANAL BASE ELEVATION | 887.792 | 887.772 | 887.757 | 887.746 | 887.737 | 887.732 | 887.720 | 887.715 | 887.694 | 887.638 | 887.605 | 887.585 | 887.580 | 887.568 | 887.558 | 887.554 | 887.544 | 887.504 | 887.499 | 887.487 | 887.475 | 887.469 | 887.461 | 887.451 | 887.447 | 887.431 | 887.422 | 887.412 | 887.382 | 887.375 | 887.359 | 887.352 | 887.344 | 887.334 | 887.324 | 887.318 | |
| GROUND SURFACE ELEVATION | 891.060 | 890.890 | 890.910 | 890.470 | 888.680 | 888.630 | 889.200 | 889.230 | 891.220 | 889.800 | 888.980 | 891.260 | 890.940 | 891.620 | 891.790 | 891.670 | 891.380 | 891.820 | 891.380 | 890.120 | 887.690 | 886.000 | 890.180 | 885.350 | 889.550 | 889.910 | 889.870 | 889.730 | 890.980 | 891.360 | 891.320 | 890.810 | 890.320 | 890.320 | 889.880 | 889.880 | 889.550 |
| REDUCED DISTANCE | 65346.00 | 65502.00 | 65618.00 | 65702.00 | 65774.00 | 65809.00 | 65902.00 | 65945.00 | 66102.00 | 66213.00 | 66302.00 | 66459.00 | 66502.00 | 66595.00 | 66671.00 | 66703.00 | 66902.00 | 66902.00 | 67001.00 | 67088.00 | 67135.00 | 67200.00 | 67275.00 | 67302.00 | 67431.00 | 67497.00 | 67578.00 | 67649.00 | 67697.00 | 67902.00 | 67959.00 | 67992.00 | 68037.00 | 68102.00 | 68118.00 | 68254.00 | 68302.00 |
| DISTANCE | 0.00 | 156.00 | 116.00 | 84.00 | 72.00 | 35.00 | 93.00 | 43.00 | 157.00 | 13.00 | 75.00 | 157.00 | 43.00 | 93.00 | 76.00 | 33.00 | 39.00 | 99.00 | 87.00 | 47.00 | 65.00 | 75.00 | 27.00 | 129.00 | 66.00 | 81.00 | 71.00 | 48.00 | 105.00 | 57.00 | 43.00 | 135.00 | 55.00 | 16.00 | 136.00 | 48.00 | |
| STATION No. | 65+346 | 65+502 | 65+618 | 65+702 | 65+774 | 65+809 | 65+902 | 65+945 | 66+102 | 66+212 | 66+227 | 66+302 | 66+459 | 66+502 | 66+595 | 66+671 | 66+703 | 66+802 | 66+901 | 66+988 | 67+135 | 67+200 | 67+275 | 67+302 | 67+431 | 67+497 | 67+578 | 67+649 | 67+697 | 67+802 | 67+859 | 67+902 | 88+037 | 88+102 | 88+118 | 88+254 | 88+302 |

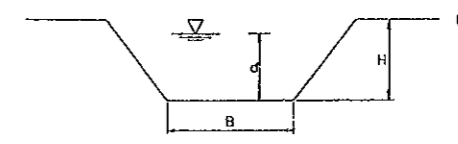
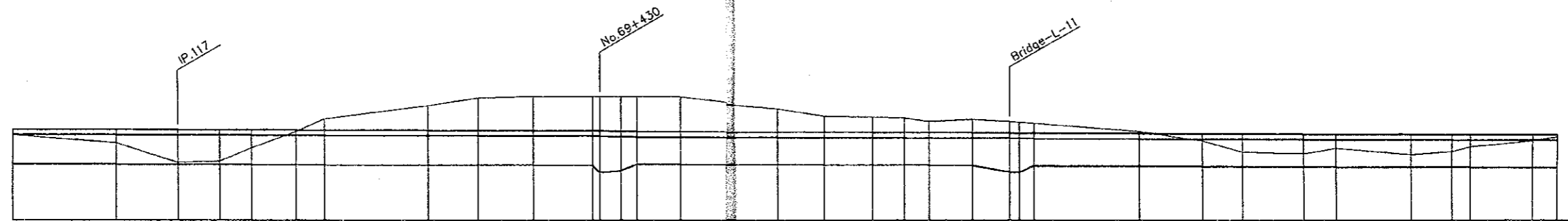
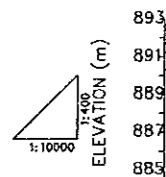
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (23/35)
 (STA. No.65+346 - STA. No.68+302 m)

Date Oct. 30, 2000 Drawing No. 3023

JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : L-T-10
 B = :3900
 H = :2650
 d = :2248
 Canal Type : L-T-11
 B = :3500
 H = :2500
 d = :2079

Typical Cross Section

| CANAL TYPE | HL=2,710.00 m T-L-10 Q=12.927 m ³ /s | | | | | | | | | | HL=785.00 m T-L-11 Q=10.657 m ³ /s | | | | | | | | | | HL=3,525.00 m | | | | | | | | | | | | | | |
|--------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| CANAL BANK ELEVATION | 889.868 | 889.942 | 889.926 | 889.916 | 889.908 | 889.897 | 889.888 | 889.884 | 889.864 | 889.851 | 889.838 | 888.823 | 888.813 | 888.765 | 888.768 | 889.757 | 889.728 | 889.716 | 889.704 | 889.696 | 889.689 | 889.679 | 889.664 | 889.632 | 889.634 | 889.608 | 889.592 | 889.583 | 889.567 | 889.559 | 889.541 | 889.531 | 889.526 | 889.511 | 889.505 |
| WATER SURFACE ELEVATION | 889.566 | 889.540 | 889.524 | 889.514 | 889.506 | 889.495 | 889.488 | 889.462 | 889.449 | 889.436 | 889.423 | 888.413 | 888.351 | 888.347 | 889.336 | 889.307 | 889.295 | 889.283 | 889.275 | 889.269 | 889.258 | 889.249 | 889.217 | 889.213 | 889.187 | 889.171 | 889.162 | 889.146 | 889.138 | 889.120 | 889.110 | 889.105 | 889.090 | 889.084 | |
| CANAL BASE ELEVATION | 887.318 | 887.292 | 887.276 | 887.266 | 887.258 | 887.247 | 887.240 | 887.214 | 887.201 | 887.188 | 887.173 | 886.163 | 886.766 | 887.268 | 887.257 | 887.228 | 887.216 | 887.204 | 887.196 | 887.190 | 887.179 | 886.664 | 886.632 | 887.134 | 887.108 | 887.092 | 887.083 | 887.067 | 887.058 | 887.041 | 887.031 | 887.025 | 887.011 | 887.005 | |
| GROUND SURFACE ELEVATION | 889.550 | 888.920 | 887.440 | 887.520 | 888.550 | 889.770 | 880.760 | 891.770 | 892.370 | 892.450 | 892.423 | 892.423 | 892.425 | 892.440 | 892.430 | 891.500 | 890.940 | 890.880 | 890.810 | 890.540 | 890.680 | 890.518 | 890.463 | 890.410 | 889.790 | 889.070 | 888.220 | 888.080 | 888.500 | 888.020 | 888.240 | 888.800 | 889.050 | 889.390 | |
| REDUCED DISTANCE | 68302.00 | 68502.00 | 68622.00 | 68702.00 | 68762.00 | 68847.00 | 68902.00 | 69102.00 | 69197.00 | 69302.00 | 69450.00 | 69450.00 | 69471.00 | 69502.00 | 69584.00 | 69812.00 | 69902.00 | 69994.00 | 70055.00 | 70102.00 | 70185.00 | 70256.00 | 70274.00 | 70302.00 | 70502.00 | 70625.00 | 70702.00 | 70821.00 | 70882.00 | 71024.00 | 71102.00 | 71137.00 | 71254.00 | 71302.00 | |
| DISTANCE | 48.00 | 200.00 | 120.00 | 80.00 | 60.00 | 85.00 | 55.00 | 200.00 | 95.00 | 105.00 | 114.00 | 41.00 | 31.00 | 82.00 | 110.00 | 90.00 | 92.00 | 61.00 | 47.00 | 83.00 | 71.00 | 18.00 | 28.00 | 200.00 | 123.00 | 77.00 | 119.00 | 61.00 | 142.00 | 78.00 | 35.00 | 117.00 | 48.00 | | |
| STATION No. | 68+302 | 68+502 | 68+622 | 68+702 | 68+762 | 68+847 | 68+902 | 69+102 | 69+197 | 69+302 | 69+416 | 69+471 | 69+502 | 69+584 | 69+694 | 69+802 | 69+894 | 70+055 | 70+102 | 70+185 | 70+256 | 70+274 | 70+302 | 70+502 | 70+625 | 70+702 | 70+821 | 70+882 | 71+024 | 71+102 | 71+137 | 71+254 | 71+302 | | |

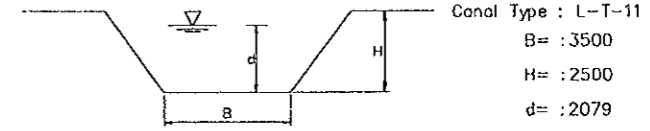
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

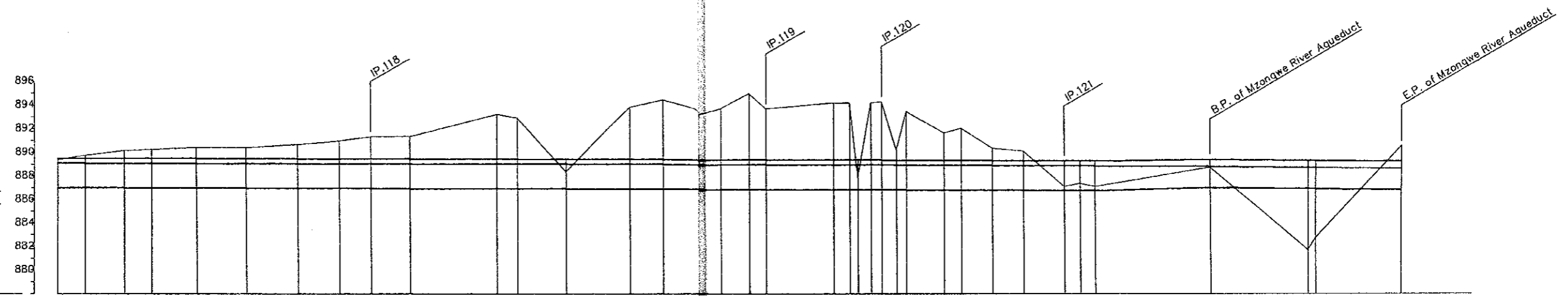
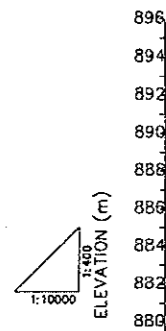
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (24/35)
 (STA. No.68+302 - STA. No.71+302 m)

Date Oct. 30, 2000 Drawing No. 3024

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section



| CANAL TYPE | HL=3,525.00 m T-L-11 Q=10.650 m ³ /s | | | | | | | | | | | | | | | HL=405.00 m Aqueduct | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| CANAL BANK ELEVATION | 889.505 | 889.497 | 889.487 | 889.479 | 889.465 | 889.453 | 889.438 | 889.427 | 889.418 | 889.407 | 889.394 | 889.378 | 889.364 | 889.347 | 889.337 | 889.316 | 889.308 | 889.303 | 889.285 | 889.280 | 889.278 | 889.274 | 889.271 | 889.267 | 889.265 | 889.254 | 889.249 | 889.241 | 889.232 | 889.221 | 889.217 | 889.213 | 889.176 | | | |
| WATER SURFACE ELEVATION | 889.084 | 889.076 | 889.066 | 889.058 | 889.045 | 889.032 | 889.017 | 889.006 | 888.997 | 888.986 | 888.963 | 888.957 | 888.943 | 888.926 | 888.916 | 888.895 | 888.887 | 888.882 | 888.864 | 888.859 | 888.857 | 888.853 | 888.850 | 888.846 | 888.844 | 888.833 | 888.828 | 888.820 | 888.811 | 888.800 | 888.798 | 888.792 | 888.760 | 888.655 | 888.658 | 888.576 |
| CANAL BASE ELEVATION | 887.005 | 886.997 | 886.987 | 886.979 | 886.966 | 886.953 | 886.938 | 886.927 | 886.918 | 886.907 | 886.884 | 886.878 | 886.864 | 886.847 | 886.837 | 886.816 | 886.808 | 886.803 | 886.785 | 886.780 | 886.778 | 886.774 | 886.771 | 886.767 | 886.765 | 886.754 | 886.749 | 886.741 | 886.732 | 886.721 | 886.717 | 886.713 | 886.650 | 886.665 | 886.658 | 886.776 |
| GROUND SURFACE ELEVATION | 889.390 | 889.760 | 890.160 | 890.280 | 890.440 | 890.380 | 890.640 | 890.960 | 891.300 | 891.300 | 893.130 | 892.840 | 888.310 | 893.730 | 894.360 | 893.640 | 894.870 | 893.580 | 894.080 | 894.860 | 894.860 | 894.080 | 894.080 | 894.170 | 893.380 | 891.560 | 891.950 | 890.300 | 890.020 | 887.070 | 887.320 | 887.070 | 888.710 | 886.865 | 886.720 | 890.490 |
| REDUCED DISTANCE | 71302.00 | 71359.00 | 71442.00 | 71502.00 | 71597.00 | 71702.00 | 71813.00 | 71902.00 | 71970.00 | 72052.00 | 72236.00 | 72281.00 | 72387.00 | 72521.00 | 72592.00 | 72759.00 | 72821.00 | 72858.00 | 73000.00 | 73033.00 | 73050.00 | 73078.00 | 73101.00 | 73132.00 | 73153.00 | 73234.00 | 73271.00 | 73337.00 | 73402.00 | 73489.00 | 73522.00 | 73554.00 | 73799.00 | 74008.00 | 74024.00 | 74204.00 |
| DISTANCE | 48.00 | 57.00 | 83.00 | 60.00 | 95.00 | 105.00 | 111.00 | 89.00 | 68.00 | 82.00 | 184.00 | 45.00 | 106.00 | 134.00 | 71.00 | 58.00 | 62.00 | 37.00 | 142.00 | 33.00 | 17.00 | 28.00 | 23.00 | 31.00 | 21.00 | 81.00 | 37.00 | 66.00 | 65.00 | 87.00 | 33.00 | 32.00 | 245.00 | 209.00 | 16.00 | 180.00 |
| STATION No. | 71+302 | 71+359 | 71+442 | 71+502 | 71+597 | 71+702 | 71+813 | 71+902 | 71+970 | 72+052 | 72+236 | 72+281 | 72+387 | 72+521 | 72+592 | 72+759 | 72+821 | 72+858 | 73+000 | 73+033 | 73+050 | 73+078 | 73+101 | 73+132 | 73+153 | 73+234 | 73+271 | 73+337 | 73+402 | 73+489 | 73+522 | 73+554 | 73+799 | 74+008 | 74+024 | 74+204 |

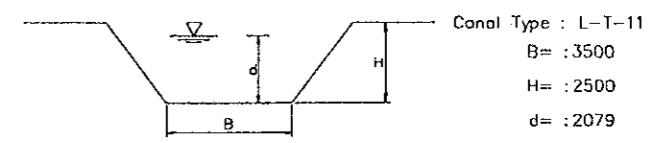
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

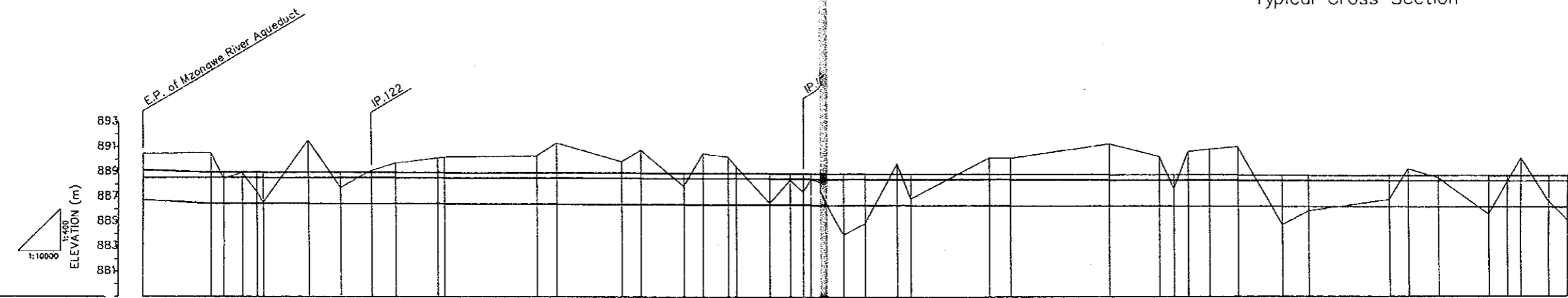
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (25/35)
 (STA. No.71+302 - STA. No.74+204 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3025 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section



| CANAL TYPE | T-L-11 Q=10.650 m ³ /s HL=3,988.00 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| CANAL BANK ELEVATION | 889.176 | 888.990 | 888.976 | 888.971 | 888.967 | 888.954 | 888.945 | 888.937 | 888.931 | 888.918 | 888.903 | 888.893 | 888.888 | 888.872 | 888.867 | 888.855 | 888.850 | 888.844 | 888.842 | 888.833 | 888.828 | 888.823 | 888.808 | 888.802 | 888.794 | 888.790 | 888.770 | 888.764 | 888.738 | 888.725 | 888.722 | 888.716 | 888.712 | 888.705 | 888.694 | 888.687 | 888.666 | 888.661 | 888.653 | 888.640 | 888.635 | 888.631 | 888.624 | 888.620 |
| WATER SURFACE ELEVATION | 888.576 | 888.559 | 888.555 | 888.550 | 888.548 | 888.543 | 888.524 | 888.518 | 888.510 | 888.499 | 888.487 | 888.472 | 888.467 | 888.446 | 888.434 | 888.429 | 888.423 | 888.421 | 888.412 | 888.407 | 888.402 | 888.387 | 888.381 | 888.373 | 888.369 | 888.343 | 888.349 | 888.337 | 888.325 | 888.304 | 888.301 | 888.297 | 888.291 | 888.284 | 888.273 | 888.266 | 888.245 | 888.240 | 888.232 | 888.219 | 888.214 | 888.210 | 888.203 | 888.199 |
| CANAL BASE ELEVATION | 886.776 | 886.480 | 886.476 | 886.471 | 886.466 | 886.454 | 886.445 | 886.437 | 886.431 | 886.418 | 886.408 | 886.393 | 886.388 | 886.367 | 886.355 | 886.350 | 886.344 | 886.342 | 886.333 | 886.328 | 886.323 | 886.308 | 886.302 | 886.294 | 886.290 | 886.264 | 886.270 | 886.258 | 886.225 | 886.222 | 886.216 | 886.212 | 886.205 | 886.194 | 886.187 | 886.166 | 886.161 | 886.153 | 886.140 | 886.135 | 886.131 | 886.124 | 886.120 | |
| GROUND SURFACE ELEVATION | 890.490 | 890.540 | 888.490 | 888.930 | 886.468 | 891.510 | 887.730 | 889.120 | 889.710 | 890.190 | 888.480 | 890.240 | 891.280 | 889.800 | 887.840 | 890.450 | 890.150 | 888.410 | 888.310 | 888.310 | 888.380 | 883.960 | 884.850 | 889.840 | 886.830 | 890.040 | 890.080 | 891.190 | 890.180 | 887.610 | 890.570 | 890.760 | 890.970 | 884.740 | 885.850 | 886.770 | 889.210 | 888.500 | 885.580 | 888.200 | 890.040 | 886.600 | 885.120 | |
| REDUCED DISTANCE | 74204.00 | 74339.00 | 74365.00 | 74404.00 | 74432.00 | 74538.00 | 74604.00 | 74668.00 | 74717.00 | 74806.00 | 75004.00 | 75043.00 | 75173.00 | 75212.00 | 75298.00 | 75337.00 | 75387.00 | 75404.00 | 75470.00 | 75511.00 | 75537.00 | 75665.00 | 75710.00 | 75776.00 | 75804.00 | 75961.00 | 76004.00 | 76204.00 | 76303.00 | 76333.00 | 76361.00 | 76404.00 | 76461.00 | 76549.00 | 76603.00 | 76766.00 | 76804.00 | 76865.00 | 76966.00 | 77003.00 | 77029.00 | 77084.00 | 77121.00 | |
| DISTANCE | 180.00 | 135.00 | 26.00 | 39.00 | 28.00 | 93.00 | 66.00 | 64.00 | 49.00 | 87.00 | 186.00 | 39.00 | 130.00 | 39.00 | 86.00 | 38.00 | 50.00 | 66.00 | 41.00 | 28.00 | 61.00 | 45.00 | 66.00 | 28.00 | 157.00 | 43.00 | 200.00 | 99.00 | 30.00 | 28.00 | 43.00 | 57.00 | 88.00 | 54.00 | 163.00 | 38.00 | 61.00 | 101.00 | 37.00 | 26.00 | 55.00 | 37.00 | | |
| STATION No. | 74+204 | 74+339 | 74+365 | 74+404 | 74+432 | 74+538 | 74+604 | 74+668 | 74+717 | 74+804 | 75+004 | 75+043 | 75+173 | 75+212 | 75+298 | 75+337 | 75+387 | 75+404 | 75+470 | 75+511 | 75+537 | 75+665 | 75+710 | 75+776 | 75+804 | 75+961 | 76+004 | 76+204 | 76+303 | 76+333 | 76+361 | 76+404 | 76+461 | 76+549 | 76+603 | 76+766 | 76+804 | 76+865 | 76+966 | 77+003 | 77+029 | 77+084 | 77+121 | |

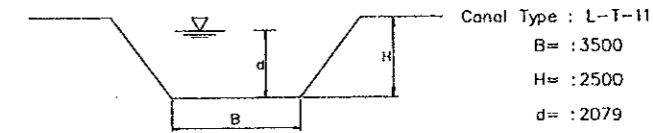
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (26/35)
 (STA. No.74+204 - STA. No.77+121 m)

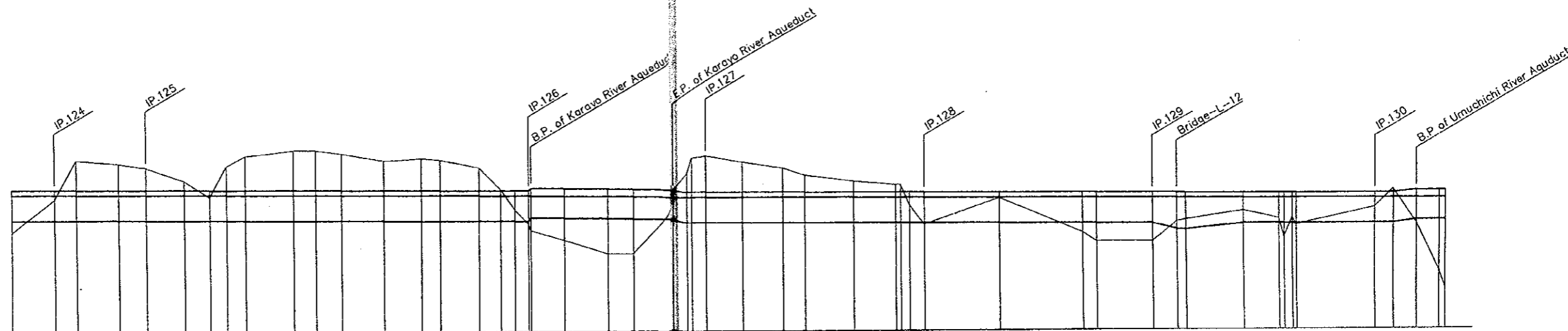
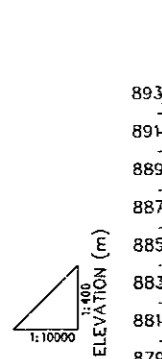
| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3026 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : L-T-11
 B = :3500
 H = :2500
 d = :2079

Typical Cross Section



| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION | CANAL TYPE | |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|--|---------------------------------|
| | | | | | | | HL=3,988.00 m T-L-11 Q=10.650 m ³ /s Aqueduct | HL=336.00 m L-11 Aqueduct |
| 77+121 | 37.00 | 77121.00 | 885.120 | 886.120 | 888.199 | 888.620 | L-11 | HL=1,041.00 m Aqueduct |
| 77+208 | 87.00 | 77208.00 | 887.840 | 886.108 | 888.187 | 888.608 | | |
| 77+253 | 45.00 | 77253.00 | 891.020 | 886.102 | 888.181 | 888.602 | L-11 | HL=469.00 m Aqueduct |
| 77+341 | 88.00 | 77341.00 | 890.740 | 886.091 | 888.170 | 888.591 | | |
| 77+398 | 57.00 | 77398.00 | 890.410 | 886.084 | 888.163 | 888.584 | L-11 | HL=469.00 m Aqueduct |
| 77+477 | 79.00 | 77477.00 | 889.320 | 886.074 | 888.153 | 888.574 | | |
| 77+530 | 53.00 | 77530.00 | 888.000 | 886.067 | 888.146 | 888.567 | L-11 | HL=469.00 m Aqueduct |
| 77+565 | 35.00 | 77565.00 | 890.520 | 886.062 | 888.141 | 888.562 | | |
| 77+603 | 38.00 | 77603.00 | 891.320 | 886.057 | 888.136 | 888.557 | L-11 | HL=469.00 m Aqueduct |
| 77+703 | 100.00 | 77703.00 | 891.790 | 886.044 | 888.123 | 888.544 | | |
| 77+749 | 46.00 | 77749.00 | 891.770 | 886.038 | 888.117 | 888.538 | L-11 | HL=469.00 m Aqueduct |
| 77+803 | 54.00 | 77803.00 | 891.510 | 886.031 | 888.110 | 888.531 | | |
| 77+890 | 87.00 | 77890.00 | 890.930 | 886.020 | 888.099 | 888.520 | L-11 | HL=469.00 m Aqueduct |
| 77+966 | 76.00 | 77966.00 | 891.110 | 886.010 | 888.089 | 888.510 | | |
| 78+003 | 37.00 | 78003.00 | 891.010 | 886.005 | 888.084 | 888.505 | L-11 | HL=469.00 m Aqueduct |
| 78+083 | 80.00 | 78083.00 | 890.390 | 885.995 | 888.074 | 888.495 | | |
| 78+129 | 46.00 | 78129.00 | 888.620 | 885.989 | 888.068 | 888.489 | L-11 | HL=469.00 m Aqueduct |
| 78+158 | 29.00 | 78158.00 | 886.950 | 885.985 | 888.064 | 888.485 | | |
| 78+192 | 58.00 | 78192.00 | 885.260 | 885.980 | 888.060 | 888.480 | L-11 | HL=469.00 m Aqueduct |
| 78+261 | 69.00 | 78261.00 | 884.420 | 885.973 | 888.053 | 888.473 | | |
| 78+350 | 89.00 | 78350.00 | 883.330 | 885.966 | 888.046 | 888.466 | L-11 | HL=469.00 m Aqueduct |
| 78+403 | 53.00 | 78403.00 | 883.360 | 885.959 | 888.039 | 888.459 | | |
| 78+573 | 11.00 | 78573.00 | 882.480 | 885.952 | 888.032 | 888.452 | L-11 | HL=469.00 m Aqueduct |
| 78+603 | 30.00 | 78603.00 | 891.280 | 885.945 | 888.025 | 888.445 | | |
| 78+679 | 76.00 | 78679.00 | 890.770 | 885.938 | 888.018 | 888.438 | L-11 | HL=469.00 m Aqueduct |
| 78+760 | 81.00 | 78760.00 | 890.280 | 885.931 | 888.011 | 888.431 | | |
| 78+804 | 44.00 | 78804.00 | 889.690 | 885.924 | 888.004 | 888.424 | L-11 | HL=469.00 m Aqueduct |
| 78+902 | 98.00 | 78902.00 | 889.210 | 885.917 | 887.997 | 888.417 | | |
| 79+019 | 19.00 | 79019.00 | 888.980 | 885.910 | 887.990 | 888.410 | L-11 | HL=469.00 m Aqueduct |
| 79+050 | 31.00 | 79050.00 | 885.640 | 885.903 | 887.983 | 888.403 | | |
| 79+204 | 154.00 | 79204.00 | 887.810 | 885.762 | 887.841 | 888.262 | L-11 | HL=469.00 m Aqueduct |
| 79+375 | 171.00 | 79375.00 | 884.990 | 885.740 | 887.819 | 888.240 | | |
| 79+404 | 29.00 | 79404.00 | 884.240 | 885.736 | 887.815 | 888.236 | L-11 | HL=469.00 m Aqueduct |
| 79+519 | 115.00 | 79519.00 | 884.240 | 885.721 | 887.800 | 888.221 | | |
| 79+569 | 50.00 | 79569.00 | 885.820 | 885.709 | 887.794 | 888.209 | L-11 | HL=469.00 m Aqueduct |
| 79+587 | 18.00 | 79587.00 | 886.010 | 885.177 | 887.762 | 888.177 | | |
| 79+703 | 116.00 | 79703.00 | 886.710 | 885.668 | 887.747 | 888.168 | L-11 | HL=469.00 m Aqueduct |
| 79+766 | 74.00 | 79766.00 | 886.950 | 885.635 | 887.714 | 888.135 | | |
| 79+812 | 16.00 | 79812.00 | 885.950 | 885.630 | 887.709 | 888.130 | L-11 | HL=469.00 m Aqueduct |
| 79+972 | 160.00 | 79972.00 | 886.400 | 885.630 | 887.709 | 888.130 | | |
| 80+009 | 37.00 | 80009.00 | 886.400 | 885.640 | 887.703 | 888.303 | L-11 | HL=469.00 m Aqueduct |
| 80+056 | 47.00 | 80056.00 | 886.350 | 885.635 | 887.698 | 888.298 | | |
| 80+103 | 42.00 | 80103.00 | 886.350 | 885.635 | 887.698 | 888.298 | L-11 | HL=469.00 m Aqueduct |

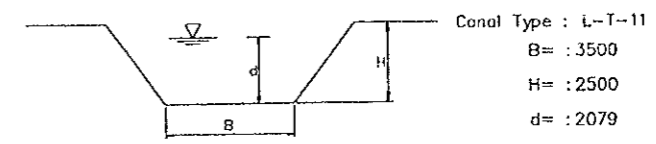
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

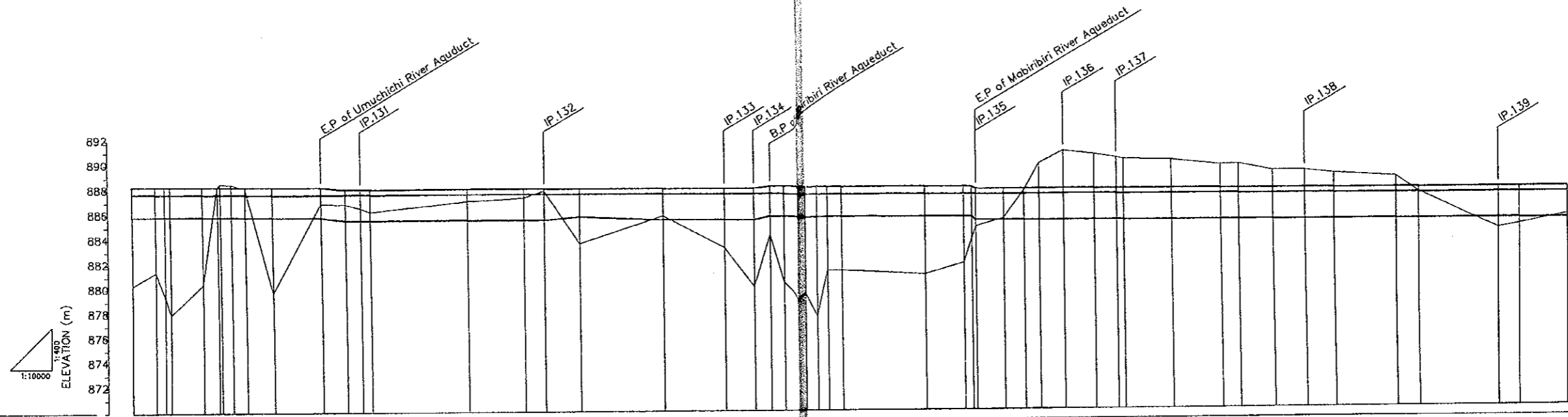
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (27/35)
 (STA. No.77+121 – STA. No.80+115 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3027 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section



| CANAL TYPE | HL=448.00 m | | HL=910.00 m | | HL=470.00 m | | HL=2,780.00 m | |
|-------------------------|-----------------------------------|---------|-------------|----------|-------------|---------|---------------|---------|
| CANAL BANK ELEVATION | Aqueduct | | | | | | | |
| WATER SURFACE ELEVATION | T-L-11 Q=10.650 m ³ /s | | | | | | | |
| 80+115 | 888.285 | 887.685 | 886.350 | 80115.00 | 885.885 | 887.409 | 885.908 | 886.009 |
| 80+161 | 888.271 | 887.671 | 881.410 | 80161.00 | 885.871 | 887.402 | 885.902 | 886.002 |
| 80+192 | 888.262 | 887.662 | 877.986 | 80192.00 | 885.862 | 887.393 | 885.893 | 886.002 |
| 80+259 | 888.241 | 887.641 | 880.400 | 80259.00 | 885.841 | 887.384 | 885.874 | 886.002 |
| 80+287 | 888.230 | 887.630 | 888.300 | 80287.00 | 885.830 | 887.375 | 885.863 | 886.002 |
| 80+320 | 888.223 | 887.623 | 888.430 | 80320.00 | 885.823 | 887.366 | 885.854 | 886.002 |
| 80+348 | 888.214 | 887.614 | 888.170 | 80348.00 | 885.814 | 887.357 | 885.845 | 886.002 |
| 80+404 | 888.197 | 887.597 | 879.720 | 80404.00 | 885.797 | 887.348 | 885.836 | 886.002 |
| 80+504 | 888.187 | 887.587 | 886.860 | 80504.00 | 885.787 | 887.339 | 885.827 | 886.002 |
| 80+553 | 887.982 | 887.561 | 886.790 | 80553.00 | 885.482 | 887.330 | 885.818 | 886.002 |
| 80+583 | 887.978 | 887.557 | 886.490 | 80583.00 | 885.478 | 887.321 | 885.809 | 886.002 |
| 80+603 | 887.975 | 887.554 | 886.190 | 80603.00 | 885.475 | 887.312 | 885.800 | 886.002 |
| 80+803 | 887.950 | 887.529 | 886.970 | 80803.00 | 885.450 | 887.303 | 885.791 | 886.002 |
| 80+918 | 887.935 | 887.514 | 887.240 | 80918.00 | 885.435 | 887.294 | 885.782 | 886.002 |
| 80+959 | 887.930 | 887.509 | 887.770 | 80959.00 | 885.430 | 887.285 | 885.773 | 886.002 |
| 81+031 | 887.921 | 887.500 | 883.520 | 81031.00 | 885.700 | 887.276 | 885.764 | 886.002 |
| 81+200 | 887.899 | 887.478 | 885.740 | 81200.00 | 885.399 | 887.267 | 885.755 | 886.002 |
| 81+321 | 887.884 | 887.463 | 883.140 | 81321.00 | 885.384 | 887.258 | 885.746 | 886.002 |
| 81+381 | 887.876 | 887.455 | 880.010 | 81381.00 | 885.376 | 887.249 | 885.737 | 886.002 |
| 81+414 | 888.051 | 887.451 | 884.150 | 81414.00 | 885.651 | 887.240 | 885.728 | 886.002 |
| 81+442 | 888.043 | 887.443 | 880.350 | 81442.00 | 885.643 | 887.231 | 885.719 | 886.002 |
| 81+557 | 888.009 | 887.409 | 877.610 | 81557.00 | 885.609 | 887.222 | 885.710 | 886.002 |
| 81+581 | 888.002 | 887.402 | 881.310 | 81581.00 | 885.602 | 887.213 | 885.701 | 886.002 |
| 81+610 | 887.993 | 887.393 | 881.270 | 81610.00 | 885.593 | 887.204 | 885.692 | 886.002 |
| 81+781 | 887.943 | 887.343 | 880.920 | 81781.00 | 885.543 | 887.195 | 885.683 | 886.002 |
| 81+858 | 887.920 | 887.320 | 881.550 | 81858.00 | 885.520 | 887.186 | 885.674 | 886.002 |
| 81+884 | 887.915 | 887.315 | 884.780 | 81884.00 | 885.515 | 887.177 | 885.665 | 886.002 |
| 81+940 | 887.728 | 887.307 | 885.360 | 81940.00 | 885.507 | 887.168 | 885.656 | 886.002 |
| 81+981 | 887.722 | 887.301 | 887.540 | 81981.00 | 885.501 | 887.159 | 885.647 | 886.002 |
| 82+012 | 887.718 | 887.297 | 889.710 | 82012.00 | 885.492 | 887.150 | 885.638 | 886.002 |
| 82+061 | 887.712 | 887.291 | 880.730 | 82061.00 | 885.484 | 887.141 | 885.629 | 886.002 |
| 82+122 | 887.704 | 887.283 | 880.430 | 82122.00 | 885.475 | 887.132 | 885.620 | 886.002 |
| 82+187 | 887.689 | 887.276 | 888.300 | 82187.00 | 885.466 | 887.123 | 885.611 | 886.002 |
| 82+278 | 887.684 | 887.263 | 889.940 | 82278.00 | 885.457 | 887.114 | 885.602 | 886.002 |
| 82+381 | 887.671 | 887.250 | 889.550 | 82381.00 | 885.448 | 887.105 | 885.593 | 886.002 |
| 82+418 | 887.666 | 887.245 | 889.610 | 82418.00 | 885.439 | 887.096 | 885.584 | 886.002 |
| 82+489 | 887.657 | 887.236 | 889.040 | 82489.00 | 885.430 | 887.087 | 885.575 | 886.002 |
| 82+553 | 887.649 | 887.228 | 889.070 | 82553.00 | 885.421 | 887.078 | 885.566 | 886.002 |
| 82+610 | 887.641 | 887.220 | 888.790 | 82610.00 | 885.412 | 887.069 | 885.557 | 886.002 |
| 82+735 | 887.625 | 887.204 | 888.500 | 82735.00 | 885.403 | 887.060 | 885.548 | 886.002 |
| 82+780 | 887.620 | 887.199 | 887.250 | 82780.00 | 885.394 | 887.051 | 885.539 | 886.002 |
| 82+940 | 887.599 | 887.178 | 884.320 | 82940.00 | 885.385 | 887.042 | 885.530 | 886.002 |
| 82+981 | 887.584 | 887.173 | 884.600 | 82981.00 | 885.376 | 887.033 | 885.521 | 886.002 |
| 83+077 | 887.581 | 887.180 | 885.370 | 83077.00 | 885.367 | 887.024 | 885.512 | 886.002 |

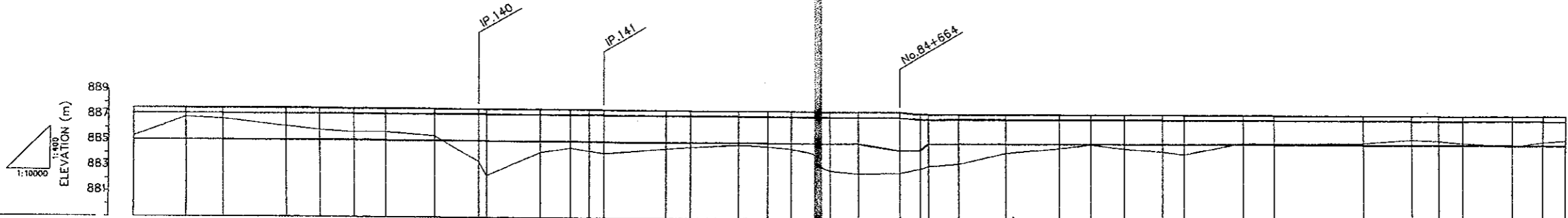
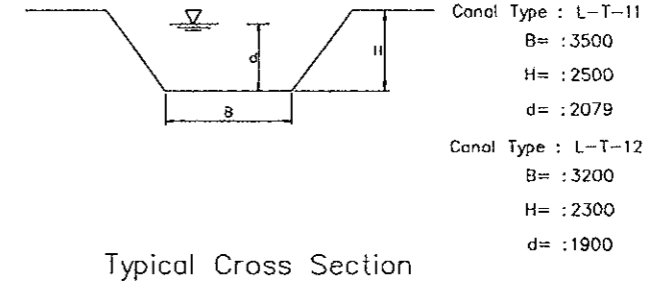
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
MAIN IRRIGATION CANAL
PROFILE OF LEFT MAIN CANAL (28/35)
(STA. No.80+115 - STA. No.83+077 m)

Date | Oct. 30, 2000 | Drawing No. | 3028

JAPAN INTERNATIONAL COOPERATION AGENCY



| CANAL TYPE | HL=2,780.00 m T-L-11 Q=10.650 m ³ /s | | | | | | | | | | | | | | | | | HL=4,086.00 m T-L-12 Q=8.379 m ³ /s | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|
| CANAL BANK ELEVATION | 887.581 | 887.568 | 887.558 | 887.542 | 887.534 | 887.525 | 887.516 | 887.504 | 887.495 | 887.485 | 887.477 | 887.470 | 887.465 | 887.461 | 887.453 | 887.445 | 887.439 | 887.432 | 887.427 | 887.420 | 887.413 | 887.405 | 887.395 | 887.388 | 887.371 | 887.219 | 887.206 | 887.198 | 887.186 | 887.172 | 887.164 | 887.156 | 887.146 | 887.140 | 887.125 | 887.117 | 887.094 | 887.081 | 887.074 | 887.066 | 887.056 | 887.048 | 887.042 |
| WATER SURFACE ELEVATION | 887.160 | 887.147 | 887.137 | 887.121 | 887.113 | 887.104 | 887.095 | 887.083 | 887.072 | 887.066 | 887.056 | 887.049 | 887.044 | 887.040 | 887.038 | 887.024 | 887.018 | 887.018 | 887.006 | 886.999 | 886.992 | 886.974 | 886.967 | 886.956 | 886.956 | 886.908 | 886.866 | 886.798 | 886.786 | 886.772 | 886.764 | 886.756 | 886.746 | 886.740 | 886.725 | 886.717 | 886.694 | 886.681 | 886.674 | 886.666 | 886.656 | 886.648 | 886.642 |
| CANAL BASE ELEVATION | 885.081 | 885.068 | 885.058 | 885.042 | 885.034 | 885.025 | 885.015 | 885.004 | 884.993 | 884.983 | 884.977 | 884.970 | 884.965 | 884.961 | 884.945 | 884.939 | 884.927 | 884.920 | 884.913 | 884.905 | 884.895 | 884.895 | 884.888 | 884.871 | 884.871 | 884.819 | 884.806 | 884.808 | 884.802 | 884.794 | 884.786 | 884.785 | 884.784 | 884.780 | 884.774 | 884.768 | 884.755 | 884.748 | 884.742 | 884.735 | 884.728 | 884.722 | |
| GROUND SURFACE ELEVATION | 885.370 | 886.870 | 886.740 | 886.140 | 885.840 | 885.590 | 885.680 | 885.380 | 884.430 | 884.560 | 884.110 | 884.460 | 884.250 | 884.060 | 884.430 | 884.300 | 884.780 | 884.640 | 884.480 | 884.340 | 884.280 | 884.540 | 884.888 | 882.600 | 882.950 | 883.120 | 883.340 | 884.170 | 884.540 | 884.830 | 884.510 | 884.270 | 884.060 | 884.970 | 884.960 | 884.960 | 885.220 | 885.130 | 884.950 | 884.660 | 885.040 | 885.190 | |
| REDUCED DISTANCE | 83077.00 | 83181.00 | 83256.00 | 83381.00 | 83448.00 | 83517.00 | 83561.00 | 83679.00 | 83766.00 | 83781.00 | 83865.00 | 83944.00 | 83981.00 | 84010.00 | 84133.00 | 84181.00 | 84275.00 | 84333.00 | 84381.00 | 84523.00 | 84581.00 | 84654.00 | 84705.00 | 84722.00 | 84781.00 | 84876.00 | 84981.00 | 85042.00 | 85107.00 | 85181.00 | 85225.00 | 85343.00 | 85406.00 | 85581.00 | 85679.00 | 85733.00 | 85781.00 | 85878.00 | 85938.00 | 85981.00 | | | |
| DISTANCE | 96.00 | 104.00 | 75.00 | 125.00 | 67.00 | 69.00 | 64.00 | 96.00 | 87.00 | 104.00 | 59.00 | 37.00 | 29.00 | 123.00 | 48.00 | 94.00 | 58.00 | 48.00 | 79.00 | 58.00 | 83.00 | 17.00 | 59.00 | 95.00 | 105.00 | 61.00 | 65.00 | 74.00 | 44.00 | 118.00 | 63.00 | 175.00 | 98.00 | 54.00 | 48.00 | 97.00 | 60.00 | 43.00 | | | | | |
| STATION No. | 83+077 | 83+181 | 83+256 | 83+381 | 83+448 | 83+517 | 83+581 | 83+679 | 83+766 | 83+781 | 83+865 | 83+944 | 83+981 | 84+010 | 84+133 | 84+181 | 84+275 | 84+333 | 84+381 | 84+523 | 84+581 | 84+664 | 84+705 | 84+722 | 84+781 | 84+876 | 84+981 | 85+042 | 85+107 | 85+181 | 85+225 | 85+343 | 85+406 | 85+581 | 85+679 | 85+733 | 85+781 | 85+878 | 85+938 | 85+981 | | | |

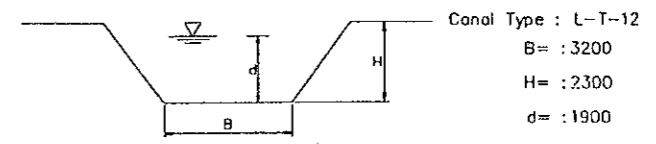
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (29/35)
 (STA. No.83+077 – STA. No.85+981 m)

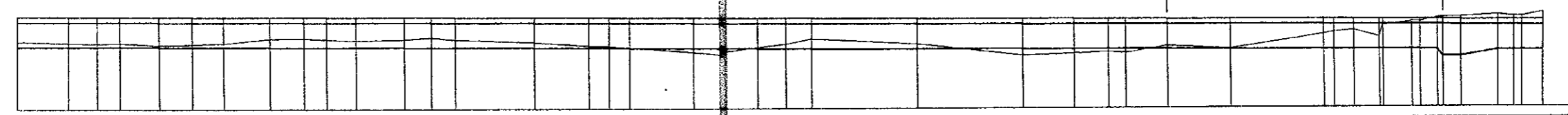
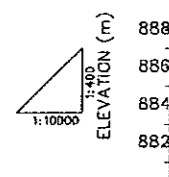
| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3029 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : L-T-12
 B = : 3200
 H = : 2300
 d = : 1900

Typical Cross Section



| CANAL TYPE | HL=4,086.00 m T-L-12 Q=8.379 m ³ /s | | HL=193.00 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| CANAL BANK ELEVATION | 887.042 | 887.029 | 887.022 | 887.016 | 887.006 | 886.998 | 886.990 | 886.978 | 886.970 | 886.964 | 886.957 | 886.945 | 886.938 | 886.932 | 886.912 | 886.899 | 886.894 | 886.889 | 886.872 | 886.848 | 886.841 | 886.834 | 886.808 | 886.782 | 886.769 | 886.761 | 886.756 | 886.746 | 886.730 | 886.707 | 886.704 | 886.699 | 886.692 | 886.685 | 886.685 | 886.679 | 886.671 | 886.661 | 886.606 | | |
| WATER SURFACE ELEVATION | 886.642 | 886.629 | 886.622 | 886.616 | 886.606 | 886.598 | 886.590 | 886.578 | 886.570 | 886.564 | 886.557 | 886.545 | 886.538 | 886.532 | 886.512 | 886.499 | 886.494 | 886.489 | 886.472 | 886.448 | 886.441 | 886.434 | 886.408 | 886.382 | 886.369 | 886.361 | 886.356 | 886.346 | 886.330 | 886.307 | 886.304 | 886.299 | 886.292 | 886.285 | 886.285 | 886.279 | 886.271 | 886.261 | 886.206 | | |
| CANAL BASE ELEVATION | 884.742 | 884.729 | 884.722 | 884.716 | 884.706 | 884.698 | 884.690 | 884.678 | 884.670 | 884.664 | 884.657 | 884.645 | 884.638 | 884.632 | 884.612 | 884.599 | 884.594 | 884.589 | 884.572 | 884.548 | 884.541 | 884.534 | 884.508 | 884.482 | 884.469 | 884.461 | 884.456 | 884.446 | 884.430 | 884.407 | 884.404 | 884.399 | 884.392 | 884.385 | 884.385 | 884.379 | 884.371 | 884.361 | 884.306 | | |
| GROUND SURFACE ELEVATION | 885.160 | 885.060 | 884.970 | 885.040 | 884.860 | 884.920 | 885.000 | 885.340 | 885.380 | 885.280 | 885.190 | 885.270 | 885.420 | 885.250 | 885.040 | 884.750 | 884.730 | 884.640 | 884.250 | 884.630 | 884.890 | 885.270 | 884.900 | 884.010 | 884.130 | 884.270 | 884.160 | 884.690 | 884.450 | 885.560 | 885.720 | 885.680 | 885.258 | 886.470 | 886.580 | 886.580 | 886.580 | 887.010 | 886.980 | 886.970 | 887.200 |
| REDUCED DISTANCE | 85981.00 | 86092.00 | 86137.00 | 86181.00 | 86256.00 | 86320.00 | 86381.00 | 86471.00 | 86537.00 | 86581.00 | 86637.00 | 86730.00 | 86781.00 | 86828.00 | 86981.00 | 87085.00 | 87123.00 | 87181.00 | 87287.00 | 87478.00 | 87532.00 | 87581.00 | 87781.00 | 87981.00 | 88080.00 | 88147.00 | 88181.00 | 88261.00 | 88361.00 | 88560.00 | 88581.00 | 88618.00 | 88658.00 | 88726.00 | 88781.00 | 88825.00 | 88893.00 | 88924.00 | 88940.00 | 88981.00 | |
| DISTANCE | 0.00 | 101.00 | 55.00 | 44.00 | 75.00 | 64.00 | 61.00 | 90.00 | 66.00 | 44.00 | 56.00 | 93.00 | 51.00 | 47.00 | 153.00 | 104.00 | 38.00 | 38.00 | 126.00 | 97.00 | 54.00 | 49.00 | 200.00 | 200.00 | 99.00 | 67.00 | 34.00 | 80.00 | 120.00 | 179.00 | 21.00 | 37.00 | 70.00 | 78.00 | 70.00 | 34.00 | 68.00 | 31.00 | 76.00 | 41.00 | |
| STATION No. | 85+981 | 86+082 | 86+137 | 86+181 | 86+256 | 86+320 | 86+381 | 86+471 | 86+537 | 86+581 | 86+637 | 86+730 | 86+781 | 86+828 | 86+981 | 87+085 | 87+123 | 87+161 | 87+287 | 87+478 | 87+532 | 87+581 | 87+781 | 87+981 | 88+080 | 88+147 | 88+181 | 88+261 | 88+381 | 88+560 | 88+581 | 88+618 | 88+658 | 88+726 | 88+781 | 88+825 | 88+893 | 88+924 | 88+940 | 88+981 | |

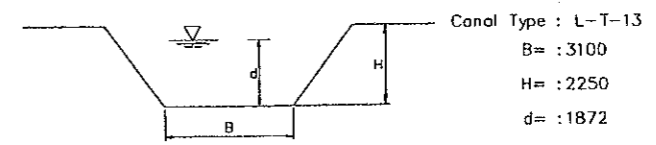
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (30/35)
 (STA. No.85+981 - STA. No.88+981 m)

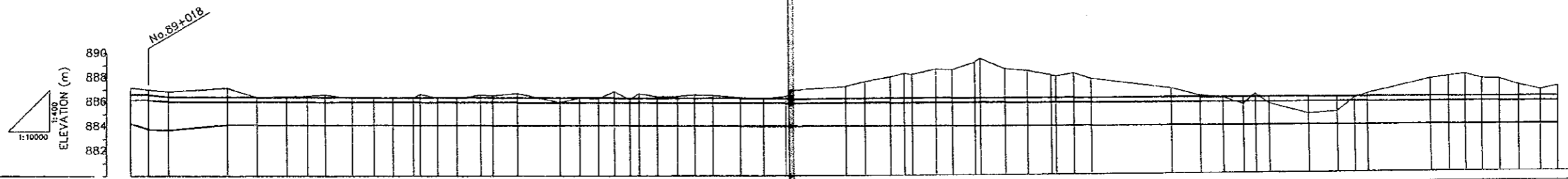
Date Oct. 30, 2000 Drawing No. 3030

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section

Canal Type : L-T-13
 B = : 3100
 H = : 2250
 d = : 1872



| CANAL TYPE | T-L-13 Q=7.960 m ³ /s | | | | | | | | | | HL=3,708.00 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| CANAL BANK ELEVATION | 886.505 | 886.612 | 886.451 | 886.412 | 886.404 | 886.397 | 886.391 | 886.386 | 886.379 | 886.373 | 886.368 | 886.362 | 886.355 | 886.350 | 886.344 | 886.341 | 886.334 | 886.323 | 886.318 | 886.313 | 886.308 | 886.304 | 886.302 | 886.297 | 886.291 | 886.287 | 886.282 | 886.275 | 886.259 | 886.252 | 886.238 | 886.233 | 886.227 | 886.223 | 886.215 | 886.210 | 886.204 | 886.196 | 886.190 | 886.184 | 886.178 | 886.174 | 886.152 | 886.145 | 886.139 | 886.133 | 886.130 | 886.126 | 886.116 | 886.108 | 886.104 | 886.100 | 886.083 | 886.079 | 886.074 | 886.070 | 886.065 | 886.060 | 886.054 | 886.050 | |
| WATER SURFACE ELEVATION | 886.206 | 886.201 | 886.050 | 886.034 | 886.026 | 886.019 | 886.013 | 886.008 | 886.001 | 885.995 | 885.990 | 885.984 | 885.977 | 885.972 | 885.966 | 885.963 | 885.956 | 885.945 | 885.940 | 885.935 | 885.930 | 885.926 | 885.924 | 885.919 | 885.913 | 885.909 | 885.904 | 885.897 | 885.891 | 885.884 | 885.860 | 885.855 | 885.849 | 885.845 | 885.843 | 885.837 | 885.832 | 885.825 | 885.818 | 885.812 | 885.806 | 885.800 | 885.796 | 885.774 | 885.767 | 885.761 | 885.755 | 885.752 | 885.748 | 885.738 | 885.730 | 885.726 | 885.722 | 885.705 | 885.701 | 885.696 | 885.692 | 885.687 | 885.682 | 885.676 | 885.672 |
| CANAL BASE ELEVATION | 884.306 | 883.812 | 883.751 | 884.162 | 884.154 | 884.147 | 884.141 | 884.136 | 884.129 | 884.123 | 884.118 | 884.112 | 884.105 | 884.100 | 884.094 | 884.091 | 884.084 | 884.073 | 884.068 | 884.063 | 884.058 | 884.054 | 884.052 | 884.047 | 884.041 | 884.037 | 884.032 | 884.025 | 884.019 | 884.012 | 883.988 | 883.983 | 883.977 | 883.973 | 883.971 | 883.965 | 883.960 | 883.955 | 883.946 | 883.940 | 883.933 | 883.929 | 883.924 | 883.902 | 883.895 | 883.889 | 883.883 | 883.880 | 883.876 | 883.866 | 883.858 | 883.854 | 883.850 | 883.833 | 883.829 | 883.824 | 883.820 | 883.815 | 883.810 | 883.804 | 883.800 |
| GROUND SURFACE ELEVATION | 887.200 | 887.043 | 886.870 | 887.160 | 886.410 | 886.480 | 886.530 | 886.620 | 886.330 | 886.320 | 886.410 | 886.280 | 886.370 | 886.280 | 886.570 | 886.510 | 886.720 | 885.970 | 886.310 | 886.270 | 886.840 | 886.200 | 886.030 | 886.430 | 886.440 | 886.580 | 886.340 | 886.340 | 886.250 | 886.460 | 887.200 | 887.590 | 887.950 | 888.250 | 888.140 | 888.570 | 888.500 | 888.590 | 888.400 | 888.400 | 888.960 | 888.170 | 887.710 | 886.920 | 886.290 | 886.130 | 886.560 | 886.410 | 886.600 | 884.740 | 884.920 | 885.980 | 886.350 | 887.520 | 887.710 | 887.890 | 887.540 | 887.450 | 886.890 | 886.570 | 886.880 |
| REDUCED DISTANCE | 88981.00 | 89016.00 | 89059.00 | 89181.00 | 89240.00 | 89301.00 | 89343.00 | 89381.00 | 89438.00 | 89484.00 | 89524.00 | 89581.00 | 89617.00 | 89657.00 | 89706.00 | 89731.00 | 89781.00 | 89868.00 | 89908.00 | 89947.00 | 89981.00 | 90013.00 | 90032.00 | 90069.00 | 90110.00 | 90144.00 | 90181.00 | 90238.00 | 90286.00 | 90334.00 | 90517.00 | 90556.00 | 90608.00 | 90635.00 | 90652.00 | 90700.00 | 90734.00 | 90792.00 | 90843.00 | 90888.00 | 90945.00 | 90981.00 | 91016.00 | 91181.00 | 91239.00 | 91286.00 | 91328.00 | 91352.00 | 91379.00 | 91458.00 | 91518.00 | 91554.00 | 91581.00 | 91710.00 | 91746.00 | 91781.00 | 91815.00 | 91851.00 | 91889.00 | 91934.00 | 91969.00 |
| DISTANCE | 41.00 | 37.00 | 41.00 | 122.00 | 59.00 | 61.00 | 42.00 | 38.00 | 57.00 | 46.00 | 40.00 | 43.00 | 36.00 | 40.00 | 49.00 | 25.00 | 50.00 | 87.00 | 40.00 | 38.00 | 34.00 | 32.00 | 19.00 | 37.00 | 41.00 | 34.00 | 37.00 | 57.00 | 48.00 | 136.00 | 39.00 | 52.00 | 27.00 | 17.00 | 48.00 | 34.00 | 51.00 | 45.00 | 45.00 | 45.00 | 36.00 | 35.00 | 165.00 | 58.00 | 47.00 | 42.00 | 24.00 | 27.00 | 79.00 | 60.00 | 36.00 | 27.00 | 129.00 | 36.00 | 35.00 | 34.00 | 36.00 | 38.00 | 45.00 | 35.00 | |
| STATION No. | 88+981 | 89+018 | 89+059 | 89+181 | 89+240 | 89+301 | 89+343 | 89+381 | 89+438 | 89+484 | 89+524 | 89+581 | 89+617 | 89+657 | 89+706 | 89+731 | 89+781 | 89+868 | 89+908 | 89+947 | 89+981 | 90+013 | 90+032 | 90+069 | 90+110 | 90+144 | 90+181 | 90+238 | 90+286 | 90+334 | 90+517 | 90+556 | 90+608 | 90+635 | 90+652 | 90+700 | 90+734 | 90+792 | 90+843 | 90+888 | 90+945 | 90+981 | 91+016 | 91+181 | 91+239 | 91+286 | 91+328 | 91+352 | 91+379 | 91+458 | 91+518 | 91+554 | 91+581 | 91+710 | 91+746 | 91+781 | 91+815 | 91+851 | 91+889 | 91+934 | 91+969 |

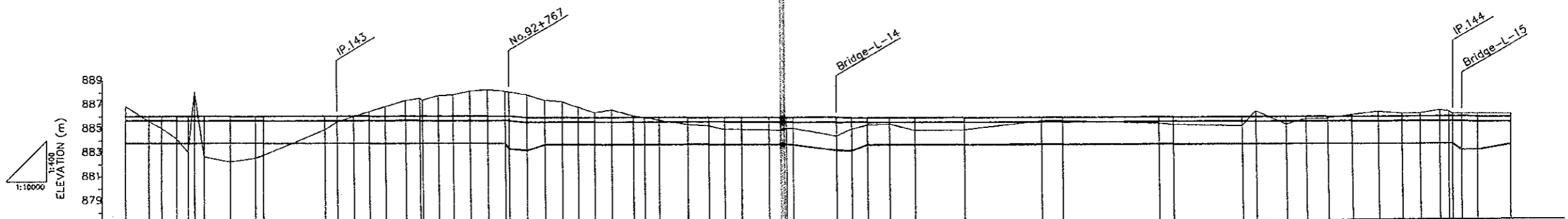
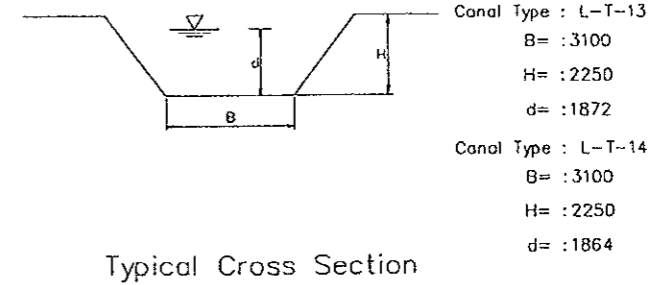
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

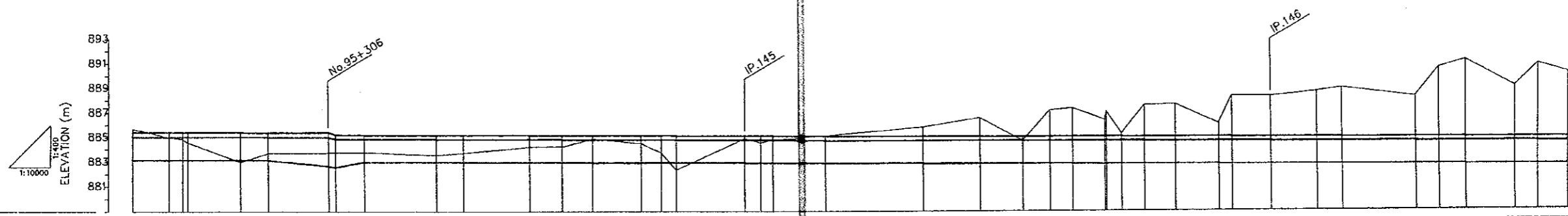
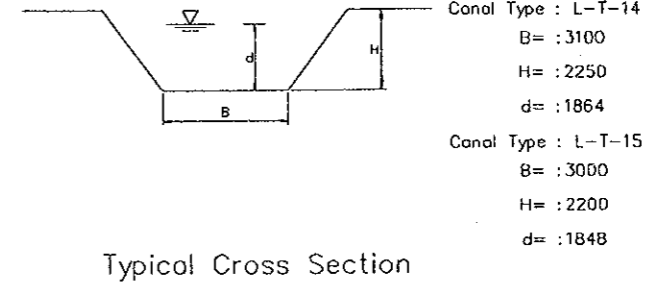
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (31/35)
 (STA. No.88+981 - STA. No.91+969 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3031 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



| CANAL TYPE | HL=3,708.00 m | | | HL=709.00 m | | | HL=1,258.00 m | | | HL=1,467.00 m | | | | |
|--------------------------|---------------|---------|---------|-------------|---------|---------|---------------|--|--|---------------|--|--|--|--|
| CANAL BANK ELEVATION | | | | | | | | | | | | | | |
| WATER SURFACE ELEVATION | | | | | | | | | | | | | | |
| CANAL BASE ELEVATION | | | | | | | | | | | | | | |
| GROUND SURFACE ELEVATION | | | | | | | | | | | | | | |
| REDUCED DISTANCE | | | | | | | | | | | | | | |
| DISTANCE | | | | | | | | | | | | | | |
| STATION No. | | | | | | | | | | | | | | |
| 91+969 | 91969.02 | 886.880 | 883.800 | 885.672 | 883.800 | 886.021 | | | | | | | | |
| 92+018 | 92018.00 | 885.650 | 883.793 | 885.565 | 883.793 | 886.043 | | | | | | | | |
| 92+045 | 92045.00 | 885.060 | 883.790 | 885.562 | 883.790 | 886.040 | | | | | | | | |
| 92+076 | 92076.00 | 884.170 | 883.786 | 885.658 | 883.786 | 886.036 | | | | | | | | |
| 92+099 | 92099.00 | 883.050 | 883.783 | 885.653 | 883.783 | 886.033 | | | | | | | | |
| 92+112 | 92112.00 | 882.660 | 883.778 | 885.650 | 883.778 | 886.028 | | | | | | | | |
| 92+133 | 92133.00 | 882.180 | 883.771 | 885.643 | 883.771 | 886.021 | | | | | | | | |
| 92+187 | 92187.00 | 882.540 | 883.765 | 885.637 | 883.765 | 886.015 | | | | | | | | |
| 92+217 | 92217.00 | 882.760 | 883.763 | 885.635 | 883.763 | 886.013 | | | | | | | | |
| 92+254 | 92254.00 | 884.890 | 883.746 | 885.618 | 883.746 | 885.996 | | | | | | | | |
| 92+381 | 92381.00 | 885.500 | 883.743 | 885.615 | 883.743 | 885.993 | | | | | | | | |
| 92+407 | 92407.00 | 885.980 | 883.738 | 885.610 | 883.738 | 885.988 | | | | | | | | |
| 92+442 | 92442.00 | 886.370 | 883.734 | 885.606 | 883.734 | 885.984 | | | | | | | | |
| 92+475 | 92475.00 | 886.780 | 883.730 | 885.602 | 883.730 | 885.980 | | | | | | | | |
| 92+508 | 92508.00 | 887.270 | 883.724 | 885.596 | 883.724 | 885.974 | | | | | | | | |
| 92+551 | 92551.00 | 887.430 | 883.719 | 885.592 | 883.719 | 885.970 | | | | | | | | |
| 92+581 | 92581.00 | 887.860 | 883.715 | 885.587 | 883.715 | 885.965 | | | | | | | | |
| 92+620 | 92620.00 | 887.720 | 883.711 | 885.583 | 883.711 | 885.961 | | | | | | | | |
| 92+650 | 92650.00 | 888.010 | 883.707 | 885.579 | 883.707 | 885.957 | | | | | | | | |
| 92+688 | 92688.00 | 888.160 | 883.702 | 885.574 | 883.702 | 885.952 | | | | | | | | |
| 92+722 | 92722.00 | 887.990 | 883.697 | 885.568 | 883.697 | 885.946 | | | | | | | | |
| 92+767 | 92767.00 | 887.700 | 883.683 | 885.563 | 883.683 | 885.941 | | | | | | | | |
| 92+805 | 92805.00 | 887.240 | 883.548 | 885.542 | 883.548 | 885.798 | | | | | | | | |
| 92+841 | 92841.00 | 887.100 | 883.544 | 885.540 | 883.544 | 885.794 | | | | | | | | |
| 92+877 | 92877.00 | 886.650 | 883.539 | 885.539 | 883.539 | 885.789 | | | | | | | | |
| 92+911 | 92911.00 | 886.210 | 883.535 | 885.535 | 883.535 | 885.785 | | | | | | | | |
| 92+946 | 92946.00 | 886.420 | 883.530 | 885.530 | 883.530 | 885.780 | | | | | | | | |
| 92+981 | 92981.00 | 885.910 | 883.525 | 885.525 | 883.525 | 885.775 | | | | | | | | |
| 93+025 | 93025.00 | 885.800 | 883.522 | 885.522 | 883.522 | 885.772 | | | | | | | | |
| 93+048 | 93048.00 | 885.540 | 883.518 | 885.518 | 883.518 | 885.768 | | | | | | | | |
| 93+077 | 93077.00 | 885.180 | 883.510 | 885.510 | 883.510 | 885.760 | | | | | | | | |
| 93+136 | 93136.00 | 885.060 | 883.504 | 885.504 | 883.504 | 885.754 | | | | | | | | |
| 93+181 | 93181.00 | 884.760 | 883.500 | 885.500 | 883.500 | 885.750 | | | | | | | | |
| 93+215 | 93215.00 | 884.770 | 883.495 | 885.495 | 883.495 | 885.745 | | | | | | | | |
| 93+251 | 93251.00 | 884.720 | 883.486 | 885.486 | 883.486 | 885.738 | | | | | | | | |
| 93+309 | 93309.00 | 884.350 | 883.473 | 885.473 | 883.473 | 885.723 | | | | | | | | |
| 93+348 | 93348.00 | 884.160 | 882.991 | 885.325 | 882.991 | 885.741 | | | | | | | | |
| 93+517 | 93517.00 | 884.740 | 882.939 | 885.273 | 882.939 | 885.699 | | | | | | | | |
| 93+548 | 93548.00 | 885.040 | 883.405 | 885.269 | 883.405 | 885.655 | | | | | | | | |
| 93+581 | 93581.00 | 885.130 | 883.399 | 885.263 | 883.399 | 885.649 | | | | | | | | |
| 93+627 | 93627.00 | 884.610 | 883.392 | 885.256 | 883.392 | 885.642 | | | | | | | | |
| 93+680 | 93680.00 | 884.620 | 883.379 | 885.243 | 883.379 | 885.629 | | | | | | | | |
| 93+780 | 93780.00 | 885.310 | 883.359 | 885.223 | 883.359 | 885.609 | | | | | | | | |
| 93+936 | 93936.00 | 885.300 | 883.353 | 885.217 | 883.353 | 885.603 | | | | | | | | |
| 93+981 | 93981.00 | 885.040 | 883.327 | 885.191 | 883.327 | 885.577 | | | | | | | | |
| 94+181 | 94181.00 | 884.940 | 883.323 | 885.187 | 883.323 | 885.573 | | | | | | | | |
| 94+211 | 94211.00 | 884.800 | 883.305 | 885.169 | 883.305 | 885.555 | | | | | | | | |
| 94+353 | 94353.00 | 885.040 | 883.301 | 885.165 | 883.301 | 885.551 | | | | | | | | |
| 94+381 | 94381.00 | 884.910 | 883.293 | 885.157 | 883.293 | 885.543 | | | | | | | | |
| 94+443 | 94443.00 | 885.360 | 883.288 | 885.152 | 883.288 | 885.538 | | | | | | | | |
| 94+485 | 94485.00 | 885.420 | 883.282 | 885.146 | 883.282 | 885.532 | | | | | | | | |
| 94+530 | 94530.00 | 885.660 | 883.275 | 885.139 | 883.275 | 885.525 | | | | | | | | |
| 94+581 | 94581.00 | 885.930 | 883.268 | 885.132 | 883.268 | 885.518 | | | | | | | | |
| 94+636 | 94636.00 | 885.770 | 883.262 | 885.126 | 883.262 | 885.512 | | | | | | | | |
| 94+684 | 94684.00 | 885.800 | 883.257 | 885.121 | 883.257 | 885.507 | | | | | | | | |
| 94+721 | 94721.00 | 885.030 | 883.252 | 885.116 | 883.252 | 885.502 | | | | | | | | |
| 94+762 | 94762.00 | 885.590 | 883.248 | 885.112 | 883.248 | 885.498 | | | | | | | | |
| 94+789 | 94789.00 | 885.730 | 883.243 | 885.108 | 883.243 | 885.494 | | | | | | | | |
| 94+839 | 94839.00 | 885.730 | 883.224 | 885.058 | 883.224 | 885.474 | | | | | | | | |
| 94+907 | 94907.00 | 885.700 | 883.185 | 885.049 | 883.185 | 885.435 | | | | | | | | |



| CANAL TYPE | HL=3,418.00 m L-T-14 Q=7.892 m ³ /s | | | | | | | | | | HL=3,418.00 m L-T-15 Q=7.598 m ³ /s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|
| CANAL BANK ELEVATION | 885.435 | 885.426 | 885.427 | 885.408 | 885.401 | 885.415 | 885.431 | 885.193 | 885.174 | 885.187 | 885.150 | 885.141 | 885.133 | 885.121 | 885.115 | 885.111 | 885.094 | 885.089 | 885.086 | 885.083 | 885.071 | 885.037 | 885.023 | 885.011 | 885.004 | 884.998 | 884.980 | 884.985 | 884.975 | 884.971 | 884.960 | 884.955 | 884.946 | 884.933 | 884.927 | 884.907 | 884.901 | 884.894 | 884.881 | 884.875 | 884.868 |
| WATER SURFACE ELEVATION | 885.049 | 885.040 | 885.033 | 885.022 | 885.015 | 884.989 | 884.848 | 884.841 | 884.822 | 884.815 | 884.786 | 884.789 | 884.781 | 884.769 | 884.763 | 884.759 | 884.742 | 884.737 | 884.734 | 884.711 | 884.685 | 884.671 | 884.659 | 884.652 | 884.646 | 884.638 | 884.633 | 884.627 | 884.619 | 884.608 | 884.604 | 884.594 | 884.581 | 884.575 | 884.555 | 884.549 | 884.542 | 884.529 | 884.523 | 884.516 | |
| CANAL BASE ELEVATION | 883.185 | 883.176 | 883.177 | 883.158 | 883.151 | 882.585 | 882.581 | 882.993 | 882.974 | 882.967 | 882.950 | 882.941 | 882.933 | 882.921 | 882.915 | 882.911 | 882.894 | 882.889 | 882.886 | 882.863 | 882.837 | 882.823 | 882.811 | 882.804 | 882.798 | 882.790 | 882.785 | 882.779 | 882.771 | 882.760 | 882.756 | 882.746 | 882.733 | 882.727 | 882.707 | 882.701 | 882.694 | 882.681 | 882.675 | 882.668 | |
| GROUND SURFACE ELEVATION | 885.700 | 885.030 | 884.890 | 883.020 | 883.730 | 883.746 | 883.780 | 883.780 | 883.570 | 883.710 | 884.210 | 884.220 | 884.870 | 884.520 | 883.740 | 882.350 | 884.850 | 884.530 | 884.760 | 885.090 | 885.780 | 886.520 | 884.680 | 887.130 | 887.270 | 885.350 | 885.210 | 887.510 | 887.600 | 886.030 | 888.270 | 885.230 | 886.610 | 886.900 | 886.200 | 890.520 | 891.140 | 889.020 | 890.800 | 890.130 | |
| REDUCED DISTANCE | 94907.00 | 94981.00 | 95009.00 | 95125.00 | 95181.00 | 95306.00 | 95381.00 | 95527.00 | 95581.00 | 95716.00 | 95781.00 | 95842.00 | 95940.00 | 95981.00 | 96010.00 | 96148.00 | 96181.00 | 96206.00 | 96380.00 | 96580.00 | 96895.00 | 96780.00 | 96834.00 | 96880.00 | 96948.00 | 96980.00 | 97027.00 | 97091.00 | 97180.00 | 97207.00 | 97287.00 | 97381.00 | 97433.00 | 97581.00 | 97628.00 | 97681.00 | 97781.00 | 97827.00 | 97888.00 | | |
| DISTANCE | 68.00 | 74.00 | 78.00 | 105.00 | 56.00 | 125.00 | 60.00 | 146.00 | 54.00 | 135.00 | 65.00 | 61.00 | 98.00 | 41.00 | 29.00 | 138.00 | 33.00 | 25.00 | 174.00 | 200.00 | 115.00 | 85.00 | 54.00 | 46.00 | 55.00 | 32.00 | 47.00 | 64.00 | 89.00 | 27.00 | 80.00 | 94.00 | 52.00 | 148.00 | 47.00 | 53.00 | 100.00 | 46.00 | 61.00 | | |
| STATION No. | 94+907 | 94+981 | 95+009 | 95+125 | 95+181 | 95+306 | 95+381 | 95+527 | 95+581 | 95+716 | 95+781 | 95+842 | 95+940 | 95+981 | 96+010 | 96+148 | 96+181 | 96+206 | 96+350 | 96+550 | 96+695 | 96+780 | 96+834 | 96+880 | 96+948 | 96+980 | 97+027 | 97+091 | 97+180 | 97+207 | 97+287 | 97+381 | 97+433 | 97+581 | 97+628 | 97+681 | 97+781 | 97+827 | 97+888 | | |

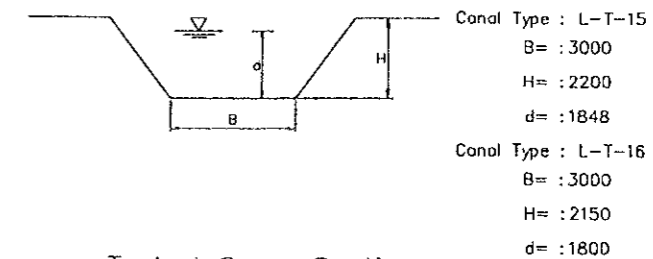
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

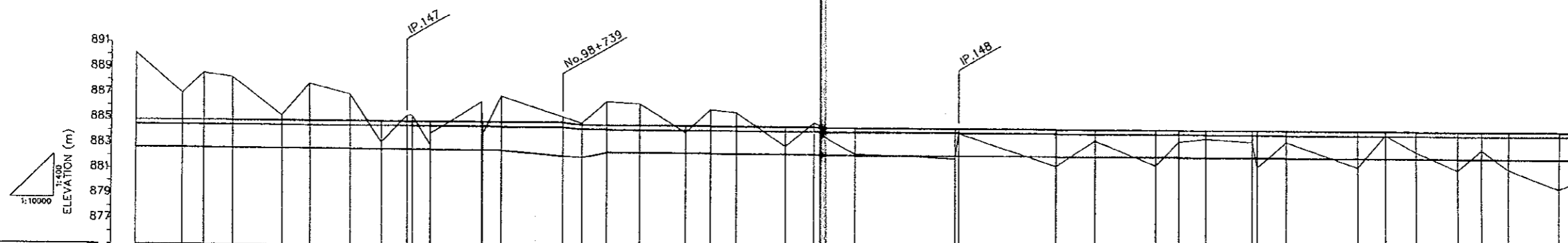
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (33/35)
 (STA. No.94+907 - STA. No.97+888 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3033 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section



| CANAL TYPE | HL=3,418.00 m T-L-15 Q=7.598 m ³ /s | | | | | | | | | | | | | | | | | | HL=5,048.00 m T-L-16 Q=7.200 m ³ /s | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| CANAL BANK ELEVATION | 884.868 | 884.855 | 884.850 | 884.842 | 884.825 | 884.822 | 884.812 | 884.804 | 884.796 | 884.791 | 884.778 | 884.773 | 884.787 | 884.627 | 884.598 | 884.589 | 884.578 | 884.571 | 884.564 | 884.552 | 884.544 | 884.526 | 884.508 | 884.498 | 884.474 | 884.463 | 884.448 | 884.442 | 884.435 | 884.422 | 884.414 | 884.396 | 884.388 | 884.380 | 884.370 | 884.364 | 884.357 | 884.344 | 884.339 |
| WATER SURFACE ELEVATION | 884.516 | 884.503 | 884.498 | 884.490 | 884.477 | 884.470 | 884.460 | 884.452 | 884.444 | 884.438 | 884.426 | 884.421 | 884.405 | 884.254 | 884.248 | 884.239 | 884.228 | 884.221 | 884.214 | 884.202 | 884.194 | 884.176 | 884.159 | 884.149 | 884.124 | 884.113 | 884.098 | 884.092 | 884.085 | 884.072 | 884.064 | 884.046 | 884.038 | 884.030 | 884.020 | 884.014 | 884.007 | 883.994 | 883.989 |
| CANAL BASE ELEVATION | 882.668 | 882.655 | 882.650 | 882.642 | 882.629 | 882.622 | 882.612 | 882.604 | 882.596 | 882.591 | 882.578 | 882.573 | 882.562 | 882.427 | 882.428 | 882.439 | 882.428 | 882.421 | 882.414 | 882.402 | 882.394 | 882.376 | 882.359 | 882.349 | 882.324 | 882.313 | 882.298 | 882.292 | 882.285 | 882.272 | 882.264 | 882.246 | 882.238 | 882.230 | 882.220 | 882.214 | 882.207 | 882.194 | 882.189 |
| GROUND SURFACE ELEVATION | 880.130 | 887.010 | 886.570 | 888.240 | 885.230 | 887.760 | 886.930 | 883.140 | 885.280 | 883.880 | 885.380 | 886.830 | 885.250 | 884.750 | 886.460 | 886.330 | 884.080 | 885.880 | 885.680 | 883.040 | 884.920 | 882.500 | 884.128 | 881.590 | 883.610 | 881.640 | 883.540 | 883.770 | 887.550 | 883.550 | 881.540 | 884.140 | 882.790 | 881.360 | 882.970 | 881.420 | 879.910 | 880.480 | |
| REDUCED DISTANCE | 97888.00 | 97991.00 | 98024.00 | 98081.00 | 98181.00 | 98236.00 | 98319.00 | 98381.00 | 98442.00 | 98476.00 | 98528.00 | 98618.00 | 98739.00 | 98777.00 | 98825.00 | 98891.00 | 98981.00 | 99032.00 | 99084.00 | 99181.00 | 99236.00 | 99381.00 | 99508.00 | 99781.00 | 99860.00 | 99981.00 | 100026.00 | 100078.00 | 100181.00 | 100237.00 | 100381.00 | 100437.00 | 100499.00 | 100581.00 | 100627.00 | 100681.00 | 100781.00 | 100815.00 | |
| DISTANCE | 61.00 | 93.00 | 43.00 | 57.00 | 100.00 | 55.00 | 83.00 | 62.00 | 50.00 | 75.00 | 300.00 | 37.00 | 121.00 | 38.00 | 48.00 | 56.00 | 90.00 | 51.00 | 52.00 | 97.00 | 57.00 | 97.00 | 200.00 | 193.00 | 79.00 | 121.00 | 45.00 | 52.00 | 92.00 | 56.00 | 144.00 | 56.00 | 52.00 | 82.00 | 46.00 | 54.00 | 100.00 | 34.00 | |
| STATION No. | 97+888 | 97+981 | 98+024 | 98+081 | 98+181 | 98+236 | 98+319 | 98+381 | 98+442 | 98+476 | 98+528 | 98+568 | 98+739 | 98+777 | 98+825 | 98+891 | 98+981 | 99+032 | 99+084 | 99+181 | 99+238 | 99+381 | 99+588 | 99+781 | 99+860 | 99+981 | 100+026 | 100+078 | 100+181 | 100+237 | 100+381 | 100+437 | 100+499 | 100+581 | 100+627 | 100+681 | 100+781 | 100+815 | |

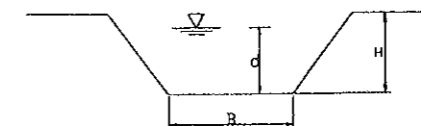
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (34/35)
 (STA. No.97+888 - STA. No.100+815 m)

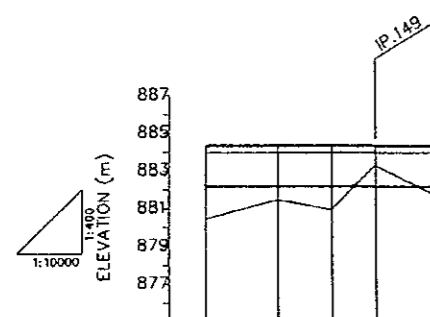
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|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3034 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : L-T-16
 B = :
 H = :
 d = :

Typical Cross Section



| CANAL TYPE | T-L-16 HL=5.048.00 m Q=7.200 m ³ /s | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|-----------|-----------|-----------|-----------|--|-----------|-----------|--|-----------|-----------|-----------|-----------|-----------|--|-----------|-----------|-----------|-----------|-----------|
| CANAL BANK ELEVATION | 884.339 | 884.327 | 884.318 | 884.310 | 884.292 | | 884.266 | 884.240 | | 883.890 | 883.884 | 884.214 | 884.208 | 884.202 | | 884.168 | 884.183 | 884.175 | 884.162 | 884.151 |
| WATER SURFACE ELEVATION | 883.989 | 883.977 | 883.968 | 883.960 | 883.942 | | 883.916 | 883.890 | | 883.890 | 883.884 | 883.864 | 883.858 | 883.852 | | 883.838 | 883.833 | 883.825 | 883.812 | 883.801 |
| CANAL BASE ELEVATION | 882.189 | 882.177 | 882.168 | 882.160 | 882.142 | | 882.116 | 882.090 | | 882.090 | 882.064 | 882.058 | 882.052 | 882.038 | | 882.033 | 882.025 | 882.012 | 882.001 | 882.001 |
| GROUND SURFACE ELEVATION | 880.480 | 881.490 | 880.960 | 883.270 | 880.540 | | 880.910 | 880.840 | | 880.840 | 880.960 | 881.620 | 881.050 | 880.320 | | 881.350 | 883.760 | 881.030 | 881.050 | 881.370 |
| REDUCED DISTANCE | 100915.00 | 100910.00 | 100981.00 | 101039.00 | 101181.00 | | 101381.00 | 101581.00 | | 101581.00 | 101781.00 | 101825.00 | 101875.00 | 101981.00 | | 102021.00 | 102078.00 | 102078.00 | 102078.00 | 102263.00 |
| DISTANCE | 34.00 | 95.00 | 71.00 | 58.00 | 142.00 | | 200.00 | 200.00 | | 200.00 | 200.00 | 44.00 | 90.00 | 106.00 | | 40.00 | 57.00 | 57.00 | 57.00 | 62.00 |
| STATION No. | 100+815 | 100+910 | 100+981 | 101+039 | 101+181 | | 101+381 | 101+581 | | 101+581 | 101+781 | 101+825 | 101+875 | 101+981 | | 102+021 | 102+078 | 102+078 | 102+078 | 102+263 |

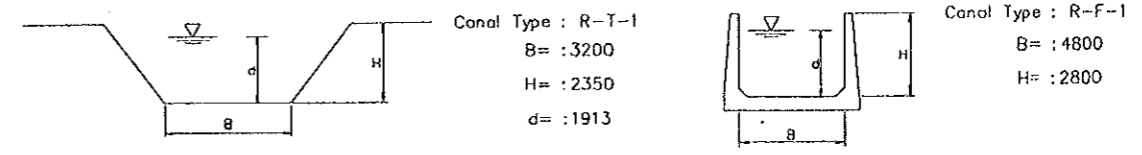
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

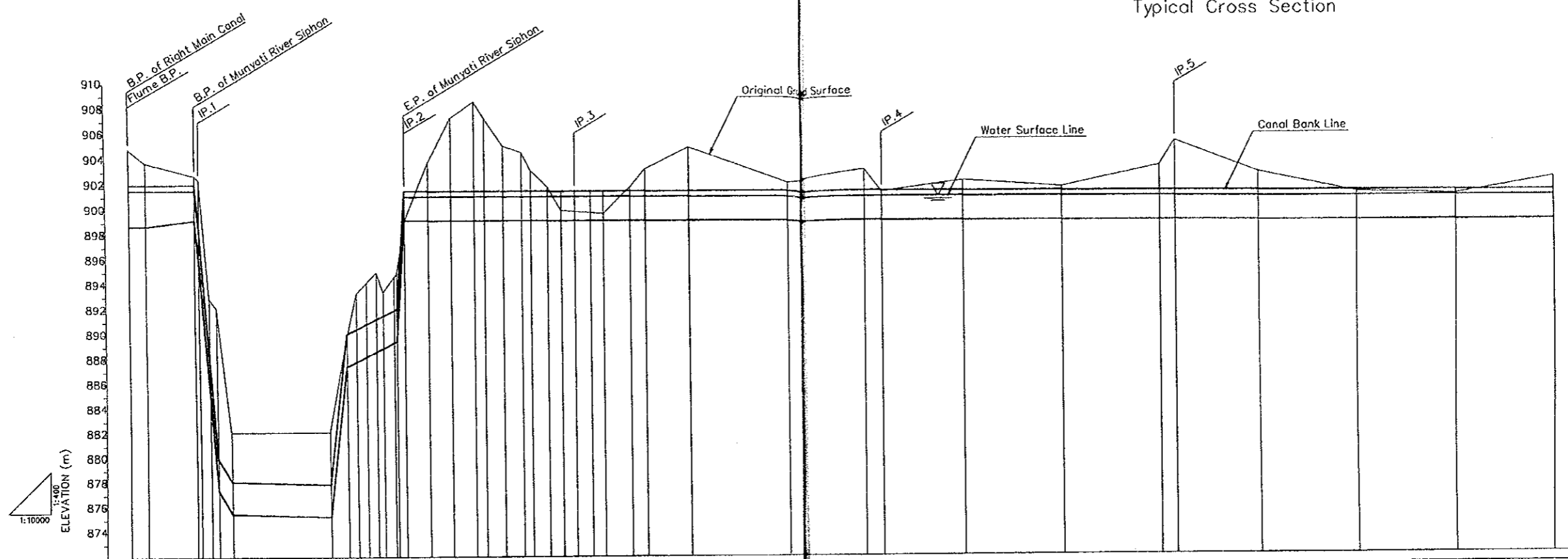
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF LEFT MAIN CANAL (35/35)
 (STA. No.100+815 - STA. No.103+800 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3035 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section



| | | | | | | |
|--------------------------|-----------------------------|--|---|--|--------------------|---------|
| CANAL TYPE | HL=133.00 m R-F-1 Siphon | | HL=430.00 m R-T-1 Q=8.493 m ³ /s | | HL=7,045.00 m | |
| CANAL BANK ELEVATION | 901.990 901.989 | 901.978 | 901.365 901.359 901.353 901.346 901.344 901.339 901.334 901.331 901.327 901.323 901.320 901.316 901.312 | 901.308 901.301 | 901.290 | 901.264 |
| WATER SURFACE ELEVATION | 901.553 901.552 | 901.541 | 900.928 900.922 900.916 900.909 900.907 900.902 900.897 900.894 900.890 900.886 900.883 900.879 900.875 | 900.869 900.864 | 900.853 | 900.827 |
| CANAL BASE ELEVATION | 898.683 898.682 | 898.178 898.000 897.200 897.000 | 875.291 887.400 887.773 886.184 885.851 885.819 885.819 | 899.009 899.003 898.996 898.994 898.989 898.984 898.981 898.977 898.973 898.970 898.966 898.962 | 898.956 898.951 | 898.914 |
| GROUND SURFACE ELEVATION | 904.830 903.760 | 902.700 902.400 892.888 892.099 | 892.099 890.743 893.731 894.088 894.916 893.347 893.942 893.819 | 903.821 907.167 908.460 907.137 904.929 904.420 902.981 901.688 899.813 899.712 899.610 899.523 | 901.615 903.025 | 901.940 |
| REDUCED DISTANCE | 0.00 34.00 | 133.00 170.00 180.00 | 204.00 406.00 445.00 464.00 485.00 516.00 541.00 563.00 | 611.00 658.00 706.00 727.00 765.00 802.00 821.00 855.00 882.00 909.00 941.00 967.00 | 1020.00 1051.00 | 1341.00 |
| DISTANCE | 0.00 34.00 | 85.00 120.00 130.00 | 204.00 37.00 30.00 21.00 74.00 72.00 68.00 | 48.00 47.00 48.00 21.00 38.00 37.00 19.00 34.00 27.00 27.00 32.00 26.00 | 53.00 31.00 | 90.00 |
| STATION No. | 0+000 0+034 | 0+133 0+170 0+180 | 0+204 0+408 0+445 0+464 0+485 0+516 0+541 0+563 | 0+611 0+658 0+706 0+727 0+765 0+802 0+821 0+855 0+882 0+909 0+941 0+967 | 1+020 1+051 | 1+141 |
| | | | | 1+341 | | |
| | | | | | 1+541 1+577 | |
| | | | | | 1+741 | |
| | | | | | 1+941 | |
| | | | | | 2+141 2+172 | |
| | | | | | 2+341 | |
| | | | | | 2+541 | |
| | | | | | 2+741 | |
| | | | | | 2+941 | |

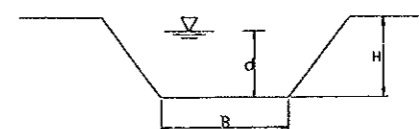
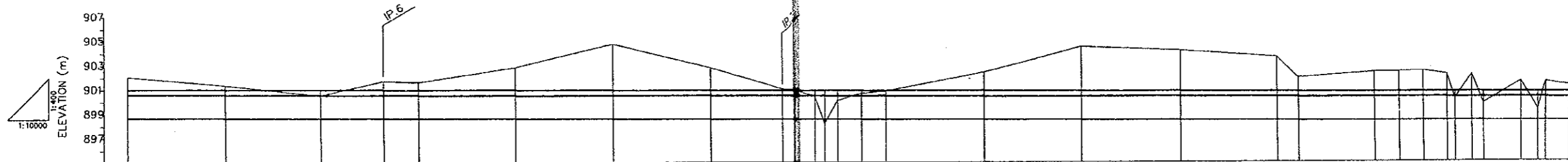
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
MAIN IRRIGATION CANAL
PROFILE OF RIGHT MAIN CANAL (1/25)
(STA. No. 0.00 - STA. No.2+941 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3036 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : R-T-1
 B= :
 H= :
 d= :

Typical Cross Section

| CANAL TYPE | R-T-1 Q=8.493 m ³ /s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|
| CANAL BANK ELEVATION | 901.056 | 901.029 | 901.003 | 900.987 | 900.977 | 900.951 | 900.925 | 900.899 | 900.880 | 900.867 | 900.854 | 900.847 | 900.821 | 900.795 | 900.769 | 900.743 | 900.737 | 900.717 | 900.711 | 900.704 | 900.698 | 900.698 | 900.674 | 900.672 | 900.665 | | | | | |
| WATER SURFACE ELEVATION | 900.619 | 900.592 | 900.566 | 900.550 | 900.540 | 900.514 | 900.488 | 900.462 | 900.443 | 900.430 | 900.427 | 900.423 | 900.417 | 900.410 | 900.384 | 900.358 | 900.332 | 900.280 | 900.274 | 900.267 | 900.265 | 900.259 | 900.254 | 900.251 | 900.241 | 900.235 | 900.228 | | | |
| CANAL BASE ELEVATION | 898.708 | 898.673 | 898.653 | 898.637 | 898.627 | 898.601 | 898.575 | 898.549 | 898.530 | 898.517 | 898.514 | 898.510 | 898.504 | 898.497 | 898.471 | 898.445 | 898.419 | 898.367 | 898.361 | 898.354 | 898.348 | 898.346 | 898.341 | 898.338 | 898.328 | 898.324 | 898.315 | | | |
| GROUND SURFACE ELEVATION | 902.090 | 901.400 | 900.550 | 901.720 | 901.600 | 902.810 | 904.710 | 902.750 | 900.990 | 900.400 | 900.140 | 900.080 | 900.520 | 900.300 | 902.320 | 904.410 | 904.110 | 902.350 | 902.380 | 902.420 | 902.130 | 900.140 | 902.110 | 898.760 | 901.550 | 898.270 | 901.530 | 901.220 | | |
| REDUCED DISTANCE | 2941.00 | 3141.00 | 3341.00 | 3469.00 | 3541.00 | 3741.00 | 3941.00 | 4141.00 | 4289.00 | 4391.00 | 4413.00 | 4441.00 | 4491.00 | 4541.00 | 4741.00 | 4941.00 | 5141.00 | 5341.00 | 5395.00 | 5541.00 | 5591.00 | 5641.00 | 5691.00 | 5741.00 | 5764.00 | 5841.00 | 5891.00 | 5941.00 | | |
| DISTANCE | 200.00 | 200.00 | 200.00 | 128.00 | 72.00 | 200.00 | 200.00 | 200.00 | 148.00 | 50.00 | 22.00 | 28.00 | 50.00 | 50.00 | 200.00 | 200.00 | 200.00 | 200.00 | 44.00 | 156.00 | 50.00 | 50.00 | 50.00 | 34.00 | 23.00 | 77.00 | 34.00 | 50.00 | | |
| STATION No. | 2+941 | 3+141 | 3+341 | 3+469 | 3+541 | 3+741 | 3+941 | 4+141 | 4+289 | 4+339 | 4+413 | 4+441 | 4+491 | 4+541 | 4+741 | 4+941 | 5+141 | 5+341 | 5+385 | 5+541 | 5+591 | 5+641 | 5+691 | 5+707 | 5+741 | 5+764 | 5+841 | 5+875 | 5+891 | 5+941 |

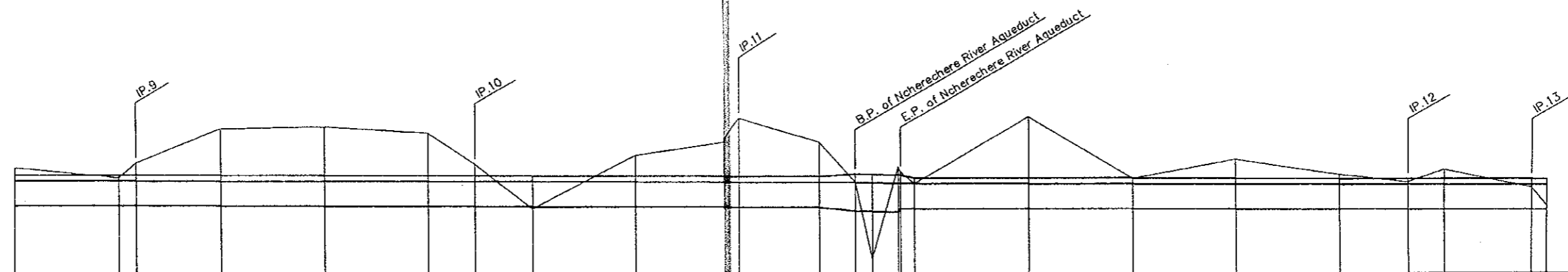
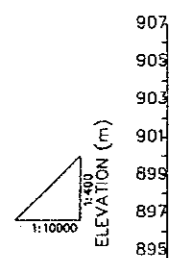
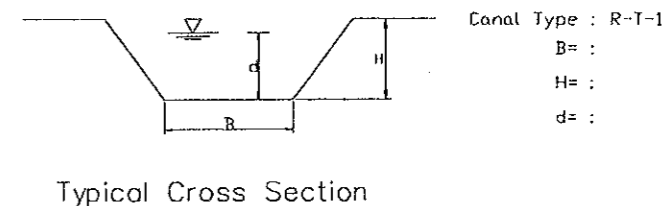
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (2/25)
 (STA. No.2+94 - STA. No.5+941 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3037 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



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|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|-------|-------|-------|-------|
| CANAL TYPE | R-T-1 | | | | | | | | | | | | | | | HL=7046.00 m Q=8.493 m ³ /s | | | | | | | | | | | | | | | HL=86.00 m Aqueduct R-T-1 | | | | | | | | | | | | | | | HL=2.088.00 m | | | | | | | | | | | | | | | | | | | | | | | |
| CANAL BANK ELEVATION | 900.655 | 900.639 | 900.635 | 900.613 | 900.587 | 900.561 | 900.549 | 900.535 | 900.509 | 900.478 | 900.457 | 900.650 | 900.612 | 900.551 | 900.543 | 900.314 | 900.288 | 900.219 | 900.210 | 900.188 | 900.184 | 900.655 | 900.639 | 900.635 | 900.613 | 900.587 | 900.561 | 900.549 | 900.535 | 900.509 | 900.478 | 900.457 | 900.650 | 900.612 | 900.551 | 900.543 | 900.314 | 900.288 | 900.219 | 900.210 | 900.188 | 900.184 | 900.655 | 900.639 | 900.635 | 900.613 | 900.587 | 900.561 | 900.549 | 900.535 | 900.509 | 900.478 | 900.457 | 900.650 | 900.612 | 900.551 | 900.543 | 900.314 | 900.288 | 900.219 | 900.210 | 900.188 | 900.184 | | | | | | |
| WATER SURFACE ELEVATION | 900.228 | 900.202 | 900.198 | 900.176 | 900.150 | 900.124 | 900.112 | 900.098 | 900.072 | 900.041 | 900.020 | 900.011 | 899.973 | 899.914 | 899.906 | 899.877 | 899.851 | 899.782 | 899.773 | 899.751 | 899.747 | 900.228 | 900.202 | 900.198 | 900.176 | 900.150 | 900.124 | 900.112 | 900.098 | 900.072 | 900.041 | 900.020 | 900.011 | 899.973 | 899.914 | 899.906 | 899.877 | 899.851 | 899.782 | 899.773 | 899.751 | 899.747 | 900.228 | 900.202 | 900.198 | 900.176 | 900.150 | 900.124 | 900.112 | 900.098 | 900.072 | 900.041 | 900.020 | 900.011 | 899.973 | 899.914 | 899.906 | 899.877 | 899.851 | 899.782 | 899.773 | 899.751 | 899.747 | | | | | | |
| CANAL BASE ELEVATION | 898.315 | 898.289 | 898.285 | 898.263 | 898.237 | 898.211 | 898.199 | 898.185 | 898.159 | 898.128 | 898.107 | 897.833 | 897.795 | 897.736 | 897.728 | 897.694 | 897.658 | 897.589 | 897.580 | 897.558 | 897.544 | 898.315 | 898.289 | 898.285 | 898.263 | 898.237 | 898.211 | 898.199 | 898.185 | 898.159 | 898.128 | 898.107 | 897.833 | 897.795 | 897.736 | 897.728 | 897.694 | 897.658 | 897.589 | 897.580 | 897.558 | 897.544 | 898.315 | 898.289 | 898.285 | 898.263 | 898.237 | 898.211 | 898.199 | 898.185 | 898.159 | 898.128 | 898.107 | 897.833 | 897.795 | 897.736 | 897.728 | 897.694 | 897.658 | 897.589 | 897.580 | 897.558 | 897.544 | | | | | | |
| GROUND SURFACE ELEVATION | 901.220 | 900.420 | 901.570 | 904.180 | 904.310 | 903.830 | 901.450 | 898.020 | 902.100 | 904.980 | 903.110 | 900.080 | 894.240 | 900.200 | 899.900 | 905.010 | 900.260 | 900.920 | 900.920 | 899.560 | 898.170 | 901.220 | 900.420 | 901.570 | 904.180 | 904.310 | 903.830 | 901.450 | 898.020 | 902.100 | 904.980 | 903.110 | 900.080 | 894.240 | 900.200 | 899.900 | 905.010 | 900.260 | 900.920 | 900.920 | 899.560 | 898.170 | 901.220 | 900.420 | 901.570 | 904.180 | 904.310 | 903.830 | 901.450 | 898.020 | 902.100 | 904.980 | 903.110 | 900.080 | 894.240 | 900.200 | 899.900 | 905.010 | 900.260 | 900.920 | 900.920 | 899.560 | 898.170 | | | | | | |
| REDUCED DISTANCE | 5941.00 | 6141.00 | 6175.00 | 6341.00 | 6541.00 | 6741.00 | 6830.00 | 6941.00 | 7141.00 | 7380.00 | 7541.00 | 7609.00 | 7641.00 | 7695.00 | 7721.00 | 7941.00 | 8141.00 | 8341.00 | 8541.00 | 8672.00 | 8907.00 | 5941.00 | 6141.00 | 6175.00 | 6341.00 | 6541.00 | 6741.00 | 6830.00 | 6941.00 | 7141.00 | 7380.00 | 7541.00 | 7609.00 | 7641.00 | 7695.00 | 7721.00 | 7941.00 | 8141.00 | 8341.00 | 8541.00 | 8672.00 | 8907.00 | 5941.00 | 6141.00 | 6175.00 | 6341.00 | 6541.00 | 6741.00 | 6830.00 | 6941.00 | 7141.00 | 7380.00 | 7541.00 | 7609.00 | 7641.00 | 7695.00 | 7721.00 | 7941.00 | 8141.00 | 8341.00 | 8541.00 | 8672.00 | 8907.00 | | | | | | |
| DISTANCE | 50.00 | 200.00 | 34.00 | 166.00 | 200.00 | 200.00 | 99.00 | 111.00 | 200.00 | 39.00 | 161.00 | 68.00 | 32.00 | 50.00 | 26.00 | 220.00 | 200.00 | 200.00 | 200.00 | 131.00 | 166.00 | 50.00 | 200.00 | 34.00 | 166.00 | 200.00 | 200.00 | 99.00 | 111.00 | 200.00 | 39.00 | 161.00 | 68.00 | 32.00 | 50.00 | 26.00 | 220.00 | 200.00 | 200.00 | 200.00 | 131.00 | 166.00 | 50.00 | 200.00 | 34.00 | 166.00 | 200.00 | 200.00 | 99.00 | 111.00 | 200.00 | 39.00 | 161.00 | 68.00 | 32.00 | 50.00 | 26.00 | 220.00 | 200.00 | 200.00 | 200.00 | 131.00 | 166.00 | | | | | | |
| STATION No. | 5+941 | 6+141 | 6+175 | 6+341 | 6+541 | 6+741 | 6+830 | 6+941 | 7+141 | 7+380 | 7+541 | 7+609 | 7+641 | 7+695 | 7+721 | 7+941 | 8+141 | 8+341 | 8+541 | 8+672 | 8+741 | 8+907 | 8+936 | 5+941 | 6+141 | 6+175 | 6+341 | 6+541 | 6+741 | 6+830 | 6+941 | 7+141 | 7+380 | 7+541 | 7+609 | 7+641 | 7+695 | 7+721 | 7+941 | 8+141 | 8+341 | 8+541 | 8+672 | 8+741 | 8+907 | 8+936 | 5+941 | 6+141 | 6+175 | 6+341 | 6+541 | 6+741 | 6+830 | 6+941 | 7+141 | 7+380 | 7+541 | 7+609 | 7+641 | 7+695 | 7+721 | 7+941 | 8+141 | 8+341 | 8+541 | 8+672 | 8+741 | 8+907 | 8+936 |

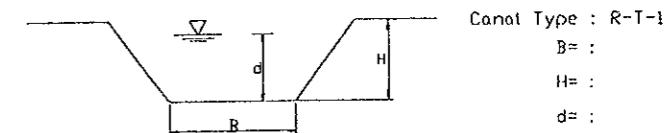
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

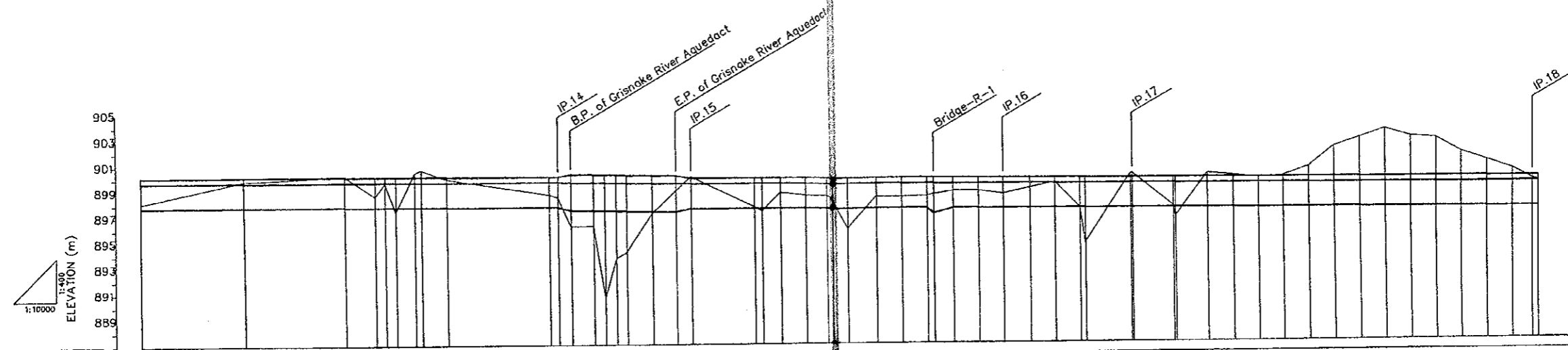
TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (3/25)
 (STA. No.5+941 - STA. No.8+936 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3038 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section



| | | | | | | | | | | | | |
|--------------------------|---------|---------|---------------|---------|-------------|---------|------------|---------|---------|---------|---------------|---------|
| CANAL TYPE | R-T-1 | | HL=2,058.00 m | | HL=204.00 m | | HL=50.00 m | | 28.00 m | | HL=6,568.00 m | |
| CANAL BANK ELEVATION | 900.184 | 900.156 | 900.132 | 900.124 | 900.121 | 900.119 | 900.118 | 900.106 | 900.079 | 900.077 | 900.276 | 900.243 |
| WATER SURFACE ELEVATION | 899.747 | 899.721 | 899.695 | 899.687 | 899.684 | 899.682 | 899.673 | 899.669 | 899.642 | 899.640 | 899.637 | 899.604 |
| CANAL BASE ELEVATION | 897.834 | 897.808 | 897.782 | 897.774 | 897.771 | 897.769 | 897.762 | 897.756 | 897.729 | 897.727 | 897.459 | 897.426 |
| GROUND SURFACE ELEVATION | 898.170 | 899.860 | 900.210 | 895.560 | 895.670 | 897.410 | 900.388 | 899.340 | 898.710 | 898.480 | 896.220 | 896.230 |
| REDUCED DISTANCE | 8936.00 | 9141.00 | 9341.00 | 9399.00 | 9410.00 | 9440.00 | 9478.00 | 9541.00 | 9741.00 | 9756.00 | 9783.00 | 9826.00 |
| DISTANCE | 29.00 | 205.00 | 200.00 | 58.00 | 20.00 | 21.00 | 38.00 | 50.00 | 200.00 | 17.00 | 25.00 | 43.00 |
| STATION No. | 8+936 | 9+141 | 9+341 | 9+399 | 9+419 | 9+440 | 9+478 | 9+541 | 9+741 | 9+758 | 9+783 | 9+826 |

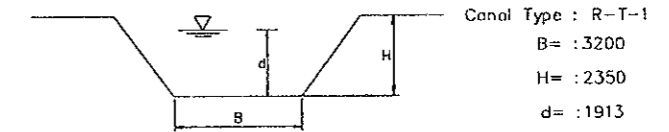
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (4/25)
 (STA. No.8+936 - STA. No.11+741 m)

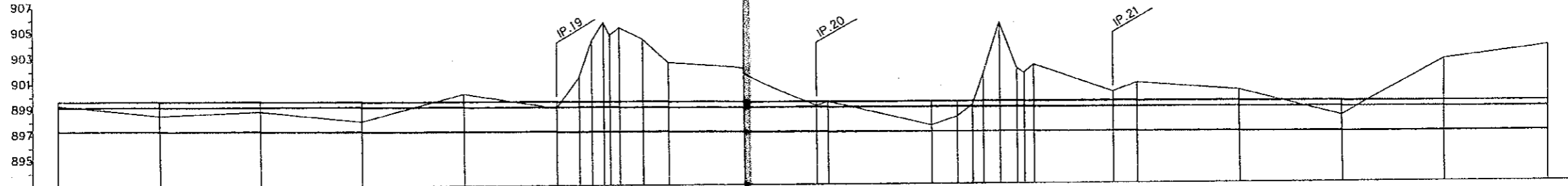
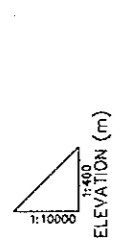
| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3039 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : R-T-1
 B = : 3200
 H = : 2350
 d = : 1913

Typical Cross Section



HL = 6,596.0

R-T-1 Q=8.493 m³/s

| CANAL TYPE | R-T-1 Q=8.493 m ³ /s | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|
| CANAL BANK ELEVATION | 899.663 | 899.637 | 899.611 | 899.585 | 899.559 | 899.536 | 899.530 | 899.526 | 899.523 | 899.519 | 899.513 | 899.507 | 899.458 | 899.455 | 899.429 | 899.422 | 899.418 | 899.418 | 899.411 | 899.393 | 899.377 | 899.351 | 899.325 | 899.299 | 899.273 | |
| WATER SURFACE ELEVATION | 899.226 | 899.200 | 899.174 | 899.148 | 899.122 | 899.099 | 899.093 | 899.089 | 899.086 | 899.082 | 899.076 | 899.070 | 899.021 | 899.018 | 898.992 | 898.985 | 898.981 | 898.979 | 898.974 | 898.946 | 898.940 | 898.914 | 898.888 | 898.862 | 898.836 | |
| CANAL BASE ELEVATION | 897.313 | 897.287 | 897.261 | 897.235 | 897.209 | 897.186 | 897.180 | 897.176 | 897.172 | 897.169 | 897.163 | 897.157 | 897.108 | 897.105 | 897.079 | 897.072 | 897.068 | 897.066 | 897.061 | 897.033 | 897.027 | 897.001 | 896.975 | 896.949 | 896.923 | |
| GROUND SURFACE ELEVATION | 898.340 | 898.540 | 898.820 | 898.050 | 900.160 | 899.020 | 901.450 | 904.240 | 905.736 | 905.230 | 904.400 | 902.560 | 899.170 | 899.440 | 897.560 | 898.260 | 899.140 | 901.520 | 905.570 | 900.110 | 900.780 | 900.200 | 898.180 | 902.560 | 903.590 | |
| REDUCED DISTANCE | 11741.00 | 11941.00 | 12141.00 | 12341.00 | 12541.00 | 12721.00 | 12766.00 | 12791.00 | 12815.00 | 12846.00 | 12891.00 | 12941.00 | 13319.00 | 13341.00 | 13541.00 | 13581.00 | 13621.00 | 13641.00 | 13674.00 | 13707.00 | 13722.00 | 14141.00 | 14341.00 | 14541.00 | 14741.00 | |
| DISTANCE | 11.00 | 200.00 | 200.00 | 200.00 | 200.00 | 180.00 | 45.00 | 25.00 | 24.00 | 19.00 | 45.00 | 50.00 | 178.00 | 22.00 | 200.00 | 50.00 | 30.00 | 20.00 | 33.00 | 33.00 | 153.00 | 47.00 | 200.00 | 200.00 | 200.00 | |
| STATION No. | 11+741 | 11+941 | 12+141 | 12+341 | 12+541 | 12+721 | 12+766 | 12+791 | 12+815 | 12+846 | 12+891 | 12+941 | 13+319 | 13+341 | 13+541 | 13+591 | 13+621 | 13+641 | 13+674 | 13+707 | 13+722 | 13+941 | 14+141 | 14+341 | 14+541 | 14+741 |

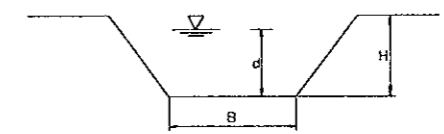
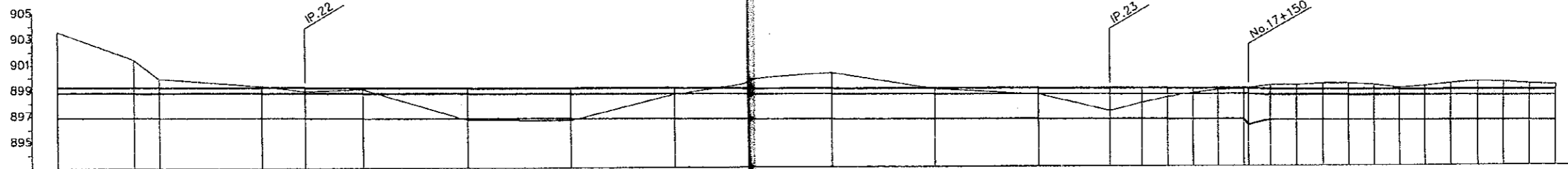
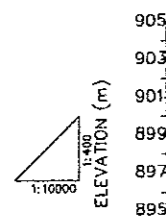
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (5/25)
 (STA. No.11+741 - STA. No.14+741 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3040 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Canal Type : R-T-1
 B = :3200
 H = :2350
 d = :1913

Canal Type : R-T-2
 B = :3100
 H = :2350
 d = :1913

Typical Cross Section

| CANAL TYPE | HL=6,568.00 m | | | | | | | | | | HL=909.00 m | | | | | | | | | | | | | | | |
|--------------------------|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | R-T-1 Q=8.493 m ³ /s | | | | | | | | | | R-T-2 Q=8.306 m ³ /s | | | | | | | | | | | | | | | |
| CANAL BANK ELEVATION | 899.273 | 899.253 | 899.247 | 899.221 | 899.209 | 899.194 | 899.168 | 899.142 | 899.116 | 899.064 | 899.038 | 899.012 | 898.994 | 898.986 | 898.980 | 898.973 | 898.967 | 898.959 | 898.950 | 898.948 | 898.939 | 898.933 | 898.926 | 898.920 | 898.913 | |
| WATER SURFACE ELEVATION | 898.836 | 898.816 | 898.810 | 898.784 | 898.772 | 898.757 | 898.731 | 898.705 | 898.679 | 898.627 | 898.601 | 898.575 | 898.557 | 898.549 | 898.543 | 898.536 | 898.530 | 898.523 | 898.522 | 898.522 | 898.516 | 898.509 | 898.502 | 898.496 | 898.489 | 898.482 |
| CANAL BASE ELEVATION | 896.923 | 896.903 | 896.897 | 896.871 | 896.859 | 896.844 | 896.818 | 896.792 | 896.766 | 896.714 | 896.688 | 896.662 | 896.644 | 896.636 | 896.630 | 896.623 | 896.617 | 896.610 | 896.609 | 896.609 | 896.602 | 896.599 | 896.592 | 896.586 | 896.580 | 896.573 |
| GROUND SURFACE ELEVATION | 903.590 | 901.460 | 899.830 | 899.340 | 898.830 | 899.080 | 896.720 | 896.660 | 898.640 | 900.280 | 899.010 | 898.570 | 897.280 | 897.900 | 898.320 | 898.630 | 898.850 | 898.980 | 898.980 | 899.220 | 899.230 | 899.330 | 899.320 | 899.330 | 899.330 | 899.230 |
| REDUCED DISTANCE | 14741.00 | 14891.00 | 14941.00 | 15141.00 | 15227.00 | 15341.00 | 15541.00 | 15741.00 | 15941.00 | 16341.00 | 16541.00 | 16741.00 | 16876.00 | 16941.00 | 16991.00 | 17041.00 | 17091.00 | 17141.00 | 17191.00 | 17241.00 | 17291.00 | 17341.00 | 17391.00 | 17441.00 | 17491.00 | 17541.00 |
| DISTANCE | 200.00 | 150.00 | 50.00 | 200.00 | 86.00 | 114.00 | 200.00 | 200.00 | 200.00 | 200.00 | 200.00 | 200.00 | 137.00 | 63.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 41.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 |
| STATION No. | 14+741 | 14+891 | 14+941 | 15+141 | 15+227 | 15+341 | 15+541 | 15+741 | 15+941 | 16+341 | 16+541 | 16+741 | 16+878 | 16+941 | 16+991 | 17+041 | 17+091 | 17+141 | 17+191 | 17+241 | 17+291 | 17+341 | 17+391 | 17+441 | 17+491 | 17+541 |

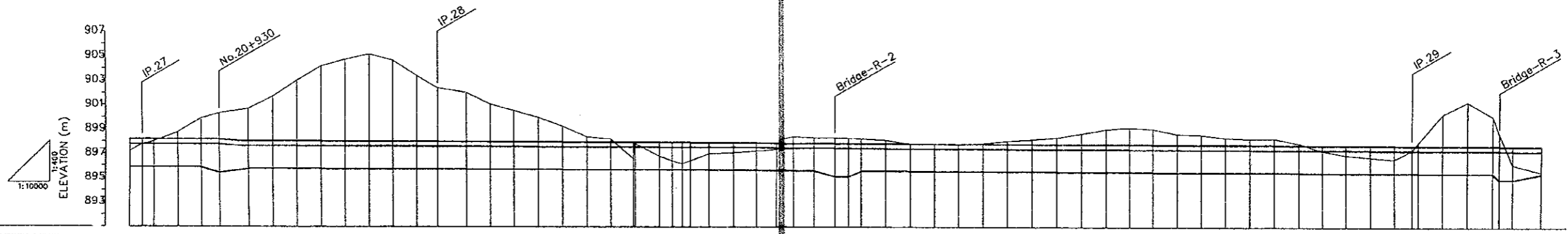
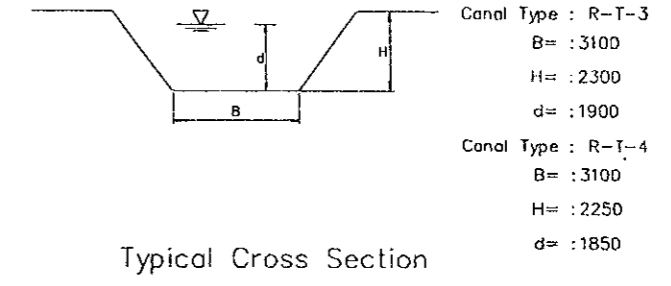
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (6/25)
 (STA. No.14+741 - STA. No.17+741 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3041 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|
| 20+741 | 50.00 | 20741.00 | 897.240 | 895.896 | 897.796 | 898.196 |
| 20+767 | 26.00 | 20767.00 | 897.780 | 895.892 | 897.792 | 898.192 |
| 20+791 | 24.00 | 20791.00 | 898.000 | 895.889 | 897.789 | 898.189 |
| 20+841 | 50.00 | 20841.00 | 898.760 | 895.883 | 897.783 | 898.183 |
| 20+891 | 50.00 | 20891.00 | 899.890 | 895.876 | 897.776 | 898.176 |
| 20+930 | 39.00 | 20930.00 | 900.319 | 895.419 | 897.771 | 898.171 |
| 20+991 | 61.00 | 20991.00 | 900.670 | 895.764 | 897.614 | 898.014 |
| 21+041 | 50.00 | 21041.00 | 901.680 | 895.758 | 897.608 | 898.008 |
| 21+091 | 50.00 | 21091.00 | 902.880 | 895.751 | 897.601 | 898.001 |
| 21+141 | 50.00 | 21141.00 | 904.150 | 895.745 | 897.595 | 897.995 |
| 21+191 | 50.00 | 21191.00 | 904.710 | 895.738 | 897.588 | 897.988 |
| 21+241 | 50.00 | 21241.00 | 905.110 | 895.732 | 897.582 | 897.982 |
| 21+291 | 50.00 | 21291.00 | 904.620 | 895.725 | 897.575 | 897.975 |
| 21+341 | 50.00 | 21341.00 | 903.400 | 895.719 | 897.569 | 897.969 |
| 21+383 | 42.00 | 21383.00 | 902.380 | 895.713 | 897.563 | 897.963 |
| 21+441 | 58.00 | 21441.00 | 901.990 | 895.708 | 897.556 | 897.956 |
| 21+491 | 50.00 | 21491.00 | 901.030 | 895.699 | 897.549 | 897.949 |
| 21+541 | 50.00 | 21541.00 | 900.520 | 895.693 | 897.543 | 897.943 |
| 21+591 | 50.00 | 21591.00 | 899.960 | 895.686 | 897.536 | 897.936 |
| 21+641 | 50.00 | 21641.00 | 899.240 | 895.680 | 897.530 | 897.930 |
| 21+691 | 50.00 | 21691.00 | 898.370 | 895.673 | 897.523 | 897.923 |
| 21+741 | 50.00 | 21741.00 | 898.210 | 895.667 | 897.517 | 897.917 |
| 21+791 | 47.00 | 21791.00 | 897.840 | 895.660 | 897.510 | 897.910 |
| 21+841 | 50.00 | 21841.00 | 896.790 | 895.654 | 897.504 | 897.904 |
| 21+867 | 26.00 | 21867.00 | 896.420 | 895.651 | 897.501 | 897.901 |
| 21+888 | 21.00 | 21888.00 | 896.170 | 895.648 | 897.498 | 897.898 |
| 21+904 | 16.00 | 21904.00 | 896.400 | 895.646 | 897.496 | 897.896 |
| 21+941 | 37.00 | 21941.00 | 896.980 | 895.641 | 897.491 | 897.891 |
| 21+991 | 50.00 | 21991.00 | 897.080 | 895.634 | 897.484 | 897.884 |
| 22+041 | 50.00 | 22041.00 | 897.210 | 895.628 | 897.478 | 897.878 |
| 22+081 | 40.00 | 22081.00 | 897.480 | 895.621 | 897.471 | 897.871 |
| 22+191 | 50.00 | 22191.00 | 898.420 | 895.608 | 897.458 | 897.858 |
| 22+241 | 50.00 | 22241.00 | 898.340 | 895.602 | 897.452 | 897.852 |
| 22+286 | 45.00 | 22286.00 | 898.304 | 895.599 | 897.446 | 897.846 |
| 22+314 | 28.00 | 22314.00 | 898.272 | 895.598 | 897.445 | 897.845 |
| 22+341 | 27.00 | 22341.00 | 898.240 | 895.591 | 897.441 | 897.841 |
| 22+391 | 50.00 | 22391.00 | 898.090 | 895.555 | 897.405 | 897.805 |
| 22+441 | 50.00 | 22441.00 | 897.820 | 895.549 | 897.399 | 897.799 |
| 22+491 | 50.00 | 22491.00 | 897.800 | 895.542 | 897.392 | 897.792 |
| 22+541 | 50.00 | 22541.00 | 897.730 | 895.536 | 897.386 | 897.786 |
| 22+591 | 50.00 | 22591.00 | 897.870 | 895.529 | 897.379 | 897.779 |
| 22+641 | 50.00 | 22641.00 | 898.050 | 895.523 | 897.373 | 897.773 |
| 22+691 | 50.00 | 22691.00 | 898.160 | 895.516 | 897.366 | 897.766 |
| 22+741 | 50.00 | 22741.00 | 898.340 | 895.510 | 897.360 | 897.760 |
| 22+791 | 50.00 | 22791.00 | 898.660 | 895.503 | 897.353 | 897.753 |
| 22+841 | 50.00 | 22841.00 | 899.020 | 895.497 | 897.347 | 897.747 |
| 22+891 | 50.00 | 22891.00 | 899.150 | 895.490 | 897.340 | 897.740 |
| 22+941 | 50.00 | 22941.00 | 899.040 | 895.484 | 897.334 | 897.734 |
| 22+991 | 50.00 | 22991.00 | 898.630 | 895.477 | 897.327 | 897.727 |
| 23+041 | 50.00 | 23041.00 | 898.560 | 895.471 | 897.321 | 897.721 |
| 23+091 | 50.00 | 23091.00 | 898.350 | 895.464 | 897.314 | 897.714 |
| 23+141 | 50.00 | 23141.00 | 898.230 | 895.458 | 897.308 | 897.708 |
| 23+191 | 50.00 | 23191.00 | 898.280 | 895.451 | 897.301 | 897.701 |
| 23+241 | 50.00 | 23241.00 | 897.880 | 895.445 | 897.295 | 897.695 |
| 23+291 | 50.00 | 23291.00 | 897.260 | 895.438 | 897.288 | 897.688 |
| 23+341 | 50.00 | 23341.00 | 896.940 | 895.432 | 897.282 | 897.682 |
| 23+391 | 50.00 | 23391.00 | 896.720 | 895.425 | 897.275 | 897.675 |
| 23+441 | 50.00 | 23441.00 | 896.570 | 895.419 | 897.269 | 897.669 |
| 23+479 | 33.00 | 23479.00 | 897.990 | 895.412 | 897.262 | 897.662 |
| 23+541 | 50.00 | 23541.00 | 900.260 | 895.406 | 897.256 | 897.656 |
| 23+591 | 50.00 | 23591.00 | 901.260 | 895.399 | 897.249 | 897.649 |
| 23+691 | 50.00 | 23691.00 | 898.990 | 895.392 | 897.242 | 897.642 |
| 23+681 | 27.00 | 23681.00 | 896.140 | 895.385 | 897.235 | 897.635 |
| 23+741 | 60.00 | 23741.00 | 895.510 | 895.352 | 897.202 | 897.602 |

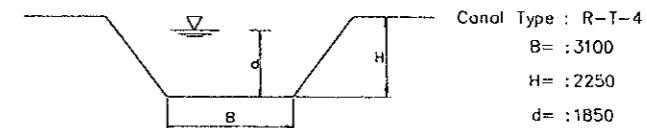
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (8/25)
 (STA. No.20+741 - STA. No.23+741 m)

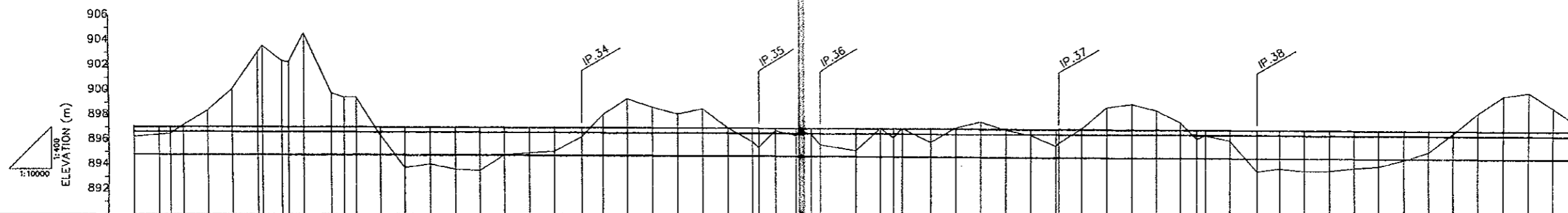
Date | Oct. 30, 2000 | Drawing No. | 3043

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section

Canal Type : R-T-4
 B = :3100
 H = :2250
 d = :1850



| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION | CANAL TYPE |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|--------------------------------|
| 26+735 | 50.00 | 26735.00 | 896.260 | 894.813 | 896.563 | 897.063 | R-T-4 Q=7.774 m³/s HL=8.0 m |
| 26+785 | 50.00 | 26785.00 | 896.450 | 894.805 | 896.556 | 897.056 | |
| 26+809 | 24.00 | 26809.00 | 896.530 | 894.803 | 896.553 | 897.053 | |
| 26+835 | 26.00 | 26835.00 | 897.200 | 894.800 | 896.550 | 897.050 | |
| 26+885 | 50.00 | 26885.00 | 898.380 | 894.793 | 896.543 | 897.043 | |
| 26+935 | 50.00 | 26935.00 | 900.080 | 894.787 | 896.537 | 897.037 | |
| 26+985 | 50.00 | 26985.00 | 903.980 | 894.789 | 896.539 | 897.039 | |
| 27+035 | 49.00 | 27035.00 | 902.280 | 894.774 | 896.524 | 897.024 | |
| 27+080 | 31.00 | 27080.00 | 904.540 | 894.768 | 896.518 | 897.018 | |
| 27+135 | 55.00 | 27135.00 | 899.760 | 894.761 | 896.611 | 897.011 | |
| 27+161 | 26.00 | 27161.00 | 899.410 | 894.757 | 896.607 | 897.007 | |
| 27+185 | 24.00 | 27185.00 | 899.430 | 894.754 | 896.604 | 897.004 | |
| 27+235 | 50.00 | 27235.00 | 898.340 | 894.748 | 896.598 | 896.998 | |
| 27+285 | 50.00 | 27285.00 | 893.730 | 894.741 | 896.591 | 896.991 | |
| 27+335 | 50.00 | 27335.00 | 894.050 | 894.735 | 896.585 | 896.985 | |
| 27+385 | 50.00 | 27385.00 | 893.600 | 894.728 | 896.578 | 896.978 | |
| 27+435 | 50.00 | 27435.00 | 893.500 | 894.721 | 896.571 | 896.971 | |
| 27+485 | 50.00 | 27485.00 | 894.770 | 894.715 | 896.565 | 896.965 | |
| 27+535 | 50.00 | 27535.00 | 894.940 | 894.708 | 896.558 | 896.958 | |
| 27+585 | 50.00 | 27585.00 | 895.040 | 894.702 | 896.552 | 896.952 | |
| 27+642 | 57.00 | 27642.00 | 896.240 | 894.695 | 896.545 | 896.945 | |
| 27+685 | 43.00 | 27685.00 | 898.020 | 894.689 | 896.539 | 896.939 | |
| 27+735 | 50.00 | 27735.00 | 899.300 | 894.682 | 896.532 | 896.932 | |
| 27+785 | 50.00 | 27785.00 | 898.610 | 894.676 | 896.526 | 896.926 | |
| 27+835 | 50.00 | 27835.00 | 895.060 | 894.669 | 896.519 | 896.919 | |
| 27+885 | 50.00 | 27885.00 | 895.470 | 894.663 | 896.513 | 896.913 | |
| 27+935 | 50.00 | 27935.00 | 896.930 | 894.656 | 896.506 | 896.906 | |
| 27+985 | 50.00 | 27985.00 | 895.380 | 894.650 | 896.498 | 896.898 | |
| 28+035 | 36.00 | 28035.00 | 896.700 | 894.643 | 896.493 | 896.893 | |
| 28+085 | 50.00 | 28085.00 | 896.310 | 894.637 | 896.487 | 896.887 | |
| 28+135 | 50.00 | 28135.00 | 895.620 | 894.631 | 896.481 | 896.881 | |
| 28+185 | 50.00 | 28185.00 | 895.600 | 894.625 | 896.475 | 896.875 | |
| 28+235 | 50.00 | 28235.00 | 895.120 | 894.619 | 896.469 | 896.869 | |
| 28+285 | 50.00 | 28285.00 | 896.920 | 894.613 | 896.463 | 896.863 | |
| 28+335 | 50.00 | 28335.00 | 895.160 | 894.607 | 896.457 | 896.857 | |
| 28+362 | 27.00 | 28362.00 | 895.920 | 894.601 | 896.451 | 896.851 | |
| 28+379 | 17.00 | 28379.00 | 895.920 | 894.595 | 896.445 | 896.845 | |
| 28+435 | 56.00 | 28435.00 | 895.790 | 894.589 | 896.439 | 896.839 | |
| 28+485 | 50.00 | 28485.00 | 896.980 | 894.583 | 896.433 | 896.833 | |
| 28+535 | 50.00 | 28535.00 | 897.420 | 894.577 | 896.427 | 896.827 | |
| 28+585 | 50.00 | 28585.00 | 896.770 | 894.571 | 896.421 | 896.821 | |
| 28+635 | 50.00 | 28635.00 | 896.380 | 894.565 | 896.415 | 896.815 | |
| 28+685 | 50.00 | 28685.00 | 895.930 | 894.559 | 896.409 | 896.809 | |
| 28+735 | 45.00 | 28735.00 | 896.910 | 894.553 | 896.403 | 896.803 | |
| 28+785 | 50.00 | 28785.00 | 898.000 | 894.547 | 896.397 | 896.797 | |
| 28+835 | 50.00 | 28835.00 | 898.060 | 894.541 | 896.391 | 896.791 | |
| 28+885 | 50.00 | 28885.00 | 898.370 | 894.535 | 896.385 | 896.785 | |
| 28+935 | 50.00 | 28935.00 | 897.420 | 894.529 | 896.379 | 896.779 | |
| 28+985 | 32.00 | 28985.00 | 896.080 | 894.523 | 896.373 | 896.773 | |
| 29+035 | 50.00 | 29035.00 | 895.980 | 894.517 | 896.367 | 896.767 | |
| 29+089 | 54.00 | 29089.00 | 893.480 | 894.511 | 896.361 | 896.761 | |
| 29+135 | 46.00 | 29135.00 | 893.720 | 894.505 | 896.355 | 896.755 | |
| 29+185 | 50.00 | 29185.00 | 893.510 | 894.499 | 896.349 | 896.749 | |
| 29+235 | 50.00 | 29235.00 | 893.540 | 894.493 | 896.343 | 896.743 | |
| 29+285 | 50.00 | 29285.00 | 893.740 | 894.487 | 896.337 | 896.737 | |
| 29+335 | 50.00 | 29335.00 | 893.870 | 894.481 | 896.331 | 896.731 | |
| 29+385 | 50.00 | 29385.00 | 894.400 | 894.475 | 896.325 | 896.725 | |
| 29+435 | 50.00 | 29435.00 | 895.010 | 894.469 | 896.319 | 896.719 | |
| 29+485 | 50.00 | 29485.00 | 896.520 | 894.463 | 896.313 | 896.713 | |
| 29+535 | 50.00 | 29535.00 | 898.150 | 894.457 | 896.307 | 896.707 | |
| 29+585 | 50.00 | 29585.00 | 899.520 | 894.451 | 896.301 | 896.701 | |
| 29+635 | 50.00 | 29635.00 | 899.800 | 894.445 | 896.295 | 896.695 | |
| 29+685 | 50.00 | 29685.00 | 896.570 | 894.439 | 896.289 | 896.689 | |
| 29+735 | 50.00 | 29735.00 | 897.250 | 894.433 | 896.283 | 896.683 | |

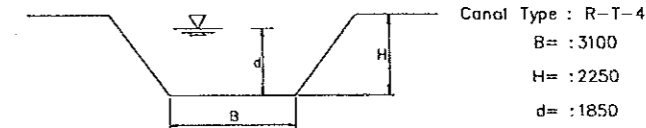
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (10/25)
 (STA. No.26+735 - STA. No.29+735 m)

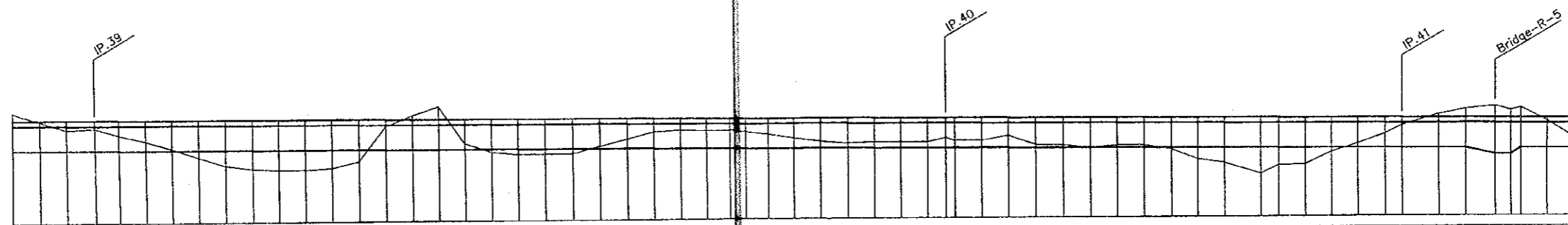
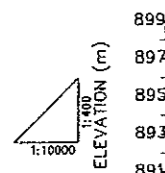
| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3045 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



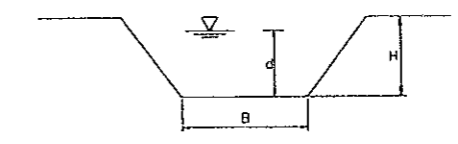
Typical Cross Section

Canal Type : R-T-4
 B= : 3100
 H= : 2250
 d= : 1850



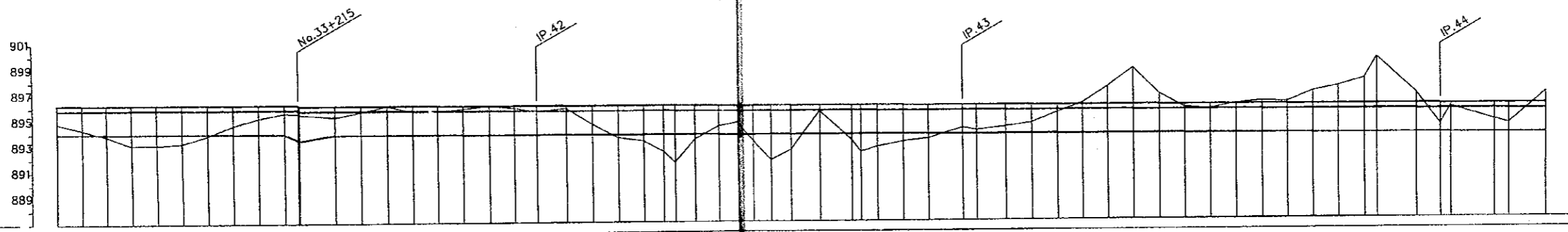
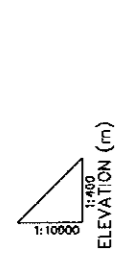
| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION | CANAL TYPE |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|--|
| 29+735 | 0.00 | 29735.00 | 897.250 | 894.422 | 896.272 | 896.872 | HL=8,062.00 m R-T-4 Q=7.774 m³/s 25.00 m culvert |
| 29+785 | 50.00 | 29785.00 | 896.580 | 894.416 | 896.266 | 896.666 | |
| 29+835 | 50.00 | 29835.00 | 895.990 | 894.409 | 896.259 | 896.659 | |
| 29+889 | 54.00 | 29889.00 | 896.070 | 894.402 | 896.252 | 896.652 | |
| 29+935 | 46.00 | 29935.00 | 895.550 | 894.396 | 896.246 | 896.646 | |
| 29+985 | 50.00 | 29985.00 | 895.080 | 894.390 | 896.240 | 896.640 | |
| 30+035 | 50.00 | 30035.00 | 894.500 | 894.383 | 896.233 | 896.633 | |
| 30+085 | 50.00 | 30085.00 | 893.840 | 894.377 | 896.227 | 896.627 | |
| 30+135 | 50.00 | 30135.00 | 893.220 | 894.370 | 896.220 | 896.620 | |
| 30+185 | 50.00 | 30185.00 | 892.970 | 894.364 | 896.214 | 896.614 | |
| 30+235 | 50.00 | 30235.00 | 892.870 | 894.357 | 896.207 | 896.607 | |
| 30+285 | 50.00 | 30285.00 | 892.870 | 894.351 | 896.201 | 896.601 | |
| 30+335 | 50.00 | 30335.00 | 892.990 | 894.344 | 896.194 | 896.594 | |
| 30+385 | 50.00 | 30385.00 | 893.480 | 894.338 | 896.188 | 896.588 | |
| 30+435 | 50.00 | 30435.00 | 896.080 | 894.331 | 896.181 | 896.581 | |
| 30+485 | 50.00 | 30485.00 | 896.890 | 894.325 | 896.175 | 896.575 | |
| 30+535 | 50.00 | 30535.00 | 897.540 | 894.318 | 896.168 | 896.568 | |
| 30+585 | 50.00 | 30585.00 | 894.760 | 894.312 | 896.162 | 896.562 | |
| 30+635 | 50.00 | 30635.00 | 894.120 | 894.305 | 896.155 | 896.555 | |
| 30+685 | 50.00 | 30685.00 | 893.910 | 894.299 | 896.149 | 896.549 | |
| 30+735 | 50.00 | 30735.00 | 893.920 | 894.292 | 896.142 | 896.542 | |
| 30+785 | 50.00 | 30785.00 | 893.960 | 894.286 | 896.136 | 896.536 | |
| 30+835 | 50.00 | 30835.00 | 894.470 | 894.279 | 896.129 | 896.529 | |
| 30+885 | 50.00 | 30885.00 | 894.990 | 894.273 | 896.123 | 896.523 | |
| 30+935 | 50.00 | 30935.00 | 895.530 | 894.266 | 896.116 | 896.516 | |
| 30+985 | 50.00 | 30985.00 | 895.660 | 894.260 | 896.110 | 896.510 | |
| 31+035 | 50.00 | 31035.00 | 895.990 | 894.253 | 896.103 | 896.503 | |
| 31+085 | 50.00 | 31085.00 | 895.600 | 894.247 | 896.097 | 896.497 | |
| 31+135 | 50.00 | 31135.00 | 895.330 | 894.240 | 896.090 | 896.490 | |
| 31+185 | 50.00 | 31185.00 | 895.300 | 894.233 | 896.083 | 896.483 | |
| 31+235 | 50.00 | 31235.00 | 895.300 | 894.227 | 896.077 | 896.477 | |
| 31+285 | 50.00 | 31285.00 | 894.960 | 894.221 | 896.071 | 896.471 | |
| 31+335 | 50.00 | 31335.00 | 894.740 | 894.214 | 896.064 | 896.464 | |
| 31+385 | 50.00 | 31385.00 | 894.570 | 894.208 | 896.058 | 896.458 | |
| 31+435 | 50.00 | 31435.00 | 894.680 | 894.201 | 896.051 | 896.451 | |
| 31+485 | 50.00 | 31485.00 | 894.640 | 894.195 | 896.045 | 896.445 | |
| 31+535 | 50.00 | 31535.00 | 894.620 | 894.188 | 896.038 | 896.438 | |
| 31+585 | 33.00 | 31585.00 | 894.950 | 894.182 | 896.032 | 896.432 | |
| 31+635 | 50.00 | 31635.00 | 894.720 | 894.175 | 896.025 | 896.425 | |
| 31+685 | 50.00 | 31685.00 | 895.100 | 894.169 | 896.019 | 896.419 | |
| 31+735 | 50.00 | 31735.00 | 894.420 | 894.162 | 896.012 | 896.412 | |
| 31+785 | 50.00 | 31785.00 | 894.390 | 894.155 | 896.005 | 896.405 | |
| 31+835 | 50.00 | 31835.00 | 894.190 | 894.149 | 895.999 | 896.399 | |
| 31+885 | 50.00 | 31885.00 | 894.350 | 894.142 | 895.992 | 896.392 | |
| 31+935 | 50.00 | 31935.00 | 894.340 | 894.136 | 895.985 | 896.386 | |
| 31+985 | 50.00 | 31985.00 | 894.030 | 894.129 | 895.979 | 896.379 | |
| 32+035 | 50.00 | 32035.00 | 893.290 | 894.123 | 895.973 | 896.373 | |
| 32+085 | 50.00 | 32085.00 | 893.010 | 894.116 | 895.966 | 896.366 | |
| 32+135 | 68.00 | 32153.00 | 892.190 | 894.108 | 895.958 | 896.358 | |
| 32+185 | 32.00 | 32185.00 | 892.800 | 894.103 | 895.953 | 896.353 | |
| 32+235 | 50.00 | 32235.00 | 892.870 | 894.097 | 895.947 | 896.347 | |
| 32+285 | 50.00 | 32285.00 | 893.790 | 894.090 | 895.940 | 896.340 | |
| 32+335 | 50.00 | 32335.00 | 894.420 | 894.084 | 895.934 | 896.334 | |
| 32+385 | 50.00 | 32385.00 | 895.110 | 894.077 | 895.927 | 896.327 | |
| 32+416 | 31.00 | 32416.00 | 895.760 | 894.073 | 895.923 | 896.323 | |
| 32+485 | 69.00 | 32485.00 | 896.560 | 894.064 | 895.914 | 896.314 | |
| 32+535 | 50.00 | 32535.00 | 896.970 | 894.058 | 895.908 | 896.308 | |
| 32+588 | 53.00 | 32588.00 | 897.182 | 893.594 | 895.901 | 896.301 | |
| 32+618 | 28.00 | 32618.00 | 896.864 | 893.563 | 895.870 | 896.270 | |
| 32+635 | 19.00 | 32635.00 | 897.090 | 894.018 | 895.868 | 896.268 | |
| 32+695 | 50.00 | 32695.00 | 896.080 | 894.011 | 895.861 | 896.261 | |
| 32+735 | 50.00 | 32735.00 | 894.960 | 894.005 | 895.855 | 896.255 | |

| | | | |
|---|---------------|-------------|------|
| REPUBLIC OF ZIMBABWE | | | |
| FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN AGRICULTURAL DEVELOPMENT PROJECT | | | |
| TITLE OF DRAWING MAIN IRRIGATION CANAL PROFILE OF RIGHT MAIN CANAL (11/25) (STA. No.29+735 - STA. No.32+735 m) | | | |
| Date | Oct. 30, 2000 | Drawing No. | 3046 |
| JAPAN INTERNATIONAL COOPERATION AGENCY | | | |



Canal Type : R-T-4
 B = :3100
 H = :2250
 d = :1850
 Canal Type : R-T-5
 B = :3000
 H = :2250
 d = :1852

Typical Cross Section



| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION | CANAL TYPE |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|-----------------------|
| 32+735 | 50.00 | 32735.00 | 894.860 | 894.005 | 895.855 | 896.255 | R-T-5 Q=7.774 m³/s |
| 32+785 | 50.00 | 32785.00 | 894.330 | 893.998 | 895.848 | 896.248 | |
| 32+835 | 50.00 | 32835.00 | 893.840 | 893.992 | 895.842 | 896.242 | R-T-5 Q=7.626 m³/s |
| 32+885 | 50.00 | 32885.00 | 893.140 | 893.985 | 895.835 | 896.235 | |
| 32+935 | 50.00 | 32935.00 | 893.120 | 893.979 | 895.829 | 896.229 | R-T-5 Q=7.626 m³/s |
| 32+985 | 50.00 | 32985.00 | 893.260 | 893.972 | 895.822 | 896.222 | |
| 33+035 | 50.00 | 33035.00 | 893.880 | 893.966 | 895.818 | 896.218 | R-T-5 Q=7.626 m³/s |
| 33+085 | 50.00 | 33085.00 | 894.630 | 893.959 | 895.809 | 896.209 | |
| 33+135 | 50.00 | 33135.00 | 895.190 | 893.953 | 895.803 | 896.203 | R-T-5 Q=7.626 m³/s |
| 33+185 | 50.00 | 33185.00 | 895.570 | 893.946 | 895.796 | 896.196 | |
| 33+215 | 37.00 | 33215.00 | 895.484 | 893.938 | 895.788 | 896.188 | R-T-5 Q=7.626 m³/s |
| 33+265 | 70.00 | 33265.00 | 895.250 | 893.932 | 895.782 | 896.182 | |
| 33+315 | 50.00 | 33315.00 | 895.650 | 893.925 | 895.775 | 896.175 | R-T-5 Q=7.626 m³/s |
| 33+365 | 50.00 | 33365.00 | 896.110 | 893.918 | 895.768 | 896.168 | |
| 33+415 | 50.00 | 33415.00 | 895.880 | 893.912 | 895.762 | 896.162 | R-T-5 Q=7.626 m³/s |
| 33+465 | 50.00 | 33465.00 | 895.660 | 893.905 | 895.755 | 896.155 | |
| 33+515 | 50.00 | 33515.00 | 895.860 | 893.898 | 895.748 | 896.148 | R-T-5 Q=7.626 m³/s |
| 33+565 | 50.00 | 33565.00 | 895.910 | 893.892 | 895.742 | 896.142 | |
| 33+615 | 50.00 | 33615.00 | 895.630 | 893.885 | 895.735 | 896.135 | R-T-5 Q=7.626 m³/s |
| 33+679 | 44.00 | 33679.00 | 895.630 | 893.878 | 895.728 | 896.128 | |
| 33+735 | 56.00 | 33735.00 | 895.860 | 893.872 | 895.722 | 896.122 | R-T-5 Q=7.626 m³/s |
| 33+785 | 50.00 | 33785.00 | 894.820 | 893.865 | 895.715 | 896.115 | |
| 33+835 | 50.00 | 33835.00 | 893.490 | 893.858 | 895.708 | 896.108 | R-T-5 Q=7.626 m³/s |
| 33+885 | 50.00 | 33885.00 | 893.450 | 893.852 | 895.702 | 896.102 | |
| 33+924 | 39.00 | 33924.00 | 892.280 | 893.845 | 895.695 | 896.095 | R-T-5 Q=7.626 m³/s |
| 33+947 | 23.00 | 33947.00 | 891.758 | 893.838 | 895.688 | 896.088 | |
| 33+985 | 38.00 | 33985.00 | 893.520 | 893.832 | 895.682 | 896.082 | R-T-5 Q=7.626 m³/s |
| 34+035 | 50.00 | 34035.00 | 894.420 | 893.825 | 895.675 | 896.075 | |
| 34+085 | 50.00 | 34085.00 | 893.200 | 893.818 | 895.668 | 896.068 | R-T-5 Q=7.626 m³/s |
| 34+185 | 50.00 | 34185.00 | 893.300 | 893.812 | 895.662 | 896.062 | |
| 34+226 | 41.00 | 34226.00 | 891.750 | 893.805 | 895.655 | 896.055 | R-T-5 Q=7.626 m³/s |
| 34+267 | 41.00 | 34267.00 | 892.530 | 893.798 | 895.648 | 896.048 | |
| 34+323 | 56.00 | 34323.00 | 895.500 | 893.792 | 895.642 | 896.042 | R-T-5 Q=7.626 m³/s |
| 34+385 | 62.00 | 34385.00 | 893.270 | 893.785 | 895.635 | 896.035 | |
| 34+403 | 18.00 | 34403.00 | 892.330 | 893.778 | 895.628 | 896.028 | R-T-5 Q=7.626 m³/s |
| 34+435 | 32.00 | 34435.00 | 892.750 | 893.772 | 895.622 | 896.022 | |
| 34+485 | 50.00 | 34485.00 | 893.110 | 893.765 | 895.615 | 896.015 | R-T-5 Q=7.626 m³/s |
| 34+535 | 50.00 | 34535.00 | 893.340 | 893.758 | 895.608 | 896.008 | |
| 34+601 | 66.00 | 34601.00 | 894.180 | 893.752 | 895.602 | 896.002 | R-T-5 Q=7.626 m³/s |
| 34+628 | 27.00 | 34628.00 | 893.960 | 893.745 | 895.595 | 895.995 | |
| 34+685 | 57.00 | 34685.00 | 894.240 | 893.738 | 895.588 | 895.988 | R-T-5 Q=7.626 m³/s |
| 34+735 | 50.00 | 34735.00 | 894.520 | 893.732 | 895.582 | 895.982 | |
| 34+785 | 50.00 | 34785.00 | 895.320 | 893.725 | 895.575 | 895.975 | R-T-5 Q=7.626 m³/s |
| 34+835 | 50.00 | 34835.00 | 896.030 | 893.718 | 895.568 | 895.968 | |
| 34+885 | 50.00 | 34885.00 | 897.260 | 893.712 | 895.562 | 895.962 | R-T-5 Q=7.626 m³/s |
| 34+935 | 50.00 | 34935.00 | 898.720 | 893.705 | 895.555 | 895.955 | |
| 34+985 | 50.00 | 34985.00 | 896.720 | 893.698 | 895.548 | 895.948 | R-T-5 Q=7.626 m³/s |
| 35+035 | 50.00 | 35035.00 | 895.650 | 893.692 | 895.542 | 895.942 | |
| 35+085 | 50.00 | 35085.00 | 895.520 | 893.685 | 895.535 | 895.935 | R-T-5 Q=7.626 m³/s |
| 35+135 | 50.00 | 35135.00 | 895.940 | 893.678 | 895.528 | 895.928 | |
| 35+185 | 50.00 | 35185.00 | 896.110 | 893.672 | 895.522 | 895.922 | R-T-5 Q=7.626 m³/s |
| 35+235 | 50.00 | 35235.00 | 896.040 | 893.665 | 895.515 | 895.915 | |
| 35+285 | 50.00 | 35285.00 | 896.940 | 893.658 | 895.508 | 895.908 | R-T-5 Q=7.626 m³/s |
| 35+335 | 50.00 | 35335.00 | 897.240 | 893.652 | 895.502 | 895.902 | |
| 35+385 | 50.00 | 35385.00 | 897.920 | 893.645 | 895.495 | 895.895 | R-T-5 Q=7.626 m³/s |
| 35+408 | 24.00 | 35408.00 | 899.450 | 893.638 | 895.488 | 895.888 | |
| 35+485 | 76.00 | 35485.00 | 896.700 | 893.632 | 895.482 | 895.882 | R-T-5 Q=7.626 m³/s |
| 35+531 | 46.00 | 35531.00 | 894.230 | 893.625 | 895.475 | 895.875 | |
| 35+551 | 20.00 | 35551.00 | 895.590 | 893.618 | 895.468 | 895.868 | R-T-5 Q=7.626 m³/s |
| 35+635 | 84.00 | 35635.00 | 894.950 | 893.612 | 895.462 | 895.862 | |
| 35+663 | 28.00 | 35663.00 | 894.260 | 893.605 | 895.455 | 895.855 | R-T-5 Q=7.626 m³/s |
| 35+735 | 72.00 | 35735.00 | 896.690 | 893.598 | 895.448 | 895.848 | |

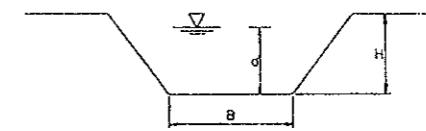
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (12/25)
 (STA. No.32+735 - STA. No.35+735 m)

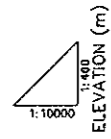
| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3047 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY

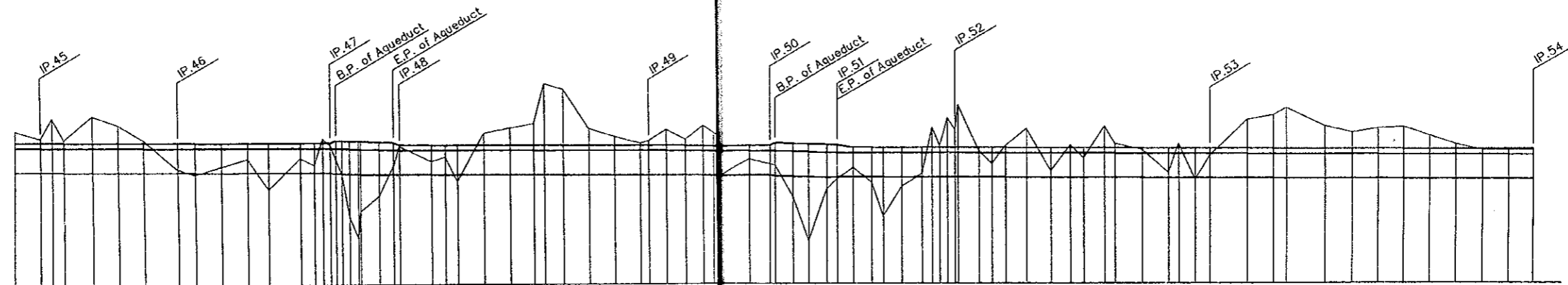


Canal Type : R-T-5
B= : 3000
H= : 2250
d= : 1852

Typical Cross Section



ELEVATION (m)



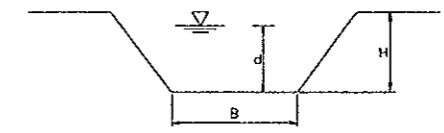
| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION | CANAL TYPE | |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|---------------|----------|
| | | | | | | | R-T-5 | Aqueduct |
| 35+735 | 72.00 | 35735.00 | 896.690 | 893.543 | 895.395 | 895.793 | HL=3,140.00 m | |
| 35+785 | 50.00 | 35785.00 | 896.120 | 893.537 | 895.389 | 895.787 | R-T-5 | |
| 35+808 | 23.00 | 35808.00 | 897.660 | 893.534 | 895.386 | 895.784 | Q=7.626 m³/s | |
| 35+830 | 22.00 | 35830.00 | 896.010 | 893.531 | 895.383 | 895.781 | | |
| 35+885 | 55.00 | 35885.00 | 897.810 | 893.524 | 895.376 | 895.774 | | |
| 35+935 | 50.00 | 35935.00 | 897.130 | 893.517 | 895.369 | 895.767 | | |
| 35+985 | 50.00 | 35985.00 | 895.990 | 893.511 | 895.363 | 895.761 | | |
| 36+052 | 67.00 | 36052.00 | 893.770 | 893.502 | 895.354 | 895.752 | | |
| 36+085 | 33.00 | 36085.00 | 893.360 | 893.498 | 895.350 | 895.748 | | |
| 36+135 | 50.00 | 36135.00 | 893.970 | 893.491 | 895.343 | 895.741 | | |
| 36+185 | 50.00 | 36185.00 | 894.570 | 893.485 | 895.337 | 895.735 | | |
| 36+225 | 40.00 | 36225.00 | 892.240 | 893.480 | 895.332 | 895.730 | | |
| 36+285 | 60.00 | 36285.00 | 894.580 | 893.472 | 895.324 | 895.722 | | |
| 36+311 | 25.00 | 36311.00 | 894.080 | 893.468 | 895.320 | 895.718 | | |
| 36+347 | 18.00 | 36347.00 | 895.970 | 893.464 | 895.316 | 895.714 | | |
| 36+378 | 15.00 | 36378.00 | 893.180 | 893.461 | 895.313 | 895.711 | | |
| 36+399 | 7.00 | 36399.00 | 893.110 | 893.458 | 895.310 | 895.708 | | |
| 36+435 | 36.00 | 36435.00 | 891.720 | 893.454 | 895.306 | 895.704 | | |
| 36+492 | 41.00 | 36492.00 | 893.380 | 893.450 | 895.302 | 895.700 | | |
| 36+535 | 61.00 | 36535.00 | 894.310 | 893.446 | 895.298 | 895.696 | | |
| 36+562 | 27.00 | 36562.00 | 894.640 | 893.442 | 895.294 | 895.692 | | |
| 36+585 | 23.00 | 36585.00 | 892.800 | 893.438 | 895.290 | 895.688 | | |
| 36+635 | 50.00 | 36635.00 | 896.450 | 893.434 | 895.286 | 895.684 | | |
| 36+685 | 50.00 | 36685.00 | 896.850 | 893.430 | 895.282 | 895.680 | | |
| 36+731 | 46.00 | 36731.00 | 897.180 | 893.426 | 895.278 | 895.676 | | |
| 36+750 | 19.00 | 36750.00 | 900.170 | 893.422 | 895.274 | 895.672 | | |
| 36+785 | 35.00 | 36785.00 | 899.760 | 893.418 | 895.270 | 895.668 | | |
| 36+835 | 50.00 | 36835.00 | 896.760 | 893.414 | 895.266 | 895.664 | | |
| 36+885 | 50.00 | 36885.00 | 896.180 | 893.410 | 895.262 | 895.660 | | |
| 36+935 | 50.00 | 36935.00 | 895.650 | 893.406 | 895.258 | 895.656 | | |
| 36+951 | 16.00 | 36951.00 | 895.850 | 893.402 | 895.254 | 895.652 | | |
| 36+985 | 34.00 | 36985.00 | 896.720 | 893.398 | 895.250 | 895.648 | | |
| 37+022 | 37.00 | 37022.00 | 895.970 | 893.394 | 895.246 | 895.644 | | |
| 37+059 | 37.00 | 37059.00 | 897.010 | 893.390 | 895.242 | 895.640 | | |
| 37+085 | 26.00 | 37085.00 | 896.480 | 893.386 | 895.238 | 895.636 | | |
| 37+235 | 70.00 | 37235.00 | 894.480 | 893.382 | 895.234 | 895.632 | | |
| 37+285 | 40.00 | 37285.00 | 893.980 | 893.378 | 895.230 | 895.628 | | |
| 37+319 | 34.00 | 37319.00 | 891.580 | 893.374 | 895.226 | 895.624 | | |
| 37+349 | 30.00 | 37349.00 | 888.230 | 893.370 | 895.222 | 895.620 | | |
| 37+385 | 36.00 | 37385.00 | 892.160 | 893.366 | 895.218 | 895.616 | | |
| 37+405 | 20.00 | 37405.00 | 892.910 | 893.362 | 895.214 | 895.612 | | |
| 37+435 | 30.00 | 37435.00 | 893.760 | 893.358 | 895.210 | 895.608 | | |
| 37+470 | 35.00 | 37470.00 | 892.650 | 893.354 | 895.206 | 895.604 | | |
| 37+492 | 22.00 | 37492.00 | 890.080 | 893.350 | 895.202 | 895.600 | | |
| 37+527 | 35.00 | 37527.00 | 892.350 | 893.346 | 895.198 | 895.596 | | |
| 37+566 | 39.00 | 37566.00 | 893.310 | 893.342 | 895.194 | 895.592 | | |
| 37+585 | 19.00 | 37585.00 | 893.820 | 893.338 | 895.190 | 895.588 | | |
| 37+605 | 20.00 | 37605.00 | 893.410 | 893.334 | 895.186 | 895.584 | | |
| 37+635 | 6.00 | 37635.00 | 896.500 | 893.330 | 895.182 | 895.580 | | |
| 37+674 | 39.00 | 37674.00 | 895.000 | 893.326 | 895.178 | 895.576 | | |
| 37+689 | 25.00 | 37689.00 | 894.060 | 893.322 | 895.174 | 895.572 | | |
| 37+725 | 26.00 | 37725.00 | 895.430 | 893.318 | 895.170 | 895.568 | | |
| 37+765 | 40.00 | 37765.00 | 896.700 | 893.314 | 895.166 | 895.564 | | |
| 37+812 | 47.00 | 37812.00 | 893.500 | 893.310 | 895.162 | 895.560 | | |
| 37+850 | 38.00 | 37850.00 | 895.460 | 893.306 | 895.158 | 895.556 | | |
| 37+875 | 25.00 | 37875.00 | 894.480 | 893.302 | 895.154 | 895.552 | | |
| 37+915 | 40.00 | 37915.00 | 895.870 | 893.298 | 895.150 | 895.548 | | |
| 37+935 | 20.00 | 37935.00 | 895.580 | 893.294 | 895.146 | 895.544 | | |
| 37+985 | 50.00 | 37985.00 | 895.110 | 893.290 | 895.142 | 895.540 | | |
| 38+035 | 50.00 | 38035.00 | 893.370 | 893.286 | 895.138 | 895.536 | | |
| 38+055 | 20.00 | 38055.00 | 895.580 | 893.282 | 895.134 | 895.532 | | |
| 38+085 | 30.00 | 38085.00 | 892.870 | 893.278 | 895.130 | 895.528 | | |
| 38+113 | 28.00 | 38113.00 | 894.700 | 893.274 | 895.126 | 895.524 | | |
| 38+185 | 72.00 | 38185.00 | 897.400 | 893.270 | 895.122 | 895.520 | | |
| 38+235 | 50.00 | 38235.00 | 897.730 | 893.266 | 895.118 | 895.516 | | |
| 38+260 | 25.00 | 38260.00 | 896.270 | 893.262 | 895.114 | 895.512 | | |
| 38+335 | 75.00 | 38335.00 | 896.890 | 893.258 | 895.110 | 895.508 | | |
| 38+365 | 50.00 | 38365.00 | 896.430 | 893.254 | 895.106 | 895.504 | | |
| 38+435 | 50.00 | 38435.00 | 896.740 | 893.250 | 895.102 | 895.500 | | |
| 38+485 | 50.00 | 38485.00 | 896.840 | 893.246 | 895.098 | 895.496 | | |
| 38+535 | 50.00 | 38535.00 | 896.200 | 893.242 | 895.094 | 895.492 | | |
| 38+585 | 50.00 | 38585.00 | 895.530 | 893.238 | 895.090 | 895.488 | | |
| 38+635 | 50.00 | 38635.00 | 895.110 | 893.234 | 895.086 | 895.484 | | |
| 38+685 | 50.00 | 38685.00 | 895.070 | 893.230 | 895.082 | 895.480 | | |
| 38+732 | 47.00 | 38732.00 | 895.120 | 893.226 | 895.078 | 895.476 | | |

REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
MAIN IRRIGATION CANAL
PROFILE OF RIGHT MAIN CANAL (13/25)
(STA. No. 35+735 – STA. No. 38+732 m)

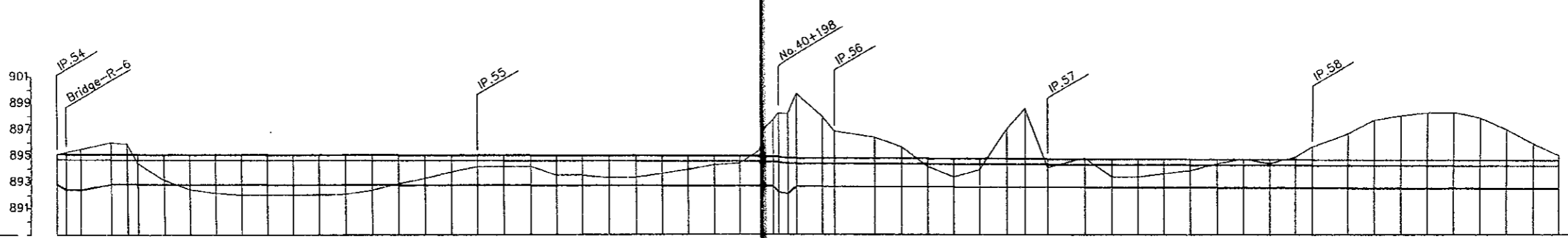
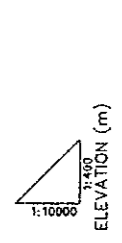
| | | | |
|--|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3048 |
| JAPAN INTERNATIONAL COOPERATION AGENCY | | | |



Canal Type : R-T-5
 B = :3000
 H = :2250
 d = :1852

Canal Type : R-T-6
 B = :2900
 H = :2150
 d = :1724

Typical Cross Section



| STATION No. | DISTANCE | REDUCED DISTANCE | GROUND SURFACE ELEVATION | CANAL BASE ELEVATION | WATER SURFACE ELEVATION | CANAL BANK ELEVATION | CANAL TYPE | |
|-------------|----------|------------------|--------------------------|----------------------|-------------------------|----------------------|------------------|--|
| | | | | | | | 28.00 Culvert | HL=1,421.00 m R-T-5 Q=7.626 m³/s |
| 38+732 | 47.00 | 38732.00 | 895.120 | 892.973 | 894.729 | 895.120 | R-T-5 | HL=1,421.00 m |
| 38+749 | 17.00 | 38749.00 | 895.300 | 892.453 | 894.727 | 895.125 | | |
| 38+777 | 28.00 | 38777.00 | 895.531 | 892.422 | 894.696 | 895.094 | R-T-6 | HL=6,832.00 m |
| 38+835 | 58.00 | 38835.00 | 896.070 | 892.836 | 894.588 | 895.086 | | |
| 38+865 | 30.00 | 38865.00 | 895.910 | 892.833 | 894.685 | 895.085 | R-T-5 | HL=1,421.00 m |
| 38+885 | 20.00 | 38885.00 | 894.450 | 892.830 | 894.682 | 895.080 | | |
| 38+935 | 50.00 | 38935.00 | 893.160 | 892.823 | 894.675 | 895.073 | R-T-6 | HL=6,832.00 m |
| 38+985 | 50.00 | 38985.00 | 892.460 | 892.817 | 894.669 | 895.067 | | |
| 39+035 | 50.00 | 39035.00 | 892.180 | 892.810 | 894.662 | 895.060 | R-T-5 | HL=1,421.00 m |
| 39+085 | 50.00 | 39085.00 | 892.040 | 892.804 | 894.656 | 895.054 | | |
| 39+135 | 50.00 | 39135.00 | 892.040 | 892.797 | 894.649 | 895.047 | R-T-6 | HL=6,832.00 m |
| 39+185 | 50.00 | 39185.00 | 892.040 | 892.791 | 894.643 | 895.041 | | |
| 39+235 | 50.00 | 39235.00 | 892.020 | 892.784 | 894.636 | 895.034 | R-T-5 | HL=1,421.00 m |
| 39+285 | 50.00 | 39285.00 | 892.090 | 892.778 | 894.630 | 895.028 | | |
| 39+335 | 50.00 | 39335.00 | 892.390 | 892.771 | 894.623 | 895.021 | R-T-6 | HL=6,832.00 m |
| 39+385 | 50.00 | 39385.00 | 892.880 | 892.765 | 894.617 | 895.015 | | |
| 39+435 | 50.00 | 39435.00 | 893.280 | 892.758 | 894.610 | 895.008 | R-T-5 | HL=1,421.00 m |
| 39+485 | 50.00 | 39485.00 | 893.760 | 892.752 | 894.604 | 895.002 | | |
| 39+535 | 50.00 | 39535.00 | 894.160 | 892.745 | 894.597 | 894.995 | R-T-6 | HL=6,832.00 m |
| 39+585 | 50.00 | 39585.00 | 894.160 | 892.739 | 894.591 | 894.989 | | |
| 39+635 | 50.00 | 39635.00 | 894.190 | 892.732 | 894.584 | 894.982 | R-T-5 | HL=1,421.00 m |
| 39+685 | 50.00 | 39685.00 | 893.460 | 892.726 | 894.578 | 894.976 | | |
| 39+735 | 50.00 | 39735.00 | 893.500 | 892.719 | 894.571 | 894.969 | R-T-6 | HL=6,832.00 m |
| 39+785 | 50.00 | 39785.00 | 893.300 | 892.713 | 894.565 | 894.963 | | |
| 39+835 | 50.00 | 39835.00 | 893.320 | 892.706 | 894.558 | 894.956 | R-T-5 | HL=1,421.00 m |
| 39+885 | 50.00 | 39885.00 | 893.640 | 892.700 | 894.552 | 894.950 | | |
| 39+935 | 50.00 | 39935.00 | 893.910 | 892.693 | 894.545 | 894.943 | R-T-6 | HL=6,832.00 m |
| 39+985 | 50.00 | 39985.00 | 894.280 | 892.687 | 894.539 | 894.937 | | |
| 40+035 | 50.00 | 40035.00 | 894.410 | 892.680 | 894.532 | 894.930 | R-T-5 | HL=1,421.00 m |
| 40+085 | 50.00 | 40085.00 | 895.430 | 892.674 | 894.526 | 894.924 | | |
| 40+135 | 50.00 | 40135.00 | 895.720 | 892.667 | 894.519 | 894.917 | R-T-6 | HL=6,832.00 m |
| 40+185 | 50.00 | 40185.00 | 895.710 | 892.661 | 894.513 | 894.911 | | |
| 40+235 | 50.00 | 40235.00 | 895.710 | 892.655 | 894.507 | 894.905 | R-T-5 | HL=1,421.00 m |
| 40+285 | 50.00 | 40285.00 | 897.950 | 892.630 | 894.354 | 894.780 | | |
| 40+308 | 23.00 | 40308.00 | 896.820 | 892.622 | 894.351 | 894.777 | R-T-6 | HL=6,832.00 m |
| 40+385 | 77.00 | 40385.00 | 896.370 | 892.617 | 894.341 | 894.767 | | |
| 40+435 | 50.00 | 40435.00 | 895.660 | 892.611 | 894.335 | 894.761 | R-T-5 | HL=1,421.00 m |
| 40+485 | 50.00 | 40485.00 | 894.160 | 892.604 | 894.328 | 894.754 | | |
| 40+535 | 50.00 | 40535.00 | 893.350 | 892.598 | 894.322 | 894.748 | R-T-6 | HL=6,832.00 m |
| 40+585 | 50.00 | 40585.00 | 893.910 | 892.591 | 894.315 | 894.741 | | |
| 40+635 | 50.00 | 40635.00 | 896.990 | 892.585 | 894.309 | 894.735 | R-T-5 | HL=1,421.00 m |
| 40+670 | 35.00 | 40670.00 | 896.540 | 892.580 | 894.304 | 894.730 | | |
| 40+713 | 43.00 | 40713.00 | 894.090 | 892.575 | 894.299 | 894.725 | R-T-6 | HL=6,832.00 m |
| 40+785 | 72.00 | 40785.00 | 894.810 | 892.565 | 894.289 | 894.715 | | |
| 40+835 | 50.00 | 40835.00 | 893.400 | 892.559 | 894.283 | 894.709 | R-T-5 | HL=1,421.00 m |
| 40+885 | 50.00 | 40885.00 | 893.370 | 892.552 | 894.276 | 894.702 | | |
| 40+935 | 50.00 | 40935.00 | 893.620 | 892.546 | 894.270 | 894.696 | R-T-6 | HL=6,832.00 m |
| 40+985 | 50.00 | 40985.00 | 893.860 | 892.539 | 894.263 | 894.689 | | |
| 41+035 | 50.00 | 41035.00 | 894.390 | 892.533 | 894.257 | 894.683 | R-T-5 | HL=1,421.00 m |
| 41+085 | 50.00 | 41085.00 | 894.690 | 892.528 | 894.250 | 894.676 | | |
| 41+135 | 50.00 | 41135.00 | 894.380 | 892.520 | 894.244 | 894.670 | R-T-6 | HL=6,832.00 m |
| 41+185 | 50.00 | 41185.00 | 894.870 | 892.513 | 894.237 | 894.663 | | |
| 41+217 | 32.00 | 41217.00 | 895.640 | 892.508 | 894.233 | 894.659 | R-T-5 | HL=1,421.00 m |
| 41+285 | 68.00 | 41285.00 | 896.640 | 892.500 | 894.224 | 894.650 | | |
| 41+335 | 50.00 | 41335.00 | 897.680 | 892.494 | 894.218 | 894.644 | R-T-6 | HL=6,832.00 m |
| 41+385 | 50.00 | 41385.00 | 896.000 | 892.487 | 894.211 | 894.637 | | |
| 41+435 | 50.00 | 41435.00 | 896.230 | 892.481 | 894.205 | 894.631 | R-T-5 | HL=1,421.00 m |
| 41+485 | 50.00 | 41485.00 | 896.270 | 892.474 | 894.198 | 894.624 | | |
| 41+535 | 50.00 | 41535.00 | 897.930 | 892.468 | 894.192 | 894.618 | R-T-6 | HL=6,832.00 m |
| 41+585 | 50.00 | 41585.00 | 896.940 | 892.461 | 894.185 | 894.611 | | |
| 41+635 | 50.00 | 41635.00 | 896.680 | 892.455 | 894.179 | 894.605 | R-T-5 | HL=1,421.00 m |
| 41+685 | 50.00 | 41685.00 | 894.990 | 892.448 | 894.172 | 894.598 | | |

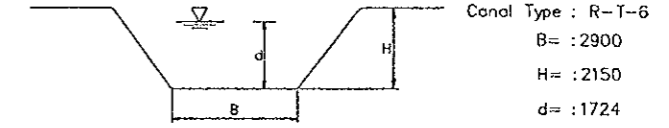
REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (14/25)
 (STA. No.38+732 - STA. No.41+685 m)

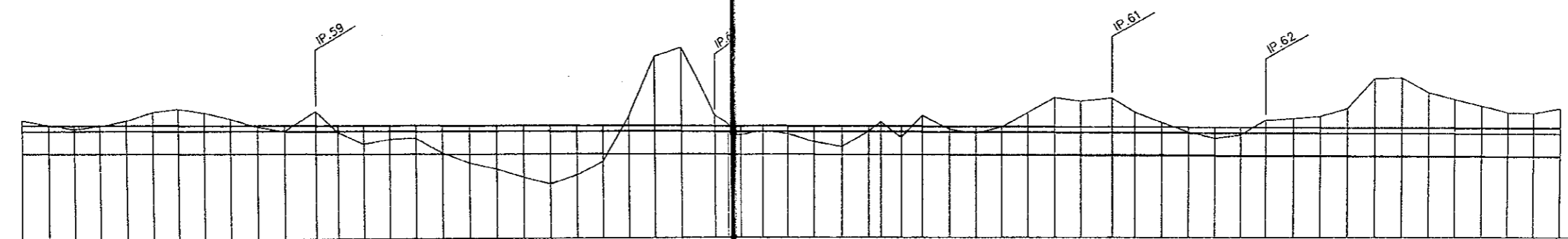
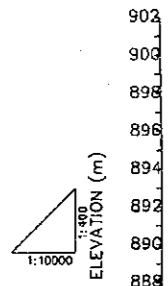
| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3049 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY



Typical Cross Section

Canal Type : R-T-6
 B = :2900
 H = :2150
 d = :1724



| CANAL TYPE | HL=6.832.00 m R-T-6 Q=6.456 m ³ /s | |
|--------------------------|--|----------|
| CANAL BANK ELEVATION | 894.588 | 894.404 |
| WATER SURFACE ELEVATION | 894.172 | 893.978 |
| CANAL BASE ELEVATION | 892.448 | 892.254 |
| GROUND SURFACE ELEVATION | 894.990 | 894.090 |
| REDUCED DISTANCE | 41685.00 | 43185.00 |
| DISTANCE | 50.00 | 50.00 |
| STATION No. | 41+685 | 43+185 |

REPUBLIC OF ZIMBABWE

FEASIBILITY STUDY ON LOWER MUNYATI RIVER BASIN
 AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 MAIN IRRIGATION CANAL
 PROFILE OF RIGHT MAIN CANAL (15/25)
 (STA. No.41+685 - STA. No.44+685 m)

| | | | |
|------|---------------|-------------|------|
| Date | Oct. 30, 2000 | Drawing No. | 3050 |
|------|---------------|-------------|------|

JAPAN INTERNATIONAL COOPERATION AGENCY