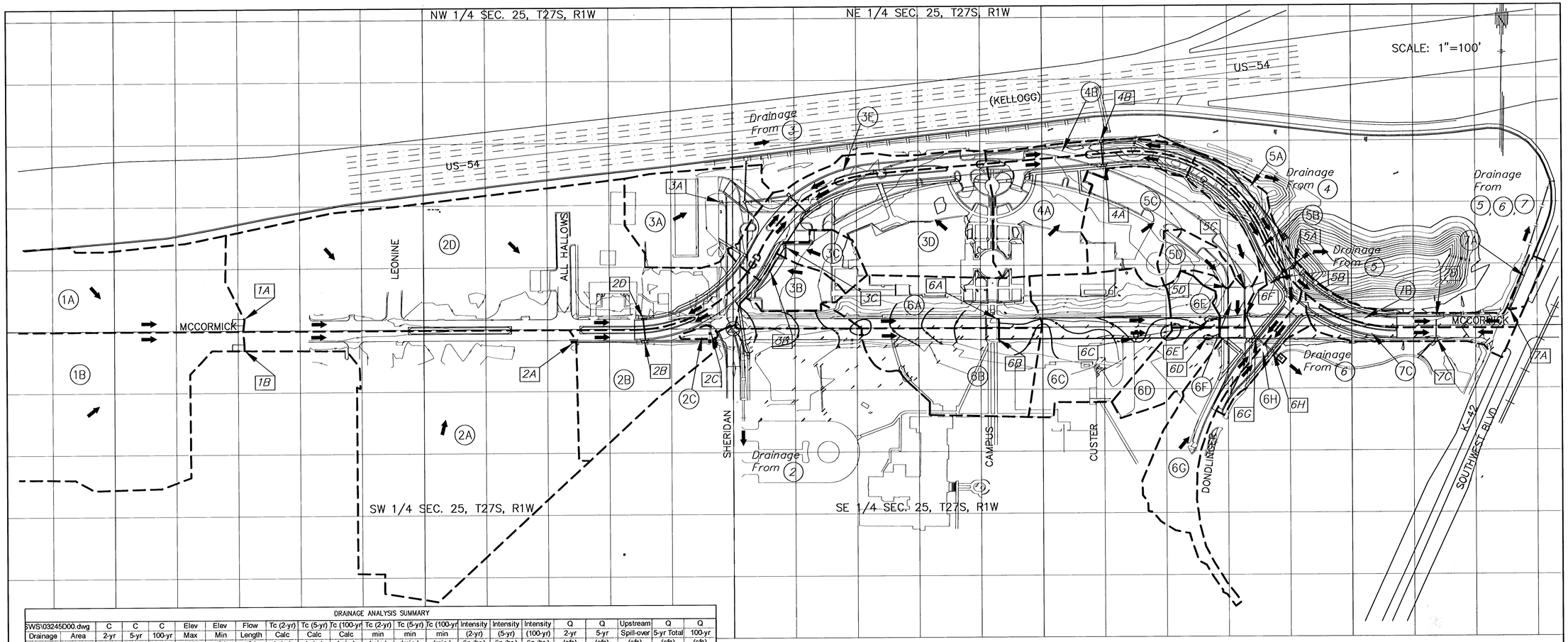


DRAINAGE ANALYSIS SUMMARY

| SWS\03245D00.dwg | | C | C | C | Elev | Elev | Flow | Tc (2-yr) | Tc (5-yr) | Tc (100-yr | Tc (2-yr) | Tc (5-yr) | Tc (100-yr | Intensity | Intensity | Intensity | Q | Q | Upstream | Q | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Drainage Area | Area (ac.) | 2-yr | 5-yr | 100-yr | Max (ft.) | Min (ft.) | Length (ft.) | Calc (min.) | Calc (min.) | Calc (min.) | min (min.) | min (min.) | min (min.) | (2-yr) (in./hr.) | (5-yr) (in./hr.) | (100-yr) (in./hr.) | 2-yr (cfs) | 5-yr (cfs) | Spill-over (cfs) | 5-yr Total (cfs) | 100-yr (cfs) |
| 1A | 3.84 | | 0.69 | 0.8 | 116 | 113.5 | 1230 | | 44 | 32 | | 44 | 32 | | 2.61 | 5.22 | | 6.92 | | 6.92 | 16.04 |
| 1B | 6.56 | | 0.69 | 0.8 | 115.84 | 113.5 | 1170 | | 43 | 32 | | 43 | 32 | | 2.64 | 5.22 | | 11.97 | | 11.97 | 27.44 |
| 2A | 5.42 | | 0.27 | 0.46 | 116 | 111.13 | 995 | | 59.7975 | 46.1089 | | 59 | 46 | | 2.18 | 4.33 | | 3.19021 | 2.43 | 5.62021 | 10.7956 |
| 2B | 1.32 | | 0.33 | 0.53 | 111.9 | 110.49 | 390 | | 38.4205 | 28.4411 | | 38 | 28 | | 2.84 | 5.59 | | 1.2371 | 2.100212 | 3.33732 | 10.93 |
| 2C** | | | | | | | | | | | | | | | | | | | | | |
| 2D | 5.89 | | 0.6 | 0.73 | 113.5 | 110.68 | 1030 | | 44.4807 | 32.9157 | | 44 | 32 | | 2.61 | 5.22 | | 9.22374 | 0 | 9.22374 | 22.4444 |
| 3A | 1.2 | | 0.81 | 0.88 | 115.54 | 111.53 | 450 | | 11.5071 | 8.7295 | | 15 | 15 | | 4.56 | 7.37 | | 4.43232 | | 4.43232 | 7.78272 |
| 3B | 0.36 | | 0.85 | 0.91 | 115 | 112.27 | 250 | | 6.90944 | 5.25118 | | 15 | 15 | | 4.56 | 7.37 | | 1.39536 | | 1.39536 | 2.41441 |
| 3C | 0.31 | | 0.85 | 0.91 | 112 | 109.5 | 200 | | 5.90782 | 4.48994 | | 15 | 15 | | 4.56 | 7.37 | | 1.20156 | | 1.20156 | 2.07908 |
| 3D | 1.93 | | 0.69 | 0.79 | 115.1 | 110.7 | 610 | | 20.324 | 15.3669 | | 20 | 15 | | 4 | 7.37 | | 5.3268 | | 5.3268 | 11.237 |
| 3E | 0.58 | | 0.62 | 0.72 | 113.34 | 110.7 | 435 | | 21.2837 | 16.8496 | | 21 | 16 | | 3.9 | 7.18 | | 1.40244 | | 1.40244 | 2.99837 |
| 4A | 1.32 | | 0.63 | 0.73 | 115.05 | 111.39 | 455 | | 19.4036 | 15.2752 | | 19 | 15 | | 4.1 | 7.37 | | 3.40956 | | 3.40956 | 7.10173 |
| 4B | 0.28 | | 0.81 | 0.87 | 114.1 | 111.39 | 225 | | 7.35928 | 5.83687 | | 15 | 15 | | 4.56 | 7.37 | | 1.03421 | | 1.03421 | 1.79533 |
| 5A | 0.26 | | 0.81 | 0.88 | 114.1 | 110.17 | 320 | | 8.71969 | 6.61494 | | 15 | 15 | | 4.56 | 7.37 | | 0.96034 | | 0.96034 | 1.68826 |
| 5B | 0.26 | | 0.81 | 0.88 | 114.1 | 110.17 | 320 | | 8.71969 | 6.61494 | | 15 | 15 | | 4.56 | 7.37 | | 0.96034 | | 0.96034 | 1.68826 |
| 5C | 1.34 | | 0.62 | 0.72 | 114.88 | 109.72 | 605 | | 22.4091 | 17.7405 | | 22 | 17 | | 3.81 | 6.84 | | 3.17 | | 3.17 | 6.6 |
| 5D | 0.28 | | 0.55 | 0.67 | 114.55 | 109.82 | 315 | | 15.3443 | 11.9964 | | 15 | 15 | | 4.56 | 8.02 | | 0.7 | | 0.7 | 1.51 |
| 6A | 1.02 | 0.32 | | | 114 | 110.88 | 380 | 29.228 | | | 29 | | | 2.72 | | | 0.88781 | | | | |
| 6B | 1.5 | 0.23 | | | 115.19 | 110.88 | 403 | 30.6938 | | | 30 | | | 2.67 | | | 0.92115 | | | | |
| 6C | 1.6 | 0.42 | | | 113 | 109.95 | 245 | 17.8097 | | | 17 | | | 3.61 | | | 2.42592 | | | | |
| 6D | 0.49 | 0.2 | | | 112 | 109.5 | 264 | 26.8043 | | | 26 | | | 2.9 | | | 0.2842 | | | | |
| 6E | 0.23 | 0.23 | | | 114.54 | 109.5 | 143 | 12.3059 | | | 15 | | | 3.83 | | | 0.20261 | | | | |
| 6F | 0.2 | | 0.42 | 0.57 | 114 | 109.4 | 207 | | 13.4953 | 10.5184 | | 15 | 15 | | 4.56 | 7.37 | | 0.38304 | | 0.38304 | 0.84018 |
| 6G | 1.27 | | 0.75 | 0.83 | 112.24 | 108.65 | 630 | | 19.073 | 14.7134 | | 19 | 15 | | 4.1 | 7.37 | | 3.90525 | 0.960336 | 4.86559 | 7.76872 |
| 6H | 0.21 | | 0.81 | 0.88 | 110.89 | 108.65 | 705 | | 20.3109 | 15.4083 | | 20 | 15 | | 4 | 7.37 | | 0.6804 | | 0.68 | 1.36198 |
| 7A | 0.09 | | 0.81 | 0.88 | 113.25 | 111.91 | 130 | | 5.8919 | 4.46972 | | 15 | 15 | | 4.56 | 7.37 | | 0.46 | | 0.46 | 0.82 |
| 7B | 0.39 | | 0.81 | 0.88 | 111.68 | 108.64 | 360 | | 10.4784 | 7.94914 | | 15 | 15 | | 4.56 | 7.37 | | 1.63 | 1.11 | 2.74 | 5.03 |
| 7C | 0.39 | | 0.81 | 0.88 | 110.58 | 108.69 | 330 | | 11.4184 | 8.6622 | | 15 | 15 | | 4.56 | 7.37 | | 1.63 | | 1.63 | 3.03 |

** *Area served by drop inlet considered to be negligible. 2C area is included in area 2B.*

*** *The design allowable width of spread on proposed McCormick is 7.25'. This will provide an 8' corridor between median curb and edge of water. The spread may increase to 14.0' where medians do not exist. The design allowable width of spread on proposed Dondlinger is 11.0'. This will provide two 8' lanes between the edges of water.*

* Sheridan
\# Dondlinger

LEGEND

(1A) DRAINAGE AREA
[1A] INLET I.D. NUMBER
DRAINAGE BASIN BOUNDARY
DRAINAGE DIRECTION

\\lctnas1\vol7\Civil\03245\DWG\SWS\03245D00.dwg 08/05/2005 11:36:00 AM CST

MKEC ENGINEERING CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

**McCORMICK AVENUE STREET IMPROVEMENTS**
PROJECT NAME

**McCORMICK - SPECIAL DRAINAGE PLAN**
SHEET TITLE

| LAC | DPG | JRA |
|---|---|---|
| DESIGN BY: | DRAWN BY: | CHECKED BY: |
| AUGUST 2005 | 03245 | 69 / 111 |
| DATE | JOB NO. | SHEET/OF |