

Appendix F

Existing Model Results



City of Richland - 2015 General Sewer Plan Update

Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|---------------------------|----------------------|-----------|--------------------|--------------------|----------------------|-----------|--------------------|--------------------|-------------|-----------|-----------|-----------|-------------|---------------|-------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 2 | | 8747 | | Old Model | Old Model | JCT_MP-454 | | Record Drawings | Record Drawings | 35 | 10 | 387.34 | 383.31 | 383.28 | 4.03 | 0.10% | 0.001 | 0.26 | 0.04 | 0.48 |
| 4 | North Trunk Sewer | 8754 | H-007 | Old Model | Straight Grade | 8753 | H-008 | Old Model | Record Drawings | 357 | 15 | 375.00 | 366.19 | 362.00 | 8.81 | 1.17% | 0.300 | 3.45 | 0.17 | 4.60 |
| 5 | HR Connection ('79) | 9018 | | AsBuilts | AsBuilts | 9019 | | AsBuilts | AsBuilts | 399 | 36 | 369.74 | 345.77 | 345.44 | 23.97 | 0.08% | 0.799 | 2.02 | 0.19 | 12.63 |
| 9 | | 8773 | | Old Model | Old Model | 8780 | | Old Model | Old Model | 373 | 10 | 373.50 | 363.50 | 360.41 | 10.00 | 0.83% | 0.001 | 0.71 | 0.02 | 1.40 |
| 12 | | 8780 | | Old Model | Old Model | 8781 | K-054 | Old Model | Old Model | 400 | 12 | 370.13 | 360.38 | 357.43 | 9.75 | 0.74% | 0.002 | 0.85 | 0.27 | 2.14 |
| 21 | | 6004 | | Old Model | Old Model | 6003 | | Inv+10 | Straight Grade | 103 | 12 | 359.96 | 349.96 | 348.97 | 10.00 | 0.97% | 0.010 | 1.16 | 0.05 | 2.44 |
| 69 | | 8700 | | COR Sewer Map Book | COR Sewer Map Book | 8699 | | Assumed | Straight Grade | 31 | 12 | 374.20 | 360.24 | 359.86 | 13.96 | 1.24% | 0.093 | 2.34 | 0.13 | 2.68 |
| 87 | | 7878 | | COR Sewer Map Book | COR Sewer Map Book | 7854 | | Old Model | Record Drawing | 300 | 12 | 391.56 | 383.66 | 377.11 | 7.90 | 2.18% | 0.021 | 1.33 | 0.05 | 3.66 |
| 115 | North Trunk Sewer | 7888 | E-012 | Old Model | Record Drawings | 7890 | E-013 | Old Model | Record Drawings | 512 | 12 | 389.79 | 380.25 | 379.25 | 9.54 | 0.20% | 0.248 | 1.74 | 0.33 | 0.85 |
| 127 | | 7792 | | Old Model | Record Drawing | 7781 | | Old Model | Record Drawings | 354 | 12 | 384.23 | 374.06 | 368.98 | 10.17 | 1.43% | 0.047 | 1.34 | 0.09 | 2.94 |
| 128 | | 7903 | | COR Sewer Map Book | COR Sewer Map Book | 7792 | | Old Model | Record Drawing | 297 | 12 | 383.70 | 375.55 | 374.06 | 8.15 | 0.50% | 0.038 | 1.52 | 0.10 | 1.73 |
| 129 | | 7901 | | Old Model | Record Drawing | 7903 | | COR Sewer Map Book | COR Sewer Map Book | 308 | 12 | 386.11 | 375.88 | 375.55 | 10.23 | 0.11% | 0.026 | 0.75 | 0.14 | 0.79 |
| 130 | | 7855 | | Old Model | Record Drawing | 7901 | | Old Model | Record Drawing | 239 | 12 | 386.95 | 376.63 | 375.88 | 10.32 | 0.31% | 0.025 | 0.77 | 0.09 | 1.37 |
| 131 | | 7854 | | Old Model | Record Drawing | 7855 | | Old Model | Record Drawing | 140 | 12 | 387.44 | 377.11 | 376.63 | 10.33 | 0.34% | 0.022 | 1.00 | 0.09 | 1.44 |
| 148 | Horn Rapids Sewer Trunk | 6016 | | Record Drawing | Old Model | 6015 | | Record Drawing | Old Model | 522 | 42 | 362.42 | 348.73 | 348.26 | 13.69 | 0.09% | 0.758 | 1.52 | 0.13 | 20.37 |
| 149 | Horn Rapids Sewer Trunk | 6008 | | AsBuilts | AsBuilts | 6034 | | AsBuilts | AsBuilts | 84 | 42 | 362.02 | 347.84 | 347.58 | 14.18 | 0.31% | 0.753 | 1.85 | 0.10 | 38.54 |
| 150 | Horn Rapids Sewer Trunk | 6025 | | AsBuilts | AsBuilts | 9018 | | AsBuilts | AsBuilts | 391 | 42 | 369.20 | 346.15 | 345.80 | 23.05 | 0.09% | 0.800 | 1.45 | 0.13 | 20.29 |
| 157 | | 6115 | K-277 | Record Drawings | Record Drawings | JCT_MP-382 | | AsBuilts | AsBuilts | 294 | 12 | 369.59 | 353.97 | 352.97 | 15.62 | 0.34% | 0.666 | 3.66 | 0.42 | 0.79 |
| 158 | Logston Sewer '13 install | 6121 | K-245 | Record Drawings | Record Drawings | 6122 | K-246 | Record Drawings | Record Drawings | 494 | 24 | 378.07 | 363.84 | 359.36 | 14.23 | 0.91% | 0.020 | 1.44 | 0.03 | 15.07 |
| 170 | | 6100 | K-233 | Record Drawings | Record Drawings | 6089 | K-232 | Record Drawings | Record Drawings | 604 | 12 | 409.60 | 398.29 | 396.42 | 11.31 | 0.31% | 0.016 | 0.99 | 0.19 | 1.37 |
| 171 | | 6095 | K-278 | Record Drawings | Record Drawings | 6096 | | Record Drawings | Record Drawings | 402 | 12 | 427.27 | 414.45 | 410.50 | 12.82 | 0.98% | 0.009 | 1.14 | 0.04 | 2.47 |
| 173 | | 6105 | K-281 | Record Drawings | Record Drawings | 6106 | K-280 | Record Drawings | Record Drawings | 399 | 12 | 444.86 | 426.92 | 425.19 | 17.94 | 0.43% | 0.008 | 0.90 | 0.05 | 1.64 |
| 174 | | 6060 | | Record Drawings | Record Drawings | 6124 | | Record Drawings | Record Drawings | 401 | 12 | 419.11 | 408.23 | 406.30 | 10.88 | 0.48% | 0.001 | 0.64 | 0.02 | 1.73 |
| 175 | | 6065 | | Old Model | Old Model | 6070 | K-109 | Record Drawings | Record Drawings | 359 | 21 | 377.10 | 367.10 | 366.54 | 10.00 | 0.16% | 0.232 | 1.50 | 0.16 | 4.15 |
| 176 | | 6074 | K-251 | Record Drawings | Record Drawings | 6075 | K-252 | Record Drawings | Record Drawings | 254 | 14 | 427.08 | 396.73 | 396.30 | 30.35 | 0.17% | 0.027 | 0.91 | 0.11 | 1.52 |
| 177 | | 6076 | K-253 | Old Model | Old Model | 6070 | K-109 | Record Drawings | Record Drawings | 311 | 15 | 400.56 | 389.37 | 389.29 | 11.19 | 0.03% | 0.026 | 0.58 | 0.16 | 0.70 |
| 178 | | 6080 | | Record Drawings | Record Drawings | 6077 | | Record Drawings | Record Drawings | 616 | 15 | 413.82 | 401.79 | 400.67 | 12.03 | 0.18% | 0.007 | 0.60 | 0.06 | 1.92 |
| 180 | | 6078 | | Record Drawings | Record Drawings | 6080 | | Record Drawings | Record Drawings | 420 | 12 | 417.00 | 402.85 | 401.91 | 14.15 | 0.22% | 0.007 | 0.66 | 0.06 | 1.17 |
| 182 | Horn Rapids Sewer Trunk | 6051 | K-214 | Record Drawing | Old Model | 6050 | K-213 | Record Drawing | Record Drawing | 465 | 42 | 360.00 | 350.30 | 349.90 | 9.70 | 0.09% | 0.766 | 1.57 | 0.13 | 19.90 |
| 185 | | 6062 | | Old Model | Old Model | 6064 | | Old Model | Old Model | 516 | 21 | 375.40 | 365.40 | 364.38 | 10.00 | 0.20% | 0.257 | 1.52 | 0.15 | 4.68 |
| 186 | | 6077 | | Record Drawings | Record Drawings | 6123 | | Record Drawings | Record Drawings | 515 | 14 | 406.32 | 400.57 | 399.92 | 5.75 | 0.13% | 0.006 | 0.50 | 0.07 | 1.33 |
| 187 | | 6124 | | Record Drawings | Record Drawings | 6944 | | Record Drawings | Record Drawings | 338 | 12 | 415.27 | 406.19 | 404.55 | 9.08 | 0.49% | 0.005 | 0.75 | 0.04 | 1.73 |
| 190 | | 6089 | K-232 | Record Drawings | Record Drawings | 6083 | K-238 | Record Drawings | Record Drawings | 400 | 18 | 412.57 | 396.01 | 395.40 | 16.56 | 0.15% | 0.017 | 0.71 | 0.07 | 2.86 |
| 191 | | 6083 | K-238 | Record Drawings | Record Drawings | 6081 | K-239 | Record Drawings | Record Drawings | 352 | 18 | 417.70 | 395.28 | 394.47 | 22.42 | 0.23% | 0.017 | 0.74 | 0.05 | 3.51 |
| 192 | | 6081 | K-239 | Record Drawings | Record Drawings | 6082 | K-240 | Record Drawings | Record Drawings | 350 | 18 | 406.05 | 394.51 | 383.18 | 11.54 | 3.23% | 0.017 | 1.98 | 0.05 | 13.21 |
| 193 | | 6082 | K-240 | Record Drawings | Record Drawings | 6084 | K-241 | Record Drawings | Record Drawings | 479 | 18 | 391.72 | 383.12 | 371.49 | 8.60 | 2.43% | 0.017 | 1.79 | 0.03 | 11.44 |
| 194 | | 6084 | K-241 | Record Drawings | Record Drawings | 6085 | K-242 | Record Drawings | Record Drawings | 500 | 18 | 384.04 | 371.41 | 369.07 | 12.63 | 0.47% | 0.025 | 2.30 | 0.05 | 5.01 |
| 195 | | 6085 | K-242 | Record Drawings | Record Drawings | 6086 | K-243 | Record Drawings | Record Drawings | 508 | 18 | 381.52 | 369.00 | 366.56 | 12.52 | 0.48% | 0.017 | 1.61 | 0.05 | 5.08 |



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|---------|---------------|----------------------|-----------|-------------------|-------------------|----------------------|-----------|-------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 196 | | 6086 | K-243 | Record Drawings | Record Drawings | 6087 | K-244 | Record Drawings | Record Drawings | 50 | 18 | 377.70 | 366.50 | 366.34 | 11.20 | 0.32% | 0.020 | 1.49 | 0.07 | 4.14 |
| 197 | | 6087 | K-244 | Record Drawings | Record Drawings | 6121 | K-245 | Record Drawings | Record Drawings | 502 | 18 | 377.54 | 366.29 | 364.04 | 11.25 | 0.45% | 0.020 | 1.10 | 0.05 | 4.91 |
| 201 | | 6169 | | Old Model | Old Model | 6162 | | Record Dwg | Old Model | 222 | 18 | 395.70 | 385.70 | 386.20 | 10.00 | -0.23% | 0.002 | 0.02 | 0.37 | 3.49 |
| 205 | | 6150 | | Old Model | Old Model | 6153 | | Old Model | Old Model | 78 | 18 | 393.46 | 383.46 | 383.25 | 10.00 | 0.27% | 0.020 | 0.85 | 0.05 | 3.81 |
| 216 | | 6151 | | Old Model | Old Model | 6200 | | Old Model | Old Model | 206 | 18 | 393.05 | 383.05 | 382.43 | 10.00 | 0.30% | 0.023 | 0.44 | 0.05 | 4.01 |
| 219 | | 6863 | | Record Drawing | Record Drawing | 6186 | | Old Model | Old Model | 111 | 21 | 397.54 | 371.26 | 371.23 | 26.28 | 0.03% | 0.233 | 1.24 | 0.21 | 1.59 |
| 224 | | 6208 | | Default to Legacy | Default to Legacy | 6207 | | Default to Legacy | Default to Legacy | 310 | 12 | 446.36 | 436.36 | 435.68 | 10.00 | 0.22% | 0.007 | 0.68 | 0.07 | 1.16 |
| 252 | | 482 | | Old Model | Old Model | 271 | | Old Model | Old Model | 218 | 12 | 396.40 | 392.76 | 391.28 | 3.64 | 0.68% | 0.173 | 1.99 | 0.20 | 1.88 |
| 253 | | 464 | | Old Model | Old Model | 456 | | Old Model | Old Model | 272 | 12 | 401.00 | 389.40 | 388.78 | 11.60 | 0.23% | 0.199 | 1.85 | 0.30 | 1.00 |
| 254 | | 442 | | Old Model | Old Model | 443 | | Old Model | Old Model | 456 | 12 | 486.80 | 466.80 | 453.08 | 20.00 | 3.01% | 0.610 | 4.45 | 0.25 | 3.72 |
| 256 | | 305 | | Old Model | Old Model | 304 | | Old Model | Old Model | 398 | 12 | 405.70 | 384.72 | 383.74 | 20.98 | 0.25% | 0.016 | 0.86 | 0.08 | 1.22 |
| 269 | | 466 | | Old Model | Old Model | 449 | | Old Model | Old Model | 335 | 30 | 359.74 | 348.74 | 348.41 | 11.00 | 0.10% | 2.650 | 2.33 | 0.39 | 6.37 |
| 272 | | 332 | | Old Model | Old Model | 366 | | Old Model | Old Model | 416 | 21 | 457.00 | 444.42 | 443.85 | 12.58 | 0.14% | 1.823 | 2.28 | 0.47 | 2.28 |
| 273 | | 469 | | Old Model | Old Model | 466 | | Old Model | Old Model | 116 | 18 | 362.66 | 352.66 | 349.74 | 10.00 | 2.52% | 0.276 | 4.20 | 0.11 | 11.40 |
| 274 | | 471 | | Old Model | Old Model | 396 | | Old Model | Old Model | 396 | 15 | 363.58 | 353.58 | 352.66 | 10.00 | 0.23% | 0.278 | 2.49 | 0.27 | 1.90 |
| 275 | | 483 | | Old Model | Old Model | 482 | | Old Model | Old Model | 129 | 12 | 405.50 | 392.86 | 392.76 | 12.64 | 0.08% | 0.173 | 1.49 | 0.36 | 0.52 |
| 276 | | 285 | | Old Model | Old Model | 303 | | Old Model | Old Model | 130 | 12 | 393.89 | 383.89 | 382.80 | 10.00 | 0.84% | 0.001 | 0.20 | 0.01 | 2.28 |
| 277 | | 281 | | Old Model | Old Model | 282 | | Old Model | Old Model | 361 | 12 | 369.18 | 362.80 | 360.95 | 6.38 | 0.51% | 0.017 | 1.02 | 0.07 | 1.77 |
| 284 | | 1036 | | Old Model | Old Model | 306 | | Old Model | Old Model | 400 | 12 | 402.00 | 386.68 | 385.70 | 15.32 | 0.24% | 0.017 | 0.85 | 0.16 | 1.22 |
| 295 | | 342 | | Old Model | Old Model | 396 | | Old Model | Old Model | 206 | 12 | 426.33 | 416.33 | 397.63 | 10.00 | 9.06% | 0.299 | 3.49 | 0.14 | 7.23 |
| 318 | | 682 | | Old Model | Old Model | 443 | | Old Model | Old Model | 56 | 15 | 467.59 | 453.55 | 453.08 | 14.04 | 0.84% | 1.169 | 4.15 | 0.43 | 2.97 |
| 327 | | 301 | | Old Model | Old Model | 367 | | Old Model | Old Model | 367 | 12 | 400.50 | 394.00 | 352.30 | 6.50 | 11.35% | 0.311 | 4.44 | 0.13 | 8.12 |
| 328 | | 302 | | Old Model | Old Model | 484 | | Old Model | Old Model | 25 | 15 | 369.96 | 359.96 | 357.69 | 10.00 | 9.08% | 0.008 | 0.23 | 0.02 | 13.65 |
| 378 | | 286 | | Old Model | Old Model | 405 | | Old Model | Old Model | 17 | 12 | 370.01 | 360.01 | 359.15 | 10.00 | 5.09% | 0.018 | 1.29 | 0.04 | 5.61 |
| 405 | | 537 | | Default to Legacy | Default to Legacy | 395 | | Old Model | Old Model | 231 | 10 | 408.32 | 398.32 | 396.95 | 10.00 | 0.59% | 0.013 | 0.24 | 0.07 | 1.17 |
| 412 | | 538 | | Default to Legacy | Default to Legacy | 537 | | Default to Legacy | Default to Legacy | 154 | 10 | 408.67 | 398.67 | 398.32 | 10.00 | 0.23% | 0.012 | 0.80 | 0.10 | 0.72 |
| 413 | | 539 | | Default to Legacy | Default to Legacy | 538 | | Default to Legacy | Default to Legacy | 348 | 10 | 409.76 | 399.76 | 398.67 | 10.00 | 0.31% | 0.011 | 0.73 | 0.08 | 0.85 |
| 469 | | 592 | | Default to Legacy | Default to Legacy | 643 | | Old Model | Old Model | 315 | 10 | 533.82 | 527.21 | 525.95 | 6.61 | 0.40% | 0.003 | 0.23 | 0.04 | 0.97 |
| 509 | | 681 | | Old Model | Old Model | 679 | | Old Model | Old Model | 460 | 10 | 482.95 | 472.95 | 471.53 | 10.00 | 0.31% | 0.495 | 2.55 | 0.58 | 0.36 |
| 510 | | 693 | | Old Model | Old Model | 684 | | Old Model | Old Model | 448 | 12 | 477.42 | 467.42 | 454.77 | 10.00 | 2.83% | 0.468 | 2.28 | 0.23 | 3.73 |
| 511 | | 632 | | Old Model | Old Model | 652 | | Old Model | Old Model | 420 | 10 | 540.23 | 530.23 | 529.11 | 10.00 | 0.27% | 0.007 | 0.62 | 0.06 | 0.79 |
| 515 | | 649 | | Old Model | Old Model | 640 | | Old Model | Old Model | 422 | 10 | 534.71 | 524.71 | 523.56 | 10.00 | 0.27% | 0.032 | 0.94 | 0.14 | 0.77 |
| 516 | | 711 | | Old Model | Old Model | 706 | | Old Model | Old Model | 464 | 10 | 510.00 | 500.00 | 484.25 | 10.00 | 3.39% | 0.120 | 4.47 | 0.15 | 2.71 |
| 517 | | 646 | | Old Model | Old Model | 644 | | Old Model | Old Model | 424 | 10 | 531.27 | 521.27 | 520.17 | 10.00 | 0.26% | 0.062 | 1.31 | 0.19 | 0.72 |
| 518 | | 647 | | Old Model | Old Model | 646 | | Old Model | Old Model | 308 | 10 | 532.25 | 522.25 | 521.27 | 10.00 | 0.32% | 0.061 | 1.36 | 0.18 | 0.81 |
| 519 | | 648 | | Old Model | Old Model | 647 | | Old Model | Old Model | 138 | 10 | 532.64 | 522.64 | 522.25 | 10.00 | 0.28% | 0.060 | 1.35 | 0.19 | 0.75 |
| 530 | | 689 | | Default to Legacy | Default to Legacy | 685 | | Default to Legacy | Default to Legacy | 221 | 10 | 481.22 | 471.22 | 470.14 | 10.00 | 0.49% | 0.014 | 1.06 | 0.08 | 1.06 |
| 531 | | 685 | | Default to Legacy | Default to Legacy | 688 | | Default to Legacy | Default to Legacy | 267 | 10 | 481.40 | 470.14 | 467.72 | 11.26 | 0.91% | 0.018 | 1.10 | 0.08 | 1.44 |
| 534 | | 443 | | Old Model | Old Model | 422 | | Old Model | Old Model | 324 | 21 | 477.20 | 453.08 | 448.02 | 24.12 | 1.56% | 1.764 | 4.00 | 0.24 | 12.10 |
| 535 | | 440 | | Old Model | Old Model | 442 | | Old Model | Old Model | 228 | 12 | 481.19 | 469.33 | 466.80 | 11.86 | 1.11% | 0.609 | 4.61 | 0.36 | 2.02 |
| 568 | | 880 | | Old Model | Old Model | 926 | | Old Model | Old Model | 150 | 10 | 536.00 | 519.84 | 518.50 | 16.16 | 0.89% | 0.061 | 2.26 | 0.15 | 1.39 |
| 583 | | 441 | | Old Model | Old Model | 440 | | Old Model | Old Model | 201 | 12 | 483.46 | 473.46 | 469.33 | 10.00 | 2.05% | 0.608 | 4.35 | 0.28 | 2.97 |
| 613 | | 4075 | | Old Model | Old Model | 4074 | | Old Model | Old Model | 330 | 12 | 531.88 | 521.88 | 519.17 | 10.00 | 0.82% | 0.128 | 2.39 | 0.16 | 2.13 |
| 614 | | 4074 | | Old Model | Old Model | 4073 | | Old Model | Old Model | 384 | 12 | 529.17 | 519.17 | 515.05 | 10.00 | 1.07% | 0.128 | 3.04 | 0.16 | 2.46 |
| 615 | | 3953 | | Old Model | Old Model | 4075 | | Old Model | Old Model | 277 | 12 | 533.69 | 523.69 | 521.88 | 10.00 | 0.65% | 0.128 | 2.27 | 0.17 | 1.89 |
| 697 | | 4073 | | Old Model | Old Model | 4072 | | Old Model | Old Model | 332 | 12 | 525.05 | 515.05 | 503.09 | 10.00 | 3.60% | 0.129 | 3.78 | 0.11 | 4.61 |
| 701 | | 926 | | Old Model | Old Model | 927 | | Old Model | Old Model | 185 | 10 | 528.50 | 518.50 | 514.34 | 10.00 | 2.25% | 0.062 | 2.52 | 0.11 | 2.24 |
| 702 | | 927 | | Old Model | Old Model | 916 | | Old Model | Old Model | 127 | 10 | 524.34 | 514.34 | 512.08 | 10.00 | 1.79% | 0.064 | 3.06 | 0.13 | 1.99 |
| 703 | | 916 | | Old Model | Old Model | 915 | | Old Model | Old Model | 272 | 10 | 522.08 | 512.08 | 490.49 | 10.00 | 7.95% | 0.067 | 3.68 | 0.09 | 4.27 |
| 705 | | 915 | | Old Model | Old Model | 914 | | Old Model | Old Model | 317 | 10 | 500.49 | 490.49 | 481.50 | 10.00 | 2.83% | 0.068 | 2.28 | 0.11 | 2.52 |
| 766 | | 1040 | | Old Model | Old Model | 1039 | | Old Model | Old Model | 303 | 12 | 404.80 | 390.50 | 389.62 | 14.30 | 0.29% | 0.018 | 0.96 | 0.08 | 1.33 |
| 820 | | 1098 | | Old Model | Old Model | 1101 | | Old Model | Old Model | 355 | 12 | 403.60 | 395.70 | 395.61 | 7.90 | 0.03% | 0.002 | 0.24 | 0.07 | 0.40 |
| 821 | | 1101 | | Old Model | Old Model | 1100 | | Old Model | Old Model | 427 | 12 | 403.40 | 395.61 | 393.64 | 7.79 | 0.46% | 0.004 | 0.49 | 0.03 | 1.69 |
| 822 | | 1100 | | Old Model | Old Model | 1099 | | Old Model | Old Model | 425 | 12 | 406.20 | 393.64 | 392.66 | 12.56 | 0.23% | 0.004 | 0.60 | 0.05 | 1.20 |
| 823 | | 1042 | | Old Model | Old Model | 1041 | | Old Model | Old Model | 260 | 12 | 408.00 | 391.70 | 391.04 | 16.30 | 0.25% | 0.015 | 0.79 | 0.08 | 1.24 |
| 832 | | 1049 | | Old Model | Old Model | 1047 | | Old Model | Old Model | 388 | 10 | 357.48 | 347.48 | 345.97 | 10.00 | 0.39% | 0.286 | 2.40 | 0.38 | 0.67 |
| 859 | | 1048 | | Old Model | Old Model | 1049 | | Old Model | Old Model | 223 | 10 | 357.50 | 347.50 | 347.48 | 10.00 | 0.01% | 0.276 | 1.43 | 0.70 | -0.13 |
| 864 | | 1047 | | Old Model | Old Model | 1102 | | Old Model | Old Model | 479 | 10 | 355.40 | 345.97 | 343.30 | 9.43 | 0.56% | 0.293 | 3.17 | 0.37 | 0.85 |
| 866 | | 1102 | | Old Model | Old Model | 1104 | | Old Model | Old Model | 312 | 10 | 348.40 | 343.30 | 336.50 | 5.10 | 2.18% | 0.295 | 2.90 | 0.24 | 1.97 |
| 874 | | 6353 | A-091 | Old Model | Old Model | 6354 | A-092 | Old Model | Old Model | 329 | 12 | 376.63 | 366.63 | 365.71 | 10.00 | 0.28% | 0.033 | 1.25 | 0.12 | 1.29 |
| 884 | | 7104 | | Old Model | Old Model | 7235 | | Old Model | Old Model | | | | | | | | | | | |



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| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|-------------------------|----------------------|-----------|--------------------|--------------------|----------------------|-----------|--------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 893 | | 6313 | | Old Model | Old Model | 6308 | | Inv+10 | Record Drawings | 262 | 10 | 403.60 | 393.60 | 386.28 | 10.00 | 2.80% | 0.093 | 1.19 | 0.13 | 2.47 |
| 898 | | 6303 | | Record Drawings | Record Drawings | 6305 | C-277 | Record Drawings | Record Drawings | 507 | 12 | 387.61 | 377.61 | 376.81 | 10.00 | 0.16% | 0.337 | 1.84 | 0.45 | 0.65 |
| 907 | | 6287 | A-071 | Old Model | Old Model | 1197 | | Record Drawings | Record Drawings | 638 | 54 | 341.92 | 331.92 | 330.82 | 10.00 | 0.17% | 5.553 | 2.95 | 0.21 | 51.60 |
| 921 | | 6346 | | Inv+10 | Record Drawings | 6333 | B-447 | COR Sewer Map Book | Straight Grade | 48 | 10 | 360.16 | 350.16 | 349.97 | 10.00 | 0.39% | 0.020 | 0.90 | 0.10 | 0.94 |
| 923 | | 6336 | B-442 | AsBuilts | AsBuilts | 6334 | | AsBuilts | Old Model | 85 | 12 | 358.45 | 347.17 | 345.17 | 11.28 | 2.34% | 0.030 | 2.23 | 0.06 | 3.79 |
| 929 | | 6342 | | Inv+10 | Record Drawings | 6346 | | Inv+10 | Record Drawings | 293 | 10 | 361.33 | 351.33 | 350.16 | 10.00 | 0.40% | 0.020 | 1.11 | 0.10 | 0.95 |
| 931 | | 6339 | B-444 | COR Sewer Map Book | COR Sewer Map Book | 6335 | B-443 | Old Model | Old Model | 273 | 10 | 353.61 | 348.28 | 347.67 | 5.33 | 0.22% | 0.030 | 1.74 | 0.16 | 0.69 |
| 943 | | 6390 | | Old Model | Old Model | 6389 | | Old Model | Old Model | 303 | 12 | 353.82 | 343.82 | 342.96 | 10.00 | 0.28% | 0.006 | 0.57 | 0.05 | 1.32 |
| 946 | | 6288 | | Old Model | Old Model | 6292 | | Record Drawings | Record Drawings | 535 | 10 | 400.03 | 390.03 | 388.68 | 10.00 | 0.25% | 0.122 | 1.59 | 0.27 | 0.65 |
| 947 | | 6304 | C-016 | Old Model | Record Drawings | 8929 | | Record Drawings | Record Drawings | 741 | 12 | 386.42 | 376.42 | 353.50 | 10.00 | 3.09% | 0.505 | 5.74 | 0.23 | 3.88 |
| 983 | | 6423 | | Old Model | Old Model | 6426 | | Old Model | Old Model | 258 | 10 | 366.34 | 356.34 | 355.69 | 10.00 | 0.25% | 0.054 | 1.01 | 0.18 | 0.72 |
| 992 | | 6426 | | Old Model | Old Model | 6425 | | Old Model | Old Model | 273 | 12 | 365.69 | 355.69 | 355.22 | 10.00 | 0.17% | 0.088 | 1.16 | 0.20 | 0.95 |
| 1133 | | 6427 | | Old Model | Old Model | 6422 | | Old Model | Old Model | 183 | 10 | 367.61 | 357.61 | 356.84 | 10.00 | 0.42% | 0.042 | 1.10 | 0.14 | 0.95 |
| 1134 | | 6575 | | Inv+10 | Min Slope | 6427 | | Old Model | Old Model | 213 | 10 | 368.21 | 358.21 | 357.61 | 10.00 | 0.28% | 0.009 | 0.45 | 0.07 | 0.81 |
| 1135 | | 6460 | | Inv+10 | Min Slope | 6427 | | Old Model | Old Model | 294 | 10 | 368.43 | 358.43 | 357.61 | 10.00 | 0.28% | 0.032 | 1.09 | 0.14 | 0.78 |
| 1138 | | 6425 | | Old Model | Old Model | 6429 | | Old Model | Old Model | 394 | 12 | 365.22 | 355.22 | 354.69 | 10.00 | 0.13% | 0.095 | 1.00 | 0.22 | 0.82 |
| 1139 | | 6429 | | Old Model | Old Model | 6446 | | Old Model | Old Model | 403 | 12 | 364.69 | 354.69 | 354.40 | 10.00 | 0.07% | 0.096 | 0.96 | 0.27 | 0.57 |
| 1151 | | 6444 | | Old Model | Old Model | 6686 | | Old Model | Old Model | 371 | 12 | 362.87 | 352.87 | 352.32 | 10.00 | 0.15% | 0.228 | 1.43 | 0.33 | 0.73 |
| 1154 | | 6443 | | Old Model | Old Model | 6576 | | Default to Legacy | Default to Legacy | 231 | 12 | 363.47 | 353.47 | 353.12 | 10.00 | 0.15% | 0.145 | 1.35 | 0.27 | 0.83 |
| 1155 | | 6576 | | Default to Legacy | Default to Legacy | 6444 | | Old Model | Old Model | 165 | 12 | 363.12 | 353.12 | 352.87 | 10.00 | 0.15% | 0.146 | 1.16 | 0.26 | 0.83 |
| 1156 | | 6446 | | Old Model | Old Model | 6534 | | Default to Legacy | Default to Legacy | 230 | 12 | 364.40 | 354.40 | 353.87 | 10.00 | 0.23% | 0.140 | 1.56 | 0.23 | 1.06 |
| 1162 | | 6422 | | Old Model | Old Model | 6423 | | Old Model | Old Model | 262 | 10 | 366.84 | 356.84 | 356.34 | 10.00 | 0.19% | 0.053 | 1.15 | 0.20 | 0.62 |
| 1167 | | 6534 | | Default to Legacy | Default to Legacy | 6443 | | Old Model | Old Model | 176 | 12 | 363.87 | 353.87 | 353.47 | 10.00 | 0.23% | 0.141 | 1.43 | 0.23 | 1.05 |
| 1278 | | 6726 | | Default to Legacy | Default to Legacy | 6692 | | Old Model | Old Model | 237 | 12 | 361.41 | 351.41 | 351.05 | 10.00 | 0.15% | 0.269 | 1.59 | 0.36 | 0.70 |
| 1280 | | 6702 | | Old Model | Old Model | 6726 | | Default to Legacy | Default to Legacy | 50 | 12 | 361.48 | 351.48 | 351.41 | 10.00 | 0.14% | 0.268 | 1.54 | 0.39 | 0.67 |
| 1281 | | 6725 | | Default to Legacy | Default to Legacy | 6702 | | Old Model | Old Model | 134 | 12 | 361.69 | 351.69 | 351.48 | 10.00 | 0.16% | 0.268 | 1.54 | 0.37 | 0.72 |
| 1287 | | 6716 | | Default to Legacy | Default to Legacy | 6684 | | Old Model | Old Model | 143 | 12 | 362.11 | 352.11 | 351.90 | 10.00 | 0.15% | 0.247 | 1.50 | 0.36 | 0.71 |
| 1288 | | 6715 | | Default to Legacy | Default to Legacy | 6716 | | Default to Legacy | Default to Legacy | 113 | 12 | 362.28 | 352.28 | 352.11 | 10.00 | 0.15% | 0.245 | 1.52 | 0.36 | 0.72 |
| 1289 | | 6686 | | Old Model | Old Model | 6715 | | Default to Legacy | Default to Legacy | 29 | 12 | 362.32 | 352.32 | 352.28 | 10.00 | 0.14% | 0.245 | 1.46 | 0.38 | 0.68 |
| 1294 | Goethals Dr Interceptor | 7020 | B-363 | Record Drawings | Record Drawings | 6623 | B-364 | Record Drawings | Record Drawings | 424 | 54 | 355.19 | 335.39 | 335.22 | 19.80 | 0.04% | 4.825 | 1.91 | 0.30 | 22.75 |
| 1295 | Goethals Dr Interceptor | 6623 | B-364 | Record Drawings | Record Drawings | 6626 | B-365 | Record Drawings | Record Drawings | 210 | 54 | 355.52 | 335.22 | 335.11 | 20.30 | 0.05% | 4.842 | 1.93 | 0.29 | 26.70 |
| 1296 | Goethals Dr Interceptor | 6626 | B-365 | Record Drawings | Record Drawings | 6610 | B-366 | Record Drawings | Record Drawings | 512 | 54 | 355.61 | 335.11 | 334.82 | 20.50 | 0.06% | 4.844 | 1.81 | 0.29 | 27.92 |
| 1300 | Goethals Dr Interceptor | 6608 | B-367 | Record Drawings | Record Drawings | JCT_MP-348 | | Record Drawings | Straight Grade | 216 | 54 | 355.09 | 334.84 | 334.88 | 20.25 | -0.02% | 4.844 | 2.07 | 0.30 | 13.89 |
| 1301 | Goethals Dr Interceptor | 6697 | B-369 | Record Drawings | Record Drawings | JCT_MP-350 | | Record Drawings | Straight Grade | 539 | 54 | 357.40 | 334.30 | 334.16 | 23.10 | 0.03% | 4.866 | 2.30 | 0.29 | 17.33 |
| 1302 | | 6695 | | Old Model | Record Drawings | JCT_MP-350 | | Record Drawings | Straight Grade | 17 | 12 | 360.56 | 350.14 | 335.70 | 10.42 | 87.26% | 0.291 | 15.71 | 0.09 | 33.05 |
| 1303 | | 6666 | | Record Drawings | Record Drawings | 6665 | | Record Drawings | Record Drawings | 415 | 12 | 356.70 | 344.83 | 344.23 | 11.87 | 0.14% | 0.048 | 0.91 | 0.15 | 0.90 |
| 1305 | | 6664 | | Record Drawings | Record Drawings | 6666 | | Record Drawings | Record Drawings | 368 | 12 | 357.80 | 345.63 | 344.83 | 12.17 | 0.22% | 0.048 | 1.08 | 0.14 | 1.12 |
| 1306 | | 6688 | | Record Drawings | Record Drawings | 6664 | | Record Drawings | Record Drawings | 452 | 12 | 357.60 | 346.25 | 345.63 | 11.35 | 0.14% | 0.032 | 0.82 | 0.13 | 0.89 |
| 1307 | | 6689 | | Record Drawings | Record Drawings | 6688 | | Record Drawings | Record Drawings | 386 | 12 | 357.30 | 347.02 | 346.25 | 10.28 | 0.20% | 0.035 | 0.99 | 0.12 | 1.08 |
| 1317 | | 6694 | | Old Model | Old Model | 6695 | | Old Model | Record Drawings | 205 | 12 | 360.86 | 350.86 | 350.14 | 10.00 | 0.35% | 0.291 | 3.22 | 0.38 | 1.19 |
| 1321 | South Trunk Sewer | 6642 | | Inv+10 | Record Drawings | 6648 | | Inv+10 | Record Drawings | 446 | 10 | 393.03 | 383.03 | 381.86 | 10.00 | 0.26% | 0.169 | 1.76 | 0.32 | 0.62 |
| 1387 | | 6862 | | Record Drawing | Record Drawing | 6863 | | Record Drawing | Record Drawing | 113 | 10 | 397.21 | 374.79 | 372.05 | 22.42 | 2.43% | 0.057 | 2.81 | 0.11 | 2.34 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|---------------|----------------------|-----------|-------------------------------|--------------------|----------------------|-----------|-------------------------------|--------------------|-------------|-----------|-----------|-----------|-------------|---------------|-------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 1389 | | 6850 | | Record Drawing | Record Drawing | 6851 | | Record Drawing | Record Drawing | 222 | 10 | 399.76 | 379.96 | 379.09 | 19.80 | 0.39% | 0.020 | 1.15 | 0.10 | 0.94 |
| 1390 | | 6851 | | Record Drawing | Record Drawing | 6852 | | Record Drawing | Record Drawing | 238 | 10 | 394.93 | 378.88 | 377.93 | 16.05 | 0.40% | 0.020 | 1.30 | 0.11 | 0.95 |
| 1391 | | 6852 | | Record Drawing | Record Drawing | 6853 | | Record Drawing | Record Drawing | 242 | 10 | 394.17 | 377.88 | 377.20 | 16.29 | 0.28% | 0.027 | 1.14 | 0.14 | 0.79 |
| 1392 | | 6853 | | Record Drawing | Record Drawing | 6860 | | Record Drawing | Record Drawing | 246 | 10 | 396.23 | 376.88 | 376.23 | 19.35 | 0.26% | 0.028 | 1.13 | 0.14 | 0.76 |
| 1393 | | 6860 | | Record Drawing | Record Drawing | 6861 | | Record Drawing | Record Drawing | 136 | 10 | 398.56 | 376.11 | 375.63 | 22.45 | 0.35% | 0.028 | 1.23 | 0.13 | 0.88 |
| 1395 | | 6854 | | Record Drawing | Record Drawing | 6850 | | Record Drawing | Record Drawing | 222 | 10 | 404.17 | 381.32 | 380.16 | 22.85 | 0.52% | 0.020 | 1.24 | 0.09 | 1.09 |
| 1396 | | 6861 | | Record Drawing | Record Drawing | 6862 | | Record Drawing | Record Drawing | 194 | 10 | 399.57 | 375.45 | 375.01 | 24.12 | 0.23% | 0.057 | 1.32 | 0.21 | 0.67 |
| 1445 | | 1846 | | Default to Legacy | Default to Legacy | 1845 | | Default to Legacy | Default to Legacy | 256 | 10 | 509.94 | 506.59 | 506.02 | 3.35 | 0.22% | 0.002 | 0.28 | 0.04 | 0.72 |
| 1447 | | 1845 | | Default to Legacy | Default to Legacy | 1847 | | Default to Legacy | Default to Legacy | 398 | 10 | 516.48 | 506.02 | 503.51 | 10.46 | 0.63% | 0.009 | 0.61 | 0.06 | 1.21 |
| 1448 | | 1837 | | Default to Legacy | Default to Legacy | 1836 | | Default to Legacy | Default to Legacy | 192 | 10 | 513.22 | 507.03 | 506.74 | 6.19 | 0.15% | 0.002 | 0.24 | 0.04 | 0.59 |
| 1449 | | 1836 | | Default to Legacy | Default to Legacy | 1835 | | Old Model | Old Model | 332 | 10 | 514.46 | 506.74 | 505.56 | 7.72 | 0.36% | 0.012 | 0.76 | 0.08 | 0.90 |
| 1476 | | 7780 | | COR Sewer Map Book | COR Sewer Map Book | 8703 | | COR Sewer Map Book | COR Sewer Map Book | 433 | 12 | 385.48 | 368.48 | 367.46 | 17.00 | 0.24% | 0.090 | 1.81 | 0.21 | 1.12 |
| 1488 | | 7703 | | Old Model | Old Model | 8783 | | Old Model | Old Model | 134 | 12 | 377.67 | 367.67 | 359.54 | 10.00 | 6.07% | 0.009 | 1.45 | 0.03 | 6.14 |
| 1515 | | 6935 | L-311 | Inv+10 | Straight Grade | 8521 | L-248 | Record Drawings | Record Drawings | 174 | 10 | 394.91 | 384.91 | 383.65 | 10.00 | 0.72% | 0.014 | 1.60 | 0.08 | 1.29 |
| 1596 | | 1199 | | Old Model | Old Model | 1194 | | Old Model | Old Model | 487 | 30 | 345.19 | 335.19 | 334.72 | 10.00 | 0.10% | 3.385 | 2.84 | 0.45 | 5.54 |
| 1602 | | 2122 | | Old Model | Old Model | 2121 | | Old Model | Old Model | 483 | 10 | 528.83 | 518.83 | 517.47 | 10.00 | 0.28% | 0.015 | 0.37 | 0.09 | 0.80 |
| 1608 | | 2156 | | Old Model | Old Model | 2158 | | Old Model | Old Model | 336 | 12 | 398.20 | 388.20 | 364.70 | 10.00 | 7.00% | 0.182 | 5.59 | 0.11 | 6.43 |
| 1611 | | 2189 | | Old Model | Old Model | 2187 | | Old Model | Old Model | 105 | 21 | 439.07 | 429.07 | 428.79 | 10.00 | 0.27% | 0.218 | 1.68 | 0.13 | 5.51 |
| 1612 | | 2195 | | Old Model | Old Model | 2196 | | Old Model | Old Model | 145 | 21 | 439.62 | 429.62 | 429.45 | 10.00 | 0.12% | 0.218 | 1.37 | 0.17 | 3.58 |
| 1614 | | 1193 | | Old Model | Record Drawings | 1197 | | Record Drawings | Record Drawings | 396 | 36 | 343.28 | 333.33 | 332.54 | 9.95 | 0.20% | 3.810 | 3.59 | 0.31 | 17.05 |
| 1616 | | 2153 | | Old Model | Old Model | 2154 | | Old Model | Old Model | 616 | 12 | 476.93 | 466.93 | 442.15 | 10.00 | 4.02% | 0.182 | 5.41 | 0.14 | 4.82 |
| 1617 | | 2155 | | Old Model | Old Model | 2156 | | Old Model | Old Model | 161 | 16 | 411.12 | 401.12 | 388.20 | 10.00 | 8.05% | 0.182 | 5.28 | 0.08 | 15.08 |
| 1618 | | 2162 | | Old Model | Old Model | 2161 | | Old Model | Old Model | 119 | 24 | 354.83 | 344.83 | 344.37 | 10.00 | 0.39% | 0.476 | 2.62 | 0.16 | 9.38 |
| 1620 | | 2161 | | Old Model | Old Model | 2157 | | Old Model | Old Model | 813 | 24 | 354.37 | 344.37 | 338.75 | 10.00 | 0.69% | 0.476 | 2.46 | 0.13 | 12.70 |
| 1622 | | 2159 | | Old Model | Old Model | 2160 | | Old Model | Old Model | 442 | 15 | 358.92 | 348.92 | 347.23 | 10.00 | 0.38% | 0.182 | 2.34 | 0.19 | 2.62 |
| 1623 | | 2158 | | Old Model | Old Model | 2159 | | Old Model | Old Model | 242 | 12 | 374.70 | 364.70 | 348.92 | 10.00 | 6.52% | 0.182 | 3.07 | 0.12 | 6.19 |
| 1625 | | 2183 | | Old Model | Old Model | 2177 | | Old Model | Old Model | 401 | 21 | 437.99 | 428.04 | 427.44 | 9.95 | 0.15% | 0.218 | 1.17 | 0.15 | 4.07 |
| 1627 | | 2157 | | Old Model | Old Model | 2179 | A-105 | Old Model | Old Model | 683 | 24 | 348.75 | 338.75 | 337.29 | 10.00 | 0.21% | 0.476 | 2.00 | 0.17 | 6.85 |
| 1636 | | 2129 | | Asbuilts - Check vs Old Model | Asbuilts | 2131 | | Old Model | Old Model | 392 | 15 | 526.20 | 514.30 | 512.00 | 11.90 | 0.59% | 0.165 | 2.36 | 0.15 | 3.30 |
| 1641 | | 2143 | | Old Model | Old Model | 2182 | | Old Model | Old Model | 394 | 16 | 459.78 | 430.34 | 429.79 | 29.44 | 0.14% | 0.218 | 1.55 | 0.25 | 1.79 |
| 1685 | | 4049 | | Old Model | Old Model | 316 | | Old Model | Old Model | 326 | 12 | 465.53 | 455.53 | 446.75 | 10.00 | 2.69% | 0.053 | 2.90 | 0.08 | 4.04 |
| 1687 | | 316 | | Old Model | Old Model | 447 | | Old Model | Old Model | 407 | 12 | 456.75 | 446.75 | 429.21 | 10.00 | 4.31% | 0.057 | 3.44 | 0.08 | 5.13 |
| 1703 | | 2201 | | Old Model | Old Model | 2202 | | Asbuilts - Check vs Old Model | Asbuilts | 598 | 16 | 533.47 | 523.47 | 521.60 | 10.00 | 0.31% | 0.160 | 2.19 | 0.17 | 2.84 |
| 1704 | | 2202 | | Asbuilts - Check vs Old Model | Asbuilts | 2129 | | Asbuilts - Check vs Old Model | Asbuilts | 310 | 15 | 533.00 | 521.60 | 514.30 | 11.40 | 2.35% | 0.165 | 2.74 | 0.11 | 6.78 |
| 1723 | | 2232 | | Old Model | Old Model | 2231 | | Old Model | Old Model | 551 | 12 | 507.78 | 498.33 | 497.03 | 9.45 | 0.24% | 0.191 | 1.84 | 0.29 | 1.02 |
| 1725 | | 2233 | | Old Model | Old Model | 2232 | | Old Model | Old Model | 600 | 12 | 513.46 | 499.81 | 498.33 | 13.65 | 0.25% | 0.196 | 1.73 | 0.27 | 1.04 |
| 1726 | | 2235 | | Old Model | Old Model | 2234 | | Old Model | Old Model | 430 | 12 | 518.06 | 502.22 | 500.63 | 15.84 | 0.37% | 0.197 | 1.80 | 0.24 | 1.32 |
| 1729 | | 2236 | | Old Model | Old Model | 2235 | | Old Model | Old Model | 493 | 12 | 517.69 | 502.79 | 502.22 | 14.90 | 0.12% | 0.017 | 0.31 | 0.10 | 0.83 |
| 1730 | | 2238 | | Old Model | Old Model | 2237 | | Old Model | Old Model | 329 | 12 | 515.30 | 504.90 | 503.98 | 10.40 | 0.28% | 0.001 | 0.07 | 0.02 | 1.32 |
| 1732 | | 2234 | | Old Model | Old Model | 2233 | | Old Model | Old Model | 398 | 12 | 516.03 | 500.63 | 499.81 | 15.40 | 0.21% | 0.197 | 1.69 | 0.29 | 0.94 |
| 1733 | | 2237 | | Old Model | Old Model | 2236 | | Old Model | Old Model | 528 | 12 | 516.34 | 503.98 | 502.79 | 12.36 | 0.23% | 0.018 | 0.80 | 0.09 | 1.17 |
| 1778 | | 2357 | | Default to Legacy | Default to Legacy | 2320 | | Default to Legacy | Default to Legacy | 58 | 10 | 516.40 | 509.25 | 508.12 | 7.15 | 1.96% | 0.027 | 2.09 | 0.08 | 2.12 |
| 1780 | | 2320 | | Default to Legacy | Default to Legacy | 2321 | | Default to Legacy | Default to Legacy | 167 | 10 | 515.07 | 508.02 | 507.30 | 7.05 | 0.43% | 0.028 | 1.31 | 0.12 | 0.98 |
| 1781 | | 2300 | | Default to Legacy | Default to Legacy | 2299 | | Default to Legacy | Default to Legacy | 185 | 10 | 513.91 | 505.34 | 504.57 | 8.57 | 0.42% | 0.040 | 1.23 | 0.14 | 0.95 |
| 1794 | | 2326 | | asbuilts | asbuilts | 2322 | | asbuilts | asbuilts | 329 | 10 | 517.33 | 509.12 | 508.18 | 8.21 | 0.29% | 0.002 | 0.60 | 0.05 | 0.82 |
| 1795 | | 2322 | | asbuilts | asbuilts | 2321 | | Default to Legacy | Default to Legacy | 169 | 10 | 515.84 | 508.08 | 507.30 | 7.76 | 0.46% | 0.003 | 0.52 | 0.04 | 1.04 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|-------------------------|----------------------|-----------|--------------------|--------------------|----------------------|-----------|--------------------|--------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 1804 | | 2299 | | Default to Legacy | Default to Legacy | 2294 | | Default to Legacy | Default to Legacy | 236 | 10 | 514.72 | 504.57 | 503.85 | 10.15 | 0.31% | 0.046 | 0.33 | 0.16 | 0.80 |
| 1805 | | 2294 | | Default to Legacy | Default to Legacy | 2293 | | Default to Legacy | Default to Legacy | 235 | 10 | 514.69 | 503.85 | 504.21 | 10.84 | -0.15% | 0.045 | 0.29 | 0.68 | 0.56 |
| 1806 | | 2293 | | Default to Legacy | Default to Legacy | 2292 | | Default to Legacy | Default to Legacy | 179 | 10 | 515.58 | 504.21 | 502.72 | 11.37 | 0.83% | 0.158 | 2.16 | 0.23 | 1.24 |
| 1861 | | 2359 | | Assumed | Straight Graded | 2358 | | Assumed | Straight Graded | 371 | 12 | 522.74 | 512.74 | 511.25 | 10.00 | 0.40% | 0.005 | 0.42 | 0.04 | 1.57 |
| 1905 | | 4743 | | Asbuits | Straight Graded | 2402 | | Inv+10 | Straight Graded | 412 | 12 | 680.93 | 550.86 | 541.79 | 130.07 | 2.20% | 0.009 | 0.67 | 0.04 | 3.69 |
| 1916 | Goethals Dr Interceptor | 7083 | B-352 | Record Drawings | Record Drawings | 7034 | B-354 | Record Drawings | Record Drawings | 362 | 54 | 353.20 | 337.61 | 337.64 | 15.59 | -0.01% | 4.359 | 1.76 | 0.31 | 8.17 |
| 1946 | | 7057 | | Old Model | Old Model | 7048 | | Old Model | Old Model | 259 | 12 | 362.00 | 352.00 | 349.69 | 10.00 | 0.89% | 0.251 | 2.79 | 0.22 | 2.11 |
| 1949 | | 7033 | | Old Model | Old Model | 7042 | B-377 | Record Drawings | Record Drawings | 519 | 10 | 358.99 | 348.99 | 347.30 | 10.00 | 0.33% | 0.015 | 0.99 | 0.10 | 0.86 |
| 1952 | | 7335 | | Old Model | Old Model | 7334 | | Old Model | Old Model | 391 | 10 | 392.10 | 382.10 | 377.12 | 10.00 | 1.27% | 0.008 | 1.02 | 0.05 | 1.72 |
| 1953 | | 7064 | | Old Model | Old Model | 7057 | | Old Model | Old Model | 411 | 10 | 372.65 | 362.65 | 352.00 | 10.00 | 2.59% | 0.233 | 3.66 | 0.21 | 2.24 |
| 1954 | | 9005 | | Asbuits | Asbuits | 7060 | | Old Model | Old Model | 248 | 10 | 378.98 | 368.98 | 366.76 | 10.00 | 0.89% | 0.221 | 3.43 | 0.29 | 1.23 |
| 1958 | | 7035 | B-132 | Assumed | Old Model | 7036 | B-040 | Assumed | Straight Grade | 35 | 10 | 355.00 | 342.31 | 342.17 | 12.69 | 0.41% | 0.026 | 1.60 | 0.13 | 0.95 |
| 1959 | | 7039 | B-378 | COR Sewer Map Book | COR Sewer Map Book | JCT_MP-358 | | Record Drawings | Record Drawings | 26 | 12 | 355.00 | 342.30 | 341.71 | 12.70 | 2.25% | 0.010 | 1.59 | 0.04 | 3.73 |
| 1984 | | 7071 | | Old Model | Old Model | 7070 | B-350 | Record Drawings | Record Drawings | 270 | 10 | 356.40 | 346.40 | 344.21 | 10.00 | 0.81% | 0.082 | 2.14 | 0.17 | 1.30 |
| 2009 | | 7012 | | Old Model | Straight Grade | 7024 | B-387 | Inv+10 | Record Drawings | 250 | 12 | 357.83 | 347.50 | 346.95 | 10.33 | 0.22% | 0.068 | 1.33 | 0.18 | 1.10 |
| 2020 | | 7480 | | Old Model | Old Model | 7053 | | Old Model | Old Model | 217 | 10 | 362.08 | 352.08 | 352.00 | 10.00 | 0.04% | 0.009 | 0.45 | 0.14 | 0.29 |
| 2021 | | 7053 | | Old Model | Old Model | 7054 | | Old Model | Old Model | 257 | 10 | 362.00 | 352.00 | 350.60 | 10.00 | 0.54% | 0.009 | 0.87 | 0.06 | 1.12 |
| 2022 | | 7054 | | Old Model | Old Model | 7033 | | Old Model | Old Model | 384 | 10 | 360.60 | 350.60 | 348.99 | 10.00 | 0.42% | 0.011 | 0.75 | 0.07 | 0.98 |
| 2031 | Lower N Interceptor | 7517 | | Record Drawings | Old Model | 7089 | B-415 | Record Drawings | Record Drawings | 357 | 54 | 357.40 | 338.27 | 338.12 | 19.13 | 0.04% | 4.255 | 1.73 | 0.29 | 23.97 |
| 2032 | | 7044 | | Old Model | Old Model | 7043 | | Old Model | Old Model | 178 | 12 | 354.48 | 344.48 | 342.98 | 10.00 | 0.84% | 0.010 | 0.94 | 0.05 | 2.28 |
| 2033 | | 7037 | | Old Model | Old Model | 7044 | | Old Model | Old Model | 320 | 12 | 355.66 | 345.66 | 344.48 | 10.00 | 0.37% | 0.007 | 0.78 | 0.05 | 1.51 |
| 2044 | Goethals Dr Interceptor | 7034 | B-354 | Record Drawings | Record Drawings | JCT_MP-356 | | Record Drawings | Record Drawings | 251 | 54 | 354.20 | 337.64 | 337.46 | 16.56 | 0.07% | 4.380 | 1.90 | 0.27 | 32.52 |
| 2045 | Goethals Dr Interceptor | JCT_MP-358 | | Record Drawings | Record Drawings | 7040 | B-356 | Record Drawings | Record Drawings | 13 | 54 | 355.20 | 337.27 | 337.16 | 17.93 | 0.87% | 4.391 | 1.82 | 0.28 | 124.20 |
| 2046 | Goethals Dr Interceptor | 7040 | B-356 | Record Drawings | Record Drawings | JCT_MP-400 | | Record Drawings | Record Drawings | 60 | 54 | 355.32 | 337.16 | 337.21 | 18.16 | -0.08% | 4.392 | 1.86 | 0.29 | 35.25 |
| 2048 | Goethals Dr Interceptor | 7005 | B-359 | Record Drawings | Record Drawings | 6999 | B-360 | COR Sewer Map Book | COR Sewer Map Book | 459 | 54 | 357.14 | 336.51 | 336.16 | 20.63 | 0.08% | 4.718 | 2.08 | 0.26 | 33.30 |
| 2050 | | 7045 | F-010 | COR Sewer Map Book | COR Sewer Map Book | 7047 | B-162 | Record Drawings | Record Drawings | 448 | 12 | 354.30 | 344.81 | 344.06 | 9.49 | 0.17% | 0.427 | 1.95 | 0.48 | 0.59 |
| 2058 | | 6991 | | Old Model | Old Model | 6981 | | Old Model | Old Model | 475 | 10 | 366.06 | 356.06 | 348.06 | 10.00 | 1.68% | 0.025 | 1.84 | 0.08 | 1.97 |
| 2059 | | 6959 | | Default to Legacy | Default to Legacy | 6990 | | Old Model | Old Model | 332 | 10 | 367.59 | 357.59 | 356.66 | 10.00 | 0.28% | 0.025 | 1.16 | 0.13 | 0.79 |
| 2060 | | 7007 | | Default to Legacy | Default to Legacy | 6959 | | Default to Legacy | Default to Legacy | 134 | 10 | 367.97 | 357.97 | 357.59 | 10.00 | 0.28% | 0.018 | 0.76 | 0.10 | 0.80 |
| 2064 | | 7073 | | Old Model | Old Model | 7071 | | Old Model | Old Model | 349 | 10 | 356.64 | 346.64 | 346.40 | 10.00 | 0.07% | 0.079 | 1.03 | 0.37 | 0.32 |
| 2066 | | 6981 | | Old Model | Old Model | 7035 | B-132 | Assumed | Old Model | 464 | 10 | 358.06 | 348.06 | 342.31 | 10.00 | 1.24% | 0.026 | 1.27 | 0.09 | 1.68 |
| 2080 | | 7067 | | Old Model | Old Model | 9005 | | Asbuits | Asbuits | 62 | 10 | 379.54 | 369.54 | 368.98 | 10.00 | 0.90% | 0.219 | 2.74 | 0.27 | 1.24 |
| 2087 | | 7098 | | Inv+10 | Straight Grade | 7097 | | Inv+10 | Straight Grade | 23 | 10 | 355.66 | 345.66 | 345.57 | 10.00 | 0.39% | 0.108 | 1.67 | 0.25 | 0.84 |
| 2088 | | 7099 | | Inv+10 | Straight Grade | 7098 | | Inv+10 | Straight Grade | 74 | 10 | 355.96 | 345.96 | 345.66 | 10.00 | 0.40% | 0.108 | 1.71 | 0.23 | 0.87 |
| 2089 | | 7097 | | Inv+10 | Straight Grade | 7096 | | Inv+10 | Straight Grade | 61 | 10 | 355.57 | 345.57 | 345.32 | 10.00 | 0.41% | 0.108 | 1.78 | 0.23 | 0.87 |
| 2090 | | 7096 | | Inv+10 | Straight Grade | 7045 | F-010 | COR Sewer Map Book | COR Sewer Map Book | 128 | 10 | 355.32 | 345.32 | 344.81 | 10.00 | 0.40% | 0.108 | 1.01 | 0.23 | 0.86 |
| 2111 | | 7237 | | Old Model | Old Model | 7234 | | Old Model | Old Model | 290 | 10 | 405.00 | 395.00 | 394.30 | 10.00 | 0.24% | 0.030 | 1.07 | 0.14 | 0.72 |
| 2207 | | 7234 | | Old Model | Old Model | 7235 | | Old Model | Old Model | 422 | 10 | 404.30 | 394.30 | 392.74 | 10.00 | 0.37% | 0.031 | 0.50 | 0.12 | 0.90 |
| 2208 | | 7235 | | Old Model | Old Model | 7236 | | Old Model | Old Model | 325 | 10 | 402.74 | 392.74 | 392.37 | 10.00 | 0.11% | 0.111 | 1.21 | 0.35 | 0.41 |
| 2209 | | 7236 | | Old Model | Old Model | 7131 | | Old Model | Old Model | 436 | 10 | 402.37 | 392.37 | 391.33 | 10.00 | 0.24% | 0.112 | 1.53 | 0.27 | 0.64 |
| 2210 | | 7131 | | Old Model | Old Model | 6288 | | Old Model | Old Model | 512 | 10 | 401.33 | 391.33 | 390.03 | 10.00 | 0.25% | 0.113 | 1.51 | 0.26 | 0.66 |
| 2217 | South Trunk Sewer | 7253 | | Inv+10 | Record Drawings | 7168 | | Inv+10 | Record Drawings | 45 | 12 | 399.89 | 389.89 | 389.78 | 10.00 | 0.25% | 0.168 | 1.53 | 0.26 | 1.07 |
| 2218 | South Trunk Sewer | 7254 | | Inv+10 | Record Drawings | 7253 | | Inv+10 | Record Drawings | 175 | 12 | 400.35 | 390.35 | 389.89 | 10.00 | 0.26% | 0.168 | 1.65 | 0.24 | 1.11 |
| 2241 | | 7376 | | Old Model | Old Model | 7375 | | Old Model | Old Model | 346 | 10 | 395.50 | 385.50 | 378.88 | 10.00 | 1.91% | 0.176 | 2.95 | 0.19 | 1.95 |
| 2323 | | 7378 | | Inv+10 | Straight Grade | 7376 | | Old Model | Old Model | 260 | 10 | 396.07 | 386.07 | 385.50 | 10.00 | 0.22% | 0.156 | 1.95 | 0.36 | 0.56 |
| 2387 | | 7439 | G-013 | Survey | Survey | 7441 | B-049 | Survey | Survey | 332 | 18 | 356.50 | 345.35 | 344.92 | 11.15 | 0.13% | 0.613 | 2.93 | 0.37 | 2.04 |
| 2397 | | 7475 | | Old Model | Old Model | 7431 | | Old Model | Old Model | 170 | 10 | 363.31 | 353.31 | 352.56 | 10.00 | 0.44% | 0.029 | 0.96 | 0.12 | 0.99 |
| 2406 | | 7429 | B-248 | Record Drawings | Record Drawings | 7440 | B-427 | Survey | Survey | 56 | 10 | 358.30 | 343.19 | 342.82 | 15.11 | 0.66% | 0.045 | 0.30 | 0.40 | 1.20 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|---------------------|----------------------|-----------|-------------------|-------------------|----------------------|-----------|-------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 2409 | | 7443 | | Old Model | Old Model | 7427 | | Old Model | Record Drawings | 174 | 10 | 355.50 | 346.60 | 346.07 | 8.90 | 0.30% | 0.039 | 1.20 | 0.15 | 0.81 |
| 2430 | | 7435 | G-045 | Old Model | Old Model | 7436 | G-044 | Old Model | Old Model | 295 | 10 | 361.29 | 351.29 | 350.40 | 10.00 | 0.30% | 0.033 | 0.49 | 0.14 | 0.81 |
| 2431 | | 7431 | | Old Model | Old Model | 7432 | G-046 | Old Model | Old Model | 485 | 10 | 362.56 | 352.56 | 351.73 | 10.00 | 0.17% | 0.031 | 0.95 | 0.16 | 0.60 |
| 2444 | | 7444 | G-079 | Old Model | Old Model | 7465 | G-314 | Old Model | Old Model | 271 | 10 | 378.80 | 368.64 | 367.73 | 10.16 | 0.34% | 0.307 | 2.12 | 0.41 | 0.58 |
| 2448 | | 7465 | G-314 | Old Model | Old Model | 7466 | G-078 | Old Model | Old Model | 7 | 12 | 377.73 | 367.73 | 367.70 | 10.00 | 0.44% | 0.316 | 1.88 | 0.38 | 1.34 |
| 2472 | | 7508 | B-425 | Old Model | Record Drawings | 7394 | B-424 | Record Drawings | Old Model | 37 | 10 | 354.67 | 344.71 | 340.51 | 9.96 | 11.30% | 0.034 | 4.11 | 0.06 | 5.14 |
| 2473 | | 7491 | | Old Model | Old Model | JCT_MP-404 | | Record Drawings | Record Drawings | 34 | 10 | 353.72 | 343.72 | 340.28 | 10.00 | 10.15% | 0.041 | 4.16 | 0.07 | 4.86 |
| 2483 | Lower N Interceptor | 7492 | B-420 | Record Drawings | Record Drawings | JCT_MP-404 | | Record Drawings | Record Drawings | 27 | 54 | 358.80 | 338.47 | 338.45 | 20.33 | 0.07% | 4.218 | 1.74 | 0.29 | 33.47 |
| 2484 | | 7510 | | Old Model | Old Model | 7491 | | Old Model | Old Model | 168 | 10 | 354.92 | 344.92 | 343.72 | 10.00 | 0.71% | 0.041 | 2.17 | 0.14 | 1.25 |
| 2485 | | 7507 | | Old Model | Old Model | 7510 | | Old Model | Old Model | 257 | 10 | 355.42 | 345.42 | 344.92 | 10.00 | 0.19% | 0.040 | 1.10 | 0.18 | 0.64 |
| 2486 | | 7428 | B-426 | Record Drawings | Record Drawings | 7395 | B-422 | Record Drawings | Record Drawings | 330 | 18 | 358.20 | 342.87 | 342.46 | 15.33 | 0.12% | 0.649 | 2.69 | 0.39 | 1.94 |
| 2494 | | 7764 | | Old Model | Old Model | 7504 | | Old Model | Old Model | 458 | 10 | 359.35 | 349.35 | 347.30 | 10.00 | 0.45% | 0.033 | 0.77 | 0.12 | 0.99 |
| 2495 | | 7504 | | Old Model | Old Model | 7505 | | Old Model | Old Model | 529 | 10 | 357.30 | 347.30 | 346.92 | 10.00 | 0.07% | 0.036 | 0.75 | 0.24 | 0.38 |
| 2496 | | 7505 | | Old Model | Old Model | 6930 | | Default to Legacy | Default to Legacy | 367 | 10 | 356.92 | 346.92 | 346.13 | 10.00 | 0.22% | 0.037 | 1.06 | 0.15 | 0.68 |
| 2497 | | 7506 | | Old Model | Old Model | 7507 | | Old Model | Old Model | 224 | 10 | 355.92 | 345.92 | 345.42 | 10.00 | 0.22% | 0.039 | 0.98 | 0.16 | 0.69 |
| 2498 | Lower N Interceptor | 7394 | B-424 | Record Drawings | Old Model | JCT_MP-360 | | Record Drawings | Record Drawings | 326 | 54 | 355.20 | 338.68 | 338.60 | 16.52 | 0.02% | 3.672 | 1.52 | 0.29 | 17.89 |
| 2499 | | 7509 | B-423 | Record Drawings | Record Drawings | JCT_MP-360 | | Record Drawings | Record Drawings | 44 | 10 | 357.50 | 344.50 | 338.57 | 13.00 | 13.34% | 0.023 | 0.13 | 0.05 | 5.60 |
| 2501 | | 7499 | | Old Model | Old Model | 7509 | B-423 | Record Drawings | Record Drawings | 201 | 10 | 355.06 | 345.06 | 344.60 | 10.00 | 0.23% | 0.023 | 1.02 | 0.14 | 0.71 |
| 2502 | | 7498 | | Old Model | Old Model | 7499 | | Old Model | Old Model | 85 | 10 | 355.34 | 345.34 | 345.06 | 10.00 | 0.33% | 0.020 | 0.84 | 0.11 | 0.86 |
| 2503 | | 7497 | | Old Model | Old Model | 7498 | | Old Model | Old Model | 69 | 10 | 355.56 | 345.56 | 345.34 | 10.00 | 0.32% | 0.019 | 0.98 | 0.10 | 0.85 |
| 2504 | | 7496 | | Old Model | Old Model | 7497 | | Old Model | Old Model | 89 | 10 | 355.85 | 345.85 | 345.56 | 10.00 | 0.32% | 0.018 | 0.98 | 0.10 | 0.86 |
| 2505 | | 7494 | | Old Model | Old Model | 7496 | | Old Model | Old Model | 217 | 10 | 356.49 | 346.49 | 345.85 | 10.00 | 0.29% | 0.017 | 0.94 | 0.10 | 0.82 |
| 2508 | | 7511 | | Old Model | Record Drawings | 7508 | B-425 | Old Model | Record Drawings | 93 | 10 | 354.98 | 344.92 | 344.81 | 10.06 | 0.12% | 0.034 | 0.96 | 0.20 | 0.50 |
| 2509 | | 7501 | | Old Model | Record Drawings | 7511 | | Old Model | Record Drawings | 84 | 10 | 355.02 | 345.07 | 344.97 | 9.95 | 0.12% | 0.034 | 0.91 | 0.19 | 0.50 |
| 2510 | | 7502 | | Old Model | Record Drawings | 7501 | | Old Model | Record Drawings | 158 | 10 | 355.27 | 345.31 | 345.12 | 9.96 | 0.12% | 0.034 | 0.90 | 0.20 | 0.50 |
| 2513 | | 7500 | | Old Model | Old Model | 7502 | | Old Model | Record Drawings | 349 | 10 | 355.76 | 345.79 | 345.36 | 9.97 | 0.12% | 0.033 | 0.86 | 0.19 | 0.51 |
| 2514 | | 7512 | | Old Model | Record Drawings | 7500 | | Old Model | Old Model | 377 | 10 | 356.31 | 346.31 | 345.84 | 10.00 | 0.12% | 0.032 | 0.86 | 0.19 | 0.51 |
| 2515 | | 7741 | | Old Model | Record Drawings | 7512 | | Old Model | Record Drawings | 414 | 10 | 356.85 | 346.85 | 346.36 | 10.00 | 0.12% | 0.031 | 0.83 | 0.19 | 0.50 |
| 2519 | | 7495 | | Old Model | Old Model | 7494 | | Old Model | Old Model | 248 | 10 | 357.14 | 347.14 | 346.49 | 10.00 | 0.26% | 0.016 | 0.87 | 0.10 | 0.77 |
| 2520 | | 7503 | | Old Model | Old Model | 7495 | | Old Model | Old Model | 155 | 10 | 358.50 | 348.50 | 347.14 | 10.00 | 0.88% | 0.014 | 1.01 | 0.07 | 1.43 |
| 2526 | Lower N Interceptor | 7646 | | Record Drawings | Record Drawings | 7396 | | Record Drawings | Record Drawings | 427 | 54 | 353.50 | 339.14 | 339.00 | 14.36 | 0.03% | 3.632 | 1.58 | 0.27 | 21.29 |
| 2529 | Lower N Interceptor | 7396 | | Record Drawings | Record Drawings | 7487 | | Record Drawings | Record Drawings | 496 | 54 | 353.20 | 339.00 | 338.85 | 14.20 | 0.03% | 3.646 | 1.57 | 0.28 | 20.30 |
| 2530 | | 7440 | B-427 | Survey | Survey | 7428 | B-426 | Record Drawings | Record Drawings | 100 | 18 | 357.32 | 342.67 | 342.87 | 14.65 | -0.20% | 0.649 | 1.20 | 0.57 | 2.64 |
| 2531 | | 7426 | | Old Model | Record Drawings | 7429 | B-248 | Record Drawings | Record Drawings | 281 | 10 | 354.40 | 345.51 | 344.81 | 8.89 | 0.25% | 0.042 | 1.24 | 0.17 | 0.72 |
| 2532 | | 7442 | | Old Model | Record Drawings | 7443 | | Old Model | Old Model | 408 | 12 | 356.89 | 347.82 | 346.60 | 9.07 | 0.30% | 0.038 | 1.13 | 0.12 | 1.33 |
| 2537 | | 7436 | G-044 | Old Model | Old Model | 7439 | G-013 | Survey | Survey | 650 | 15 | 360.40 | 350.40 | 345.40 | 10.00 | 0.77% | 0.537 | 2.40 | 0.25 | 3.43 |
| 2538 | | 7437 | G-062 | Old Model | Old Model | 7436 | G-044 | Old Model | Old Model | 59 | 12 | 360.65 | 350.65 | 350.40 | 10.00 | 0.42% | 0.504 | 2.95 | 0.43 | 1.12 |
| 2539 | | 7432 | G-046 | Old Model | Old Model | 7435 | G-045 | Old Model | Old Model | 158 | 10 | 361.73 | 351.73 | 351.29 | 10.00 | 0.28% | 0.031 | 1.10 | 0.13 | 0.78 |
| 2543 | | 7662 | | Old Model | Old Model | 7475 | | Old Model | Old Model | 402 | 10 | 364.25 | 354.25 | 353.31 | 10.00 | 0.23% | 0.028 | 1.04 | 0.14 | 0.71 |
| 2544 | | 7477 | | Default to Legacy | Default to Legacy | 7670 | | Default to Legacy | Default to Legacy | 177 | 10 | 368.08 | 358.08 | 357.59 | 10.00 | 0.28% | 0.008 | 0.73 | 0.07 | 0.80 |
| 2545 | | 7476 | | Default to Legacy | Default to Legacy | 7477 | | Default to Legacy | Default to Legacy | 155 | 10 | 368.52 | 358.52 | 358.08 | 10.00 | 0.28% | 0.007 | 0.63 | 0.06 | 0.81 |
| 2546 | | 6913 | | Default to Legacy | Default to Legacy | 7476 | | Default to Legacy | Default to Legacy | 218 | 10 | 369.13 | 359.13 | 358.52 | 10.00 | 0.28% | 0.004 | 0.51 | 0.05 | 0.81 |
| 2551 | | 7424 | G-080 | Survey | Survey | 7444 | G-079 | Old Model | Old Model | 48 | 10 | 380.62 | 368.62 | 368.64 | 12.00 | -0.04% | 0.294 | 1.66 | 0.66 | 0.02 |
| 2553 | | 7466 | G-078 | Old Model | Old Model | 7453 | G-077 | GIS Base | Old Model | 285 | 12 | 377.70 | 367.70 | 366.80 | 10.00 | 0.32% | 0.322 | 2.62 | 0.35 | 1.08 |
| 2559 | | 7468 | | Old Model | Old Model | 7451 | | Old Model | Old Model | 268 | 10 | 369.22 | 359.22 | 358.64 | 10.00 | 0.22% | 0.165 | 1.76 | 0.36 | 0.55 |
| 2560 | | 7451 | | Old Model | Old Model | 7398 | | Old Model | Old Model | 131 | 12 | 368.64 | 358.64 | 354.08 | 10.00 | 3.48% | 0.495 | 5.30 | 0.22 | 4.16 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|-------------------|-------------------|----------------------|-----------|-------------------|--------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 2561 | | 7455 | | Old Model | Old Model | 6927 | | Default to Legacy | Default to Legacy | 45 | 12 | 374.00 | 364.00 | 363.46 | 10.00 | 1.21% | 0.331 | 3.41 | 0.25 | 2.42 |
| 2562 | | 7453 | G-077 | GIS Base | Old Model | 7455 | | Old Model | Old Model | 212 | 12 | 381.00 | 366.80 | 364.00 | 14.20 | 1.32% | 0.330 | 3.52 | 0.23 | 2.53 |
| 2569 | | 7399 | | Old Model | Old Model | 7437 | G-062 | Old Model | Old Model | 301 | 12 | 361.16 | 351.16 | 350.65 | 10.00 | 0.17% | 0.505 | 2.09 | 0.53 | 0.53 |
| 2570 | | 7452 | | Old Model | Old Model | 7399 | | Old Model | Old Model | 50 | 12 | 362.00 | 352.00 | 351.16 | 10.00 | 1.67% | 0.498 | 2.64 | 0.27 | 2.73 |
| 2571 | | 7398 | | Old Model | Old Model | 7452 | | Old Model | Old Model | 105 | 12 | 364.08 | 354.08 | 352.00 | 10.00 | 1.98% | 0.497 | 4.68 | 0.26 | 3.02 |
| 2584 | | 7420 | G-082 | Old Model | Old Model | 6926 | G-467 | Survey | Survey | 148 | 10 | 381.49 | 371.43 | 370.67 | 10.06 | 0.51% | 0.263 | 2.72 | 0.36 | 0.84 |
| 2585 | | 6926 | G-467 | Survey | Survey | 7414 | G-081 | Survey | Survey | 152 | 10 | 381.67 | 370.62 | 369.78 | 11.05 | 0.55% | 0.265 | 2.70 | 0.34 | 0.88 |
| 2586 | | 7414 | G-081 | Survey | Survey | 7424 | G-080 | Survey | Survey | 264 | 10 | 381.38 | 369.73 | 368.57 | 11.65 | 0.44% | 0.285 | 1.58 | 0.36 | 0.73 |
| 2635 | | 7530 | | Inv+10 | Straight Grade | 7532 | | Inv+10 | Straight Grade | 82 | 12 | 402.25 | 392.52 | 392.34 | 9.73 | 0.21% | 0.014 | 0.72 | 0.08 | 1.14 |
| 2639 | | 7528 | | Inv+10 | Straight Grade | 7530 | | Inv+10 | Straight Grade | 285 | 12 | 403.15 | 393.15 | 392.52 | 10.00 | 0.22% | 0.013 | 0.76 | 0.08 | 1.16 |
| 2647 | | 7570 | | Inv+10 | Straight Grade | 7568 | | Inv+10 | Straight Grade | 276 | 12 | 390.53 | 380.53 | 379.92 | 10.00 | 0.22% | 0.013 | 0.61 | 0.08 | 1.16 |
| 2648 | | 7572 | | Inv+10 | Straight Grade | 7567 | | Inv+10 | Straight Grade | 136 | 12 | 392.05 | 382.05 | 381.76 | 10.00 | 0.21% | 0.001 | 0.17 | 0.03 | 1.15 |
| 2757 | | 7702 | | Old Model | Old Model | 7697 | | Old Model | Old Model | 168 | 12 | 365.07 | 355.07 | 354.29 | 10.00 | 0.46% | 0.016 | 0.90 | 0.07 | 1.68 |
| 2775 | | 6911 | | Inv+10 | Straight Grade | 7730 | | Inv+10 | Straight Grade | 74 | 10 | 375.30 | 365.30 | 365.09 | 10.00 | 0.29% | 0.129 | 1.44 | 0.27 | 0.70 |
| 2780 | | 7666 | | Old Model | Old Model | 7669 | | Record Drawings | Record Drawings | 252 | 10 | 358.67 | 348.67 | 347.89 | 10.00 | 0.31% | 0.017 | 1.02 | 0.11 | 0.84 |
| 2817 | | 7742 | | Old Model | Record Drawings | 7741 | | Old Model | Record Drawings | 196 | 10 | 357.17 | 347.15 | 346.90 | 10.02 | 0.13% | 0.028 | 0.84 | 0.17 | 0.52 |
| 2819 | | 7740 | | Old Model | Record Drawings | 7742 | | Old Model | Record Drawings | 190 | 10 | 358.59 | 347.44 | 347.20 | 11.15 | 0.13% | 0.027 | 0.85 | 0.18 | 0.52 |
| 2821 | | 7739 | | Old Model | Record Drawings | 7740 | | Old Model | Record Drawings | 109 | 10 | 358.60 | 347.60 | 347.49 | 11.00 | 0.10% | 0.027 | 0.81 | 0.18 | 0.46 |
| 2824 | | 7751 | | Old Model | Record Drawings | 7739 | | Old Model | Record Drawings | 275 | 10 | 358.62 | 348.07 | 347.70 | 10.55 | 0.13% | 0.026 | 0.86 | 0.18 | 0.54 |
| 2831 | | 7750 | | Old Model | Record Drawings | 7751 | | Old Model | Record Drawings | 414 | 10 | 358.66 | 348.65 | 348.17 | 10.01 | 0.12% | 0.019 | 1.03 | 0.20 | 0.50 |
| 2832 | | 7758 | | Old Model | Old Model | 7748 | | Old Model | Record Drawings | 498 | 10 | 360.46 | 350.46 | 348.89 | 10.00 | 0.32% | 0.016 | 1.00 | 0.10 | 0.85 |
| 2837 | Lower N Interceptor | JCT_MP-370 | | Record Drawings | Record Drawings | JCT_MP-368 | | Record Drawings | Record Drawings | 189 | 54 | 361.00 | 339.72 | 339.65 | 21.28 | 0.04% | 3.574 | 1.56 | 0.27 | 22.95 |
| 2849 | | 7697 | | Old Model | Old Model | 7698 | | Old Model | Old Model | 388 | 15 | 364.29 | 354.29 | 353.53 | 10.00 | 0.20% | 0.017 | 0.60 | 0.07 | 1.98 |
| 2850 | | 7698 | | Old Model | Old Model | 7681 | | Old Model | Old Model | 291 | 15 | 363.53 | 353.53 | 353.24 | 10.00 | 0.10% | 0.022 | 0.66 | 0.09 | 1.41 |
| 2855 | | 7660 | | Record Drawings | Record Drawings | 7659 | | Record Drawings | Record Drawings | 144 | 10 | 353.48 | 344.11 | 343.66 | 9.37 | 0.31% | 0.038 | 2.10 | 0.17 | 0.82 |
| 2856 | | 7667 | | Record Drawings | Record Drawings | 7660 | | Record Drawings | Record Drawings | 155 | 10 | 353.00 | 344.60 | 344.21 | 8.40 | 0.25% | 0.023 | 1.74 | 0.14 | 0.75 |
| 2860 | | 7663 | | Old Model | Old Model | 7664 | | Old Model | Old Model | 325 | 15 | 361.80 | 351.80 | 351.08 | 10.00 | 0.22% | 0.038 | 1.03 | 0.09 | 2.09 |
| 2861 | | 7681 | | Old Model | Old Model | 7676 | | Old Model | Old Model | 294 | 15 | 363.24 | 353.24 | 352.52 | 10.00 | 0.24% | 0.027 | 0.93 | 0.08 | 2.21 |
| 2862 | | 7670 | | Default to Legacy | Default to Legacy | 6914 | | Default to Legacy | Default to Legacy | 60 | 10 | 367.59 | 357.59 | 357.42 | 10.00 | 0.28% | 0.009 | 0.59 | 0.07 | 0.81 |
| 2864 | | 7674 | | Old Model | Old Model | 7662 | | Old Model | Old Model | 484 | 10 | 364.92 | 354.92 | 354.25 | 10.00 | 0.14% | 0.026 | 0.81 | 0.15 | 0.54 |
| 2865 | | 7673 | | Old Model | Old Model | 7674 | | Old Model | Old Model | 173 | 10 | 366.00 | 356.00 | 354.92 | 10.00 | 0.62% | 0.021 | 0.88 | 0.09 | 1.19 |
| 2866 | | 6914 | | Default to Legacy | Default to Legacy | 7673 | | Old Model | Old Model | 508 | 10 | 367.42 | 357.42 | 356.00 | 10.00 | 0.28% | 0.017 | 0.94 | 0.10 | 0.80 |
| 2874 | | 8783 | | Old Model | Old Model | 7649 | | Old Model | Old Model | 155 | 12 | 369.54 | 359.54 | 357.07 | 10.00 | 1.59% | 0.012 | 1.40 | 0.05 | 3.14 |
| 2884 | | 7692 | | Inv+10 | Straight Grade | 7691 | | Inv+10 | Straight Grade | 31 | 10 | 377.56 | 367.56 | 367.47 | 10.00 | 0.29% | 0.008 | 0.18 | 0.15 | 0.82 |
| 2886 | | 7691 | | Inv+10 | Straight Grade | 7654 | | Inv+10 | Straight Grade | 441 | 10 | 377.47 | 367.47 | 366.24 | 10.00 | 0.28% | 0.122 | 1.62 | 0.26 | 0.69 |
| 2887 | | 7654 | | Inv+10 | Straight Grade | 6911 | | Inv+10 | Straight Grade | 335 | 10 | 376.24 | 366.24 | 365.30 | 10.00 | 0.28% | 0.128 | 1.67 | 0.27 | 0.68 |
| 2923 | | 7732 | | Old Model | Old Model | 7469 | | Old Model | Old Model | 660 | 10 | 374.78 | 364.78 | 360.00 | 10.00 | 0.72% | 0.156 | 3.20 | 0.26 | 1.15 |
| 2930 | North Trunk Sewer | 7891 | E-015 | Old Model | Record Drawings | 7897 | E-016 | Old Model | Old Model | 476 | 12 | 387.75 | 378.35 | 377.35 | 9.40 | 0.21% | 0.279 | 1.83 | 0.34 | 0.86 |
| 2931 | | 8733 | | Record Dwg | Straight Grade | 8734 | | Record Dwg | Straight Grade | 360 | 12 | 392.10 | 378.01 | 377.22 | 14.09 | 0.22% | 0.035 | 1.03 | 0.12 | 1.13 |
| 2932 | | 7776 | | Old Model | Old Model | 7777 | K-011 | COR Survey | COR Survey | 405 | 12 | 395.31 | 385.31 | 384.38 | 10.00 | 0.23% | 0.000 | 0.25 | 0.02 | 1.19 |
| 2935 | | 8699 | | Assumed | Straight Grade | 8017 | H-109 | Old Model | COR Sewer Map Book | 396 | 12 | 374.20 | 359.86 | 355.00 | 14.34 | 1.23% | 0.109 | 2.57 | 0.14 | 2.65 |
| 2937 | | 7795 | K-275 | Old Model | Old Model | 7783 | K-274 | Record Drawings | Record Drawings | 348 | 12 | 389.62 | 385.49 | 384.54 | 4.13 | 0.27% | 0.001 | 0.36 | 0.02 | 1.30 |
| 2960 | Upper N Int - E Side | 8093 | I-042 | From COR - SSA | From COR - SSA | 7909 | I-043 | From COR - SSA | From COR - SSA | 275 | 24 | 361.96 | 349.41 | 349.14 | 12.55 | 0.10% | 0.344 | 1.73 | 0.21 | 4.62 |
| 2961 | | 8096 | I-220 | Old Model | Old Model | 8079 | I-219 | Old Model | Old Model | 186 | 12 | 364.36 | 354.36 | 353.23 | 10.00 | 0.60% | 0.045 | 1.06 | 0.11 | 1.89 |
| 2962 | | 8057 | | Old Model | Old Model | 7908 | | Record Drawings | Record Drawings | 82 | 10 | 361.84 | 351.84 | 350.71 | 10.00 | 1.38% | 0.060 | 2.34 | 0.13 | 1.75 |
| 2969 | Upper N Int - W Side | 7914 | H-253 | From COR - SSA | From COR - SSA | 7915 | H-250 | From COR - SSA | From COR - SSA | 589 | 54 | 355.87 | 340.64 | 340.63 | 15.23 | 0.00% | 3.068 | 1.59 | 0.27 | 2.61 |
| 2970 | NE Sewer Interceptor | 7909 | I-043 | From COR - SSA | From COR - SSA | JCT_MP-450 | | Assumed | Record Drawings | 18 | 24 | 360.94 | 349.14 | 348.75 | 11.80 | 2.13% | 0.344 | 3.62 | 0.10 | 22.76 |
| 2972 | Upper N Int - W Side | 7968 | J-221 | From COR - SSA | From COR - SSA | 7967 | J-220 | From COR - SSA | From COR - SSA | 25 | 24 | 357.16 | 350.16 | 342.79 | 7.00 | 29.68% | 1.771 | 3.10 | 0.10 | 86.53 |
| 2977 | | 8133 | J-184 | Survey | Survey | 8007 | J-183 | Survey | Survey | 323 | 10 | 362.71 | 353.77 | 353.07 | 8.94 | 0.22% | 0.046 | 0.93 | 0.17 | 0.67 |



City of Richland - 2015 General Sewer Plan Update

Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|-------------------|-------------------|----------------------|-----------|--------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 2978 | Upper N Int - W Side | 8011 | J-024 | From COR - SSA | From COR - SSA | 7968 | J-221 | From COR - SSA | From COR - SSA | 280 | 24 | 357.53 | 350.51 | 350.16 | 7.02 | 0.12% | 1.758 | 3.92 | 0.45 | 3.84 |
| 2980 | North Trunk Sewer | 8013 | H-018 | Record Drawings | Record Drawings | 8014 | H-019 | COR Sewer Map Book | Record Drawings | 455 | 15 | 357.60 | 351.89 | 351.78 | 5.71 | 0.02% | 0.309 | 1.30 | 0.46 | 0.39 |
| 2984 | North Trunk Sewer | 8756 | H-012 | Old Model | Old Model | 8028 | H-013 | Old Model | Old Model | 264 | 10 | 358.83 | 348.83 | 347.46 | 10.00 | 0.52% | 0.044 | 1.27 | 0.14 | 1.06 |
| 2986 | | 8762 | | Record Drawings | Record Drawings | 8030 | | Old Model | Straight Grade | 341 | 15 | 363.41 | 354.08 | 353.57 | 9.33 | 0.15% | 0.306 | 1.58 | 0.28 | 1.44 |
| 2988 | Lower N Interceptor | 7911 | H-244 | Survey | Survey | 7923 | H-243 | Survey | Survey | 42 | 18 | 356.10 | 349.68 | 349.73 | 6.42 | -0.12% | 0.585 | 1.63 | 0.41 | 1.94 |
| 2990 | | 8099 | H-298 | Survey | Survey | 7913 | H-287 | Survey | Survey | 23 | 42 | 354.64 | 341.34 | 341.16 | 13.30 | 0.80% | 0.861 | 0.85 | 0.20 | 61.99 |
| 2995 | Lower N Interceptor | 7959 | | Old Model | Old Model | JCT_MP-372 | | Record Drawings | Record Drawings | 237 | 54 | 364.10 | 339.89 | 339.82 | 24.21 | 0.03% | 3.553 | 1.52 | 0.28 | 20.13 |
| 2999 | | 7910 | H-247 | Record Drawings | Record Drawings | 7911 | H-244 | Survey | Survey | 746 | 12 | 358.10 | 351.30 | 350.20 | 6.80 | 0.15% | 0.359 | 2.83 | 0.59 | 0.60 |
| 3002 | Upper N Int - E Side | 8080 | I-041 | From COR - SSA | From COR - SSA | 8093 | I-042 | From COR - SSA | From COR - SSA | 373 | 24 | 359.46 | 349.76 | 349.41 | 9.70 | 0.09% | 0.341 | 1.24 | 0.18 | 4.51 |
| 3006 | Upper N Int - E Side | 8086 | I-037 | From COR - SSA | From COR - SSA | 8087 | I-038 | From COR - SSA | From COR - SSA | 185 | 24 | 358.61 | 350.61 | 350.47 | 8.00 | 0.08% | 0.326 | 1.39 | 0.19 | 4.03 |
| 3014 | | 8006 | J-182 | Survey | Survey | 8011 | J-024 | From COR - SSA | From COR - SSA | 350 | 10 | 357.40 | 352.19 | 351.46 | 5.21 | 0.21% | 0.060 | 1.30 | 0.22 | 0.64 |
| 3015 | Upper N Int - W Side | 8150 | J-023 | From COR - SSA | From COR - SSA | 8011 | J-024 | From COR - SSA | From COR - SSA | 305 | 24 | 359.21 | 350.61 | 350.51 | 8.60 | 0.03% | 1.609 | 1.72 | 0.49 | 1.26 |
| 3016 | | 8007 | J-183 | Survey | Survey | 8006 | J-182 | Survey | Survey | 337 | 10 | 360.00 | 353.10 | 352.21 | 6.90 | 0.26% | 0.052 | 1.35 | 0.23 | 0.74 |
| 3032 | | 8036 | | Old Model | Old Model | 8042 | | Old Model | Old Model | 242 | 10 | 364.06 | 354.06 | 353.55 | 10.00 | 0.21% | 0.044 | 1.09 | 0.17 | 0.66 |
| 3033 | | 8042 | | Old Model | Old Model | 8043 | | Old Model | Old Model | 191 | 10 | 363.55 | 353.55 | 353.15 | 10.00 | 0.21% | 0.046 | 1.04 | 0.17 | 0.66 |
| 3034 | | 8043 | | Old Model | Old Model | 8047 | | Old Model | Old Model | 177 | 10 | 363.15 | 353.15 | 352.79 | 10.00 | 0.20% | 0.046 | 1.17 | 0.19 | 0.65 |
| 3035 | | 8047 | | Old Model | Old Model | 8045 | | Old Model | Old Model | 61 | 10 | 362.79 | 352.79 | 352.54 | 10.00 | 0.41% | 0.046 | 1.04 | 0.15 | 0.94 |
| 3036 | | 8045 | | Old Model | Old Model | 8057 | | Old Model | Old Model | 364 | 10 | 362.54 | 352.54 | 351.84 | 10.00 | 0.19% | 0.060 | 1.36 | 0.24 | 0.61 |
| 3037 | Lower N Interceptor | 7935 | | Record Drawings | Record Drawings | JCT_MP-374 | | Record Drawings | Record Drawings | 490 | 54 | 362.10 | 340.09 | 339.92 | 22.01 | 0.03% | 3.470 | 1.50 | 0.27 | 22.17 |
| 3044 | | 6899 | | Default to Legacy | Default to Legacy | 7758 | | Old Model | Old Model | 427 | 10 | 362.31 | 352.31 | 350.46 | 10.00 | 0.43% | 0.013 | 0.81 | 0.08 | 1.00 |
| 3045 | | 8061 | | Old Model | Old Model | 6899 | | Default to Legacy | Default to Legacy | 34 | 10 | 362.46 | 352.46 | 352.31 | 10.00 | 0.44% | 0.011 | 0.91 | 0.07 | 1.01 |
| 3060 | Lower N Interceptor | 7916 | I-329 | Record Drawings | Record Drawings | 7935 | | Record Drawings | Record Drawings | 593 | 54 | 361.00 | 340.29 | 340.09 | 20.71 | 0.03% | 3.470 | 1.56 | 0.27 | 21.82 |
| 3061 | Upper N Int - W Side | 7915 | H-250 | From COR - SSA | From COR - SSA | JCT_MP-376 | | Record Drawings | Record Drawings | 35 | 54 | 360.03 | 340.63 | 340.44 | 19.40 | 0.54% | 3.067 | 1.62 | 0.23 | 97.90 |
| 3062 | | 8094 | I-201 | Old Model | Old Model | 7989 | I-330 | Old Model | Record Drawings | 222 | 12 | 361.01 | 351.01 | 350.75 | 10.00 | 0.12% | 0.065 | 1.09 | 0.22 | 0.80 |
| 3065 | | 8089 | I-214 | Old Model | Old Model | 8088 | I-213 | Old Model | Old Model | 291 | 12 | 362.04 | 352.04 | 352.09 | 10.00 | -0.02% | 0.062 | 0.59 | 0.33 | 0.26 |
| 3066 | | 8078 | I-217 | Old Model | Old Model | 8089 | I-214 | Old Model | Old Model | 317 | 12 | 362.37 | 352.37 | 352.04 | 10.00 | 0.10% | 0.060 | 0.58 | 0.19 | 0.74 |
| 3067 | | 8092 | I-212 | Old Model | Old Model | 8094 | I-201 | Old Model | Old Model | 158 | 12 | 361.92 | 351.92 | 351.01 | 10.00 | 0.57% | 0.062 | 1.07 | 0.12 | 1.83 |
| 3069 | Upper N Int - E Side | 8081 | I-040 | From COR - SSA | From COR - SSA | 8080 | I-041 | From COR - SSA | From COR - SSA | 287 | 24 | 357.86 | 349.96 | 349.76 | 7.90 | 0.07% | 0.341 | 1.27 | 0.20 | 3.84 |
| 3070 | Upper N Int - E Side | 8082 | I-039 | From COR - SSA | From COR - SSA | 8081 | I-040 | From COR - SSA | From COR - SSA | 320 | 24 | 356.14 | 349.89 | 349.96 | 6.25 | -0.02% | 0.331 | 0.87 | 0.29 | 2.01 |
| 3071 | Upper N Int - E Side | 8087 | I-038 | From COR - SSA | From COR - SSA | 8082 | I-039 | From COR - SSA | From COR - SSA | 340 | 24 | 357.32 | 350.47 | 349.89 | 6.85 | 0.17% | 0.331 | 1.00 | 0.15 | 6.21 |
| 3072 | | 8074 | I-218 | Old Model | Old Model | 8078 | I-217 | Old Model | Old Model | 368 | 12 | 362.84 | 352.84 | 352.37 | 10.00 | 0.13% | 0.052 | 0.87 | 0.16 | 0.83 |
| 3073 | | 8079 | I-219 | Old Model | Old Model | 8074 | I-218 | Old Model | Old Model | 374 | 12 | 363.23 | 353.23 | 352.84 | 10.00 | 0.11% | 0.050 | 0.89 | 0.17 | 0.76 |
| 3079 | | 7989 | I-330 | Old Model | Record Drawings | JCT_MP-380 | | Record Drawings | Record Drawings | 36 | 12 | 360.78 | 350.65 | 342.05 | 10.13 | 23.71% | 0.065 | 6.27 | 0.05 | 12.26 |
| 3080 | | 7979 | | Inv+10 | Straight Grade | 7985 | | Old Model | Record Drawings | 198 | 10 | 362.23 | 352.23 | 351.79 | 10.00 | 0.22% | 0.055 | 1.30 | 0.21 | 0.67 |
| 3086 | | 8012 | | Old Model | Old Model | 8010 | | Old Model | Old Model | 292 | 10 | 364.49 | 354.49 | 353.30 | 10.00 | 0.41% | 0.054 | 1.16 | 0.16 | 0.93 |
| 3091 | Upper N Int - W Side | 7967 | J-220 | From COR - SSA | From COR - SSA | 7966 | J-219 | From COR - SSA | From COR - SSA | 103 | 30 | 357.14 | 342.79 | 342.72 | 14.35 | 0.07% | 1.758 | 1.27 | 0.45 | 5.71 |
| 3092 | | 8009 | | Old Model | Old Model | 8011 | J-024 | From COR - SSA | From COR - SSA | 312 | 10 | 361.45 | 351.45 | 351.46 | 10.00 | 0.00% | 0.098 | 0.90 | 0.49 | -0.01 |
| 3093 | | 8008 | | Old Model | Old Model | 8009 | | Old Model | Old Model | 285 | 10 | 362.36 | 352.36 | 351.45 | 10.00 | 0.32% | 0.090 | 0.81 | 0.22 | 0.78 |
| 3095 | Upper N Int - W Side | 7965 | J-218 | From COR - SSA | From COR - SSA | 7964 | J-217 | From COR - SSA | From COR - SSA | 224 | 30 | 357.82 | 342.70 | 342.66 | 15.12 | 0.02% | 1.762 | 1.33 | 0.44 | 2.08 |
| 3096 | Upper N Int - W Side | 7964 | J-217 | From COR - SSA | From COR - SSA | 7914 | H-253 | From COR - SSA | From COR - SSA | 524 | 30 | 357.54 | 342.66 | 342.64 | 14.88 | 0.00% | 1.766 | 2.00 | 0.43 | 0.01 |
| 3097 | Lower N Interceptor | 7912 | | Survey | Survey | 7914 | H-253 | From COR - SSA | From COR - SSA | 292 | 42 | 352.53 | 341.36 | 340.64 | 11.17 | 0.25% | 1.461 | 1.22 | 0.22 | 33.54 |
| 3099 | Lower N Interceptor | 7913 | H-287 | Survey | Survey | JCT_MP-364 | H-286 | Record Drawings | Straight Grade | 267 | 42 | 354.46 | 341.31 | 341.16 | 13.15 | 0.06% | 1.312 | 1.37 | 0.25 | 15.38 |
| 3107 | | 7923 | H-243 | Survey | Survey | 7922 | H-289 | Survey | Survey | 258 | 18 | 356.36 | 349.73 | 349.26 | 6.63 | 0.18% | 0.576 | 2.25 | 0.32 | 2.57 |
| 3108 | North Trunk Sewer | 8005 | H-245 | Survey | Survey | 7911 | H-244 | Survey | Survey | 88 | 15 | 357.36 | 349.96 | 349.68 | 7.40 | 0.32% | 0.341 | 1.39 | 0.29 | 2.21 |
| 3112 | North Trunk Sewer | 8002 | H-021 | Old Model | Record Drawing | 8005 | H-245 | Survey | Survey | 400 | 15 | 360.01 | 350.20 | 349.96 | 9.81 | 0.06% | 0.341 | 1.43 | 0.41 | 0.77 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|--------------------|--------------------|----------------------|-----------|--------------------|--------------------|-------------|-----------|-----------|-----------|-------------|---------------|-------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 3142 | | 8017 | H-109 | Old Model | COR Sewer Map Book | 8033 | H-108 | COR Sewer Map Book | COR Sewer Map Book | 154 | 12 | 364.72 | 355.00 | 353.40 | 9.72 | 1.04% | 0.110 | 2.10 | 0.14 | 2.44 |
| 3143 | | 8033 | H-108 | COR Sewer Map Book | COR Sewer Map Book | 7917 | H-248 | Record Drawings | Record Drawings | 73 | 12 | 361.28 | 353.40 | 352.79 | 7.88 | 0.83% | 0.147 | 2.47 | 0.18 | 2.13 |
| 3145 | | 7917 | H-248 | Record Drawings | Record Drawings | 7910 | H-247 | Record Drawings | Record Drawings | 199 | 12 | 360.00 | 352.69 | 351.40 | 7.31 | 0.65% | 0.149 | 1.86 | 0.18 | 1.86 |
| 3174 | | 8105 | | AsBuilts | AsBuilts | 8107 | | AsBuilts | AsBuilts | 270 | 12 | 357.50 | 346.08 | 345.19 | 11.42 | 0.33% | 0.093 | 1.54 | 0.17 | 1.34 |
| 3180 | | 8127 | | Old Model | Old Model | 8148 | J-021 | From COR - SSA | From COR - SSA | 398 | 10 | 361.66 | 351.66 | 351.51 | 10.00 | 0.04% | 0.034 | 0.60 | 0.24 | 0.26 |
| 3187 | Upper N Int - W Side | 8159 | J-018 | From COR - SSA | From COR - SSA | 8136 | J-019 | From COR - SSA | From COR - SSA | 166 | 24 | 363.25 | 351.80 | 351.48 | 11.45 | 0.19% | 1.466 | 2.06 | 0.34 | 5.50 |
| 3188 | | 8183 | | Old Model | Old Model | 8159 | J-018 | From COR - SSA | From COR - SSA | 221 | 12 | 363.74 | 353.74 | 351.80 | 10.00 | 0.88% | 0.144 | 0.72 | 0.17 | 2.19 |
| 3190 | Upper N Int - W Side | 8178 | J-015 | From COR - SSA | From COR - SSA | 8167 | J-016 | From COR - SSA | From COR - SSA | 93 | 24 | 364.85 | 354.30 | 354.24 | 10.55 | 0.06% | 1.328 | 2.56 | 0.36 | 2.70 |
| 3210 | Upper N Int - E Side | 8474 | I-024 | From COR - SSA | From COR - SSA | 8286 | I-25 | From COR - SSA | From COR - SSA | 306 | 18 | 366.96 | 355.11 | 354.40 | 11.85 | 0.23% | 0.220 | 1.72 | 0.17 | 3.32 |
| 3211 | Upper N Int - E Side | 8273 | I-026 | From COR - SSA | From COR - SSA | 8272 | I-027 | From COR - SSA | From COR - SSA | 260 | 24 | 366.22 | 353.62 | 353.32 | 12.60 | 0.12% | 0.272 | 1.21 | 0.15 | 5.11 |
| 3212 | Upper N Int - E Side | 8272 | I-027 | From COR - SSA | From COR - SSA | 8250 | I-028 | From COR - SSA | From COR - SSA | 290 | 24 | 362.32 | 353.32 | 353.10 | 9.00 | 0.08% | 0.281 | 1.28 | 0.18 | 4.08 |
| 3222 | Upper N Int - E Side | 8250 | I-028 | From COR - SSA | From COR - SSA | 8252 | I-029 | From COR - SSA | From COR - SSA | 272 | 24 | 360.65 | 353.10 | 352.65 | 7.55 | 0.17% | 0.299 | 1.23 | 0.15 | 6.15 |
| 3232 | Upper N Int - E Side | 8252 | I-029 | From COR - SSA | From COR - SSA | 8242 | I-030 | From COR - SSA | From COR - SSA | 329 | 24 | 366.85 | 352.65 | 352.50 | 14.20 | 0.05% | 0.315 | 1.09 | 0.21 | 3.07 |
| 3233 | Upper N Int - E Side | 8242 | I-030 | From COR - SSA | From COR - SSA | 8241 | I-031 | From COR - SSA | From COR - SSA | 372 | 24 | 359.20 | 352.50 | 352.25 | 6.70 | 0.07% | 0.316 | 1.18 | 0.19 | 3.79 |
| 3235 | Upper N Int - E Side | 8240 | I-032 | From COR - SSA | From COR - SSA | 8233 | I-033 | From COR - SSA | From COR - SSA | 359 | 24 | 358.22 | 351.97 | 351.58 | 6.25 | 0.11% | 0.320 | 1.35 | 0.17 | 4.90 |
| 3236 | Upper N Int - E Side | 8233 | I-033 | From COR - SSA | From COR - SSA | 8212 | I-034 | From COR - SSA | From COR - SSA | 409 | 24 | 357.83 | 351.58 | 351.24 | 6.25 | 0.08% | 0.322 | 1.23 | 0.18 | 4.25 |
| 3237 | Upper N Int - E Side | 8212 | I-034 | From COR - SSA | From COR - SSA | 8211 | I-035 | From COR - SSA | From COR - SSA | 369 | 24 | 357.49 | 351.24 | 350.99 | 6.25 | 0.07% | 0.324 | 1.21 | 0.19 | 3.80 |
| 3276 | Upper N Int - W Side | 8265 | J-010 | From COR - SSA | From COR - SSA | 8115 | J-011 | From COR - SSA | From COR - SSA | 209 | 24 | 365.21 | 355.01 | 355.00 | 10.20 | 0.00% | 1.253 | 1.42 | 0.47 | -0.16 |
| 3277 | Upper N Int - W Side | 8177 | J-014 | From COR - SSA | From COR - SSA | 8178 | J-015 | From COR - SSA | From COR - SSA | 388 | 24 | 364.26 | 354.76 | 354.30 | 9.50 | 0.12% | 1.315 | 2.07 | 0.34 | 4.14 |
| 3284 | Upper N Int - W Side | 8163 | J-012 | From COR - SSA | From COR - SSA | 8175 | J-013 | Old Model | From COR - SSA | 165 | 24 | 366.96 | 354.96 | 354.66 | 12.00 | 0.18% | 1.294 | 1.64 | 0.36 | 5.45 |
| 3292 | Upper N Int - W Side | 8161 | J-017 | From COR - SSA | From COR - SSA | 8159 | J-018 | From COR - SSA | From COR - SSA | 86 | 24 | 363.77 | 351.92 | 351.80 | 11.85 | 0.14% | 1.333 | 2.20 | 0.35 | 4.59 |
| 3293 | Upper N Int - W Side | 8167 | J-016 | From COR - SSA | From COR - SSA | 8161 | J-017 | From COR - SSA | From COR - SSA | 526 | 24 | 365.74 | 354.24 | 351.92 | 11.50 | 0.44% | 1.333 | 2.68 | 0.24 | 9.18 |
| 3302 | Upper N Int - W Side | 8136 | J-019 | From COR - SSA | From COR - SSA | 8147 | J-020 | From COR - SSA | From COR - SSA | 324 | 24 | 361.68 | 351.48 | 351.26 | 10.20 | 0.07% | 1.471 | 1.82 | 0.43 | 2.66 |
| 3305 | Upper N Int - W Side | 8147 | J-020 | From COR - SSA | From COR - SSA | 8148 | J-021 | From COR - SSA | From COR - SSA | 301 | 24 | 360.26 | 351.26 | 351.02 | 9.00 | 0.08% | 1.538 | 2.06 | 0.42 | 2.93 |
| 3320 | | 8182 | | Old Model | Old Model | 8183 | | Old Model | Old Model | 311 | 12 | 365.10 | 355.10 | 353.74 | 10.00 | 0.44% | 0.120 | 1.97 | 0.19 | 1.53 |
| 3329 | Upper N Int - W Side | 8354 | L-035 | From COR - SSA | From COR - SSA | 8328 | J-001 | From COR - SSA | From COR - SSA | 328 | 24 | 368.78 | 356.03 | 356.00 | 12.75 | 0.01% | 0.973 | 1.48 | 0.40 | 0.54 |
| 3330 | Upper N Int - W Side | 8364 | | Old Model | Old Model | 8354 | L-035 | From COR - SSA | From COR - SSA | 169 | 24 | 366.00 | 356.18 | 356.03 | 9.82 | 0.09% | 0.968 | 1.35 | 0.37 | 3.76 |
| 3331 | Upper N Int - W Side | 8330 | J-003 | From COR - SSA | From COR - SSA | 8335 | J-004 | From COR - SSA | From COR - SSA | 387 | 24 | 365.24 | 355.60 | 355.43 | 9.64 | 0.04% | 1.129 | 1.17 | 0.46 | 2.19 |
| 3341 | | 8383 | | Old Model | Old Model | 8380 | L-188 | Old Model | Old Model | 271 | 12 | 383.20 | 373.20 | 364.90 | 10.00 | 3.07% | 0.043 | 3.09 | 0.07 | 4.33 |
| 3344 | | 8299 | | Old Model | Old Model | 8315 | | Old Model | Old Model | 267 | 12 | 375.77 | 365.77 | 362.42 | 10.00 | 1.26% | 0.031 | 1.67 | 0.07 | 2.77 |
| 3358 | Upper N Int - W Side | 8366 | L-190 | From COR - SSA | From COR - SSA | 8365 | L-191 | From COR - SSA | From COR - SSA | 194 | 27 | 366.66 | 356.36 | 356.34 | 10.30 | 0.01% | 0.974 | 1.33 | 0.34 | 1.23 |
| 3364 | Upper N Int - W Side | 8382 | L-032 | From COR - SSA | Old Model | 8367 | L-033 | From COR - SSA | From COR - SSA | 185 | 24 | 367.70 | 356.55 | 356.39 | 11.15 | 0.09% | 0.977 | 1.39 | 0.36 | 3.68 |
| 3372 | | 8470 | | Record Dwg | Record Dwg | 8273 | I-026 | From COR - SSA | From COR - SSA | 42 | 12 | 366.35 | 354.80 | 353.90 | 11.55 | 2.13% | 0.110 | 3.89 | 0.12 | 3.53 |
| 3386 | Upper N Int - E Side | 8457 | I-341 | From COR - SSA | From COR - SSA | 8458 | I-340 | From COR - SSA | From COR - SSA | 202 | 18 | 374.60 | 360.10 | 359.51 | 14.50 | 0.29% | 0.053 | 1.19 | 0.08 | 3.92 |
| 3388 | Upper N Int - E Side | 8597 | L-299 | From COR - SSA | From COR - SSA | 8489 | I-343 | From COR - SSA | From COR - SSA | 598 | 24 | 379.46 | 362.21 | 361.18 | 17.25 | 0.17% | 0.050 | 0.96 | 0.06 | 6.52 |
| 3391 | | 8500 | | Record Dwg | Record Dwg | 8493 | | Record Dwg | Record Dwg | 361 | 10 | 371.50 | 362.20 | 360.95 | 9.30 | 0.35% | 0.044 | 1.28 | 0.15 | 0.86 |
| 3411 | | 8443 | | Record Dwg | Record Dwg | 8412 | | Record Dwg | Record Dwg | 323 | 10 | 377.69 | 359.77 | 358.80 | 17.92 | 0.30% | 0.066 | 1.04 | 0.19 | 0.77 |



City of Richland - 2015 General Sewer Plan Update

Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|-----------------|-----------------|----------------------|-----------|-----------------|-----------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 3412 | | 8425 | | Record Dwg | Record Dwg | 8443 | | Record Dwg | Record Dwg | 330 | 10 | 379.19 | 360.76 | 359.77 | 18.43 | 0.30% | 0.064 | 1.40 | 0.19 | 0.78 |
| 3414 | | 8426 | | Record Dwg | Record Dwg | 8425 | | Record Dwg | Record Dwg | 359 | 10 | 378.87 | 361.84 | 360.76 | 17.03 | 0.30% | 0.029 | 0.83 | 0.13 | 0.81 |
| 3415 | | 8429 | | Record Dwg | Record Dwg | 8426 | | Record Dwg | Record Dwg | 319 | 10 | 377.90 | 362.81 | 361.84 | 15.09 | 0.30% | 0.029 | 1.10 | 0.13 | 0.82 |
| 3425 | | 8412 | | Record Dwg | Record Dwg | 8466 | I-016 | From COR - SSA | From COR - SSA | 329 | 10 | 371.83 | 358.80 | 358.39 | 13.03 | 0.12% | 0.067 | 1.12 | 0.29 | 0.48 |
| 3426 | Upper N Int - E Side | 8460 | I-338 | From COR - SSA | From COR - SSA | 8466 | I-016 | From COR - SSA | From COR - SSA | 342 | 18 | 370.15 | 358.70 | 358.00 | 11.45 | 0.20% | 0.114 | 1.06 | 0.13 | 3.22 |
| 3430 | | 8462 | | Record Dwg | Record Dwg | 8461 | | Old Model | Old Model | 337 | 10 | 369.92 | 359.92 | 359.00 | 10.00 | 0.27% | 0.065 | 1.78 | 0.21 | 0.74 |
| 3431 | | 8490 | | Record Dwg | Record Dwg | 8462 | | Record Dwg | Record Dwg | 314 | 10 | 369.43 | 360.70 | 359.92 | 8.73 | 0.25% | 0.063 | 1.23 | 0.19 | 0.70 |
| 3432 | | 8493 | | Record Dwg | Record Dwg | 8490 | | Record Dwg | Record Dwg | 57 | 10 | 370.95 | 360.95 | 360.70 | 10.00 | 0.44% | 0.055 | 1.32 | 0.16 | 0.97 |
| 3449 | Upper N Int - E Side | 8416 | I-018 | From COR - SSA | From COR - SSA | 8423 | I-019 | From COR - SSA | From COR - SSA | 481 | 18 | 368.98 | 357.58 | 356.91 | 11.40 | 0.14% | 0.197 | 1.40 | 0.19 | 2.55 |
| 3453 | Upper N Int - E Side | 8404 | I-022 | From COR - SSA | From COR - SSA | 8408 | I-316 | From COR - SSA | From COR - SSA | 112 | 18 | 364.91 | 355.56 | 355.32 | 9.35 | 0.21% | 0.203 | 1.33 | 0.17 | 3.21 |
| 3454 | Upper N Int - E Side | 8406 | I-021 | From COR - SSA | From COR - SSA | 8405 | I-335 | From COR - SSA | From COR - SSA | 89 | 18 | 365.87 | 355.77 | 355.54 | 10.10 | 0.26% | 0.202 | 1.25 | 0.16 | 3.54 |
| 3455 | Upper N Int - E Side | 8405 | I-335 | From COR - SSA | From COR - SSA | 8404 | I-022 | From COR - SSA | From COR - SSA | 59 | 18 | 365.34 | 355.54 | 355.56 | 9.80 | -0.03% | 0.202 | 1.21 | 0.24 | 1.16 |
| 3456 | Upper N Int - E Side | 8399 | I-020 | From COR - SSA | From COR - SSA | 8403 | I-315 | From COR - SSA | From COR - SSA | 116 | 18 | 367.37 | 356.07 | 355.96 | 11.30 | 0.09% | 0.200 | 1.32 | 0.21 | 2.07 |
| 3457 | Upper N Int - E Side | 8423 | I-019 | From COR - SSA | From COR - SSA | 8399 | I-020 | From COR - SSA | From COR - SSA | 499 | 18 | 366.61 | 356.91 | 356.07 | 9.70 | 0.17% | 0.200 | 1.30 | 0.17 | 2.82 |
| 3461 | | 8392 | | Record Dwg | Record Dwg | 8395 | | Record Dwg | Record Dwg | 372 | 12 | 373.14 | 362.30 | 360.30 | 10.84 | 0.54% | 0.049 | 1.70 | 0.12 | 1.78 |
| 3462 | | 8395 | | Record Dwg | Record Dwg | 8470 | | Record Dwg | Record Dwg | 365 | 12 | 371.16 | 360.30 | 354.80 | 10.86 | 1.51% | 0.057 | 2.35 | 0.10 | 3.01 |
| 3490 | | 8331 | J-037 | Old Model | Old Model | 8330 | J-003 | From COR - SSA | From COR - SSA | 223 | 12 | 370.66 | 358.00 | 356.39 | 12.66 | 0.72% | 0.203 | 4.43 | 0.23 | 1.91 |
| 3491 | | 8340 | | Old Model | Old Model | 8333 | | Old Model | Old Model | 275 | 12 | 383.37 | 373.37 | 363.77 | 10.00 | 3.49% | 0.139 | 4.16 | 0.12 | 4.52 |
| 3492 | Upper N Int - W Side | 8328 | J-001 | From COR - SSA | From COR - SSA | 8329 | J-002 | From COR - SSA | From COR - SSA | 240 | 24 | 367.31 | 356.00 | 355.63 | 11.31 | 0.15% | 0.976 | 1.33 | 0.32 | 5.24 |
| 3493 | | 8333 | | Old Model | Old Model | 8332 | | Old Model | Old Model | 88 | 12 | 373.77 | 363.77 | 358.75 | 10.00 | 5.71% | 0.166 | 3.58 | 0.12 | 5.80 |
| 3494 | | 8503 | | Old Model | Old Model | 8339 | | Old Model | Old Model | 111 | 12 | 400.69 | 390.69 | 379.65 | 10.00 | 9.95% | 0.085 | 4.78 | 0.07 | 7.81 |
| 3502 | | 8315 | | Old Model | Old Model | 8310 | J-005 | From COR - SSA | From COR - SSA | 549 | 12 | 372.42 | 362.42 | 355.40 | 10.00 | 1.28% | 0.039 | 0.16 | 0.08 | 2.78 |
| 3503 | | 8301 | | Old Model | Old Model | 8300 | | Old Model | Old Model | 447 | 12 | 402.76 | 392.76 | 365.96 | 10.00 | 5.99% | 0.023 | 1.13 | 0.05 | 6.09 |
| 3513 | | 762 | | Old Model | Old Model | 761 | | Old Model | Old Model | 288 | 12 | 595.95 | 585.95 | 583.92 | 10.00 | 0.71% | 0.054 | 1.74 | 0.11 | 2.04 |
| 3514 | | 761 | | Old Model | Old Model | 3957 | | Old Model | Old Model | 254 | 12 | 593.92 | 583.92 | 581.94 | 10.00 | 0.78% | 0.054 | 2.12 | 0.11 | 2.15 |
| 3533 | | 4124 | | Old Model | Old Model | 4195 | | Old Model | Old Model | 126 | 12 | 540.37 | 530.37 | 523.69 | 10.00 | 5.31% | 0.116 | 1.62 | 0.10 | 5.64 |
| 3534 | | 3957 | | Old Model | Old Model | 3956 | | Old Model | Old Model | 390 | 12 | 591.94 | 581.94 | 566.83 | 10.00 | 3.87% | 0.080 | 3.65 | 0.09 | 4.83 |
| 3535 | | 3956 | | Old Model | Old Model | 3955 | | Old Model | Old Model | 199 | 12 | 576.83 | 566.83 | 557.97 | 10.00 | 4.45% | 0.081 | 3.78 | 0.09 | 5.19 |
| 3536 | | 3955 | | Old Model | Old Model | 3954 | | Old Model | Old Model | 350 | 12 | 567.97 | 557.97 | 533.97 | 10.00 | 6.86% | 0.100 | 3.89 | 0.09 | 6.44 |
| 3537 | | 3954 | | Old Model | Old Model | 4124 | | Old Model | Old Model | 128 | 12 | 543.97 | 533.97 | 530.37 | 10.00 | 2.80% | 0.100 | 3.57 | 0.11 | 4.08 |
| 3548 | | 4143 | | Old Model | Old Model | 4141 | | Old Model | Old Model | 601 | 12 | 505.42 | 491.12 | 489.06 | 14.30 | 0.34% | 0.282 | 2.11 | 0.30 | 1.18 |
| 3549 | | 4140 | P-373 | Old Model | Old Model | 4139 | | Old Model | Old Model | 307 | 12 | 499.32 | 487.59 | 487.10 | 11.73 | 0.16% | 0.288 | 2.17 | 0.43 | 0.71 |
| 3550 | | 4141 | | Old Model | Old Model | 4140 | P-373 | Old Model | Old Model | 555 | 12 | 501.02 | 489.06 | 487.59 | 11.96 | 0.26% | 0.289 | 1.65 | 0.32 | 1.00 |
| 3553 | | 4144 | | Old Model | Old Model | 4143 | | Old Model | Old Model | 432 | 12 | 506.80 | 491.81 | 491.12 | 14.99 | 0.16% | 0.217 | 1.58 | 0.33 | 0.78 |
| 3554 | | 4145 | | Old Model | Old Model | 4144 | | Old Model | Old Model | 458 | 12 | 504.59 | 493.11 | 491.81 | 11.48 | 0.28% | 0.218 | 1.69 | 0.27 | 1.11 |
| 3555 | | 4146 | | Old Model | Old Model | 4145 | | Old Model | Old Model | 580 | 12 | 505.79 | 494.17 | 493.11 | 11.62 | 0.18% | 0.190 | 1.60 | 0.30 | 0.88 |
| 3557 | | 2231 | | Old Model | Old Model | 4147 | | Old Model | Old Model | 551 | 12 | 508.23 | 497.03 | 494.54 | 11.20 | 0.45% | 0.191 | 1.35 | 0.23 | 1.49 |
| 3559 | | 4147 | | Old Model | Old Model | 4146 | | Old Model | Old Model | 580 | 12 | 509.55 | 494.54 | 494.17 | 15.01 | 0.06% | 0.191 | 1.18 | 0.42 | 0.44 |
| 3590 | | 8655 | L-073 | Survey | Survey | 8807 | L-072 | Survey | Survey | 344 | 15 | 403.73 | 381.93 | 381.54 | 21.80 | 0.11% | 0.188 | 1.30 | 0.24 | 1.34 |
| 3591 | Upper N Int - W Side | 8624 | L-024 | From COR - SSA | From COR - SSA | 8604 | L-026 | From COR - SSA | From COR - SSA | 1014 | 21 | 369.55 | 362.05 | 357.99 | 7.50 | 0.40% | 0.922 | 2.07 | 0.24 | 6.10 |
| 3601 | | 8520 | L-249 | Old Model | Old Model | 8523 | L-028 | From COR - SSA | From COR - SSA | 260 | 10 | 371.52 | 361.53 | 357.60 | 10.00 | 1.51% | 0.015 | 0.19 | 0.06 | 1.87 |
| 3602 | | 8514 | | Record Drawings | Record Drawings | 8515 | | Record Drawings | Record Drawings | 319 | 10 | 402.93 | 393.00 | 391.37 | 9.93 | 0.51% | 0.004 | 0.76 | 0.05 | 1.09 |
| 3604 | | 8519 | | Old Model | Old Model | 8529 | | Old Model | Old Model | 707 | 10 | 405.67 | 395.67 | 393.33 | 10.00 | 0.33% | 0.006 | 0.75 | 0.06 | 0.88 |
| 3605 | | 8528 | | Old Model | Old Model | 8530 | | Old Model | Old Model | 522 | 12 | 401.88 | 391.88 | 390.72 | 10.00 | 0.22% | 0.004 | 0.08 | 0.04 | 1.17 |
| 3606 | | 8529 | | Old Model | Old Model | 8530 | | Old Model | Old Model | 565 | 10 | 403.33 | 393.33 | 390.72 | 10.00 | 0.46% | 0.006 | 0.15 | 0.06 | 1.04 |
| 3609 | | 8534 | | Old Model | Old Model | 8544 | | Record Drawings | Record Drawings | 305 | 10 | 406.23 | 390.33 | 389.48 | 15.90 | 0.28% | 0.001 | 0.34 | 0.03 | 0.81 |
| 3614 | | 8557 | | Inv+10 | Straight Grade | 8558 | | Inv+10 | Straight Grade | 260 | 12 | 396.49 | 386.49 | 385.92 | 10.00 | 0.22% | 0.004 | 0.52 | 0.04 | 1.16 |
| 3619 | | 8664 | L-053 | Survey | Survey | 8663 | L-052 | Survey | Survey | 165 | 10 | 403.34 | 395.44 | 393.05 | 7.90 | 1.45% | 0.003 | 0.99 | 0.03 | 1.85 |
| 3621 | | 8687 | | Inv+10 | Straight Grade | 8671 | | Inv+10 | Straight Grade | 498 | 14 | 402.84 | 392.84 | 390.82 | 10.00 | 0.41% | 0.608 | 3.18 | 0.36 | 1.79 |
| 3631 | | 8620 | L-021 | Inv+8 | Straight Grade | 8621 | L-022 | Record Drawings | Record Drawings | 363 | 18 | 379.73 | 371.73 | 370.64 | 8.00 | 0.30% | 0.925 | 3.67 | 0.38 | 3.11 |
| 3634 | | 8622 | | Old Model | Old Model | 8624 | L-024 | From COR - SSA | From COR - SSA | 232 | 12 | 373.56 | 363.56 | 362.41 | 10.00 | 0.50% | 0.001 | 0.63 | 0.02 | 1.76 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|---------------|----------------------|-----------|-------------------|-------------------|----------------------|------------------|-------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 3635 | | 8629 | L-020 | Inv+8 | Straight Grade | 8620 | L-021 | Inv+8 | Straight Grade | 420 | 18 | 380.86 | 372.86 | 371.73 | 8.00 | 0.27% | 0.927 | 2.55 | 0.34 | 2.89 |
| 3636 | | 8634 | | Record Drawings | Record Drawings | 8633 | | Record Drawings | Record Drawings | 298 | 18 | 360.80 | 354.95 | 353.87 | 5.85 | 0.36% | 0.001 | 0.26 | 0.01 | 4.43 |
| 3637 | | 8633 | | Record Drawings | Record Drawings | 8636 | | AsBuilts | AsBuilts | 153 | 12 | 364.70 | 353.87 | 353.50 | 10.83 | 0.24% | 0.001 | 0.35 | 0.02 | 1.22 |
| 3641 | | 8638 | | AsBuilts | AsBuilts | 8637 | | AsBuilts | AsBuilts | 439 | 12 | 360.00 | 352.98 | 352.08 | 7.02 | 0.21% | 0.300 | 1.86 | 0.36 | 0.83 |
| 3655 | | 8683 | | Default to Legacy | Default to Legacy | 8682 | | Default to Legacy | Default to Legacy | 172 | 12 | 400.90 | 390.89 | 390.52 | 10.00 | 0.22% | 0.011 | 0.71 | 0.07 | 1.16 |
| 3663 | | 8579 | L-039 | Old Model | Straight Grade | 8575 | L-038 | Survey | Survey | 465 | 18 | 396.25 | 386.75 | 386.18 | 9.50 | 0.12% | 0.340 | 1.09 | 0.25 | 2.23 |
| 3664 | | 8661 | | AsBuilts | AsBuilts | 8660 | | AsBuilts | AsBuilts | 334 | 12 | 359.00 | 350.25 | 349.30 | 8.75 | 0.28% | 0.301 | 2.05 | 0.32 | 1.03 |
| 3665 | | 8750 | | Old Model | Straight Grade | 8748 | | Old Model | Old Model | 400 | 12 | 386.89 | 374.97 | 370.85 | 11.92 | 1.03% | 0.036 | 1.80 | 0.08 | 2.50 |
| 3673 | | 8785 | | Default to Legacy | Default to Legacy | 7703 | | Old Model | Old Model | 145 | 12 | 378.00 | 368.00 | 367.67 | 10.00 | 0.23% | 0.005 | 0.64 | 0.06 | 1.19 |
| 3732 | | 8788 | | Default to Legacy | Default to Legacy | 6169 | | Old Model | Old Model | 199 | 18 | 395.70 | 385.70 | 385.70 | 10.00 | 0.00% | 0.001 | 0.00 | 0.37 | 0.16 |
| 3759 | | 8670 | L-037 | Survey | Survey | 8816 | L-036 | Survey | Survey | 390 | 18 | 404.35 | 386.15 | 385.58 | 18.20 | 0.15% | 0.272 | 1.51 | 0.21 | 2.54 |
| 3762 | | 8805 | L-015 | Survey | Survey | 8804 | L-016 | Survey | Survey | 349 | 18 | 383.70 | 376.96 | 375.83 | 6.74 | 0.32% | 0.919 | 2.87 | 0.32 | 3.27 |
| 3763 | | 8804 | L-016 | Survey | Survey | 8793 | L-018 | Survey | Survey | 444 | 18 | 386.18 | 375.78 | 374.84 | 10.40 | 0.21% | 0.929 | 2.25 | 0.36 | 2.46 |
| 3765 | | 8799 | | Survey | Survey | 8805 | L-015 | Survey | Survey | 346 | 18 | 385.81 | 377.91 | 376.97 | 7.90 | 0.27% | 0.919 | 2.77 | 0.35 | 2.91 |
| 3766 | | 8603 | L-013 | Survey | Survey | 8799 | L-014, lamp hole | Survey | Survey | 424 | 18 | 386.02 | 379.28 | 377.91 | 6.74 | 0.32% | 0.921 | 2.77 | 0.32 | 3.26 |
| 3767 | | 8645 | | Inv+8 | Straight Grade | 8794 | L-095 | Default to Legacy | Default to Legacy | 372 | 14 | 394.33 | 386.33 | 385.77 | 8.00 | 0.15% | 0.009 | 0.58 | 0.06 | 1.45 |
| 3768 | | 8800 | | Survey | Survey | 8803 | L-013 | Survey | Survey | 271 | 18 | 386.57 | 380.12 | 379.38 | 6.45 | 0.27% | 0.923 | 3.09 | 0.36 | 2.92 |
| 3769 | | 8794 | L-095 | Default to Legacy | Default to Legacy | 8795 | L-009 | Survey | Survey | 376 | 10 | 392.44 | 385.79 | 381.22 | 6.65 | 1.22% | 0.009 | 0.07 | 0.08 | 1.68 |
| 3770 | | 8807 | L-072 | Survey | Survey | 8795 | L-009 | Survey | Survey | 348 | 15 | 400.74 | 381.44 | 381.22 | 19.30 | 0.06% | 0.191 | 0.72 | 0.33 | 0.95 |
| 3771 | | 8801 | L-010 | Survey | Survey | 8800 | L-012, lamp hole | Survey | Survey | 267 | 18 | 387.08 | 381.01 | 380.12 | 6.07 | 0.33% | 0.926 | 2.70 | 0.32 | 3.32 |
| 3772 | | 8795 | L-009 | Survey | Survey | 8801 | L-010 | Survey | Survey | 63 | 18 | 389.72 | 381.22 | 381.09 | 8.50 | 0.21% | 0.929 | 2.84 | 0.39 | 2.40 |
| 3773 | | 8793 | L-018 | Survey | Survey | 8630 | L-019 | Inv+8 | Straight Grade | 328 | 18 | 380.39 | 374.96 | 374.08 | 5.43 | 0.27% | 0.929 | 2.68 | 0.42 | 2.88 |
| 3774 | | 8630 | L-019 | Inv+8 | Straight Grade | 8629 | L-020 | Inv+8 | Straight Grade | 453 | 18 | 382.08 | 374.08 | 372.86 | 8.00 | 0.27% | 0.928 | 2.72 | 0.34 | 2.89 |
| 3775 | | 8796 | L-008 | Survey | Survey | 8795 | L-009 | Survey | Survey | 280 | 18 | 389.17 | 381.54 | 381.22 | 7.63 | 0.11% | 0.764 | 1.84 | 0.41 | 1.72 |
| 3776 | | 8797 | L-007 | Survey | Survey | JCT_MP-476 | | Survey | Survey | 116 | 18 | 387.02 | 382.02 | 381.82 | 5.00 | 0.17% | 0.210 | 0.90 | 0.22 | 2.85 |
| 3777 | | 8802 | L-006 | Survey | Survey | 8797 | L-007 | Survey | Survey | 375 | 18 | 387.68 | 382.23 | 382.07 | 5.45 | 0.04% | 0.140 | 0.91 | 0.21 | 1.38 |
| 3778 | | 8798 | L-005 | Survey | Survey | 8802 | L-006 | Survey | Survey | 377 | 18 | 388.81 | 382.89 | 382.33 | 5.92 | 0.15% | 0.139 | 1.39 | 0.17 | 2.70 |
| 3779 | | 8809 | L-004 | Survey | Survey | JCT_MP-464 | | Survey | Survey | 136 | 18 | 390.18 | 383.32 | 383.01 | 6.86 | 0.23% | 0.547 | 2.41 | 0.29 | 2.97 |
| 3780 | | 8810 | L-003 | Survey | Survey | 8809 | L-004 | Survey | Survey | 376 | 18 | 390.15 | 383.90 | 383.33 | 6.25 | 0.15% | 0.554 | 1.95 | 0.31 | 2.31 |
| 3781 | | 8808 | L-002 | Survey | Survey | 8810 | L-003 | Survey | Survey | 376 | 18 | 395.42 | 384.92 | 384.00 | 10.50 | 0.24% | 0.553 | 2.41 | 0.28 | 3.09 |
| 3782 | | 8811 | L-001 | Survey | Survey | 8808 | L-002 | Survey | Survey | 376 | 18 | 394.41 | 385.21 | 384.97 | 9.20 | 0.06% | 0.573 | 1.74 | 0.45 | 1.28 |
| 3783 | | 8815 | L-226 | Survey | Survey | 8811 | L-001 | Survey | Survey | 326 | 14 | 399.66 | 388.46 | 386.01 | 11.20 | 0.75% | 0.352 | 3.06 | 0.22 | 2.91 |
| 3784 | | 8816 | L-036 | Survey | Survey | 8811 | L-001 | Survey | Survey | 415 | 18 | 401.98 | 385.58 | 385.16 | 16.40 | 0.10% | 0.263 | 0.85 | 0.23 | 2.08 |
| 3785 | | 8814 | L-227 | Survey | Survey | 8815 | L-226 | Survey | Survey | 202 | 14 | 398.76 | 389.11 | 388.51 | 9.65 | 0.30% | 0.368 | 2.80 | 0.36 | 1.68 |
| 3786 | | 8669 | | Inv+10 | Straight Grade | 8814 | L-227 | Survey | Survey | 385 | 14 | 399.20 | 389.20 | 389.06 | 10.00 | 0.04% | 0.392 | 1.40 | 0.51 | 0.33 |
| 3821 | | 7892 | K-005 | COR Survey | COR Survey | 7895 | K-008 | COR Survey | COR Survey | 189 | 12 | 391.36 | 385.56 | 384.83 | 5.80 | 0.39% | 0.241 | 3.03 | 0.30 | 1.31 |
| 3822 | | 6209 | | Default to Legacy | Default to Legacy | 6208 | | Default to Legacy | Default to Legacy | 310 | 12 | 447.04 | 437.04 | 436.36 | 10.00 | 0.22% | 0.006 | 0.53 | 0.05 | 1.16 |
| 3823 | | 6207 | | Default to Legacy | Default to Legacy | 6091 | K-283 | Record Drawings | Record Drawings | 307 | 12 | 445.68 | 435.68 | 430.86 | 10.00 | 1.57% | 0.007 | 1.26 | 0.04 | 3.12 |
| 3824 | | 6091 | K-283 | Record Drawings | Record Drawings | 6104 | K-282 | Record Drawings | Record Drawings | 442 | 12 | 445.40 | 430.65 | 428.83 | 14.75 | 0.41% | 0.008 | 0.87 | 0.05 | 1.59 |
| 3825 | | 6104 | K-282 | Record Drawings | Record Drawings | 6105 | K-281 | Record Drawings | Record Drawings | 383 | 12 | 451.53 | 428.68 | 427.09 | 22.85 | 0.41% | 0.008 | 0.88 | 0.05 | 1.60 |
| 3826 | | 6106 | K-280 | Record Drawings | Record Drawings | 6094 | K-279 | Record Drawings | Record Drawings | 401 | 12 | 437.88 | 425.05 | 418.75 | 12.83 | 1.57% | 0.008 | 1.33 | 0.04 | 3.12 |
| 3827 | | 6094 | K-279 | Record Drawings | Record Drawings | 6095 | K-278 | Record Drawings | Record Drawings | 399 | 12 | 430.33 | 418.60 | 414.61 | 11.73 | 1.00% | 0.009 | 1.15 | 0.04 | 2.49 |
| 3829 | | 6096 | | Record Drawings | Record Drawings | 6092 | | Record Drawings | Record Drawings | 587 | 12 | 421.25 | 410.44 | 407.59 | 10.81 | 0.49% | 0.009 | 0.92 | 0.05 | 1.73 |
| 3830 | | 6092 | | Record Drawings | Record Drawings | 6093 | K-235 | Record Drawings | Record Drawings | 601 | 12 | 417.59 | 407.59 | 404.37 | 10.00 | 0.54% | 0.009 | 0.98 | 0.05 | 1.82 |
| 3831 | | 6093 | K-235 | Record Drawings | Record Drawings | 6101 | K-234 | Record Drawings | Record Drawings | 601 | 12 | 415.50 | 404.29 | 401.30 | 11.21 | 0.50% | 0.009 | 0.96 | 0.05 | 1.75 |
| 3834 | | 6101 | K-234 | Record Drawings | Record Drawings | 6100 | K-233 | Record Drawings | Record Drawings | 600 | 12 | 412.44 | 401.23 | 398.26 | 11.21 | 0.49% | 0.014 | 0.65 | 0.06 | 1.74 |
| 3835 | | 6122 | K-246 | Record Drawings | Record Drawings | JCT_MP-382 | | Record Drawings | Record Drawings | 348 | 18 | 373.35 | 359.30 | 357.00 | 14.05 | 0.66% | 0.020 | 1.20 | 0.04 | 5.96 |
| 3836 | | 6114 | | Record Drawings | Record Drawings | 6115 | K-277 | Record Drawings | Record Drawings | 283 | 12 | 372.98 | 354.72 | 354.07 | 18.26 | 0.23% | 0.420 | 2.49 | 0.45 | 0.78 |
| 3842 | | 8672 | | Record Drawings | Record Drawings | 8687 | | Inv+10 | Straight Grade | 156 | 14 | 403.50 | 393.47 | 392.84 | 10.03 | 0.40% | 0.708 | 3.22 | 0.40 | 1.68 |
| 3843 | | 8671 | | Inv+10 | Straight Grade | 8669 | | Inv+10 | Straight Grade | 401 | 14 | 400.82 | 390.82 | 389.20 | 10.00 | 0.40% | 0.512 | 2.12 | 0.31 | 1.88 |
| 3846 | | 8575 | L-038 | Survey | Survey | 8577 | L-214 | Survey | Survey | 102 | 18 | 403.68 | 386.18 | 386.44 | 17.50 | -0.26% | 0.246 | 0.82 | 0.42 | 3.47 |
| 3847 | | 8509 | L-268 | Survey | Survey | 8578 | L-40 | Survey | Survey | 173 | 18 | 394.35 | 387.55 | 387.02 | 6.80 | 0.31% | 0.480 | 3.21 | 0.23 | 3.59 |
| 3848 | | 8578 | L-40 | Survey | Survey | 8579 | L-039 | Old Model | Straight Grade | 100 | 18 | 397.17 | 386.87 | 386.75 | 10.30 | 0.12% | 0.508 | 2.10 | 0.32 | 2.04 |



City of Richland - 2015 General Sewer Plan Update

Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------|----------------------|-----------|-----------------|-------------------------|----------------------|-----------|-------------------|-------------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 3850 | | 8567 | L-221 | Inv+10 | Battelle Record Drawing | 8568 | L-222 | Inv+10 | Battelle Record Drawing | 293 | 12 | 383.87 | 373.87 | 373.06 | 10.00 | 0.28% | 0.178 | 1.63 | 0.25 | 1.13 |
| 3952 | | 2121 | | Old Model | Old Model | 2123 | | Old Model | Old Model | 186 | 10 | 527.47 | 517.47 | 517.05 | 10.00 | 0.23% | 0.137 | 1.62 | 0.31 | 0.59 |
| 3953 | | 2115 | | Old Model | Old Model | 2122 | | Old Model | Old Model | 331 | 10 | 530.16 | 520.16 | 518.83 | 10.00 | 0.40% | 0.011 | 0.78 | 0.07 | 0.96 |
| 3975 | | 467 | | Old Model | Old Model | 466 | | Old Model | Old Model | 176 | 30 | 360.80 | 348.92 | 348.74 | 11.88 | 0.10% | 2.459 | 2.17 | 0.38 | 6.72 |
| 3976 | | 449 | | Old Model | Old Model | 478 | | Old Model | Old Model | 335 | 30 | 358.41 | 348.41 | 348.08 | 10.00 | 0.10% | 2.646 | 2.34 | 0.39 | 6.37 |
| 3977 | | 478 | | Old Model | Old Model | 479 | | Old Model | Old Model | 333 | 30 | 358.08 | 348.08 | 347.74 | 10.00 | 0.10% | 2.642 | 2.32 | 0.38 | 6.54 |
| 3978 | | 479 | | Old Model | Old Model | 480 | | Old Model | Old Model | 195 | 30 | 357.74 | 347.74 | 347.55 | 10.00 | 0.10% | 2.638 | 2.33 | 0.39 | 6.34 |
| 3979 | | 480 | | Old Model | Old Model | 481 | A-066 | Old Model | Old Model | 436 | 30 | 357.55 | 347.55 | 347.11 | 10.00 | 0.10% | 2.636 | 2.38 | 0.38 | 6.49 |
| 3980 | | 481 | A-066 | Old Model | Old Model | 4104 | | Old Model | Old Model | 431 | 30 | 357.11 | 347.11 | 346.68 | 10.00 | 0.10% | 2.632 | 2.37 | 0.38 | 6.44 |
| 3981 | | 4104 | | Old Model | Old Model | 4096 | | Old Model | Old Model | 428 | 30 | 356.68 | 346.68 | 346.25 | 10.00 | 0.10% | 2.628 | 2.32 | 0.38 | 6.48 |
| 3982 | | 4096 | | Old Model | Old Model | 4097 | | Old Model | Old Model | 321 | 30 | 356.25 | 346.25 | 345.93 | 10.00 | 0.10% | 2.626 | 2.91 | 0.39 | 6.44 |
| 3983 | | 4098 | | Old Model | Old Model | 4123 | | Old Model | Old Model | 1155 | 30 | 354.60 | 344.60 | 338.75 | 10.00 | 0.51% | 3.023 | 3.06 | 0.26 | 17.42 |
| 3984 | | 4097 | | Old Model | Old Model | 4098 | | Old Model | Old Model | 314 | 30 | 355.93 | 345.93 | 344.60 | 10.00 | 0.42% | 2.626 | 4.00 | 0.26 | 16.07 |
| 3985 | | 472 | | Old Model | Old Model | 459 | | Old Model | Old Model | 50 | 12 | 361.85 | 351.15 | 351.00 | 10.70 | 0.30% | 0.309 | 2.20 | 0.35 | 1.06 |
| 3986 | | 390 | | Old Model | Old Model | 389 | | Old Model | Old Model | 360 | 21 | 406.20 | 396.20 | 373.60 | 10.00 | 6.28% | 1.958 | 9.33 | 0.18 | 25.88 |
| 3987 | | 372 | | Old Model | Old Model | 371 | | Old Model | Old Model | 216 | 21 | 446.40 | 436.40 | 423.50 | 10.00 | 5.97% | 1.958 | 9.98 | 0.19 | 25.18 |
| 3988 | | 370 | | Old Model | Old Model | 372 | | Old Model | Old Model | 319 | 21 | 456.16 | 443.16 | 436.40 | 13.00 | 2.12% | 1.900 | 7.49 | 0.25 | 14.25 |
| 3989 | | 369 | | Old Model | Old Model | 370 | | Old Model | Old Model | 122 | 21 | 457.00 | 443.51 | 443.16 | 13.49 | 0.29% | 1.900 | 3.93 | 0.45 | 4.05 |
| 3991 | | 371 | | Old Model | Old Model | 390 | | Old Model | Old Model | 429 | 21 | 433.50 | 423.50 | 396.20 | 10.00 | 6.37% | 1.958 | 10.27 | 0.18 | 26.06 |
| 4009 | | 6292 | | Record Drawings | Record Drawings | 6324 | | Inv+10 | Straight Grade | 357 | 12 | 394.53 | 388.68 | 387.97 | 5.85 | 0.20% | 0.121 | 1.38 | 0.22 | 0.99 |
| 4010 | | 6322 | | Record Drawings | Record Drawings | 6308 | | Inv+10 | Record Drawings | 599 | 12 | 393.58 | 387.48 | 386.28 | 6.10 | 0.20% | 0.266 | 1.66 | 0.33 | 0.85 |
| 4011 | | 6308 | | Inv+10 | Record Drawings | 6312 | | Inv+10 | Record Drawings | 573 | 12 | 396.28 | 386.28 | 385.29 | 10.00 | 0.17% | 0.309 | 1.78 | 0.39 | 0.73 |
| 4012 | | 7895 | K-008 | COR Survey | COR Survey | 7785 | K-009 | COR Survey | COR Survey | 486 | 12 | 392.56 | 384.83 | 384.02 | 7.73 | 0.17% | 0.076 | 1.72 | 0.23 | 0.94 |
| 4013 | | 8706 | K-015 | COR Survey | COR Survey | 8732 | | COR Survey | Straight Grade | 422 | 12 | 393.63 | 379.74 | 378.81 | 13.89 | 0.22% | 0.034 | 1.04 | 0.12 | 1.14 |
| 4014 | | 6002 | | Old Model | Old Model | 6036 | | Default to Legacy | Default to Legacy | 253 | 12 | 363.00 | 353.00 | 352.19 | 10.00 | 0.32% | 0.042 | 1.10 | 0.12 | 1.37 |
| 4015 | HR Sewer Trunk | 6031 | | AsBuilts | AsBuilts | 6030 | | AsBuilts | AsBuilts | 473 | 42 | 363.70 | 347.30 | 347.07 | 16.40 | 0.05% | 0.784 | 1.25 | 0.16 | 14.75 |
| 4016 | | 8775 | | Old Model | Old Model | 8774 | | Old Model | Old Model | 400 | 12 | 368.76 | 358.76 | 357.88 | 10.00 | 0.22% | 0.035 | 1.08 | 0.13 | 1.14 |
| 4017 | | 8771 | | Old Model | Old Model | 8775 | | Old Model | Old Model | 384 | 12 | 374.81 | 364.81 | 358.76 | 10.00 | 1.58% | 0.035 | 1.32 | 0.08 | 3.10 |
| 4018 | | 6079 | K-225 | Record Drawings | Record Drawings | 6078 | | Record Drawings | Record Drawings | 399 | 12 | 412.40 | 403.88 | 402.94 | 8.52 | 0.24% | 0.007 | 0.67 | 0.06 | 1.21 |
| 4037 | | 8806 | L-051 | Survey | Survey | 8809 | L-004 | Survey | Survey | 302 | 10 | 399.38 | 390.58 | 383.38 | 8.80 | 2.38% | 0.004 | 0.07 | 0.03 | 2.37 |
| 4038 | | 8663 | L-052 | Survey | Survey | 8806 | L-051 | Survey | Survey | 103 | 10 | 402.10 | 393.05 | 390.58 | 9.05 | 2.40% | 0.003 | 1.16 | 0.03 | 2.37 |
| 4039 | | 8665 | L-054 | Survey | Survey | 8664 | L-053 | Survey | Survey | 130 | 10 | 404.50 | 396.00 | 395.44 | 8.50 | 0.43% | 0.002 | 0.65 | 0.16 | 1.00 |
| 4042 | | 8577 | L-214 | Survey | Survey | 8670 | L-037 | Survey | Survey | 328 | 18 | 406.44 | 386.44 | 386.15 | 20.00 | 0.09% | 0.215 | 1.25 | 0.22 | 1.97 |
| 4045 | | 8564 | L-078 | Survey | Survey | 8677 | L-269 | Survey | Survey | 74 | 15 | 399.64 | 383.39 | 383.52 | 16.25 | -0.18% | 0.109 | 0.57 | 0.35 | 1.79 |
| 4046 | | 4670 | | Asbuilts | Asbuilts | 4669 | | Asbuilts | Asbuilts | 232 | 18 | 519.98 | 513.05 | 511.92 | 6.93 | 0.49% | 0.003 | 0.56 | 0.02 | 5.13 |
| 4049 | | 8573 | L-217 | Inv+10 | Battelle Record Drawing | 8567 | L-221 | Inv+10 | Battelle Record Drawing | 227 | 12 | 384.45 | 374.45 | 373.87 | 10.00 | 0.26% | 0.178 | 1.75 | 0.26 | 1.08 |
| 4050 | | 8569 | L-133 | Inv+10 | Battelle Record Drawing | 8573 | L-217 | Inv+10 | Battelle Record Drawing | 187 | 12 | 385.08 | 375.08 | 374.45 | 10.00 | 0.34% | 0.178 | 1.81 | 0.24 | 1.27 |
| 4051 | | 8570 | L-48 | Inv+10 | Battelle Record Drawing | 8569 | L-133 | Inv+10 | Battelle Record Drawing | 141 | 10 | 385.50 | 375.50 | 375.08 | 10.00 | 0.30% | 0.178 | 1.93 | 0.33 | 0.66 |
| 4055 | | 8561 | | Inv+10 | Straight Grade | 8557 | | Inv+10 | Straight Grade | 404 | 12 | 398.10 | 388.10 | 386.49 | 10.00 | 0.40% | 0.001 | 0.37 | 0.02 | 1.57 |
| 4056 | | 8558 | | Inv+10 | Straight Grade | 8559 | | Inv+10 | Straight Grade | 221 | 12 | 395.92 | 385.92 | 385.43 | 10.00 | 0.22% | 0.004 | 0.53 | 0.04 | 1.17 |
| 4058 | | 8555 | | Inv+10 | Straight Grade | 8564 | L-078 | Survey | Survey | 428 | 15 | 398.36 | 384.36 | 383.54 | 14.00 | 0.19% | 0.105 | 0.98 | 0.16 | 1.87 |
| 4060 | | 8659 | L-074 | Survey | Survey | 8651 | L-282 | Survey | Survey | 371 | 15 | 404.10 | 382.65 | 382.15 | 21.45 | 0.13% | 0.121 | 1.16 | 0.18 | 1.54 |
| 4061 | | 8651 | L-282 | Survey | Survey | 8655 | L-073 | Survey | Survey | 216 | 15 | 404.25 | 382.15 | 381.93 | 22.10 | 0.10% | 0.121 | 0.96 | 0.20 | 1.32 |
| 4065 | | 8660 | | AsBuilts | AsBuilts | JCT_MP-440 | | Record Drawings | Record Drawings | 213 | 12 | 360.00 | 349.30 | 348.59 | 10.70 | 0.33% | 0.301 | 2.64 | 0.34 | 1.14 |
| 4066 | | 8639 | | AsBuilts | AsBuilts | 8661 | | AsBuilts | AsBuilts | 438 | 12 | 359.00 | 351.18 | 350.25 | 7.82 | 0.21% | 0.300 | 1.93 | 0.37 | 0.85 |
| 4067 | | 8637 | | AsBuilts | AsBuilts | 8639 | | AsBuilts | AsBuilts | 439 | 12 | 360.00 | 352.08 | 351.18 | 7.92 | 0.21% | 0.300 | 1.83 | 0.35 | 0.83 |
| 4068 | | 8636 | | AsBuilts | AsBuilts | 8638 | | AsBuilts | AsBuilts | 208 | 12 | 361.50 | 353.50 | 352.98 | 8.00 | 0.25% | 0.002 | 0.03 | 0.03 | 1.25 |
| 4090 | | 8546 | | Old Model | Old Model | 8545 | | Old Model | Old Model | 381 | 10 | 408.27 | 398.27 | 396.42 | 10.00 | 0.49% | 0.001 | 0.50 | 0.03 | 1.07 |
| 4091 | | 8545 | | Old Model | Old Model | 8513 | | Record Drawings | Record Drawings | 315 | 10 | 406.42 | 396.42 | 393.61 | 10.00 | 0.89% | 0.002 | 0.45 | 0.03 | 1.45 |
| 4094 | | 8513 | | Record Drawings | Record Drawings | 8514 | | Record Drawings | Record Drawings | 140 | 10 | 403.01 | 393.61 | 393.00 | 9.40 | 0.44% | 0.004 | 0.70 | 0.05 | 1.01 |
| 4095 | | 8515 | | Record Drawings | Record Drawings | 8544 | | Record Drawings | Record Drawings | 314 | 10 | 402.67 | 391.37 | 389.60 | 11.30 | 0.56% | 0.004 | 0.82 | 0.05 | 1.15 |
| 4096 | | 8533 | | Old Model | Old Model | 8534 | | Old Model | Old Model | 203 | 10 | 398.97 | 390.90 | 390.33 | 8.07 | 0.28% | 0.001 | 0.31 | 0.02 | 0.81 |



City of Richland - 2015 General Sewer Plan Update

Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|-----------------|-----------------|----------------------|-----------|-----------------|-----------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 4097 | | 8544 | | Record Drawings | Record Drawings | 8543 | | Old Model | Old Model | 255 | 10 | 402.93 | 389.48 | 387.96 | 13.45 | 0.60% | 0.006 | 0.62 | 0.05 | 1.18 |
| 4099 | Upper N Int - W Side | 8522 | L-027 | From COR - SSA | From COR - SSA | 8523 | L-028 | From COR - SSA | From COR - SSA | 507 | 21 | 366.87 | 357.67 | 357.60 | 9.20 | 0.01% | 0.942 | 1.77 | 0.51 | 0.36 |
| 4100 | Upper N Int - W Side | 8604 | L-026 | From COR - SSA | From COR - SSA | 8522 | L-027 | From COR - SSA | From COR - SSA | 419 | 21 | 370.99 | 357.99 | 357.67 | 13.00 | 0.08% | 0.944 | 1.34 | 0.42 | 2.12 |
| 4103 | | 8538 | | Old Model | Old Model | 8528 | | Old Model | Old Model | 465 | 12 | 404.98 | 394.98 | 391.88 | 10.00 | 0.67% | 0.004 | 0.73 | 0.03 | 2.03 |
| 4104 | | 8621 | L-022 | Record Drawings | Record Drawings | 8616 | L-310 | From COR - SSA | From COR - SSA | 20 | 18 | 382.53 | 370.64 | 369.82 | 11.89 | 4.07% | 0.925 | 6.18 | 0.17 | 13.91 |
| 4106 | Upper N Int - W Side | 8623 | L-023 | From COR - SSA | From COR - SSA | 8624 | L-024 | From COR - SSA | From COR - SSA | 419 | 21 | 380.04 | 366.79 | 362.05 | 13.25 | 1.13% | 0.925 | 3.73 | 0.19 | 10.88 |
| 4107 | | 8607 | L-175 | Record Drawings | Record Drawings | 8604 | L-026 | From COR - SSA | From COR - SSA | 404 | 12 | 375.00 | 359.21 | 358.37 | 15.79 | 0.21% | 0.041 | 0.53 | 0.13 | 1.10 |
| 4108 | | 8606 | | Record Drawings | Record Drawings | 8607 | L-175 | Record Drawings | Record Drawings | 400 | 12 | 376.50 | 360.10 | 359.26 | 16.40 | 0.21% | 0.041 | 1.14 | 0.15 | 1.10 |
| 4109 | | 8605 | | Record Drawings | Record Drawings | 8606 | | Record Drawings | Record Drawings | 401 | 12 | 375.90 | 360.99 | 360.15 | 14.91 | 0.21% | 0.041 | 1.18 | 0.15 | 1.10 |
| 4110 | | 8619 | | Record Drawings | Record Drawings | 8605 | | Record Drawings | Record Drawings | 347 | 12 | 374.30 | 361.64 | 361.04 | 12.66 | 0.17% | 0.041 | 1.07 | 0.16 | 1.00 |
| 4111 | | 8618 | | Record Drawings | Record Drawings | 8619 | | Record Drawings | Record Drawings | 198 | 12 | 375.90 | 362.16 | 361.69 | 13.74 | 0.24% | 0.040 | 1.15 | 0.13 | 1.18 |
| 4112 | | 8614 | | Record Drawings | Record Drawings | 8618 | | Record Drawings | Record Drawings | 303 | 12 | 375.50 | 362.77 | 362.21 | 12.73 | 0.18% | 0.040 | 1.15 | 0.16 | 1.03 |
| 4113 | | 8615 | | Record Drawings | Record Drawings | 8614 | | Record Drawings | Record Drawings | 285 | 12 | 377.00 | 363.37 | 362.82 | 13.63 | 0.19% | 0.040 | 1.07 | 0.15 | 1.06 |
| 4129 | Upper N Int - W Side | 8523 | L-028 | From COR - SSA | From COR - SSA | 8525 | L-029 | From COR - SSA | From COR - SSA | 117 | 21 | 367.30 | 357.60 | 357.07 | 9.70 | 0.45% | 0.948 | 1.83 | 0.24 | 6.52 |
| 4130 | | 8521 | L-248 | Record Drawings | Record Drawings | 8520 | L-249 | Old Model | Old Model | 228 | 10 | 399.50 | 383.65 | 361.52 | 15.85 | 9.71% | 0.015 | 2.08 | 0.04 | 4.78 |
| 4134 | Upper N Int - W Side | 8525 | L-029 | From COR - SSA | From COR - SSA | 8524 | L-030 | From COR - SSA | From COR - SSA | 388 | 24 | 367.12 | 357.07 | 357.08 | 10.05 | 0.00% | 0.946 | 1.29 | 0.43 | -0.14 |
| 4135 | Upper N Int - W Side | 8524 | L-029 | From COR - SSA | From COR - SSA | 8378 | L-031 | Old Model | Straight Grade | 429 | 24 | 366.33 | 357.08 | 356.83 | 9.25 | 0.06% | 0.944 | 1.67 | 0.35 | 2.88 |
| 4136 | Upper N Int - W Side | 8378 | L-031 | Old Model | Straight Grade | 8379 | L-187 | Old Model | From COR - SSA | 335 | 24 | 367.56 | 356.83 | 356.34 | 10.73 | 0.15% | 0.941 | 1.24 | 0.30 | 5.12 |
| 4138 | | 8531 | | Old Model | Old Model | 8527 | | Old Model | Old Model | 411 | 12 | 400.88 | 390.88 | 390.38 | 10.00 | 0.12% | 0.017 | 0.54 | 0.10 | 0.85 |
| 4139 | | 8530 | | Old Model | Old Model | 8531 | | Old Model | Old Model | 40 | 12 | 400.72 | 390.72 | 390.88 | 10.00 | -0.40% | 0.008 | 0.13 | 0.26 | 1.58 |
| 4144 | | 6108 | | Old Model | Old Model | 6112 | | Old Model | Old Model | 363 | 21 | 365.00 | 355.00 | 355.00 | 10.00 | 0.00% | 0.254 | 1.01 | 0.28 | -0.07 |
| 4145 | | 6058 | | Old Model | Old Model | 6108 | | Old Model | Old Model | 373 | 21 | 366.95 | 356.95 | 355.00 | 10.00 | 0.52% | 0.255 | 1.16 | 0.12 | 7.77 |
| 4146 | | 6063 | | Old Model | Old Model | 6058 | | Old Model | Old Model | 278 | 21 | 373.38 | 363.38 | 356.95 | 10.00 | 2.31% | 0.256 | 2.98 | 0.09 | 16.62 |
| 4147 | | 6064 | | Old Model | Old Model | 6063 | | Old Model | Old Model | 535 | 21 | 374.38 | 364.38 | 363.38 | 10.00 | 0.19% | 0.256 | 2.12 | 0.18 | 4.54 |
| 4148 | | 6070 | K-109 | Record Drawings | Record Drawings | 6062 | | Old Model | Old Model | 472 | 21 | 399.09 | 366.54 | 365.40 | 32.55 | 0.24% | 0.257 | 1.74 | 0.15 | 5.19 |
| 4153 | | 6944 | | Record Drawings | Record Drawings | 6079 | K-225 | Record Drawings | Record Drawings | 91 | 12 | 414.55 | 404.55 | 403.96 | 10.00 | 0.65% | 0.006 | 0.91 | 0.04 | 2.00 |
| 4155 | | 6072 | K-248 | Record Drawings | Record Drawings | 6071 | K-249 | Record Drawings | Record Drawings | 370 | 14 | 427.91 | 398.36 | 397.78 | 29.55 | 0.16% | 0.027 | 1.17 | 0.11 | 1.46 |
| 4156 | | 6071 | K-249 | Record Drawings | Record Drawings | 6073 | K-250 | Record Drawings | Record Drawings | 337 | 14 | 427.10 | 397.71 | 397.29 | 29.39 | 0.12% | 0.027 | 0.79 | 0.13 | 1.30 |
| 4157 | | 6073 | K-250 | Record Drawings | Record Drawings | 6074 | K-251 | Record Drawings | Record Drawings | 249 | 14 | 429.79 | 397.21 | 396.78 | 32.58 | 0.17% | 0.027 | 0.92 | 0.11 | 1.54 |
| 4158 | | 6075 | K-252 | Record Drawings | Record Drawings | 6076 | K-253 | Old Model | Old Model | 225 | 14 | 412.43 | 396.18 | 389.44 | 16.25 | 2.99% | 0.027 | 1.22 | 0.05 | 6.48 |
| 4159 | | 6067 | | Old Model | Old Model | 6065 | | Old Model | Old Model | 350 | 21 | 377.80 | 367.80 | 367.10 | 10.00 | 0.20% | 0.232 | 1.51 | 0.15 | 4.73 |
| 4160 | | 6068 | | Old Model | Old Model | 6067 | | Old Model | Old Model | 473 | 21 | 378.76 | 368.76 | 367.80 | 10.00 | 0.20% | 0.232 | 1.63 | 0.15 | 4.77 |
| 4161 | | 6069 | | Inv+10 | Straight Grade | 6068 | | Old Model | Old Model | 163 | 21 | 379.11 | 369.11 | 368.76 | 10.00 | 0.22% | 0.232 | 1.63 | 0.15 | 4.92 |
| 4162 | | 6202 | | Old Model | Old Model | 6069 | | Inv+10 | Straight Grade | 286 | 21 | 379.74 | 369.74 | 369.11 | 10.00 | 0.22% | 0.232 | 1.66 | 0.14 | 4.97 |
| 4163 | | 6189 | | Old Model | Old Model | 6202 | | Old Model | Old Model | 301 | 21 | 380.29 | 370.29 | 369.74 | 10.00 | 0.18% | 0.232 | 1.58 | 0.16 | 4.51 |
| 4164 | | 6188 | | Old Model | Old Model | 6189 | | Old Model | Old Model | 186 | 21 | 380.71 | 370.71 | 370.29 | 10.00 | 0.23% | 0.232 | 1.60 | 0.14 | 5.04 |
| 4165 | | 6187 | | Old Model | Old Model | 6188 | | Old Model | Old Model | 90 | 21 | 380.95 | 370.95 | 370.71 | 10.00 | 0.27% | 0.233 | 1.72 | 0.14 | 5.50 |
| 4166 | | 6186 | | Old Model | Old Model | 6187 | | Old Model | Old Model | 116 | 21 | 381.23 | 371.23 | 370.95 | 10.00 | 0.24% | 0.233 | 1.70 | 0.15 | 5.21 |
| 4167 | | 6185 | | Old Model | Old Model | 6863 | | Record Drawing | Record Drawing | 68 | 21 | 381.63 | 371.63 | 371.48 | 10.00 | 0.22% | 0.180 | 1.68 | 0.14 | 5.03 |
| 4260 | | 6190 | | Old Model | Old Model | 6185 | | Old Model | Old Model | 256 | 18 | 389.90 | 379.90 | 371.63 | 10.00 | 3.23% | 0.181 | 2.30 | 0.08 | 13.05 |
| 4261 | | 6191 | | Old Model | Old Model | 6190 | | Old Model | Old Model | 277 | 18 | 390.40 | 380.40 | 379.90 | 10.00 | 0.18% | 0.181 | 2.01 | 0.18 | 2.94 |
| 4262 | | 6193 | | Old Model | Old Model | 6191 | | Old Model | Old Model | 132 | 18 | 390.70 | 380.70 | 380.40 | 10.00 | 0.23% | 0.181 | 1.42 | 0.15 | 3.32 |
| 4263 | | 6192 | | Old Model | Old Model | 6193 | | Old Model | Old Model | 195 | 18 | 391.10 | 381.10 | 380.70 | 10.00 | 0.21% | 0.180 | 1.55 | 0.16 | 3.15 |
| 4264 | | 6195 | | Old Model | Old Model | 6192 | | Old Model | Old Model | 203 | 18 | 391.50 | 381.50 | 381.10 | 10.00 | 0.20% | 0.180 | 1.50 | 0.16 | 3.08 |
| 4265 | | 6196 | | Old Model | Old Model | 6195 | | Old Model | Old Model | 141 | 18 | 391.81 | 381.81 | 381.50 | 10.00 | 0.22% | 0.180 | 1.54 | 0.16 | 3.27 |
| 4266 | | 6197 | | Old Model | Old Model | 6196 | | Old Model | Old Model | 56 | 18 | 391.99 | 381.99 | 381.81 | 10.00 | 0.32% | 0.180 | 1.66 | 0.14 | 4.00 |
| 4267 | | 6199 | | Old Model | Old Model | 6197 | | Old Model | Old Model | 110 | 18 | 392.25 | 382.25 | 381.99 | 10.00 | 0.24% | 0.179 | 1.64 | 0.16 | 3.40 |
| 4268 | | 6200 | | Old Model | Old Model | 6199 | | Old Model | Old Model | 42 | 18 | 392.43 | 382.43 | 382.25 | 10.00 | 0.43% | 0.179 | 1.73 | 0.13 | 4.62 |
| 4270 | | 6152 | | Old Model | Old Model | 6151 | | Old Model | Old Model | 41 | 18 | 403.29 | 393.29 | 383.05 | 10.00 | 24.80% | 0.002 | 0.25 | 0.00 | 37.21 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|-------------------|-------------------|----------------------|-----------|----------------|----------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 4271 | | 6153 | | Old Model | Old Model | 6151 | | Old Model | Old Model | 75 | 18 | 393.25 | 383.25 | 383.05 | 10.00 | 0.27% | 0.021 | 0.88 | 0.05 | 3.78 |
| 4273 | | 6155 | | Old Model | Old Model | 6150 | | Old Model | Old Model | 149 | 18 | 393.78 | 383.78 | 383.46 | 10.00 | 0.21% | 0.019 | 0.81 | 0.06 | 3.39 |
| 4274 | | 6156 | | Old Model | Old Model | 6155 | | Old Model | Old Model | 136 | 18 | 394.07 | 384.07 | 383.78 | 10.00 | 0.21% | 0.018 | 0.75 | 0.05 | 3.38 |
| 4275 | | 6168 | | Old Model | Old Model | 6156 | | Old Model | Old Model | 100 | 18 | 394.30 | 384.30 | 384.07 | 10.00 | 0.23% | 0.016 | 0.74 | 0.05 | 3.51 |
| 4276 | | 6167 | | Old Model | Old Model | 6168 | | Old Model | Old Model | 148 | 18 | 395.45 | 385.45 | 384.30 | 10.00 | 0.78% | 0.016 | 0.94 | 0.04 | 6.47 |
| 4278 | | 6165 | | Old Model | Old Model | 6167 | | Old Model | Old Model | 159 | 18 | 395.78 | 385.78 | 385.45 | 10.00 | 0.21% | 0.015 | 0.78 | 0.06 | 3.33 |
| 4279 | | 6164 | | Old Model | Old Model | 6165 | | Old Model | Old Model | 54 | 18 | 395.87 | 385.87 | 385.78 | 10.00 | 0.17% | 0.013 | 0.58 | 0.05 | 3.00 |
| 4280 | | 6166 | | Old Model | Old Model | 6164 | | Old Model | Old Model | 130 | 18 | 396.06 | 386.06 | 385.87 | 10.00 | 0.15% | 0.012 | 0.61 | 0.05 | 2.80 |
| 4281 | | 6162 | | Record Dwg | Old Model | 6166 | | Old Model | Old Model | 26 | 18 | 396.30 | 386.20 | 386.06 | 10.10 | 0.55% | 0.010 | 0.67 | 0.03 | 5.43 |
| 4285 | | 6112 | | Old Model | Old Model | 6111 | K-216 | Old Model | Old Model | 452 | 21 | 365.00 | 355.00 | 353.75 | 10.00 | 0.28% | 0.319 | 1.97 | 0.16 | 5.51 |
| 4289 | Upper N Int - E Side | 8459 | I-339 | From COR - SSA | From COR - SSA | 8460 | I-338 | From COR - SSA | From COR - SSA | 105 | 18 | 370.56 | 358.96 | 358.70 | 11.60 | 0.25% | 0.055 | 0.85 | 0.09 | 3.61 |
| 4290 | Upper N Int - E Side | 8458 | I-340 | From COR - SSA | From COR - SSA | 8459 | I-339 | From COR - SSA | From COR - SSA | 199 | 18 | 371.66 | 359.51 | 358.96 | 12.15 | 0.28% | 0.054 | 1.18 | 0.08 | 3.82 |
| 4291 | Upper N Int - E Side | 8456 | I-342 | From COR - SSA | From COR - SSA | 8457 | I-341 | From COR - SSA | From COR - SSA | 154 | 18 | 376.97 | 360.27 | 360.10 | 16.70 | 0.11% | 0.051 | 0.91 | 0.11 | 2.39 |
| 4292 | Upper N Int - E Side | 8489 | I-343 | From COR - SSA | From COR - SSA | 8456 | I-342 | From COR - SSA | From COR - SSA | 449 | 24 | 375.63 | 361.18 | 360.27 | 14.45 | 0.20% | 0.051 | 0.78 | 0.06 | 7.08 |
| 4322 | | 8380 | L-188 | Old Model | Old Model | 8379 | L-187 | Old Model | From COR - SSA | 105 | 12 | 374.90 | 364.90 | 356.34 | 10.00 | 8.16% | 0.043 | 0.16 | 0.06 | 7.09 |
| 4323 | Upper N Int - W Side | 8379 | L-187 | Old Model | From COR - SSA | 8382 | L-032 | From COR - SSA | Old Model | 158 | 24 | 366.69 | 356.34 | 356.55 | 10.35 | -0.13% | 0.978 | 1.17 | 0.50 | 4.80 |
| 4324 | Upper N Int - W Side | 8367 | L-033 | From COR - SSA | From COR - SSA | 8366 | L-190 | From COR - SSA | From COR - SSA | 111 | 27 | 366.99 | 356.39 | 356.36 | 10.60 | 0.03% | 0.975 | 1.23 | 0.35 | 2.60 |
| 4328 | Upper N Int - W Side | 8358 | L-192 | From COR - SSA | From COR - SSA | 8362 | L-193 | From COR - SSA | From COR - SSA | 66 | 27 | 367.76 | 356.31 | 356.23 | 11.45 | 0.12% | 0.971 | 1.41 | 0.31 | 6.56 |
| 4329 | Upper N Int - W Side | 8365 | L-191 | From COR - SSA | From COR - SSA | 8358 | L-192 | From COR - SSA | From COR - SSA | 40 | 27 | 367.64 | 356.34 | 356.31 | 11.30 | 0.07% | 0.973 | 1.45 | 0.31 | 4.97 |
| 4333 | Upper N Int - W Side | 8362 | L-193 | From COR - SSA | From COR - SSA | 8364 | | Old Model | Old Model | 57 | 24 | 366.78 | 356.23 | 356.18 | 10.55 | 0.09% | 0.969 | 1.45 | 0.36 | 3.72 |
| 4343 | HR Sewer Trunk | 6005 | | Old Model | Old Model | 6008 | | AsBuilts | AsBuilts | 327 | 42 | 357.83 | 348.12 | 347.84 | 9.71 | 0.09% | 0.754 | 1.78 | 0.14 | 19.86 |
| 4344 | HR Sewer Trunk | 6015 | | Record Drawing | Old Model | 6005 | | Old Model | Old Model | 176 | 42 | 363.18 | 348.26 | 348.12 | 14.92 | 0.08% | 0.754 | 1.40 | 0.14 | 19.12 |
| 4345 | | 6003 | | Inv+10 | Straight Grade | 6005 | | Old Model | Old Model | 88 | 12 | 358.97 | 348.97 | 348.12 | 10.00 | 0.97% | 0.010 | 0.11 | 0.05 | 2.45 |
| 4346 | | 8342 | | Old Model | Old Model | 8503 | | Old Model | Old Model | 81 | 12 | 405.96 | 395.96 | 390.69 | 10.00 | 6.48% | 0.084 | 4.57 | 0.08 | 6.27 |
| 4347 | | 8339 | | Old Model | Old Model | 8340 | | Old Model | Old Model | 85 | 12 | 389.65 | 379.65 | 373.37 | 10.00 | 7.36% | 0.085 | 4.57 | 0.08 | 6.69 |
| 4348 | | 8332 | | Old Model | Old Model | 8331 | J-037 | Old Model | Old Model | 83 | 12 | 368.75 | 358.75 | 358.00 | 10.00 | 0.90% | 0.167 | 2.34 | 0.18 | 2.21 |
| 4349 | Upper N Int - W Side | 8329 | J-002 | From COR - SSA | From COR - SSA | 8330 | J-003 | From COR - SSA | From COR - SSA | 124 | 24 | 365.98 | 355.63 | 355.60 | 10.35 | 0.02% | 0.975 | 1.06 | 0.47 | 1.49 |
| 4351 | Upper N Int - W Side | 8335 | J-004 | From COR - SSA | From COR - SSA | 8310 | J-005 | From COR - SSA | From COR - SSA | 291 | 24 | 369.78 | 355.43 | 355.40 | 14.35 | 0.01% | 1.136 | 1.16 | 0.50 | 0.47 |
| 4360 | Upper N Int - E Side | 8466 | I-016 | From COR - SSA | From COR - SSA | 8415 | I-017 | From COR - SSA | From COR - SSA | 311 | 18 | 369.87 | 358.00 | 357.58 | 11.87 | 0.14% | 0.182 | 1.14 | 0.18 | 2.52 |
| 4361 | Upper N Int - E Side | 8415 | I-017 | From COR - SSA | From COR - SSA | 8416 | I-018 | From COR - SSA | From COR - SSA | 31 | 18 | 369.18 | 357.58 | 357.58 | 11.60 | 0.00% | 0.194 | 1.16 | 0.22 | 0.23 |
| 4363 | Upper N Int - E Side | 8408 | I-316 | From COR - SSA | From COR - SSA | 8400 | I-023 | From COR - SSA | From COR - SSA | 124 | 18 | 364.32 | 355.32 | 355.20 | 9.00 | 0.10% | 0.202 | 0.99 | 0.22 | 2.09 |
| 4364 | Upper N Int - E Side | 8403 | I-315 | From COR - SSA | From COR - SSA | 8406 | I-021 | From COR - SSA | From COR - SSA | 85 | 18 | 366.11 | 355.96 | 355.77 | 10.15 | 0.22% | 0.201 | 1.64 | 0.17 | 3.28 |
| 4365 | Upper N Int - E Side | 8400 | I-023 | From COR - SSA | From COR - SSA | 8474 | I-024 | From COR - SSA | From COR - SSA | 187 | 18 | 364.10 | 355.20 | 355.11 | 8.90 | 0.05% | 0.218 | 1.23 | 0.25 | 1.40 |
| 4366 | Upper N Int - E Side | 8286 | I-25 | From COR - SSA | From COR - SSA | 8273 | I-026 | From COR - SSA | From COR - SSA | 312 | 18 | 364.85 | 354.40 | 353.62 | 10.45 | 0.25% | 0.221 | 1.53 | 0.17 | 3.45 |
| 4374 | Upper N Int - W Side | 8310 | J-005 | From COR - SSA | From COR - SSA | 8312 | J-006 | Old Model | Straight Grade | 197 | 24 | 370.03 | 355.40 | 355.35 | 14.63 | 0.03% | 1.172 | 1.25 | 0.48 | 1.35 |
| 4375 | Upper N Int - W Side | 8312 | J-006 | Old Model | Straight Grade | 8311 | J-007 | From COR - SSA | From COR - SSA | 136 | 24 | 365.39 | 355.35 | 355.31 | 10.04 | 0.03% | 1.172 | 1.28 | 0.47 | 1.55 |
| 4376 | Upper N Int - W Side | 8311 | J-007 | From COR - SSA | From COR - SSA | 8314 | J-008 | From COR - SSA | From COR - SSA | 183 | 24 | 366.56 | 355.31 | 355.25 | 11.25 | 0.03% | 1.178 | 1.32 | 0.46 | 1.69 |
| 4377 | Upper N Int - W Side | 8314 | J-008 | From COR - SSA | From COR - SSA | 8373 | J-009 | From COR - SSA | From COR - SSA | 176 | 24 | 364.60 | 355.25 | 355.21 | 9.35 | 0.02% | 1.207 | 1.41 | 0.45 | 1.18 |
| 4378 | Upper N Int - W Side | 8373 | J-009 | From COR - SSA | From COR - SSA | 8265 | J-010 | From COR - SSA | From COR - SSA | 281 | 24 | 365.26 | 355.21 | 355.01 | 10.05 | 0.07% | 1.242 | 1.41 | 0.43 | 2.98 |
| 4379 | Upper N Int - W Side | 8115 | J-011 | From COR - SSA | From COR - SSA | 8163 | J-012 | From COR - SSA | From COR - SSA | 192 | 24 | 372.66 | 355.00 | 354.96 | 17.66 | 0.02% | 1.285 | 1.75 | 0.42 | 1.00 |
| 4402 | | 6036 | | Default to Legacy | Default to Legacy | 6035 | | AsBuilts | AsBuilts | 45 | 12 | 362.19 | 352.19 | 352.05 | 10.00 | 0.31% | 0.042 | 1.72 | 0.14 | 1.36 |
| 4403 | | 6035 | | AsBuilts | AsBuilts | 6034 | | AsBuilts | AsBuilts | 12 | 12 | 361.50 | 352.05 | 350.38 | 9.45 | 13.41% | 0.042 | 4.41 | 0.05 | 9.14 |
| 4404 | HR Sewer Trunk | 6034 | | AsBuilts | AsBuilts | 6031 | | AsBuilts | AsBuilts | 375 | 42 | 363.01 | 347.58 | 347.30 | 15.43 | 0.07% | 0.787 | 1.39 | 0.14 | 18.47 |
| 4405 | HR Sewer Trunk | 6030 | | AsBuilts | AsBuilts | 6029 | | AsBuilts | AsBuilts | 470 | 42 | 361.40 | 347.07 | 346.87 | 14.33 | 0.04% | 0.782 | 1.31 | 0.16 | 13.75 |
| 4406 | HR Sewer Trunk | 6029 | | AsBuilts | AsBuilts | 6028 | | AsBuilts | AsBuilts | 128 | 42 | 367.10 | 346.87 | 346.80 | 20.23 | 0.05% | 0.781 | 1.88 | 0.15 | 15.69 |
| 4407 | HR Sewer Trunk | 6028 | | AsBuilts | AsBuilts | 6027 | | AsBuilts | AsBuilts | 336 | 42 | 368.10 | 346.78 | 346.61 | 21.32 | 0.05% | 0.781 | 1.36 | 0.15 | 15.08 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|--------------------|-------------------|----------------------|-----------|-------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 4408 | | 6017 | | Old Model | Old Model | 6002 | | Old Model | Old Model | 121 | 12 | 363.39 | 353.39 | 353.00 | 10.00 | 0.32% | 0.042 | 1.23 | 0.12 | 1.38 |
| 4409 | | 8776 | K-028 | Survey | Survey | 6017 | | Old Model | Old Model | 649 | 12 | 365.38 | 355.18 | 353.39 | 10.20 | 0.28% | 0.042 | 1.19 | 0.13 | 1.27 |
| 4410 | | 8778 | | Old Model | Old Model | 8779 | | Old Model | Old Model | 253 | 12 | 372.94 | 362.94 | 361.72 | 10.00 | 0.48% | 0.001 | 0.75 | 0.03 | 1.73 |
| 4411 | | 8777 | | Old Model | Old Model | 8778 | | Old Model | Old Model | 410 | 12 | 375.36 | 365.36 | 362.94 | 10.00 | 0.59% | 0.001 | 0.47 | 0.02 | 1.92 |
| 4412 | | 8779 | | Old Model | Old Model | 8780 | | Old Model | Old Model | 337 | 12 | 371.41 | 361.72 | 360.46 | 9.69 | 0.37% | 0.002 | 0.71 | 0.34 | 1.52 |
| 4415 | | 8774 | | Old Model | Old Model | 8776 | K-028 | Survey | Survey | 396 | 12 | 367.88 | 357.88 | 355.33 | 10.00 | 0.64% | 0.042 | 1.58 | 0.10 | 1.96 |
| 4416 | | 8748 | | Old Model | Old Model | 8771 | | Old Model | Old Model | 527 | 12 | 380.85 | 370.85 | 364.81 | 10.00 | 1.15% | 0.036 | 1.94 | 0.08 | 2.64 |
| 4419 | HR Sewer Trunk | 6027 | | AsBuilts | AsBuilts | 6026 | | AsBuilts | AsBuilts | 498 | 42 | 368.60 | 346.57 | 346.31 | 22.03 | 0.05% | 0.780 | 1.39 | 0.15 | 15.32 |
| 4420 | HR Sewer Trunk | 6026 | | AsBuilts | AsBuilts | 6025 | | AsBuilts | AsBuilts | 126 | 42 | 364.90 | 346.31 | 346.20 | 18.59 | 0.09% | 0.794 | 1.71 | 0.14 | 20.05 |
| 4424 | | 8197 | | Old Model | Old Model | 8182 | | Old Model | Old Model | 123 | 12 | 365.79 | 355.79 | 355.10 | 10.00 | 0.56% | 0.113 | 1.87 | 0.17 | 1.76 |
| 4427 | Upper N Int - W Side | 8175 | J-013 | Old Model | From COR - SSA | 8177 | J-014 | From COR - SSA | From COR - SSA | 153 | 24 | 366.58 | 354.66 | 354.76 | 11.92 | -0.07% | 1.299 | 1.70 | 0.47 | 2.75 |
| 4429 | Upper N Int - E Side | 8241 | I-031 | From COR - SSA | From COR - SSA | 8240 | I-032 | From COR - SSA | From COR - SSA | 357 | 24 | 358.50 | 352.25 | 351.97 | 6.25 | 0.08% | 0.319 | 1.30 | 0.19 | 4.12 |
| 4432 | Upper N Int - E Side | 8205 | I-036 | From COR - SSA | From COR - SSA | 8086 | I-037 | From COR - SSA | From COR - SSA | 301 | 24 | 356.94 | 350.69 | 350.61 | 6.25 | 0.03% | 0.326 | 1.04 | 0.23 | 2.26 |
| 4433 | Upper N Int - E Side | 8211 | I-035 | From COR - SSA | From COR - SSA | 8205 | I-036 | From COR - SSA | From COR - SSA | 401 | 24 | 357.24 | 350.99 | 350.69 | 6.25 | 0.07% | 0.325 | 1.07 | 0.19 | 4.01 |
| 4434 | | 8010 | | Old Model | Old Model | 8008 | | Old Model | Old Model | 299 | 10 | 363.30 | 353.30 | 352.36 | 10.00 | 0.32% | 0.082 | 1.62 | 0.22 | 0.78 |
| 4435 | Upper N Int - W Side | 8148 | J-021 | From COR - SSA | From COR - SSA | 8149 | J-022 | From COR - SSA | From COR - SSA | 125 | 24 | 359.67 | 351.02 | 350.73 | 8.65 | 0.23% | 1.569 | 1.89 | 0.38 | 6.07 |
| 4436 | Upper N Int - W Side | 8149 | J-022 | From COR - SSA | From COR - SSA | 8150 | J-023 | From COR - SSA | From COR - SSA | 179 | 24 | 360.23 | 350.73 | 350.61 | 9.50 | 0.07% | 1.570 | 1.60 | 0.48 | 2.53 |
| 4437 | HR Sewer Trunk | 8101 | | AsBuilts | AsBuilts | 8100 | H-299 | Survey | Survey | 353 | 42 | 356.60 | 341.41 | 341.24 | 15.19 | 0.05% | 0.862 | 0.88 | 0.20 | 14.60 |
| 4438 | HR Sewer Trunk | 8108 | | AsBuilts | AsBuilts | 8104 | | AsBuilts | AsBuilts | 299 | 42 | 361.90 | 342.06 | 341.86 | 19.84 | 0.07% | 0.858 | 1.33 | 0.15 | 17.35 |
| 4439 | HR Sewer Trunk | 6032 | | AsBuilts | AsBuilts | 8108 | | AsBuilts | AsBuilts | 400 | 42 | 363.30 | 342.33 | 342.06 | 20.97 | 0.07% | 0.798 | 1.38 | 0.14 | 17.51 |
| 4440 | HR Sewer Trunk | 6033 | | AsBuilts | AsBuilts | 6032 | | AsBuilts | AsBuilts | 302 | 42 | 365.00 | 342.61 | 342.38 | 22.39 | 0.08% | 0.798 | 1.83 | 0.15 | 18.64 |
| 4444 | North Trunk Sewer | 8021 | H-015 | Old Model | Record Drawings | 8022 | H-116 | Old Model | Record Drawings | 331 | 15 | 362.59 | 353.27 | 352.16 | 9.32 | 0.34% | 0.308 | 1.67 | 0.23 | 2.31 |
| 4445 | North Trunk Sewer | 8031 | H-014 | Old Model | Straight Grade | 8021 | H-015 | Old Model | Record Drawings | 133 | 15 | 362.28 | 353.47 | 353.27 | 8.81 | 0.15% | 0.307 | 1.80 | 0.30 | 1.45 |
| 4446 | North Trunk Sewer | 8030 | H-013 | Old Model | Straight Grade | 8031 | H-014 | Old Model | Straight Grade | 69 | 15 | 362.89 | 353.57 | 353.47 | 9.32 | 0.15% | 0.307 | 1.50 | 0.30 | 1.42 |
| 4447 | North Trunk Sewer | 8764 | H-010 | Old Model | Straight Grade | 8761 | H-011 | Old Model | Straight Grade | 160 | 15 | 364.16 | 357.57 | 355.56 | 6.59 | 1.26% | 0.305 | 3.50 | 0.17 | 4.76 |
| 4448 | North Trunk Sewer | 8761 | H-011 | Old Model | Straight Grade | 8762 | H-012 | Old Model | Record Drawings | 110 | 15 | 364.08 | 355.56 | 354.08 | 8.52 | 1.35% | 0.305 | 2.31 | 0.16 | 4.95 |
| 4449 | North Trunk Sewer | 8763 | H-009 | Old Model | Straight Grade | 8764 | H-010 | Old Model | Straight Grade | 51 | 15 | 364.99 | 358.26 | 357.57 | 6.73 | 1.35% | 0.302 | 3.39 | 0.17 | 4.96 |
| 4450 | North Trunk Sewer | 8753 | H-008 | Old Model | Record Drawings | 8763 | H-009 | Old Model | Straight Grade | 277 | 15 | 365.38 | 362.00 | 358.26 | 3.38 | 1.35% | 0.301 | 3.49 | 0.16 | 4.95 |
| 4451 | North Trunk Sewer | 8722 | H-006 | Old Model | Record Drawings | 8754 | H-007 | Old Model | Straight Grade | 440 | 12 | 380.49 | 371.35 | 366.19 | 9.14 | 1.17% | 0.298 | 3.59 | 0.23 | 2.40 |
| 4452 | | 8742 | | Record Dwg | Straight Grade | 8731 | | Record Dwg | Straight Grade | 348 | 12 | 391.60 | 376.98 | 376.22 | 14.62 | 0.22% | 0.037 | 1.05 | 0.13 | 1.13 |
| 4453 | | 8731 | | Record Dwg | Straight Grade | 8749 | | Record Dwg | Straight Grade | 166 | 12 | 390.50 | 376.22 | 375.85 | 14.28 | 0.22% | 0.037 | 0.96 | 0.12 | 1.14 |
| 4454 | | 8746 | | Old Model | Old Model | 8737 | | Old Model | Old Model | 70 | 12 | 392.31 | 382.31 | 381.52 | 10.00 | 1.13% | 0.001 | 0.30 | 0.01 | 2.65 |
| 4455 | | 8737 | | Old Model | Old Model | 8738 | | Old Model | Old Model | 135 | 12 | 387.33 | 381.52 | 381.25 | 5.81 | 0.20% | 0.003 | 0.47 | 0.04 | 1.11 |
| 4456 | | 8738 | | Old Model | Old Model | 6041 | | Default to Legacy | Default to Legacy | 240 | 12 | 391.25 | 381.25 | 380.75 | 10.00 | 0.21% | 0.004 | 0.50 | 0.04 | 1.14 |
| 4457 | | 6041 | | Default to Legacy | Default to Legacy | 6043 | | Default to Legacy | Default to Legacy | 77 | 12 | 390.75 | 380.75 | 380.60 | 10.00 | 0.19% | 0.004 | 0.51 | 0.04 | 1.10 |
| 4458 | | 6043 | | Default to Legacy | Default to Legacy | 8736 | | Old Model | Old Model | 69 | 12 | 390.60 | 380.60 | 380.45 | 10.00 | 0.22% | 0.004 | 0.42 | 0.04 | 1.16 |
| 4459 | | 8736 | | Old Model | Old Model | 8735 | | Old Model | Old Model | 422 | 12 | 390.45 | 380.45 | 379.65 | 10.00 | 0.19% | 0.004 | 0.54 | 0.06 | 1.08 |
| 4460 | | 8735 | | Old Model | Old Model | 8742 | | Record Dwg | Straight Grade | 176 | 12 | 389.65 | 379.65 | 376.98 | 10.00 | 1.52% | 0.004 | 0.30 | 0.03 | 3.07 |
| 4461 | | 8734 | | Record Dwg | Straight Grade | 8742 | | Record Dwg | Straight Grade | 107 | 12 | 391.50 | 377.22 | 376.98 | 14.28 | 0.22% | 0.034 | 1.00 | 0.12 | 1.15 |
| 4462 | | 8732 | | Record Dwg | Straight Grade | 8744 | | Old Model | Straight Grade | 288 | 12 | 392.00 | 378.81 | 378.17 | 13.19 | 0.22% | 0.033 | 0.98 | 0.12 | 1.14 |
| 4463 | | 8744 | | Old Model | Straight Grade | 8733 | | Record Dwg | Straight Grade | 75 | 12 | 387.90 | 378.17 | 378.01 | 9.73 | 0.21% | 0.035 | 1.01 | 0.12 | 1.12 |
| 4468 | | 6039 | K-322 | COR Survey | COR Survey | 8706 | K-015 | COR Survey | COR Survey | 269 | 12 | 395.59 | 380.59 | 379.74 | 15.00 | 0.32% | 0.036 | 1.15 | 0.11 | 1.37 |
| 4469 | | 8705 | K-013 | COR Survey | COR Survey | 6039 | K-322 | COR Survey | COR Survey | 110 | 12 | 395.53 | 381.13 | 380.59 | 14.40 | 0.49% | 0.036 | 1.33 | 0.10 | 1.71 |
| 4470 | | 8691 | K-012 | COR Survey | COR Survey | 8705 | K-013 | COR Survey | COR Survey | 381 | 12 | 391.31 | 381.81 | 381.13 | 9.50 | 0.18% | 0.039 | 1.07 | 0.15 | 1.02 |
| 4471 | North Trunk Sewer | 8717 | H-004 | Old Model | Record Drawings | 8730 | H-005 | Old Model | Record Drawings | 488 | 12 | 388.66 | 373.35 | 372.35 | 15.31 | 0.20% | 0.297 | 1.74 | 0.35 | 0.83 |
| 4472 | North Trunk Sewer | 8743 | H-003 | Old Model | Record Drawings | 8717 | H-004 | Old Model | Record Drawings | 495 | 12 | 385.80 | 374.35 | 373.35 | 11.45 | 0.20% | 0.296 | 1.85 | 0.36 | 0.83 |
| 4473 | North Trunk Sewer | 8730 | H-005 | Old Model | Record Drawings | 8722 | H-006 | Old Model | Record Drawings | 460 | 12 | 381.58 | 372.35 | 371.35 | 9.23 | 0.22% | 0.297 | 2.22 | 0.39 | 0.87 |
| 4474 | North Trunk Sewer | 8692 | H-002 | Old Model | Old Model | 8743 | H-003 | Old Model | Record Drawings | 136 | 12 | 385.00 | 374.66 | 374.35 | 10.34 | 0.23% | 0.295 | 1.85 | 0.35 | 0.90 |
| 4475 | North Trunk Sewer | 8693 | H-001 | Old Model | Record Drawings | 8692 | H-002 | Old Model | Old Model | 298 | 12 | 385.60 | 375.35 | 374.66 | 10.25 | 0.23% | 0.282 | 1.87 | 0.33 | 0.92 |
| 4481 | North Trunk Sewer | 8003 | H-232 | Old Model | Record Drawings | 8002 | H-021 | Old Model | Record Drawing | 278 | 15 | 360.45 | 350.53 | 350.20 | 9.92 | 0.12% | 0.323 | 1.25 | 0.31 | 1.24 |
| 4482 | North Trunk Sewer | 8014 | H-019 | COR Sewer Map Book | Record Drawings | 7992 | H-020 | Old Model | Record Drawings | 217 | 15 | 356.75 | 351.78 | 350.82 | 4.97 | 0.44% | 0.310 | 1.80 | 0.22 | 2.70 |



City of Richland - 2015 General Sewer Plan Update

Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|----------------------|----------------------|-----------|--------------------|--------------------|----------------------|-----------|--------------------|--------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 4483 | North Trunk Sewer | 8023 | H-017 | Record Drawings | Record Drawings | 8013 | H-018 | Record Drawings | Record Drawings | 154 | 15 | 359.00 | 352.07 | 351.89 | 6.93 | 0.12% | 0.307 | 1.00 | 0.36 | 1.24 |
| 4484 | North Trunk Sewer | 8022 | H-116 | Old Model | Record Drawings | 8023 | H-017 | Record Drawings | Record Drawings | 72 | 15 | 362.16 | 352.16 | 352.07 | 10.00 | 0.12% | 0.308 | 1.25 | 0.34 | 1.29 |
| 4487 | HR Sewer Trunk | 8107 | | AsBuilts | AsBuilts | 8108 | | AsBuilts | AsBuilts | 267 | 12 | 359.90 | 345.17 | 344.52 | 14.73 | 0.24% | 0.093 | 1.52 | 0.20 | 1.14 |
| 4489 | | 8104 | | AsBuilts | AsBuilts | 8103 | | AsBuilts | AsBuilts | 275 | 42 | 361.40 | 341.86 | 341.71 | 19.54 | 0.05% | 0.861 | 1.18 | 0.17 | 15.58 |
| 4490 | HR Sewer Trunk | 8103 | | AsBuilts | AsBuilts | 8102 | | AsBuilts | AsBuilts | 334 | 42 | 360.60 | 341.71 | 341.66 | 18.89 | 0.01% | 0.861 | 1.29 | 0.18 | 7.76 |
| 4491 | HR Sewer Trunk | 8102 | | AsBuilts | AsBuilts | 8101 | | AsBuilts | AsBuilts | 260 | 42 | 358.50 | 341.54 | 341.41 | 16.96 | 0.05% | 0.861 | 1.05 | 0.18 | 14.88 |
| 4492 | HR Sewer Trunk | 8100 | H-299 | Survey | Survey | 8099 | H-298 | Survey | Survey | 100 | 42 | 356.04 | 341.24 | 341.34 | 14.80 | -0.10% | 0.861 | 0.89 | 0.23 | 21.43 |
| 4493 | | | 7922 | H-289 | Survey | Survey | 7913 | H-287 | Survey | Survey | 28 | 18 | 354.36 | 349.01 | 343.46 | 5.35 | 19.57% | 0.575 | 10.29 | 0.10 |
| 4494 | North Trunk Sewer | 7992 | H-020 | Old Model | Record Drawings | 8003 | H-232 | Old Model | Record Drawings | 257 | 15 | 360.71 | 350.82 | 350.53 | 9.89 | 0.11% | 0.322 | 1.50 | 0.32 | 1.20 |
| 4497 | Upper N Int - W Side | 7966 | J-219 | From COR - SSA | From COR - SSA | 7965 | J-218 | From COR - SSA | From COR - SSA | 217 | 30 | 357.22 | 342.72 | 342.70 | 14.50 | 0.01% | 1.759 | 1.27 | 0.46 | 1.00 |
| 4504 | | 7985 | | Old Model | Record Drawings | JCT_MP-378 | | Record Drawings | Record Drawings | 49 | 10 | 361.38 | 351.65 | 344.25 | 9.73 | 15.02% | 0.056 | 5.26 | 0.07 | 5.93 |
| 4505 | | 8088 | I-213 | Old Model | Old Model | 8092 | I-212 | Old Model | Old Model | 104 | 12 | 362.09 | 352.09 | 351.92 | 10.00 | 0.16% | 0.062 | 1.22 | 0.19 | 0.95 |
| 4513 | | 7775 | | Old Model | Old Model | 7795 | K-275 | Old Model | Old Model | 290 | 12 | 391.33 | 387.03 | 385.49 | 4.30 | 0.53% | 0.001 | 0.36 | 0.02 | 1.82 |
| 4514 | | 7783 | K-274 | Record Drawings | Record Drawings | 7784 | K-273 | Record Drawings | Record Drawings | 187 | 12 | 390.04 | 384.54 | 383.97 | 5.50 | 0.30% | 0.001 | 0.45 | 0.03 | 1.38 |
| 4515 | | 7784 | K-273 | Record Drawings | Record Drawings | 7786 | K-010 | COR Survey | COR Survey | 50 | 12 | 390.87 | 383.97 | 383.43 | 6.90 | 1.08% | 0.002 | 1.03 | 0.02 | 2.59 |
| 4516 | | 8702 | | Old Model | Old Model | 8700 | | COR Sewer Map Book | COR Sewer Map Book | 286 | 12 | 375.00 | 365.00 | 360.24 | 10.00 | 1.67% | 0.092 | 2.60 | 0.12 | 3.13 |
| 4517 | | 8703 | | COR Sewer Map Book | COR Sewer Map Book | 8702 | | Old Model | Old Model | 93 | 12 | 383.70 | 367.46 | 365.00 | 16.24 | 2.64% | 0.091 | 3.01 | 0.10 | 3.96 |
| 4518 | North Trunk Sewer | 7787 | E-017 | Old Model | Record Drawings | 8693 | H-001 | Old Model | Record Drawings | 547 | 12 | 385.51 | 376.35 | 375.35 | 9.16 | 0.18% | 0.282 | 1.79 | 0.37 | 0.78 |
| 4519 | North Trunk Sewer | 7897 | E-016 | Old Model | Old Model | 7787 | E-017 | Old Model | Record Drawings | 504 | 12 | 387.35 | 377.35 | 376.35 | 10.00 | 0.20% | 0.281 | 1.74 | 0.34 | 0.83 |
| 4520 | North Trunk Sewer | 7887 | E-014 | Old Model | Straight Grade | 7891 | E-015 | Old Model | Record Drawings | 315 | 12 | 393.00 | 378.97 | 378.35 | 14.03 | 0.20% | 0.277 | 1.79 | 0.35 | 0.83 |
| 4521 | | 7777 | K-011 | COR Survey | COR Survey | 8691 | K-012 | COR Survey | COR Survey | 399 | 12 | 389.61 | 382.76 | 381.81 | 6.85 | 0.24% | 0.050 | 1.30 | 0.14 | 1.17 |
| 4522 | | 7786 | K-010 | COR Survey | COR Survey | 7777 | K-011 | COR Survey | COR Survey | 155 | 12 | 390.68 | 383.38 | 382.76 | 7.30 | 0.40% | 0.056 | 1.54 | 0.13 | 1.52 |
| 4523 | | 7785 | K-009 | COR Survey | COR Survey | 7786 | K-010 | COR Survey | COR Survey | 79 | 12 | 391.62 | 384.02 | 383.43 | 7.60 | 0.74% | 0.058 | 2.37 | 0.13 | 2.10 |
| 4527 | North Trunk Sewer | 7890 | E-013 | Old Model | Record Drawings | 7887 | E-014 | Old Model | Straight Grade | 140 | 12 | 388.80 | 379.25 | 378.97 | 9.55 | 0.20% | 0.248 | 1.66 | 0.32 | 0.87 |
| 4528 | North Trunk Sewer | 9112 | E-011 | COR Sewer Map Book | COR Sewer Map Book | 7888 | E-012 | Old Model | Record Drawings | 481 | 12 | 393.86 | 381.38 | 380.25 | 12.48 | 0.24% | 0.247 | 1.79 | 0.31 | 0.96 |
| 4530 | | 7879 | | COR Sewer Map Book | COR Sewer Map Book | 7878 | | COR Sewer Map Book | COR Sewer Map Book | 156 | 12 | 394.40 | 384.00 | 383.66 | 10.40 | 0.22% | 0.012 | 0.80 | 0.08 | 1.15 |
| 4532 | | 7649 | | Old Model | Old Model | 7702 | | Old Model | Old Model | 125 | 12 | 367.07 | 357.07 | 355.07 | 10.00 | 1.60% | 0.014 | 1.18 | 0.05 | 3.14 |
| 4536 | | 7676 | | Old Model | Old Model | 7663 | | Old Model | Old Model | 322 | 15 | 362.52 | 352.52 | 351.80 | 10.00 | 0.22% | 0.031 | 0.92 | 0.08 | 2.11 |
| 4540 | Lower N Interceptor | 7648 | | Record Drawings | Record Drawings | 7647 | | Old Model | Old Model | 407 | 54 | 356.70 | 339.57 | 339.43 | 17.13 | 0.03% | 3.604 | 1.62 | 0.27 | 21.93 |
| 4541 | Lower N Interceptor | 7647 | | Old Model | Old Model | 7679 | | Record Drawings | Record Drawings | 428 | 54 | 353.80 | 339.43 | 339.28 | 14.37 | 0.04% | 3.603 | 1.60 | 0.27 | 22.16 |
| 4542 | Lower N Interceptor | 7679 | | Record Drawings | Record Drawings | 7646 | | Record Drawings | Record Drawings | 418 | 54 | 353.10 | 339.28 | 339.14 | 13.82 | 0.03% | 3.630 | 1.59 | 0.27 | 21.58 |
| 4543 | | 7678 | | Record Drawings | Record Drawings | 7679 | | Record Drawings | Record Drawings | 41 | 10 | 353.00 | 343.28 | 341.53 | 9.72 | 4.25% | 0.037 | 2.98 | 0.08 | 3.13 |
| 4544 | | 7659 | | Record Drawings | Record Drawings | 7678 | | Record Drawings | Record Drawings | 72 | 10 | 352.50 | 343.56 | 343.38 | 8.94 | 0.25% | 0.036 | 1.19 | 0.16 | 0.73 |
| 4545 | | 7669 | | Record Drawings | Record Drawings | 7667 | | Record Drawings | Record Drawings | 28 | 10 | 353.00 | 344.69 | 344.63 | 8.31 | 0.22% | 0.018 | 0.97 | 0.12 | 0.70 |
| 4547 | | 7748 | | Old Model | Record Drawings | 7750 | | Old Model | Record Drawings | 37 | 10 | 359.52 | 348.79 | 348.70 | 10.73 | 0.25% | 0.017 | 0.84 | 0.10 | 0.74 |
| 4550 | Lower N Interceptor | 7487 | | Record Drawings | Record Drawings | 7394 | B-424 | Record Drawings | Old Model | 442 | 54 | 353.80 | 338.85 | 338.68 | 14.95 | 0.04% | 3.646 | 1.53 | 0.28 | 23.37 |
| 4552 | | 6930 | | Default to Legacy | Default to Legacy | 7506 | | Old Model | Old Model | 96 | 10 | 356.13 | 346.13 | 345.92 | 10.00 | 0.22% | 0.037 | 1.05 | 0.16 | 0.68 |
| 4554 | | 7664 | | Old Model | Old Model | 7665 | | Old Model | Old Model | 299 | 15 | 361.08 | 351.08 | 350.36 | 10.00 | 0.24% | 0.038 | 1.05 | 0.09 | 2.18 |
| 4555 | | 7665 | | Old Model | Old Model | 7479 | | Old Model | Old Model | 300 | 15 | 360.36 | 350.36 | 349.64 | 10.00 | 0.24% | 0.038 | 1.01 | 0.09 | 2.18 |
| 4556 | | 7479 | | Old Model | Old Model | 7434 | | Old Model | Old Model | 282 | 15 | 359.64 | 349.64 | 348.92 | 10.00 | 0.25% | 0.038 | 1.13 | 0.10 | 2.25 |
| 4557 | | 7434 | | Old Model | Old Model | 7433 | G-011 | Old Model | Old Model | 356 | 15 | 358.92 | 348.92 | 347.24 | 10.00 | 0.47% | 0.038 | 0.89 | 0.08 | 3.06 |
| 4558 | | 7433 | G-011 | Old Model | Old Model | 7438 | G-012 | Survey | Survey | 374 | 15 | 357.24 | 347.24 | 346.87 | 10.00 | 0.10% | 0.041 | 0.81 | 0.13 | 1.39 |
| 4559 | | 7438 | G-012 | Survey | Survey | 7439 | G-013 | Survey | Survey | 365 | 15 | 355.22 | 346.87 | 345.95 | 8.35 | 0.25% | 0.041 | 1.17 | 0.10 | 2.23 |
| 4560 | | 7441 | B-049 | Survey | Survey | 7440 | B-427 | Survey | Survey | 35 | 18 | 357.07 | 344.82 | 343.92 | 12.25 | 2.58% | 0.612 | 4.96 | 0.18 | 11.21 |
| 4561 | | 7395 | B-422 | Record Drawings | Record Drawings | JCT_MP-362 | | Record Drawings | Record Drawings | 41 | 18 | 358.20 | 342.46 | 340.00 | 15.74 | 6.07% | 0.649 | 7.05 | 0.14 | 17.49 |
| 4562 | | 7427 | | Old Model | Record Drawings | 7426 | | Old Model | Record Drawings | 188 | 10 | 354.96 | 346.07 | 345.51 | 8.89 | 0.30% | 0.039 | 1.07 | 0.15 | 0.80 |



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| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|-------------------|----------------------|-----------|--------------------|--------------------|----------------------|-----------|--------------------|--------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 4564 | | 7731 | | Old Model | Old Model | 7732 | | Old Model | Old Model | 19 | 10 | 375.02 | 365.02 | 364.78 | 10.00 | 1.25% | 0.150 | 2.44 | 0.20 | 1.57 |
| 4565 | | 7469 | | Old Model | Old Model | 7468 | | Old Model | Old Model | 10 | 10 | 370.00 | 360.00 | 359.22 | 10.00 | 7.49% | 0.156 | 2.32 | 0.13 | 4.05 |
| 4603 | | 7060 | | Old Model | Old Model | 7062 | | Old Model | Old Model | 93 | 10 | 376.76 | 366.76 | 363.53 | 10.00 | 3.47% | 0.221 | 3.02 | 0.19 | 2.64 |
| 4604 | | 7062 | | Old Model | Old Model | 7064 | | Old Model | Old Model | 165 | 10 | 373.53 | 363.53 | 362.65 | 10.00 | 0.54% | 0.221 | 2.88 | 0.33 | 0.90 |
| 4605 | | 7095 | | Old Model | Old Model | 7057 | | Old Model | Old Model | 220 | 10 | 363.00 | 353.00 | 352.00 | 10.00 | 0.45% | 0.001 | 0.03 | 0.02 | 1.03 |
| 4610 | | 7038 | | Old Model | Old Model | 7044 | | Old Model | Old Model | 90 | 12 | 354.49 | 344.49 | 344.48 | 10.00 | 0.01% | 0.001 | 0.16 | 0.05 | 0.26 |
| 4613 | | 7036 | B-040 | Assumed | Straight Grade | 7034 | B-354 | Record Drawings | Record Drawings | 28 | 10 | 355.00 | 342.17 | 339.23 | 12.83 | 10.59% | 0.026 | 3.68 | 0.05 | 4.98 |
| 4614 | | 6990 | | Old Model | Old Model | 6991 | | Old Model | Old Model | 52 | 10 | 366.66 | 356.66 | 356.06 | 10.00 | 1.15% | 0.025 | 1.75 | 0.09 | 1.62 |
| 4620 | | 6345 | B-541 | Old Model | Straight Grade | 6344 | B-540 | Record Dwg | Straight Grade | 148 | 10 | 360.40 | 350.74 | 350.40 | 9.66 | 0.23% | 0.002 | 0.40 | 0.04 | 0.74 |
| 4621 | | 6344 | B-540 | Record Dwg | Straight Grade | 6333 | B-447 | COR Sewer Map Book | Straight Grade | 184 | 10 | 357.30 | 350.40 | 349.97 | 6.90 | 0.23% | 0.003 | 0.18 | 0.04 | 0.74 |
| 4622 | | 6333 | B-447 | COR Sewer Map Book | Straight Grade | 6340 | B-446 | COR Sewer Map Book | Straight Grade | 315 | 10 | 355.20 | 349.97 | 349.33 | 5.23 | 0.20% | 0.021 | 0.94 | 0.14 | 0.67 |
| 4623 | | 6340 | B-446 | COR Sewer Map Book | Straight Grade | 6338 | B-445 | COR Sewer Map Book | COR Sewer Map Book | 204 | 10 | 354.35 | 349.23 | 348.85 | 5.12 | 0.19% | 0.037 | 1.87 | 0.20 | 0.63 |
| 4624 | | 6338 | B-445 | COR Sewer Map Book | COR Sewer Map Book | 6339 | B-444 | COR Sewer Map Book | COR Sewer Map Book | 147 | 10 | 353.82 | 348.75 | 348.38 | 5.07 | 0.25% | 0.029 | 2.25 | 0.14 | 0.74 |
| 4625 | | 6335 | B-443 | Old Model | Old Model | 6336 | B-442 | AsBuilds | AsBuilds | 139 | 10 | 354.90 | 347.57 | 347.27 | 7.33 | 0.22% | 0.029 | 1.07 | 0.15 | 0.68 |
| 4631 | | 6369 | A-090 | Old Model | Old Model | 6353 | A-091 | Old Model | Old Model | 303 | 12 | 377.52 | 367.52 | 366.63 | 10.00 | 0.29% | 0.037 | 1.17 | 0.12 | 1.31 |
| 4636 | | 6371 | | Inv+10 | AsBuilds | 6372 | | AsBuilds | Old Model | 247 | 12 | 349.84 | 339.84 | 339.34 | 10.00 | 0.20% | 0.042 | 1.14 | 0.15 | 1.08 |
| 4637 | | 6370 | | AsBuilds | Old Model | 6371 | | Inv+10 | AsBuilds | 220 | 12 | 352.24 | 340.47 | 339.84 | 11.77 | 0.29% | 0.043 | 1.06 | 0.12 | 1.29 |
| 4638 | | 6387 | | Old Model | Old Model | 6370 | | AsBuilds | Old Model | 234 | 12 | 352.24 | 341.08 | 340.57 | 11.16 | 0.22% | 0.042 | 1.17 | 0.15 | 1.12 |
| 4639 | | 6381 | | Old Model | Old Model | 6387 | | Old Model | Old Model | 119 | 12 | 351.43 | 341.43 | 341.18 | 10.00 | 0.21% | 0.053 | 1.84 | 0.21 | 1.09 |
| 4640 | | 6388 | | Old Model | Old Model | 6381 | | Old Model | Old Model | 364 | 12 | 352.43 | 342.43 | 341.63 | 10.00 | 0.22% | 0.010 | 0.75 | 0.08 | 1.16 |
| 4641 | | 6389 | | Old Model | Old Model | 6388 | | Old Model | Old Model | 194 | 12 | 352.96 | 342.96 | 342.43 | 10.00 | 0.27% | 0.010 | 0.65 | 0.06 | 1.29 |
| 4643 | | 6380 | | AsBuilds | AsBuilds | 6381 | | Old Model | Old Model | 387 | 12 | 351.97 | 342.81 | 341.63 | 9.16 | 0.30% | 0.032 | 1.64 | 0.11 | 1.35 |
| 4651 | | 7042 | B-377 | Record Drawings | Record Drawings | JCT_MP-356 | | Record Drawings | Record Drawings | 21 | 10 | 355.00 | 346.49 | 341.96 | 8.51 | 21.15% | 0.015 | 3.97 | 0.03 | 7.12 |
| 4652 | | 7043 | | Old Model | Old Model | 7039 | B-378 | COR Sewer Map Book | COR Sewer Map Book | 166 | 12 | 352.98 | 342.98 | 342.30 | 10.00 | 0.41% | 0.010 | 1.07 | 0.06 | 1.59 |
| 4655 | | 7048 | | Old Model | Old Model | 7046 | F-008 | Old Model | Old Model | 232 | 12 | 359.69 | 349.69 | 348.00 | 10.00 | 0.73% | 0.252 | 3.07 | 0.25 | 1.88 |
| 4656 | | 7059 | | Old Model | Old Model | 7057 | | Old Model | Old Model | 194 | 12 | 369.00 | 359.00 | 352.00 | 10.00 | 3.60% | 0.034 | 0.95 | 0.06 | 4.70 |
| 4657 | | 7063 | | Old Model | Old Model | 7059 | | Old Model | Old Model | 193 | 10 | 383.12 | 373.12 | 359.00 | 10.00 | 7.33% | 0.012 | 1.91 | 0.04 | 4.15 |
| 4658 | | 7058 | | Old Model | Old Model | 7063 | | Old Model | Old Model | 264 | 10 | 385.85 | 375.85 | 373.12 | 10.00 | 1.03% | 0.012 | 1.61 | 0.07 | 1.55 |
| 4659 | | 7334 | | Old Model | Old Model | 7058 | | Old Model | Old Model | 152 | 10 | 387.12 | 377.12 | 375.85 | 10.00 | 0.83% | 0.011 | 1.12 | 0.06 | 1.39 |
| 4660 | | 7258 | | Old Model | Old Model | 6790 | | Inv+10 | Straight Grade | 245 | 10 | 396.25 | 386.25 | 383.10 | 10.00 | 1.28% | 0.004 | 0.96 | 0.04 | 1.73 |
| 4661 | | 6790 | | Inv+10 | Straight Grade | 7335 | | Old Model | Old Model | 78 | 10 | 393.10 | 383.10 | 382.10 | 10.00 | 1.28% | 0.005 | 0.92 | 0.04 | 1.73 |
| 4676 | | 7315 | | Old Model | Old Model | 7316 | | Old Model | Old Model | 12 | 10 | 404.19 | 394.19 | 394.02 | 10.00 | 1.42% | 0.035 | 0.72 | 0.10 | 1.79 |
| 4688 | | 7024 | B-387 | Inv+10 | Record Drawings | JCT_MP-354 | | Straight Grade | Straight Grade | 19 | 12 | 356.95 | 347.04 | 337.34 | 9.91 | 50.29% | 0.069 | 8.35 | 0.14 | 18.96 |
| 4693 | South Trunk Sewer | 7168 | | Inv+10 | Record Drawings | 6627 | | Inv+10 | Record Drawings | 381 | 10 | 399.78 | 389.78 | 388.85 | 10.00 | 0.24% | 0.168 | 1.73 | 0.33 | 0.59 |
| 4694 | South Trunk Sewer | 6627 | | Inv+10 | Record Drawings | 6628 | | Inv+10 | Record Drawings | 93 | 10 | 398.85 | 388.85 | 388.58 | 10.00 | 0.29% | 0.168 | 1.75 | 0.31 | 0.66 |
| 4695 | South Trunk Sewer | 6628 | | Inv+10 | Record Drawings | 6599 | | Inv+10 | Record Drawings | 357 | 10 | 398.58 | 388.58 | 387.69 | 10.00 | 0.25% | 0.167 | 1.72 | 0.32 | 0.60 |
| 4708 | | 7212 | | Old Model | Old Model | 7104 | | Old Model | Old Model | 177 | 10 | 403.55 | 393.55 | 393.16 | 10.00 | 0.22% | 0.079 | 1.33 | 0.23 | 0.64 |
| 4720 | | 6324 | | Inv+10 | Straight Grade | 6322 | | Record Drawings | Record Drawings | 253 | 12 | 397.97 | 387.97 | 387.48 | 10.00 | 0.19% | 0.378 | 2.35 | 0.45 | 0.72 |
| 4733 | | 1041 | | Old Model | Old Model | 1040 | | Old Model | Old Model | 285 | 12 | 406.70 | 391.04 | 390.50 | 15.66 | 0.19% | 0.015 | 0.77 | 0.09 | 1.07 |
| 4734 | | 1039 | | Old Model | Old Model | 1038 | | Old Model | Old Model | 398 | 12 | 402.80 | 389.62 | 388.64 | 13.18 | 0.25% | 0.017 | 0.81 | 0.20 | 1.22 |
| 4735 | | 1038 | | Old Model | Old Model | 1037 | | Old Model | Old Model | 397 | 12 | 401.90 | 388.64 | 387.66 | 13.26 | 0.25% | 0.016 | 0.92 | 0.23 | 1.22 |
| 4736 | | 1037 | | Old Model | Old Model | 1036 | | Old Model | Old Model | 401 | 12 | 403.90 | 387.66 | 386.68 | 16.24 | 0.24% | 0.017 | 0.85 | 0.14 | 1.22 |
| 4737 | | 306 | | Old Model | Old Model | 305 | | Old Model | Old Model | 398 | 12 | 404.30 | 385.70 | 384.72 | 18.60 | 0.25% | 0.016 | 0.84 | 0.08 | 1.22 |
| 4738 | | 304 | | Old Model | Old Model | 303 | | Old Model | Old Model | 243 | 12 | 403.50 | 383.74 | 382.80 | 19.76 | 0.39% | 0.016 | 1.15 | 0.08 | 1.54 |
| 4739 | | 303 | | Old Model | Old Model | 272 | | Old Model | Old Model | 111 | 12 | 403.80 | 382.80 | 381.20 | 21.00 | 1.45% | 0.017 | 1.62 | 0.05 | 2.98 |
| 4742 | | 272 | | Old Model | Old Model | 284 | | Old Model | Old Model | 308 | 12 | 405.50 | 381.20 | 375.38 | 24.30 | 1.89% | 0.017 | 1.77 | 0.05 | 3.41 |
| 4743 | | 284 | | Old Model | Old Model | 283 | | Old Model | Old Model | 329 | 12 | 398.00 | 375.38 | 368.12 | 22.62 | 2.21% | 0.017 | 1.82 | 0.05 | 3.69 |
| 4744 | | 283 | | Old Model | Old Model | 281 | | Old Model | Old Model | 245 | 12 | 380.15 | 368.12 | 362.80 | 12.03 | 2.17% | 0.017 | 1.39 | 0.05 | 3.66 |
| 4745 | | 282 | | Old Model | Old Model | 286 | | Old Model | Old Model | 196 | 12 | 374.16 | 360.95 | 360.01 | 13.21 | 0.48% | 0.017 | 1.41 | 0.08 | 1.71 |
| 4757 | | 405 | | Old Model | Old Model | 401 | | Old Model | Old Model | 286 | 15 | 369.15 | 359.15 | 358.34 | 10.00 | 0.28% | 1.028 | 3.99 | 0.47 | 1.38 |
| 4758 | | 401 | | Old Model | Old Model | 484 | | Old Model | Old Model | 406 | 15 | 368.34 | 358.34 | 357.69 | 10.00 | 0.16% | 0.410 | 2.18 | 0.37 | 1.40 |
| 4759 | | 484 | | Old Model | Old Model | 477 | | Old Model | Old Model | 458 | 15 | 367.69 | 357.69 | 356.79 | 10.00 | 0.20% | 0.310 | 1.85 | 0.28 | 1.69 |
| 4760 | | 477 | | Old Model | Old Model | 476 | | Old Model | Old Model | 362 | 15 | 366.79 | 356.79 | 355.93 | 10.00 | 0.24% | 0.299 | 1.92 | 0.25 | 1.91 |
| 4761 | | 476 | | Old Model | Old Model | 475 | | Old Model | Old Model | 345 | 15 | 365.93 | 355.93 | 355.17 | 10.00 | 0.22% | 0.294 | 1.79 | 0.25 | 1.83 |
| 4762 | | 475 | | Old Model | Old Model | 470 | | Old Model | Old Model | 459 | 15 | 365.17 | 355.17 | 354.34 | 10.00 | 0.18% | 0.291 | 1.75 | 0.27 | 1.63 |
| 4763 | | 470 | | Old Model | Old Model | 471 | | Old Model | Old Model | 396 | 15 | 364.34 | 354.34 | 353.58 | 10.00 | 0.19% | 0.289 | 1.75 | 0.26 | 1.69 |
| 4773 | | 626 | | Old Model | Old Model | 632 | | Old Model | Old Model | 385 | 10 | 541.35 | 531.35 | 530.23 | 10.00 | 0.29% | 0.003 | 0.43 | 0.05 | 0.82 |



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| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|-------------------------|----------------------|-----------|-------------------------------|-----------------|----------------------|-----------|-------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 4833 | | 4123 | | Old Model | Old Model | 1170 | | Old Model | Old Model | 440 | 30 | 348.75 | 338.75 | 338.31 | 10.00 | 0.10% | 3.410 | 2.53 | 0.44 | 5.67 |
| 4834 | | 1170 | | Old Model | Old Model | 1171 | | Old Model | Old Model | 440 | 30 | 348.31 | 338.31 | 337.87 | 10.00 | 0.10% | 3.406 | 2.52 | 0.44 | 5.68 |
| 4835 | | 1171 | | Old Model | Old Model | 1172 | | Old Model | Old Model | 444 | 30 | 347.87 | 337.87 | 337.43 | 10.00 | 0.10% | 3.403 | 2.52 | 0.44 | 5.64 |
| 4836 | | 1172 | | Old Model | Old Model | 1173 | | Old Model | Old Model | 436 | 30 | 347.43 | 337.43 | 336.99 | 10.00 | 0.10% | 3.400 | 2.53 | 0.44 | 5.72 |
| 4837 | | 1173 | | Old Model | Old Model | 1174 | | Old Model | Old Model | 445 | 30 | 346.99 | 336.99 | 336.54 | 10.00 | 0.10% | 3.396 | 2.54 | 0.44 | 5.73 |
| 4838 | | 1174 | | Old Model | Old Model | 1175 | | Old Model | Old Model | 440 | 30 | 346.54 | 336.54 | 336.09 | 10.00 | 0.10% | 3.393 | 2.52 | 0.44 | 5.79 |
| 4839 | | 1175 | | Old Model | Old Model | 1176 | | Old Model | Old Model | 468 | 30 | 346.09 | 336.09 | 335.64 | 10.00 | 0.10% | 3.390 | 2.52 | 0.44 | 5.52 |
| 4840 | | 1176 | | Old Model | Old Model | 1199 | | Old Model | Old Model | 435 | 30 | 345.64 | 335.64 | 335.19 | 10.00 | 0.10% | 3.387 | 2.49 | 0.44 | 5.85 |
| 4841 | | 1194 | | Old Model | Old Model | 2180 | A-53 | Old Model | Old Model | 470 | 30 | 344.72 | 334.72 | 333.75 | 10.00 | 0.21% | 3.386 | 3.24 | 0.35 | 9.66 |
| 4842 | | 2180 | A-53 | Old Model | Old Model | 1193 | | Old Model | Record Drawings | 228 | 36 | 343.75 | 333.75 | 333.33 | 10.00 | 0.18% | 3.811 | 3.12 | 0.31 | 16.23 |
| 4843 | | 2150 | A-103 | Old Model | Old Model | 2180 | | Old Model | Old Model | 462 | 24 | 345.82 | 335.82 | 334.75 | 10.00 | 0.23% | 0.475 | 2.21 | 0.18 | 7.15 |
| 4844 | | 2151 | A-104 | Old Model | Old Model | 2150 | A-103 | Old Model | Old Model | 398 | 24 | 346.58 | 336.58 | 335.82 | 10.00 | 0.19% | 0.476 | 1.92 | 0.18 | 6.45 |
| 4845 | | 2179 | A-105 | Old Model | Old Model | 2151 | A-104 | Old Model | Old Model | 351 | 24 | 347.29 | 337.29 | 336.58 | 10.00 | 0.20% | 0.475 | 1.95 | 0.18 | 6.65 |
| 4846 | | 1104 | | Old Model | Old Model | 10 | | Old Model | Old Model | 10 | 10 | 348.40 | 336.50 | 336.45 | 11.90 | 0.48% | 0.479 | 3.17 | 0.45 | 0.58 |
| 4867 | | 6315 | | Old Model | Old Model | 6313 | | Old Model | Old Model | 124 | 10 | 407.50 | 397.50 | 393.60 | 10.00 | 3.15% | 0.092 | 3.50 | 0.13 | 2.63 |
| 4887 | South Trunk Sewer | 6599 | | Inv+10 | Record Drawings | 6596 | | Inv+10 | Record Drawings | 273 | 10 | 397.69 | 387.69 | 387.00 | 10.00 | 0.25% | 0.168 | 1.72 | 0.32 | 0.60 |
| 4888 | South Trunk Sewer | 6596 | | Inv+10 | Record Drawings | 6637 | | Inv+10 | Record Drawings | 909 | 10 | 397.00 | 387.00 | 384.68 | 10.00 | 0.26% | 0.168 | 1.76 | 0.32 | 0.61 |
| 4889 | South Trunk Sewer | 6637 | | Inv+10 | Record Drawings | 6643 | | Inv+10 | Record Drawings | 452 | 10 | 394.68 | 384.68 | 383.48 | 10.00 | 0.27% | 0.167 | 1.61 | 0.31 | 0.62 |
| 4890 | South Trunk Sewer | 6643 | | Inv+10 | Record Drawings | 6642 | | Inv+10 | Record Drawings | 235 | 10 | 393.48 | 383.48 | 383.03 | 10.00 | 0.19% | 0.168 | 1.60 | 0.36 | 0.50 |
| 4898 | Goethals Dr Interceptor | 6610 | B-366 | Record Drawings | Record Drawings | 6608 | B-367 | Record Drawings | Record Drawings | 97 | 54 | 354.92 | 334.82 | 334.84 | 20.10 | -0.02% | 4.844 | 1.78 | 0.32 | 14.96 |
| 4899 | Goethals Dr Interceptor | 6602 | B-368 | Record Drawings | Record Drawings | 6697 | B-369 | Record Drawings | Record Drawings | 618 | 54 | 356.46 | 334.57 | 334.30 | 21.89 | 0.04% | 4.864 | 1.97 | 0.29 | 23.91 |
| 4909 | | 2163 | | Old Model | Old Model | 2162 | | Old Model | Old Model | 385 | 21 | 355.55 | 345.55 | 344.83 | 10.00 | 0.19% | 0.476 | 2.06 | 0.23 | 4.32 |
| 4910 | | 2164 | | Old Model | Old Model | 2163 | | Old Model | Old Model | 126 | 21 | 355.71 | 345.71 | 345.55 | 10.00 | 0.13% | 0.295 | 1.23 | 0.19 | 3.66 |
| 4911 | | 2165 | | Old Model | Old Model | 2164 | | Old Model | Old Model | 357 | 21 | 356.62 | 346.62 | 345.71 | 10.00 | 0.25% | 0.295 | 1.63 | 0.16 | 5.31 |
| 4912 | | 2166 | | Old Model | Old Model | 2165 | | Old Model | Old Model | 295 | 21 | 357.36 | 347.36 | 346.62 | 10.00 | 0.25% | 0.295 | 1.88 | 0.16 | 5.26 |
| 4913 | | 2167 | | Old Model | Old Model | 2166 | | Old Model | Old Model | 211 | 21 | 357.99 | 347.99 | 347.36 | 10.00 | 0.30% | 0.295 | 1.93 | 0.15 | 5.77 |
| 4914 | | 2168 | | Old Model | Old Model | 2167 | | Old Model | Old Model | 353 | 21 | 365.78 | 355.78 | 347.99 | 10.00 | 2.21% | 0.295 | 2.75 | 0.09 | 16.19 |
| 4915 | | 2173 | | Old Model | Old Model | 2172 | | Old Model | Old Model | 497 | 21 | 410.39 | 400.39 | 400.32 | 10.00 | 0.01% | 0.296 | 1.00 | 0.29 | 1.02 |
| 4916 | | 2152 | | Old Model | Old Model | 2153 | | Old Model | Old Model | 45 | 12 | 484.56 | 474.56 | 466.93 | 10.00 | 17.01% | 0.182 | 5.57 | 0.09 | 10.18 |
| 4917 | | 2181 | | Old Model | Old Model | 2152 | | Old Model | Old Model | 440 | 12 | 486.78 | 476.78 | 474.56 | 10.00 | 0.50% | 0.182 | 3.11 | 0.25 | 1.59 |
| 4926 | | 4503 | | Asbuilts - Check vs Old Model | Asbuilts | 2149 | | Old Model | Old Model | 294 | 16 | 510.20 | 499.30 | 490.65 | 10.90 | 2.94% | 0.214 | 4.30 | 0.11 | 9.00 |
| 4927 | | 2149 | | Old Model | Old Model | 2146 | | Old Model | Old Model | 307 | 16 | 500.65 | 490.65 | 479.74 | 10.00 | 3.55% | 0.217 | 4.17 | 0.10 | 9.91 |
| 4928 | | 2146 | | Old Model | Old Model | 2144 | | Old Model | Old Model | 194 | 16 | 489.74 | 479.74 | 472.81 | 10.00 | 3.57% | 0.218 | 5.47 | 0.11 | 9.94 |
| 4929 | | 2144 | | Old Model | Old Model | 2143 | | Old Model | Old Model | 198 | 16 | 482.81 | 472.81 | 430.34 | 10.00 | 21.42% | 0.218 | 2.38 | 0.07 | 24.94 |
| 5122 | | 615 | | Old Model | Old Model | 674 | | Old Model | Old Model | 290 | 10 | 481.86 | 474.74 | 473.82 | 7.12 | 0.32% | 0.474 | 2.43 | 0.54 | 0.39 |
| 5123 | | 674 | | Old Model | Old Model | 681 | | Old Model | Old Model | 286 | 10 | 483.82 | 473.82 | 472.95 | 10.00 | 0.30% | 0.492 | 2.40 | 0.55 | 0.36 |
| 5137 | | 650 | | Old Model | Old Model | 649 | | Old Model | Old Model | 149 | 10 | 535.15 | 525.15 | 524.71 | 10.00 | 0.29% | 0.029 | 1.05 | 0.13 | 0.80 |
| 5138 | | 640 | | Old Model | Old Model | 648 | | Old Model | Old Model | 232 | 10 | 533.56 | 523.56 | 522.64 | 10.00 | 0.40% | 0.060 | 1.40 | 0.17 | 0.91 |
| 5139 | | 641 | | Old Model | Old Model | 643 | | Old Model | Old Model | 306 | 10 | 536.77 | 526.77 | 525.95 | 10.00 | 0.27% | 0.024 | 1.01 | 0.12 | 0.77 |
| 5140 | | 652 | | Old Model | Old Model | 651 | | Old Model | Old Model | 404 | 10 | 539.11 | 529.11 | 527.99 | 10.00 | 0.28% | 0.009 | 0.72 | 0.07 | 0.80 |
| 5141 | | 651 | | Old Model | Old Model | 641 | | Old Model | Old Model | 378 | 10 | 537.99 | 527.99 | 526.77 | 10.00 | 0.32% | 0.011 | 0.60 | 0.08 | 0.86 |
| 5142 | | 650 | | Old Model | Old Model | 643 | | Old Model | Old Model | 216 | 10 | 535.95 | 525.95 | 525.15 | 10.00 | 0.37% | 0.028 | 1.12 | 0.12 | 0.91 |
| 5143 | | 644 | | Old Model | Old Model | 717 | | Old Model | Old Model | 329 | 10 | 530.17 | 520.17 | 519.00 | 10.00 | 0.36% | 0.062 | 1.90 | 0.19 | 0.86 |
| 5352 | | 6684 | | Old Model | Old Model | 6725 | | Default to Legacy | Default to Legacy | 140 | 12 | 361.90 | 351.90 | 351.69 | 10.00 | 0.15% | 0.259 | 1.55 | 0.36 | 0.71 |
| 5411 | | 6692 | | Old Model | Old Model | 6694 | | Old Model | Old Model | 118 | 12 | 361.05 | 351.05 | 350.86 | 10.00 | 0.16% | 0.278 | 1.60 | 0.37 | 0.72 |
| 5424 | Goethals Dr Interceptor | 6703 | B-370 | Record Drawings | Record Drawings | 6693 | B-371 | Record Drawings | Record Drawings | 105 | 54 | 357.20 | 333.90 | 333.74 | 23.30 | 0.15% | 5.070 | 2.23 | 0.26 | 48.59 |
| 5425 | Goethals Dr Interceptor | 6693 | B-371 | Record Drawings | Record Drawings | 6669 | B-372 | Record Drawings | Record Drawings | 477 | 54 | 357.44 | 333.74 | 333.47 | 23.70 | 0.06% | 5.070 | 2.11 | 0.28 | 27.69 |
| 5460 | | 2198 | | Asbuilts - Check vs Old Model | Old Model | 2207 | | Old Model | Old Model | 450 | 15 | 552.09 | 535.12 | 532.77 | 16.97 | 0.52% | 0.069 | 1.75 | 0.10 | 3.20 |
| 5462 | | 2175 | | Old Model | Old Model | 2174 | | Old Model | Old Model | 243 | 21 | 411.68 | 401.68 | 401.44 | 10.00 | 0.10% | 0.297 | 1.47 | 0.21 | 3.19 |
| 5463 | | 2176 | | Old Model | Old Model | 2175 | | Old Model | Old Model | 55 | 21 | 437.26 | 427.26 | 401.68 | 10.00 | 46.24% | 0.297 | 2.53 | 0.04 | 79.82 |
| 5464 | | 2177 | | Old Model | Old Model | 2176 | | Old Model | Old Model | 76 | 21 | 440.69 | 427.44 | 427.26 | 13.25 | 0.24% | 0.297 | 2.73 | 0.20 | 5.11 |
| 5465 | | 2185 | | Old Model | Old Model | 2183 | | Old Model | Old Model | 308 | 21 | 440.40 | 428.60 | 428.08 | 11.80 | 0.17% | 0.218 | 1.63 | 0.17 | 4.34 |
| 5467 | | 2187 | | Old Model | Old Model | 2185 | | Old Model | Old Model | 91 | 21 | 438.79 | 428.79 | 428.60 | 10.00 | 0.21% | 0.218 | 1.44 | 0.14 | 4.85 |
| 5470 | | 2196 | | Old Model | Old Model | 2189 | | Old Model | Old Model | 179 | 21 | 439.45 | 429.45 | 429.07 | 10.00 | 0.21% | 0.218 | 1.64 | 0.15 | 4.89 |
| 5471 | | 2182 | | Old Model | Old Model | 2195 | | Old Model | Old Model | 63 | 21 | 439.79 | 429.79 | 429.62 | 10.00 | 0.27% | 0.218 | 1.46 | 0.13 | 5.52 |
| 5535 | | 690 | | Old Model | Old Model | 683 | | Old Model | Old Model | 476 | 10 | 474.83 | 458.77 | 456.19 | 16.06 | 0.54% | 0.610 | 2.97 | 0.52 | 0.52 |



City of Richland - 2015 General Sewer Plan Update

Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|-------------------------|----------------------|-----------|-------------------|-------------------|----------------------|-----------|-------------------|-------------------|-------------|-----------|-----------|-----------|-------------|---------------|--------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 5536 | | 688 | | Default to Legacy | Default to Legacy | 692 | | Old Model | Old Model | 323 | 10 | 476.88 | 467.72 | 466.44 | 9.16 | 0.40% | 0.024 | 0.24 | 0.11 | 0.94 |
| 5538 | | 677 | | Old Model | Old Model | 692 | | Old Model | Old Model | 317 | 10 | 478.13 | 468.13 | 466.44 | 10.00 | 0.53% | 0.509 | 2.55 | 0.47 | 0.61 |
| 5539 | | 744 | | Default to Legacy | Default to Legacy | 677 | | Old Model | Old Model | 153 | 10 | 480.54 | 469.01 | 468.13 | 11.53 | 0.57% | 0.504 | 3.06 | 0.47 | 0.66 |
| 5540 | | 678 | | Old Model | Old Model | 744 | | Default to Legacy | Default to Legacy | 148 | 10 | 480.08 | 470.08 | 469.01 | 10.00 | 0.72% | 0.501 | 3.22 | 0.43 | 0.80 |
| 5541 | | 679 | | Old Model | Old Model | 678 | | Old Model | Old Model | 300 | 10 | 481.53 | 471.53 | 470.08 | 10.00 | 0.48% | 0.497 | 3.08 | 0.50 | 0.57 |
| 5551 | | 669 | | Old Model | Old Model | 739 | | Old Model | Old Model | 139 | 12 | 484.29 | 474.29 | 474.08 | 10.00 | 0.15% | 0.322 | 1.82 | 0.41 | 0.64 |
| 5552 | | 739 | | Old Model | Old Model | 709 | | Old Model | Old Model | 522 | 12 | 489.18 | 474.08 | 473.09 | 15.10 | 0.19% | 0.329 | 1.98 | 0.41 | 0.76 |
| 5563 | | 2154 | | Old Model | Old Model | 2155 | | Old Model | Old Model | 295 | 12 | 452.15 | 442.15 | 401.12 | 10.00 | 13.91% | 0.182 | 6.94 | 0.10 | 9.17 |
| 5564 | | 2174 | | Old Model | Old Model | 2173 | | Old Model | Old Model | 474 | 21 | 411.44 | 401.44 | 400.39 | 10.00 | 0.22% | 0.296 | 1.13 | 0.16 | 4.92 |
| 5565 | | 2169 | | Old Model | Old Model | 2168 | | Old Model | Old Model | 421 | 21 | 401.07 | 391.07 | 355.78 | 10.00 | 8.38% | 0.295 | 5.06 | 0.07 | 31.88 |
| 5566 | | 2172 | | Old Model | Old Model | 2171 | | Old Model | Old Model | 120 | 21 | 410.32 | 400.32 | 400.17 | 10.00 | 0.13% | 0.296 | 1.68 | 0.20 | 3.63 |
| 5567 | | 2171 | | Old Model | Old Model | 2170 | | Old Model | Old Model | 175 | 21 | 410.17 | 400.17 | 399.10 | 10.00 | 0.61% | 0.295 | 3.06 | 0.14 | 8.37 |
| 5568 | | 2170 | | Old Model | Old Model | 2169 | | Old Model | Old Model | 195 | 21 | 409.10 | 399.10 | 391.07 | 10.00 | 4.13% | 0.295 | 5.46 | 0.08 | 22.25 |
| 5569 | | 2160 | | Old Model | Old Model | 2163 | | Old Model | Old Model | 108 | 15 | 357.23 | 347.23 | 345.55 | 10.00 | 1.56% | 0.182 | 1.39 | 0.12 | 5.47 |
| 5570 | | 6301 | | Record Drawings | Record Drawings | 6297 | | Record Drawings | Record Drawings | 481 | 12 | 392.68 | 382.68 | 381.68 | 10.00 | 0.21% | 0.339 | 1.80 | 0.37 | 0.80 |
| 5571 | | 6297 | | Record Drawings | Record Drawings | 6302 | | Record Drawings | Record Drawings | 692 | 12 | 391.68 | 381.68 | 380.28 | 10.00 | 0.20% | 0.338 | 2.08 | 0.42 | 0.78 |
| 5572 | | 6302 | | Record Drawings | Record Drawings | 6303 | | Record Drawings | Record Drawings | 507 | 12 | 390.28 | 380.28 | 377.61 | 10.00 | 0.53% | 0.338 | 1.99 | 0.29 | 1.47 |
| 5573 | | 6305 | C-277 | Record Drawings | Record Drawings | 6304 | C-016 | Old Model | Record Drawings | 79 | 12 | 386.81 | 376.81 | 376.42 | 10.00 | 0.49% | 0.337 | 2.89 | 0.33 | 1.41 |
| 5590 | | 6286 | A-101 | Old Model | Old Model | 6284 | A-102 | Old Model | Old Model | 400 | 12 | 357.50 | 347.50 | 344.90 | 10.00 | 0.65% | 0.031 | 1.53 | 0.09 | 1.98 |
| 5591 | | 6331 | A-100 | Old Model | Old Model | 6286 | A-101 | Old Model | Old Model | 380 | 12 | 358.60 | 348.60 | 347.50 | 10.00 | 0.29% | 0.030 | 1.16 | 0.11 | 1.31 |
| 5592 | | 6392 | A-099 | Old Model | Old Model | 6331 | A-100 | Old Model | Old Model | 400 | 12 | 359.70 | 349.70 | 348.60 | 10.00 | 0.27% | 0.031 | 1.06 | 0.11 | 1.28 |
| 5593 | | 6391 | A-098 | Old Model | Old Model | 6392 | A-099 | Old Model | Old Model | 400 | 12 | 360.90 | 350.90 | 349.70 | 10.00 | 0.30% | 0.032 | 1.12 | 0.11 | 1.34 |
| 5594 | | 6349 | A-097 | Old Model | Old Model | 6391 | A-098 | Old Model | Old Model | 390 | 12 | 365.00 | 355.00 | 350.90 | 10.00 | 1.05% | 0.032 | 1.41 | 0.08 | 2.53 |
| 5595 | | 6358 | A-096 | Old Model | Old Model | 6349 | A-097 | Old Model | Old Model | 270 | 12 | 369.00 | 359.00 | 355.00 | 10.00 | 1.48% | 0.032 | 1.87 | 0.07 | 3.00 |
| 5596 | | 6357 | A-095 | Old Model | Old Model | 6358 | A-096 | Old Model | Old Model | 153 | 12 | 371.70 | 361.70 | 359.00 | 10.00 | 1.76% | 0.032 | 2.03 | 0.07 | 3.28 |
| 5597 | | 6356 | A-094 | Old Model | Old Model | 6357 | A-095 | Old Model | Old Model | 209 | 12 | 372.40 | 362.40 | 361.70 | 10.00 | 0.33% | 0.032 | 1.41 | 0.11 | 1.41 |
| 5598 | | 6355 | A-093 | Old Model | Old Model | 6356 | A-094 | Old Model | Old Model | 260 | 12 | 374.45 | 364.45 | 362.40 | 10.00 | 0.79% | 0.033 | 1.31 | 0.09 | 2.18 |
| 5599 | | 6354 | A-092 | Old Model | Old Model | 6355 | A-093 | Old Model | Old Model | 140 | 12 | 375.71 | 365.71 | 364.45 | 10.00 | 0.90% | 0.033 | 1.64 | 0.08 | 2.34 |
| 5601 | Goethals Dr Interceptor | 6669 | B-372 | Record Drawings | Record Drawings | 6670 | B-373 | Record Drawings | Record Drawings | 373 | 54 | 356.12 | 333.47 | 333.38 | 22.65 | 0.02% | 5.070 | 2.49 | 0.29 | 16.31 |
| 5602 | Goethals Dr Interceptor | 6670 | B-373 | Record Drawings | Record Drawings | 6677 | A-064 | Record Drawings | Record Drawings | 170 | 54 | 356.50 | 333.38 | 332.41 | 23.12 | 0.57% | 5.071 | 1.73 | 0.22 | 98.85 |
| 5603 | Goethals Dr Interceptor | 6677 | A-064 | Record Drawings | Record Drawings | 6577 | A-065 | Record Drawings | Record Drawings | 187 | 54 | 357.71 | 332.41 | 332.81 | 25.30 | -0.21% | 5.070 | 1.39 | 0.44 | 58.57 |
| 5644 | | 1835 | | Old Model | Old Model | 1834 | | Default to Legacy | Default to Legacy | 326 | 10 | 517.31 | 505.56 | 504.74 | 11.75 | 0.25% | 0.013 | 0.86 | 0.10 | 0.76 |
| 5645 | | 1834 | | Default to Legacy | Default to Legacy | 1847 | | Default to Legacy | Default to Legacy | 168 | 10 | 519.79 | 504.74 | 503.51 | 15.05 | 0.73% | 0.016 | 0.97 | 0.08 | 1.29 |
| 5652 | | 2321 | | Default to Legacy | Default to Legacy | 2303 | | Default to Legacy | Default to Legacy | 287 | 10 | 515.41 | 507.26 | 506.47 | 8.15 | 0.28% | 0.036 | 1.18 | 0.15 | 0.77 |
| 5653 | | 2303 | | Default to Legacy | Default to Legacy | 2302 | | Default to Legacy | Default to Legacy | 80 | 10 | 514.77 | 506.47 | 506.15 | 8.30 | 0.40% | 0.036 | 1.28 | 0.13 | 0.93 |
| 5654 | | 2302 | | Default to Legacy | Default to Legacy | 2301 | | Default to Legacy | Default to Legacy | 75 | 10 | 515.26 | 506.15 | 505.84 | 9.11 | 0.41% | 0.036 | 1.33 | 0.13 | 0.95 |
| 5655 | | 2301 | | Default to Legacy | Default to Legacy | 2300 | | Default to Legacy | Default to Legacy | 94 | 10 | 514.19 | 505.84 | 505.34 | 8.35 | 0.53% | 0.039 | 1.41 | 0.13 | 1.08 |
| 5693 | | 4195 | | Old Model | Old Model | 3953 | | Old Model | Old Model | 50 | 12 | 533.69 | 523.69 | 523.69 | 10.00 | 0.00% | 0.118 | 1.29 | 0.30 | -0.01 |
| 5733 | | 4072 | | Old Model | Old Model | 912 | | Default to Legacy | Default to Legacy | 153 | 12 | 511.54 | 503.09 | 496.88 | 8.45 | 4.07% | 0.166 | 4.52 | 0.13 | 4.87 |
| 5792 | | 692 | | Old Model | Old Model | 691 | | Old Model | Old Model | 306 | 10 | 477.36 | 466.44 | 465.07 | 10.92 | 0.45% | 0.604 | 3.64 | 0.63 | 0.42 |
| 5793 | | 691 | | Old Model | Old Model | 690 | | Old Model | Old Model | 202 | 10 | 475.07 | 465.07 | 458.77 | 10.00 | 3.11% | 0.609 | 4.30 | 0.32 | 2.10 |
| 5794 | | 683 | | Old Model | Old Model | 684 | | Old Model | Old Model | 417 | 10 | 466.12 | 456.19 | 454.77 | 9.93 | 0.34% | 0.614 | 2.49 | 0.61 | 0.28 |
| 5795 | | 684 | | Old Model | Old Model | 682 | | Old Model | Old Model | 293 | 12 | 464.77 | 454.77 | 453.55 | 10.00 | 0.42% | 1.085 | 3.46 | 0.64 | 0.53 |
| 5797 | | 717 | | Old Model | Old Model | 716 | | Old Model | Old Model | 289 | 10 | 529.00 | 519.00 | 509.12 | 10.00 | 3.42% | 0.062 | 1.18 | 0.10 | 2.78 |
| 5798 | | 716 | | Old Model | Old Model | 715 | | Old Model | Old Model | 97 | 10 | 519.12 | 509.12 | 509.00 | 10.00 | 0.12% | 0.103 | 1.24 | 0.31 | 0.44 |
| 5799 | | 715 | | Old Model | Old Model | 714 | | Old Model | Old Model | 172 | 10 | 519.00 | 509.00 | 508.40 | 10.00 | 0.35% | 0.103 | 2.23 | 0.26 | 0.80 |
| 5800 | | 714 | | Old Model | Old Model | 711 | | Old Model | Old Model | 164 | 10 | 518.40 | 508.40 | 500.00 | 10.00 | 5.13% | 0.105 | 3.76 | 0.12 | 3.37 |
| 5803 | | 709 | | Old Model | Old Model | 708 | | Old Model | Old Model | 428 | 12 | 483.09 | 473.09 | 472.10 | 10.00 | 0.23% | 0.303 | 1.87 | 0.34 | 0.90 |
| 5804 | | 706 | | Old Model | Old Model | 708 | | Old Model | Old Model | 125 | 10 | 494.25 | 484.25 | 472.10 | 10.00 | 9.69% | 0.131 | 2.46 | 0.11 | 4.66 |
| 5820 | | 708 | | Old Model | Old Model | 720 | | Old Model | Old Model | 232 | 12 | 482.10 | 472.10 | 471.45 | 10.00 | 0.28% | 0.410 | 1.90 | 0.38 | 0.91 |
| 5821 | | 720 | | Old Model | Old Model | 698 | | Old Model | Old Model | 413 | 12 | 481.45 | 471.45 | 470.71 | 10.00 | 0.18% | 0.460 | 2.16 | 0.52 | 0.60 |
| 5824 | | 698 | | Old Model | Old Model | 697 | | Old Model | Old Model | 419 | 12 | 480.71 | 470.71 | 468.76 | 10.00 | 0.47% | 0.467 | 2.17 | 0.36 | 1.24 |
| 5825 | | 697 | | Old Model | Old Model | 696 | | Old Model | Old Model | 284 | 12 | 478.76 | 468.76 | 468.44 | 10.00 | 0.11% | 0.460 | 1.71 | 0.55 | 0.38 |



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Appendix F - Existing Model Results

| Pipe ID | Pipe Descrip. | Upstream Manhole | | | | Downstream Manhole | | | | Length (ft) | Size (in) | Ground Up | Invert Up | Invert Down | Depth Up (ft) | Slope | Max Flow (mgd) | Max Velocity (ft/s) | Max d/D | Reserve Capacity (mgd) |
|---------|---------------|----------------------|-----------|------------|---------------|----------------------|-----------|------------|---------------|-------------|-----------|-----------|-----------|-------------|---------------|-------|----------------|---------------------|---------|------------------------|
| | | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | ID - Hydraulic Model | ID - City | Rim Source | Invert Source | | | | | | | | | | | |
| 5826 | | 696 | | Old Model | Old Model | 695 | | Old Model | Old Model | 69 | 12 | 478.44 | 468.44 | 468.34 | 10.00 | 0.14% | 0.457 | 1.95 | 0.51 | 0.49 |
| 5827 | | 695 | | Old Model | Old Model | 694 | | Old Model | Old Model | 14 | 12 | 478.34 | 468.34 | 468.27 | 10.00 | 0.50% | 0.455 | 2.10 | 0.44 | 1.31 |
| 5828 | | 694 | | Old Model | Old Model | 693 | | Old Model | Old Model | 279 | 12 | 478.27 | 468.27 | 467.42 | 10.00 | 0.30% | 0.460 | 3.06 | 0.45 | 0.92 |
| 5865 | | 349 | | Old Model | Old Model | 343 | | Old Model | Old Model | 130 | 12 | 443.52 | 433.52 | 427.00 | 10.00 | 5.03% | 0.066 | 2.35 | 0.08 | 5.53 |
| 5866 | | 343 | | Old Model | Old Model | 342 | | Old Model | Old Model | 136 | 12 | 437.00 | 427.00 | 416.33 | 10.00 | 7.87% | 0.288 | 6.79 | 0.14 | 6.72 |
| 5867 | | 422 | | Old Model | Old Model | 421 | | Old Model | Old Model | 357 | 21 | 458.02 | 448.02 | 447.31 | 10.00 | 0.20% | 1.777 | 2.67 | 0.41 | 3.19 |
| 5868 | | 421 | | Old Model | Old Model | 418 | | Old Model | Old Model | 285 | 21 | 457.31 | 447.31 | 446.91 | 10.00 | 0.14% | 1.774 | 2.32 | 0.48 | 2.38 |
| 5869 | | 418 | | Old Model | Old Model | 420 | | Old Model | Old Model | 284 | 21 | 471.42 | 446.91 | 446.60 | 24.51 | 0.11% | 1.774 | 2.48 | 0.51 | 1.89 |