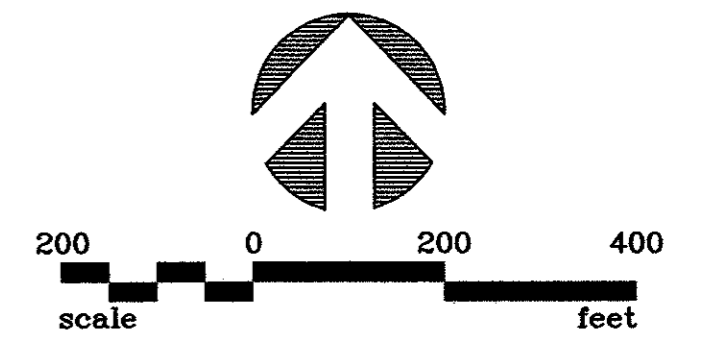


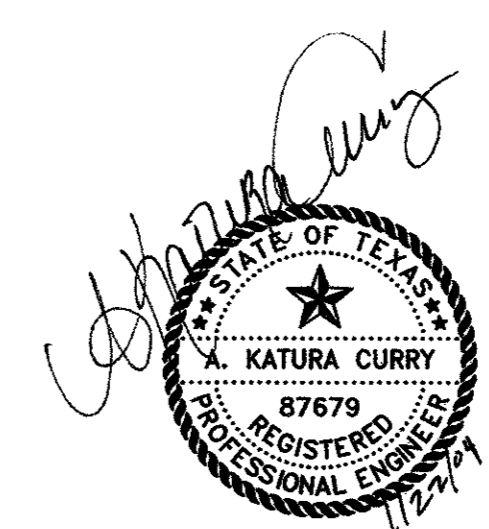
- LEGEND:**
- DRAINAGE DIVIDE
 - EXISTING STORM SEWER SYSTEM
 - PROPOSED STORM SEWER SYSTEM
 - DRAINAGE AREA
 - ACRES
 - Q₁₀₀



DRAINAGE AREA CALCULATIONS

| DRAINAGE AREA NO. | AREA (ACRES) | C | Tc (MINUTES) | I 100 YR (IN/HR) | Q (cfs) (100-YR) | INTERCEPTED BY |
|-------------------|--------------|------|--------------|------------------|------------------|------------------|
| 6 | 0.51 | 0.70 | 10.00 | 8.74 | 3.1 | I-0+06.58, A-A1 |
| 8 | 9.41 | 0.70 | 12.00 | 8.25 | 54.3 | J-1+23.37B |
| 8B | 0.44 | 0.90 | 10.00 | 8.74 | 3.5 | I-0+06.29, LAT1 |
| 8C | 0.52 | 0.90 | 10.00 | 8.74 | 4.1 | I-0+12.70, LAT2 |
| 9 | 2.39 | 0.70 | 10.00 | 8.74 | 14.6 | IEX D2 |
| 9A | 0.41 | 0.70 | 10.00 | 8.74 | 2.5 | I-1+33.87, A-A |
| 10A | 0.15 | 0.50 | 10.00 | 8.74 | 0.7 | I-0+39.04, B-1 |
| 10B | 0.28 | 0.90 | 10.00 | 8.74 | 2.2 | I-3+66.25B |
| 11A | 2.02 | 0.90 | 10.00 | 8.74 | 15.9 | I-A2-A |
| 11A-1 | 0.23 | 0.90 | 10.00 | 8.74 | 1.8 | I-0+13.33, A-2 |
| 11B-1 | 0.32 | 0.90 | 10.00 | 8.74 | 2.5 | I-0+26.48, A-1A |
| 11C | 4.34 | 0.90 | 10.00 | 8.74 | 34.1 | I-0+64.55, A-1 |
| 11D | 0.13 | 0.90 | 10.00 | 8.74 | 1.0 | I-0+12.54, A1-C |
| 11E | 0.35 | 0.70 | 10.00 | 8.74 | 2.1 | I-0+59.28, A1-B |
| 13 | 1.49 | 0.50 | 10.00 | 8.74 | 6.5 | I-0+34.57, B-7 |
| 12, 13A | 72.92 | 0.65 | 20.00 | 6.80 | 322.3 | I-1+12.12, B-2 |
| 13C | 0.35 | 0.90 | 10.00 | 8.74 | 2.8 | I-0+16.98, B-5 |
| 14 | 0.16 | 0.90 | 10.00 | 8.74 | 1.3 | I-0+01.92, B-3 |
| 14A | 0.08 | 0.90 | 10.00 | 8.74 | 0.6 | I-0+24.63, B-4A |
| 14B | 0.31 | 0.90 | 10.00 | 8.74 | 2.4 | I-0+12.89, A-3 |
| 15 | 0.11 | 0.90 | 10.00 | 8.74 | 0.9 | I-0+07.24, A-4A |
| 15A | 0.30 | 0.90 | 10.00 | 8.74 | 2.4 | I-0+13.47, A-5 |
| 15B | 0.33 | 0.90 | 10.00 | 8.74 | 2.6 | I-0+23.79, A-5C |
| 16 | 17.61 | 0.80 | 15.00 | 7.52 | 105.9 | I-0+18.76, A-4 |
| 17A | 2.99 | 0.50 | 10.00 | 8.74 | 13.1 | I-0+20, B-8 |
| 17B | 0.66 | 0.90 | 10.00 | 8.74 | 4.4 | I-0+27.73, A-5B |
| 19, 21B | 166.50 | 0.58 | 39.50 | 5.03 | 485.7 | I-24+10.26B |
| 21A | 4.39 | 0.90 | 10.00 | 8.74 | 34.5 | I-MID SOUTH 30 |
| 21C | 6.17 | 0.80 | 10.00 | 8.74 | 43.1 | I-0+24.76, A-6 |
| 22 | 0.29 | 0.90 | 10.00 | 8.74 | 2.3 | I-0+05, A-8A |
| 22B | 0.45 | 0.90 | 10.00 | 8.74 | 3.5 | I-0+56.67, A-8 |
| 23 | 1.50 | 0.70 | 10.00 | 8.74 | 9.2 | I-0+68.85, A-7 |
| 25 | 1.28 | 0.70 | 10.00 | 8.74 | 7.8 | I-0+58.52, A-10 |
| 26A | 0.24 | 0.90 | 10.00 | 8.74 | 1.9 | I-0+8.86, A-12 |
| 26B | 0.30 | 0.90 | 10.00 | 8.74 | 2.4 | I-0+16.79, A-10A |
| 27A | 0.51 | 0.90 | 10.00 | 8.74 | 4.0 | I-1+56.20, C-7 |
| 27C | 0.23 | 0.90 | 10.00 | 8.74 | 1.8 | I-0+30.27, C-9 |
| 27E | 0.20 | 0.30 | 15.00 | 7.52 | 0.5 | I-0+88.00, C-8 |
| 28A | 0.33 | 0.30 | 15.00 | 7.52 | 0.7 | I-0+13.86, C-3C |
| 28B | 0.30 | 0.30 | 15.00 | 7.52 | 0.7 | I-0+13.86, C-5 |
| 28C | 0.37 | 0.90 | 10.00 | 8.74 | 2.9 | I-8+33.85C |
| 28D | 0.15 | 0.90 | 10.00 | 8.74 | 1.2 | I-0+60.04, C-4 |
| 28E | 0.34 | 0.30 | 15.00 | 7.52 | 0.8 | I-0+90.00, C-6 |
| 29B | 10.95 | 0.50 | 10.00 | 8.74 | 47.9 | I-LATA11 |
| B1 | 0.26 | 0.30 | 10.00 | 8.74 | 0.7 | I-1+09.49, A-13 |
| B2 | 0.32 | 0.70 | 10.00 | 8.74 | 2.0 | I-0+80.04, C-3B |
| B4 | 0.72 | 0.70 | 10.00 | 8.74 | 4.4 | I-0+80.04, C-2 |
| B5 | 9.16 | 0.50 | 12.00 | 8.25 | 37.8 | I-0+10, A-14 |
| B6 | 6.54 | 0.50 | 12.00 | 8.25 | 27.0 | I-45+05.00A |
| B7 | 28.80 | 0.65 | 18.90 | 6.96 | 130.3 | I-2+43.50D |
| B8 | 30.31 | 0.65 | 15.00 | 7.52 | 148.2 | I-44+71.86A |
| B11 | 0.67 | 0.30 | 15.00 | 7.52 | 1.5 | I-0+13.86, C-3 |
| B12 | 1.75 | 0.30 | 15.00 | 7.52 | 3.9 | I-0+04.55, D-1 |
| BRIDGE | 0.49 | 0.90 | 10.00 | 8.74 | 3.9 | I-0+03.19, B-7A |
| BRIDGE | 0.49 | 0.90 | 10.00 | 8.74 | 3.9 | I-0+05.46, A-5A |
| BRIDGE | 0.34 | 0.90 | 10.00 | 8.74 | 2.7 | I-0+29.44, A-6A |
| BRIDGE | 0.34 | 0.90 | 10.00 | 8.74 | 2.7 | I-0+06.41, A-6B |

MATCH LINE STA. 59+00



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY: A. KATURA CURRY ON 7-21-04. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

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|---|------------|---------|--|-----------|----------|
| DATE: | MAY 2004 | SCALE: | 1"=200' | JOB NO.: | 02-320 |
| DRAWN: | G&A | DESIGN: | AKC | REVIEWED: | BRG |
| DWG: | 320DRNAREA | | | | |
| ARAPAHO ROAD PHASE III | | | | | |
| DRAINAGE AREA MAP - SHEET 1 | | | | | |
| TOWN OF ADDISON | | | | | |
| | | | Grantham & Associates, Inc. | | SHT. D-1 |
| 1919 S. SHILOH ROAD, SUITE 310, L.B. 8 GARLAND, TEXAS 75042 | | | (972) 864-2333 (TEL) (972) 864-2334 (FAX) | | |