



| Upp Str | Low Str | PL      | S   | Upp FL | Low FL | PS     | Upp ST | Low ST | Upp HY | Low HY | Upp EL | Low EL  | Hyd Head | FR Head | VEL  | VEL  | Junc Loss | Turn Loss | Curve Loss | STR Cap | Inl Area | DR P.I. | O     | TO    | Pipe Cap | Remarks        |            |            |
|---------|---------|---------|-----|--------|--------|--------|--------|--------|--------|--------|--------|---------|----------|---------|------|------|-----------|-----------|------------|---------|----------|---------|-------|-------|----------|----------------|------------|------------|
| 1       | OS48    | FE47    | 106 | 42     | 496.00 | 490.00 | 6.66   | 504.00 | 6.41   | 497.59 | 493.50 | 0.01020 | 1.08     | 10.57   | 1.73 | 1.73 | 0.00      | 0.00      | 0.00       | 0.00    | OS       | 0.00    | 3.02  | 3.30  | 101.74   | 101.74         | 239.36     | ITP=493.50 |
| 2       | C146    | C145    | 35  | 12     | 538.67 | 537.62 | 3.00   | 543.53 | 4.80   | 538.93 | 538.62 | 0.00070 | 0.02     | 1.24    | 0.02 | 0.02 | 0.00      | 0.00      | 0.00       | 3.88%   | 1.26     | 0.37    | 2.59  | 0.97  | 0.97     | 6.17           |            |            |
| 3       | C145    | EXMH44  | 60  | 12     | 537.42 | 532.03 | 9.01   | 543.53 | 5.87   | 537.69 | 534.20 | 0.00150 | 0.09     | 1.74    | 0.05 | 0.00 | 0.01      | 0.00      | 0.00       | 3.88%   | 1.26     | 0.12    | 3.30  | 0.40  | 1.37     | 10.69          |            |            |
| 4       | EXMH44  | EXG143  | 117 | 12     | 531.83 | 530.70 | 0.97   | 544.00 | 9.80   | 534.20 | 534.02 | 0.00150 | 0.18     | 1.74    | 0.05 | 0.00 | 0.00      | 0.00      | 0.00       | MH      | 0.00     | 0.00    | 0.00  | 0.00  | 1.37     | 3.51           |            |            |
| 5       | EXG143  | EXG143A | 72  | 12     | 530.70 | 529.89 | 1.13   | 535.95 | 1.63   | 534.02 | 533.91 | 0.00150 | 0.11     | 1.74    | 0.05 | 0.00 | 0.00      | 0.00      | 0.00       | LOW     | 3.40     | 0.00    | 0.00  | 0.00  | 1.37     | 3.79           | ITP=530.89 |            |
| 6       | A142    | AH1     | 192 | 12     | 528.00 | 521.09 | 3.60   | 532.50 | 4.12   | 528.38 | 522.08 | 0.00310 | 0.60     | 2.53    | 0.10 | 0.10 | 0.00      | 0.00      | 0.00       | 4S      | 11.00    | 0.89    | 2.59  | 1.99  | 1.99     | 6.76           |            |            |
| 7       | A141    | FE40    | 72  | 12     | 520.89 | 519.00 | 3.99   | 525.90 | 4.57   | 521.33 | 519.00 | 0.00650 | 0.47     | 3.65    | 0.21 | 0.00 | 0.07      | 0.00      | 0.00       | 4S      | 11.00    | 0.81    | 2.59  | 0.88  | 2.87     | 7.12           | ITP=519.00 |            |
| 8       | EP39    | EP38    | 30  | 15     | 512.90 | 512.21 | 2.30   | 514.15 | 0.38   | 513.77 | 513.46 | 0.00420 | 0.13     | 3.41    | 0.18 | 0.18 | 0.00      | 0.00      | 0.00       | 0.00    | 0.00     | 0.44    | 3.30  | 1.45  | 4.18     | 9.80           | ITP=513.46 |            |
| 9       | DC137   | A135    | 155 | 15     | 515.19 | 508.11 | 5.88   | 524.85 | 9.15   | 515.70 | 507.64 | 0.00690 | 1.07     | 4.36    | 0.30 | 0.30 | 0.00      | 0.00      | 0.00       | LOW     | 6.85     | 1.82    | 3.30  | 5.35  | 5.35     | 15.64          |            |            |
| 10      | A136    | A135    | 216 | 12     | 509.35 | 508.11 | 1.50   | 514.40 | 4.47   | 509.93 | 507.64 | 0.00620 | 1.34     | 3.58    | 0.20 | 0.20 | 0.00      | 0.00      | 0.00       | 4S      | 11.00    | 0.85    | 3.30  | 2.91  | 2.91     | 4.36           |            |            |
| 11      | A135    | FE34    | 68  | 18     | 505.91 | 505.25 | 1.00   | 510.20 | 2.56   | 507.64 | 506.75 | 0.00840 | 0.56     | 5.44    | 0.46 | 0.33 | 0.00      | 0.00      | 0.00       | 4S      | 11.00    | 0.44    | 3.30  | 1.45  | 9.81     | 10.50          | ITP=506.75 |            |
| 12      | A133    | MH32    | 75  | 12     | 524.15 | 523.40 | 1.01   | 528.40 | 3.66   | 524.74 | 524.40 | 0.00320 | 0.24     | 2.55    | 0.10 | 0.10 | 0.00      | 0.00      | 0.00       | 4S      | 11.00    | 0.85    | 2.97  | 2.00  | 2.00     | 3.58           |            |            |
| 13      | MH32    | C131    | 109 | 12     | 523.20 | 522.11 | 1.00   | 536.10 | 12.38  | 523.72 | 523.11 | 0.00320 | 0.35     | 2.55    | 0.10 | 0.00 | 0.06      | 0.00      | 0.00       | MH      | 0.00     | 0.00    | 0.00  | 0.00  | 2.00     | 3.56           |            |            |
| 14      | C131    | C130    | 35  | 12     | 521.91 | 521.58 | 1.00   | 534.48 | 11.71  | 522.77 | 522.56 | 0.00490 | 0.17     | 3.18    | 0.16 | 0.00 | 0.04      | 0.00      | 4%         | 1.21    | 0.15     | 3.30    | 0.50  | 2.50  | 3.56     |                |            |            |
| 15      | C130    | MH29    | 103 | 12     | 521.38 | 520.33 | 1.00   | 534.48 | 12.44  | 522.24 | 521.33 | 0.00580 | 0.61     | 3.48    | 0.19 | 0.00 | 0.10      | 0.00      | 4%         | 1.21    | 0.07     | 3.30    | 0.23  | 2.73  | 3.56     |                |            |            |
| 16      | MH29    | MH28    | 88  | 12     | 520.13 | 519.25 | 1.00   | 536.40 | 15.51  | 520.89 | 520.25 | 0.00580 | 0.52     | 3.48    | 0.19 | 0.00 | 0.12      | 0.00      | 0.00       | MH      | 0.00     | 0.00    | 0.00  | 0.00  | 2.73     | 3.56           |            |            |
| 17      | MH28    | FE27    | 105 | 12     | 519.05 | 518.00 | 1.00   | 528.40 | 8.86   | 519.74 | 519.00 | 0.00590 | 0.62     | 3.48    | 0.19 | 0.00 | 0.12      | 0.00      | 0.00       | MH      | 0.00     | 0.00    | 0.00  | 0.00  | 2.73     | 3.56           | ITP=519.00 |            |
| 18      | A126    | MH25    | 98  | 18     | 522.70 | 521.82 | 1.00   | 528.70 | 2.87   | 523.93 | 523.32 | 0.00360 | 0.32     | 3.54    | 0.19 | 0.19 | 0.00      | 0.00      | 4S         | 11.00   | 2.23     | 2.97    | 6.26  | 6.26  | 10.50    |                |            |            |
| 19      | MH25    | C124    | 21  | 18     | 521.82 | 521.42 | 0.97   | 531.30 | 8.17   | 523.13 | 522.97 | 0.00360 | 0.07     | 3.54    | 0.00 | 0.00 | 0.00      | 0.00      | 0.00       | MH      | 0.00     | 0.00    | 0.00  | 0.00  | 6.26     | 10.35          |            |            |
| 20      | C124    | C123    | 35  | 18     | 521.22 | 520.87 | 1.00   | 530.82 | 7.85   | 522.97 | 522.66 | 0.00630 | 0.22     | 4.74    | 0.35 | 0.00 | 0.09      | 0.00      | LOW        | 3.40    | 0.84     | 3.30    | 2.11  | 8.37  | 10.50    |                |            |            |
| 21      | C123    | MH22    | 19  | 24     | 520.67 | 520.48 | 1.01   | 530.82 | 8.16   | 522.66 | 522.48 | 0.00230 | 0.04     | 3.48    | 0.19 | 0.00 | 0.14      | 0.00      | LOW        | 3.40    | 0.78     | 3.30    | 2.57  | 10.84 | 22.74    |                |            |            |
| 22      | MH22    | MH15    | 140 | 24     | 520.28 | 508.30 | 10.02  | 531.30 | 10.50  | 520.90 | 508.30 | 0.00230 | 0.32     | 3.48    | 0.19 | 0.00 | 0.08      | 0.00      | 0.00       | MH      | 0.00     | 0.00    | 0.00  | 0.00  | 10.84    | 21.61          |            |            |
| 23      | FE21    | C120    | 26  | 36     | 516.00 | 516.74 | 1.00   | 528.00 | 7.76   | 520.24 | 519.11 | 0.00690 | 0.18     | 7.83    | 0.95 | 0.95 | 0.00      | 0.00      | FE         | 0.00    | 3.30     | 2.60    | 55.34 | 55.34 | 68.70    |                |            |            |
| 24      | C120    | C119    | 35  | 36     | 515.54 | 515.19 | 1.00   | 530.00 | 10.89  | 518.11 | 518.94 | 0.00780 | 0.27     | 8.33    | 1.08 | 0.00 | 0.00      | 0.00      | LOW        | 3.40    | 0.86     | 3.30    | 2.94  | 59.91 | 68.70    |                |            |            |
| 25      | C119    | MH18    | 86  | 36     | 514.99 | 514.13 | 1.00   | 530.00 | 11.16  | 518.94 | 517.57 | 0.00840 | 0.72     | 8.63    | 1.16 | 0.00 | 0.55      | 0.00      | LOW        | 3.40    | 0.83     | 3.30    | 2.08  | 60.89 | 68.70    |                |            |            |
| 26      | MH18    | A117    | 103 | 36     | 513.93 | 512.90 | 1.00   | 533.50 | 15.93  | 517.57 | 515.90 | 0.00840 | 0.87     | 8.63    | 1.16 | 0.00 | 0.80      | 0.00      | MH         | 0.00    | 0.00     | 0.00    | 0.00  | 60.89 | 68.70    |                |            |            |
| 27      | A117    | A116    | 191 | 36     | 512.70 | 504.40 | 4.34   | 522.90 | 8.78   | 514.11 | 507.40 | 0.00850 | 1.53     | 8.99    | 1.17 | 0.00 | 0.78      | 0.00      | 4S         | 11.00   | 0.15     | 3.30    | 0.43  | 61.42 | 138.95   |                |            |            |
| 28      | A116    | MH15    | 90  | 36     | 504.20 | 503.30 | 1.00   | 511.80 | 4.63   | 507.17 | 506.30 | 0.00930 | 0.84     | 9.11    | 1.29 | 0.00 | 0.03      | 0.00      | 4S         | 11.00   | 0.90     | 3.30    | 2.97  | 64.39 | 68.70    |                |            |            |
| 29      | MH15    | FE14    | 61  | 42     | 503.10 | 501.00 | 3.46   | 511.55 | 6.91   | 504.64 | 503.32 | 0.00560 | 0.34     | 7.83    | 0.95 | 0.28 | 0.00      | 0.00      | 6%         | 0.00    | 0.00     | 0.00    | 0.00  | 75.33 | 187.15   | HW=503.32      |            |            |
| 30      | C113    | C14     | 35  | 12     | 517.74 | 515.62 | 6.01   | 523.74 | 5.86   | 517.88 | 516.62 | 0.00020 | 0.01     | 0.64    | 0.01 | 0.01 | 0.00      | 0.00      | 6%         | 0.50    | 0.30     | 3.30    | 0.99  | 0.50  | 8.73     | BYPASS=0.49cfs |            |            |
| 31      | A112    | A111    | 141 | 12     | 519.94 | 515.01 | 3.50   | 526.50 | 6.20   | 520.30 | 516.01 | 0.00290 | 0.41     | 2.43    | 0.09 | 0.09 | 0.00      | 0.00      | 0.00       | 4S      | 11.00    | 0.58    | 3.30  | 1.91  | 1.91     | 6.87           |            |            |
| 32      | A111    | A110    | 57  | 15     | 516.81 | 510.56 | 7.50   | 520.90 | 5.74   | 515.16 | 511.81 | 0.00250 | 0.14     | 2.61    | 0.11 | 0.00 | 0.01      | 0.00      | 4S         | 11.00   | 0.39     | 3.30    | 1.29  | 3.20  | 17.69    |                |            |            |
| 33      | A110    | A19     | 124 | 15     | 510.36 | 507.88 | 2.00   | 516.70 | 5.79   | 510.91 | 509.13 | 0.00330 | 0.41     | 3.02    | 0.14 | 0.00 | 0.03      | 0.00      | 4S         | 11.00   | 0.15     | 3.30    | 0.50  | 3.70  | 9.14     |                |            |            |
| 34      | A19     | MH9     | 100 | 15     | 507.68 | 505.18 | 1.50   | 513.30 | 4.78   | 508.32 | 507.43 | 0.00430 | 0.43     | 3.45    | 0.18 | 0.00 | 0.04      | 0.00      | 4S         | 11.00   | 0.16     | 3.30    | 0.53  | 4.23  | 7.91     |                |            |            |
| 35      | MH9     | MH2     | 117 | 15     | 505.98 | 501.87 | 3.50   | 511.40 | 4.91   | 506.49 | 505.52 | 0.00430 | 0.50     | 3.45    | 0.18 | 0.00 | 0.10      | 0.00      | MH         | 0.00    | 0.00     | 0.00    | 0.00  | 4.23  | 12.09    |                |            |            |
| 36      | C17     | C16     | 35  | 12     | 534.41 | 534.06 | 1.00   | 540.42 | 5.30   | 535.12 | 535.06 | 0.00080 | 0.03     | 1.31    | 0.03 | 0.03 | 0.00      | 0.00      | 4.5%       | 1.03    | 0.56     | 2.59    | 1.76  | 1.03  | 3.56     | BYPASS=0.73cfs |            |            |
| 37      | C16     | MH5     | 40  | 12     | 533.87 | 530.67 | 8.00   | 540.42 | 6.25   | 534.17 | 531.67 | 0.00330 | 0.13     | 2.62    | 0.11 | 0.00 | 0.01      | 0.00      | 4.5%       | 1.03    | 0.49     | 3.30    | 1.62  | 2.06  | 10.08    | BYPASS=0.58cfs |            |            |
| 38      | MH5     | C14     | 203 | 12     | 530.47 | 515.62 | 7.90   | 538.00 | 7.21   | 530.79 | 516.82 | 0.00330 | 0.67     | 2.62    | 0.11 | 0.00 | 0.02      | 0.00      | MH         | 0.00    | 0.00     | 0.00    | 0.00  | 2.06  | 9.63     | BYPASS=1.34cfs |            |            |
| 39      | C14     | MH3A    | 171 | 12     | 515.42 | 510.95 | 2.68   | 523.47 | 7.54   | 515.93 | 511.85 | 0.00740 | 1.26     | 3.      |      |      |           |           |            |         |          |         |       |       |          |                |            |            |