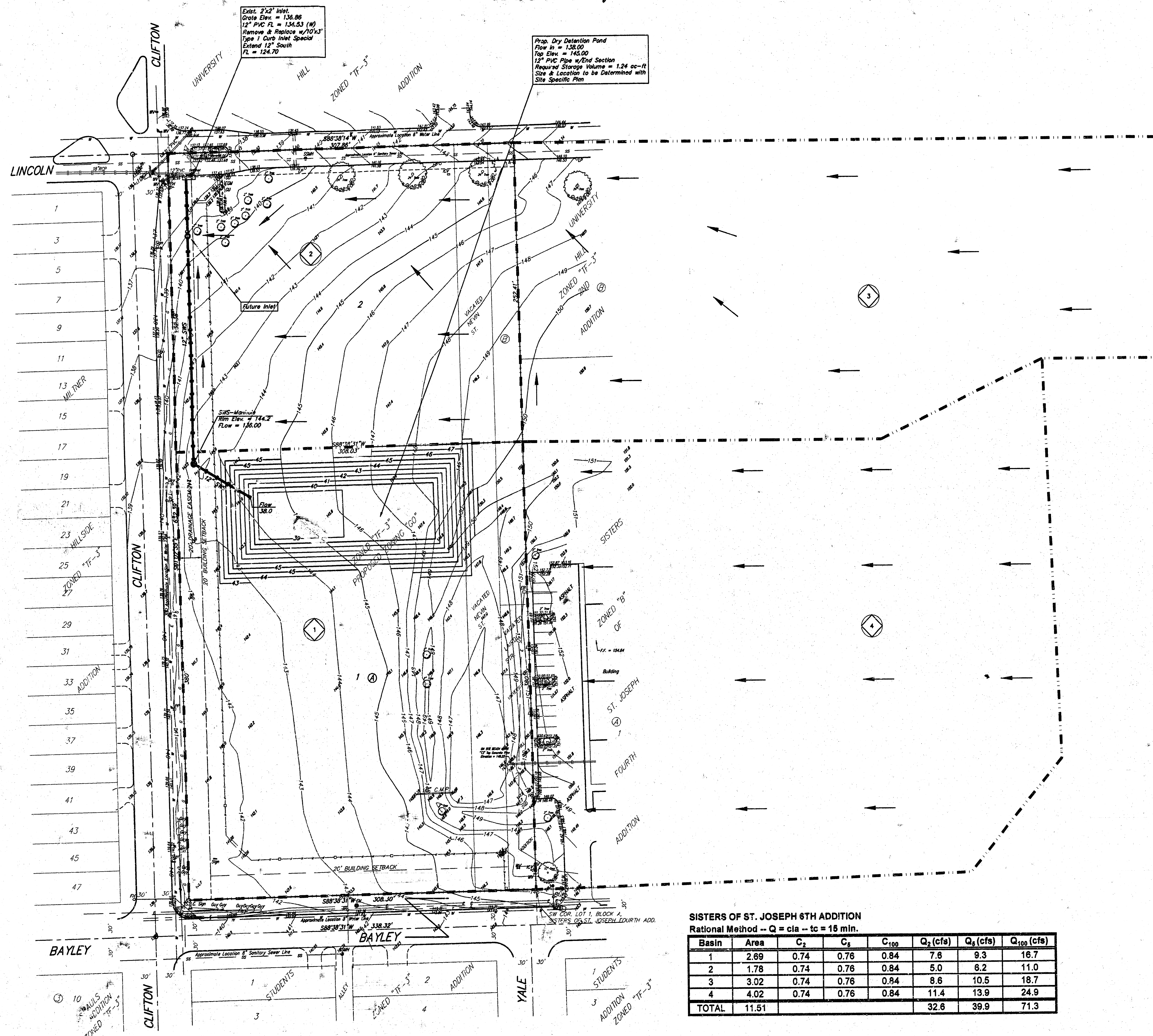


DRAINAGE PLAN SISTERS OF ST. JOSEPH 6TH ADDITION WICHITA, SEDGWICK COUNTY, KANSAS

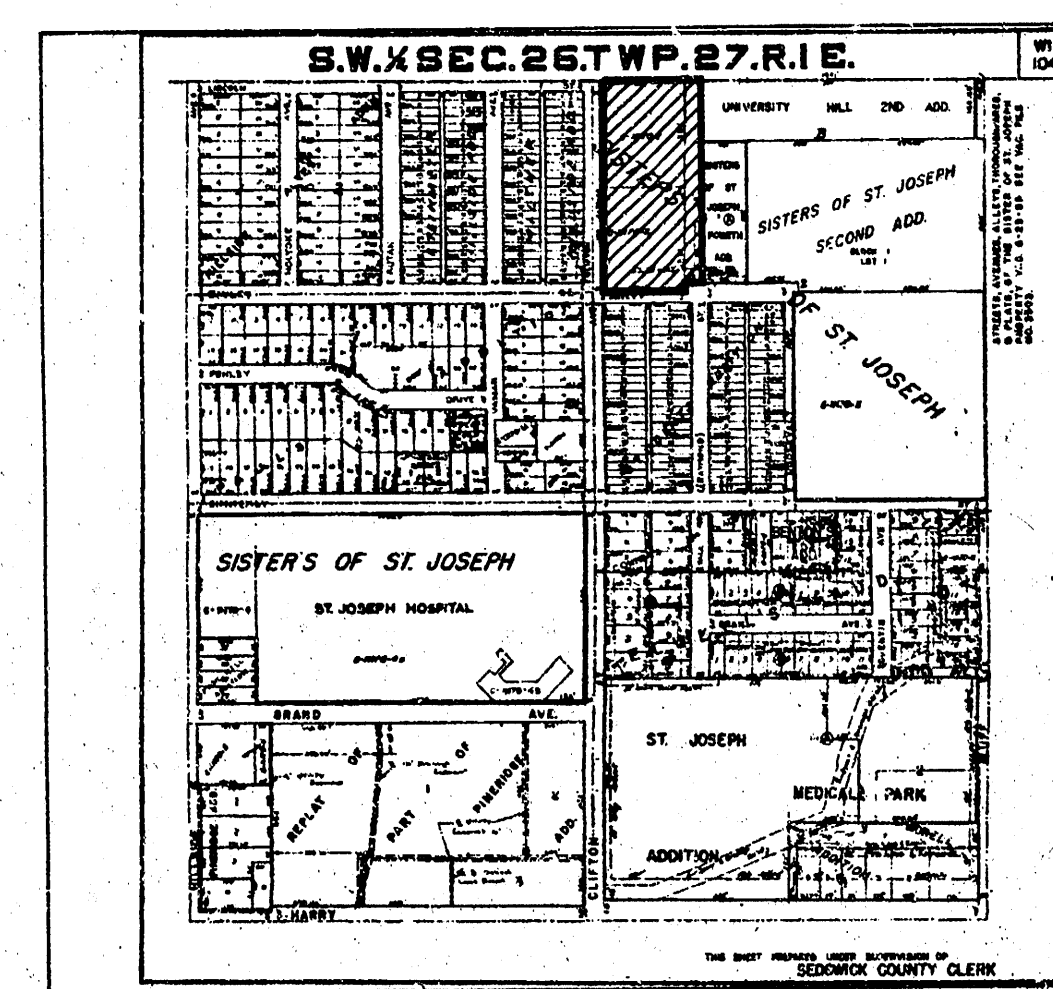


DATE OF PREPARATION: 15 MARCH 2004
DATE OF TOPOGRAPHY: 28 FEBRUARY 2004
CONTOUR INTERVALS = 1 FOOT

OWNER/DEVELOPER:
The Sisters of St. Joseph of Wichita, Kansas
3700 E. Lincoln
Wichita, KS 67218

BENCHMARK:
City of Wichita benchmark disc - NW corner of intersection
of Harry and Bluffview on base of traffic signal pole.
9.50' North of north curb
42.50' North of centerline of Harry
46.50' West of centerline of Bluffview
Elev. = 152.22 City Datum
1336.62 NGVD29

- EB = Electric Box
 - GV = Gas Valve
 - PH = Fire Hydrant
 - LP = Light Pole
 - HP = High Line Pole
 - PP = Power Pole
 - ICV = Irrigation Control Valve - Valve Box
 - GP = Guy Pole
 - WM = Water Meter
 - WV = Water Valve
 - Sign = Sign
 - TP = Telephone Pole
 - Guy = Guy Anchor
 - EV = Electric Vault
 - EM = E.G.B. E. Manhole
 - SSMH = Sanitary Sewer Manhole
 - SK = Security Keypad
 - GU = Guard Post (Ballard)
 - EGM = Electric Gate Motor
- = #1 REBAR W/ "BAUGHMAN" CAP (SET)
O = 3/4" IRON FOUND
- (U) = MEASURED
(D) = DESCRIBED
(P) = PLATTED
(C) = CALCULATED



VICINITY MAP

DRAINAGE NOTE:
The proposed dry detention pond has been sized for the entire 11.5 acre drainage basin. The SCS runoff method was used to calculate the peak flow and runoff volume for both existing and developed conditions. The minimum time of concentration of fifteen minutes was used for both conditions. The results are as follows:

Existing Conditions --
CN = 80
Q5 = 34 cfs
Q100 = 75 cfs
Total Vol. = 3,624 ac-ft

Developed Conditions --
CN = 91
Q5 = 46 cfs
Q100 = 87 cfs
Total Vol. = 4,751 ac-ft

LEGEND:

BASIN DELINEATION

BASIN I.D.

PROP. FLOW DIRECTION

SISTERS OF ST. JOSEPH 6TH ADDITION
Rational Method -- Q = cfs -- tc = 15 min.

Basin	Area	C _s	C ₁₀₀	Q ₂ (cfs)	Q ₅ (cfs)	Q ₁₀₀ (cfs)
1	2.69	0.74	0.76	0.84	7.6	9.3
2	1.78	0.74	0.76	0.84	5.0	6.2
3	3.02	0.74	0.76	0.84	8.6	10.5
4	4.02	0.74	0.76	0.84	11.4	13.9
TOTAL	11.51				32.6	39.9