



STORM SEWER HYDRAULICS
THE STERLING COMPANY
153R-ADMIN-DESIGN

Job Name: AVONDALE SPRING
Prepared by: JCH
Job No: 0101012
Checked by: JCH
Street No: 1
Date: 10/17/01
Revised: 02/25/02

| Upper Str. No. | Lower Str. No. | Len. | Q | Total | Ripe Const. | V | Vh | Q x Vh | Hyd. Grade | Flow Line | Top of Structure | Free | Hydraulic | Frict. | Curve | Junc. | Entn. | Turn | Capacity | Normal | | | | |
|----------------|----------------|------|--------|--------|-------------|-----|-------|--------|------------|-----------|------------------|--------|-----------|--------|-------|--------|--------|-----------|----------|--------|------|------|------|------|
| Type | Type | ft. | c.f.s. | c.f.s. | ft. | ft. | ft. | ft. | ft. | ft. | Elevation | Upper | Lower | Loss | Loss | Loss | Loss | (5 a) Ft. | C.F.S. | Depth | | | | |
| T | 11 | 10 | 41.1 | 4.83 | 4.83 | 12 | 6.012 | 6.15 | 0.59 | 2.84 | 1.843 | 494.55 | 492.08 | 498.66 | 3.58 | 495.08 | 493.30 | 0.76 | | 0.59 | 8.73 | 0.55 | D.53 | |
| T | 12 | 9 | 34.5 | 0.97 | 0.97 | 15 | 1.012 | 0.90 | 0.00 | 0.00 | 0.008 | 508.09 | 507.74 | 512.59 | 3.60 | 508.99 | 508.99 | 0.00 | | 0.04 | 0.00 | 6.91 | 0.06 | D.20 |
| CI | 7 | 7 | 53.6 | 1.35 | 1.78 | 15 | 1.012 | 1.40 | 0.03 | 0.05 | 0.073 | 507.54 | 507.00 | 512.39 | 3.60 | 508.17 | 508.13 | 0.04 | | 45 | 0.20 | 6.48 | 0.27 | D.44 |
| T | 8 | 7 | 91.8 | 3.48 | 3.48 | 12 | 1.002 | 4.43 | 0.30 | 1.06 | 0.953 | 507.92 | 507.00 | 512.11 | 3.60 | 509.07 | 508.19 | 0.88 | | 0.19 | 0.30 | 80 | 0.25 | 3.97 |
| CI | 6 | 6 | 34.5 | 0.53 | 0.73 | 15 | 1.162 | 4.67 | 0.34 | 1.34 | 0.75 | 506.80 | 506.40 | 512.11 | 3.38 | 507.98 | 507.65 | 0.33 | | 0.03 | | 6.96 | 0.82 | D.96 |
| CI | 5 | 4 | 38.5 | 1.02 | 1.02 | 15 | 1.002 | 4.97 | 0.38 | 2.34 | 0.895 | 506.20 | 505.79 | 512.11 | 3.46 | 507.43 | 507.04 | 0.37 | | 45 | 0.18 | 6.44 | 0.95 | D.96 |
| MH | 4 | 3 | 18.8 | 0.38 | 0.38 | 15 | 1.012 | 4.97 | 0.38 | 2.34 | 0.895 | 505.59 | 500.20 | 511.00 | 3.96 | 506.43 | 501.45 | 3.43 | | 80 | 0.25 | 7.64 | 0.80 | D.84 |
| CI | 3 | 2 | 34.5 | 0.64 | 0.64 | 18 | 1.132 | 4.78 | 0.38 | 3.32 | 0.693 | 499.61 | 498.80 | 504.34 | 3.68 | 501.23 | 501.06 | 0.17 | | 10 | 0.06 | 6.49 | 0.94 | D.95 |
| CI | 2 | 1 | 92.1 | 2.64 | 2.64 | 18 | 1.002 | 6.09 | 0.58 | 6.21 | 1.052 | 496.42 | 495.50 | 504.34 | 3.64 | 497.97 | 497.00 | 0.97 | | 11.45 | 0.76 | 0.98 | | |
| CI | 1 | 1 | 1.0 | 0.00 | 0.00 | 18 | 1.002 | 6.09 | 0.58 | 6.21 | 1.052 | 496.42 | 495.50 | 504.34 | 3.64 | 497.97 | 497.00 | 0.97 | | 10.90 | 1.03 | 1.26 | | |

NOTE: AI=Area Inlet, MH=Manhole, T=Terminal Structure, CI=Curb Inlet, DCI=Double Curb Inlet, SCI=Skewed Curb Inlet, TP=Tangent Point, EP=End of Pipe, DS=Outfall Structure
n=0.013 For RCP, n=0.014 For CMP, For Drainage Areas, P, I, & Bypass, See Drainage Area Map.

PROJECT: AVONDALE SPRING

DRAWN: GS

DESIGNED: JM

CHECKED: DM

NO. 01 01 012

M.S.D. SHEET 5

DATE: 10/17/01

REVISION: 02/25/02

PREPARED FOR: GOLDKAP III, L.L.C.
401 NORTH LINDBERGH BOULEVARD
ST. LOUIS, MO. 63141
(314) 432-3088

ISSUE REMARKS/DATE

| | | |
|---|----------|---------------------------|
| 1 | 10-19-01 | FIRST SUBMITTAL |
| 2 | 11-26-01 | CITY COMMENTS |
| 3 | 11-28-01 | DCSD COMMENTS |
| 4 | 12-12-01 | DCSD COMMENTS & ADDRESSES |
| 5 | 01-22-01 | CITY COMMENTS |

BASE MAP