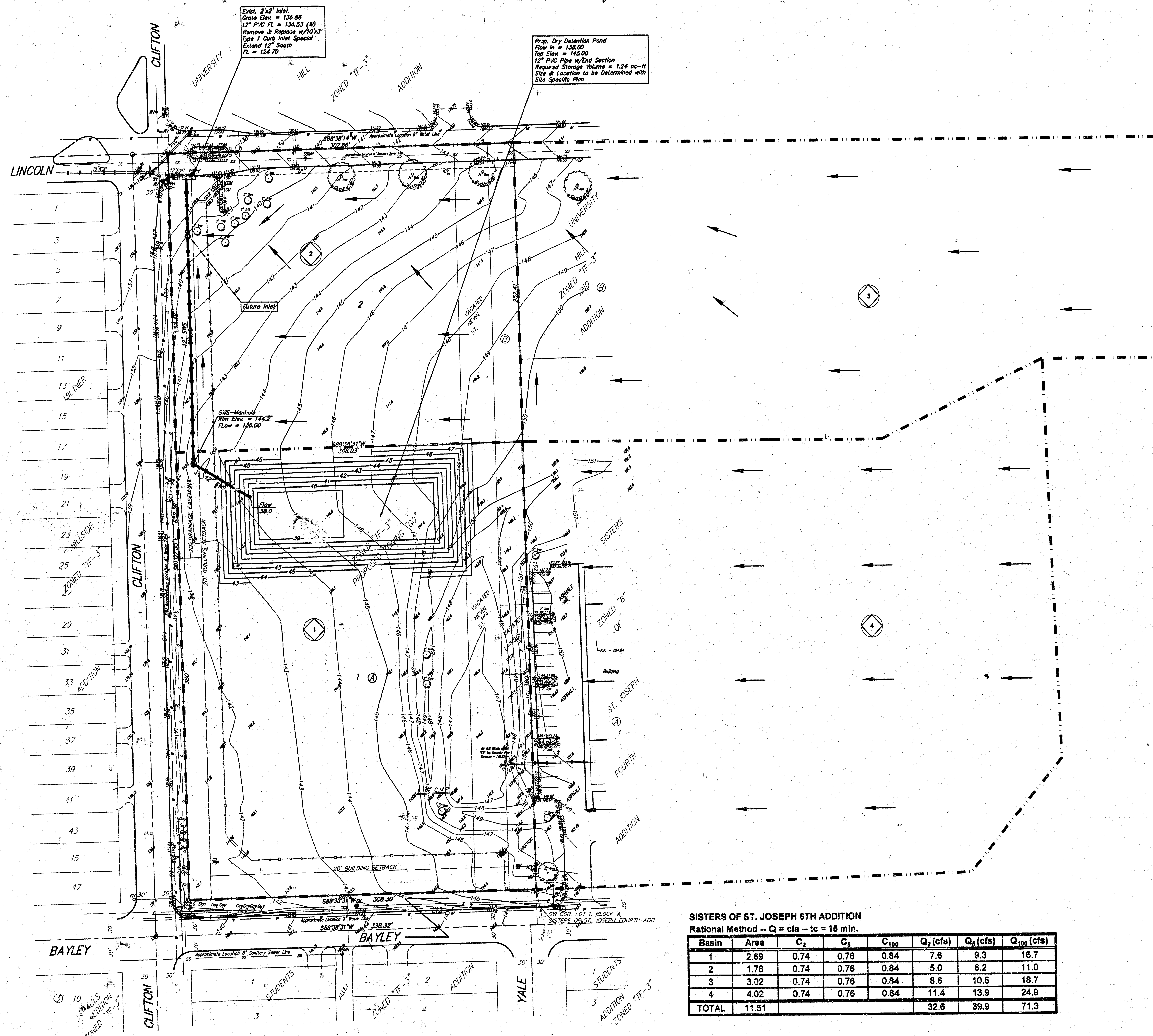


DRAINAGE PLAN SISTERS OF ST. JOSEPH 6TH ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



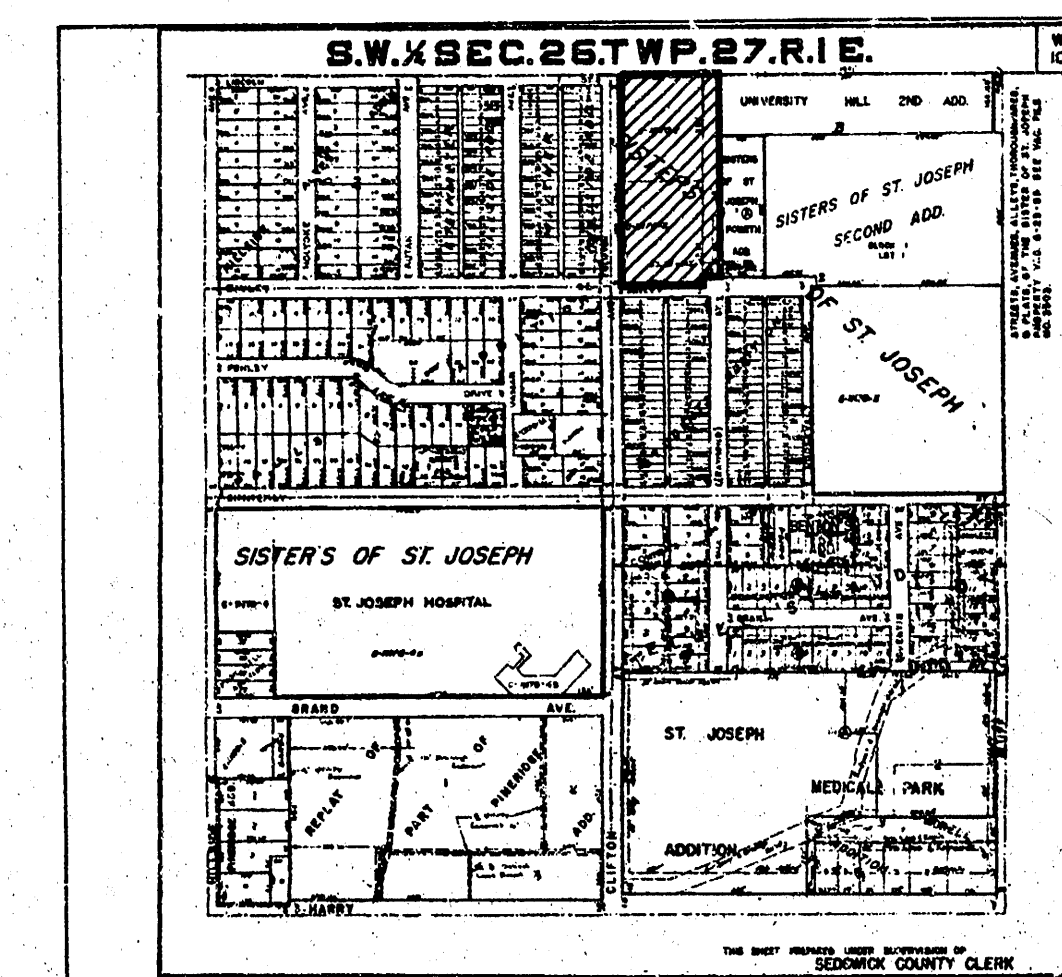
0 40 80
DATE OF PREPARATION: 15 MARCH 2004
DATE OF TOPOGRAPHY: 28 FEBRUARY 2004
CONTOUR INTERVALS = 1 FOOT

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
1338.62 NGVD29

• = #1 REBAR W/ "BAUGHMAN" CAP (SET)
O = 3/4" IRON (FOUND)
(M) = MEASURED
(D) = DESCRIBED
(P) = PLATTED
(C) = CALCULATED

EB = Electric Box
GV = Gas Valve
FH = Fire Hydrant
LP = Light Pole
HLP = 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



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 = CIA -- tc = 15 min.

Basin	Area	C ₂	C ₅	C ₁₀₀	Q ₂ (cfs)	Q ₅ (cfs)	Q ₁₀₀ (cfs)
1	2.69	0.74	0.76	0.84	7.6	9.3	16.7
2	1.78	0.74	0.76	0.84	5.0	6.2	11.0
3	3.02	0.74	0.76	0.84	8.6	10.5	18.7
4	4.02	0.74	0.76	0.84	11.4	13.9	24.9
TOTAL	11.51				32.6	39.9	71.3