

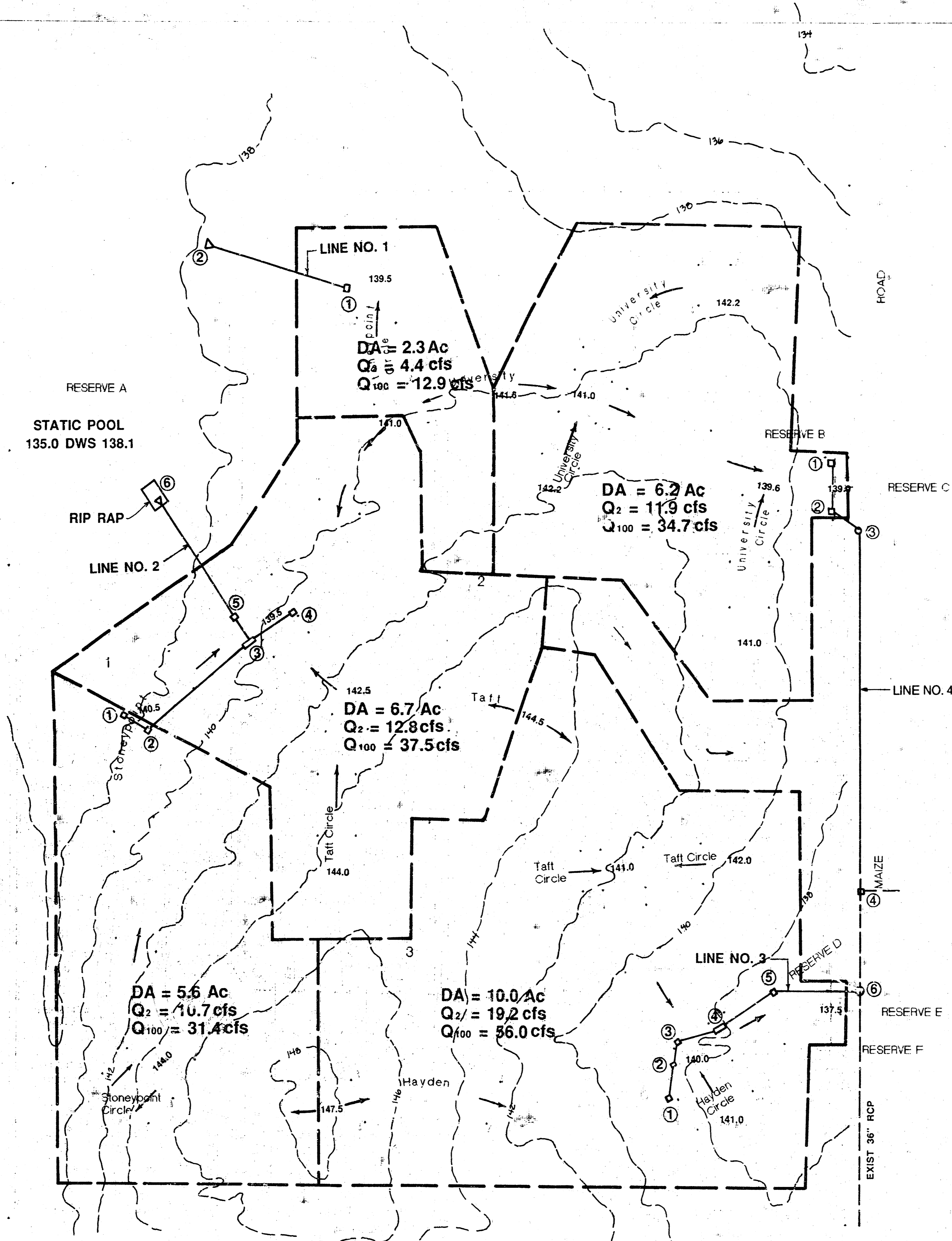
LOT GRADING PLAN LEXINGTON ADDITION

Date: December 9, 1992

Scale 1 = 80'

**APPROVED
DRAINAGE PLAN**

Poe and Associates of Kansas, Inc.
Consulting Engineers



LINE NO. 2

NO.	Q ₂	PIPE SIZE	PIPE CAPACITY	PIPE VELOCITY	Q ₁₀₀ BYPASS	STRUCTURE
1						INLET
2	4.5	15"	4.5			INLET
3	9.0	24"	15.0			DBL INLET
4/3	4.0	15"	4.5			INLET
5	20.5	30"	28.0			INLET
6	23.5	30"	28.0	5.7 FPS	40.9'	END SEC.

*CONSTR. "V" SWALE @ 0.4%, 7.5:1 SIDES, DEPTH 1.5'
 n=.030 Q=40.9 CFS V=2.53 fps
 USE RIP RAP AT STORM SEWER OUTLET

LINE NO. 1

NO.	Q ₂	PIPE SIZE	PIPE CAPACITY	PIPE VELOCITY	Q ₁₀₀ BYPASS	STRUCTURE
1	4.4	18"	8.0	4.5	4.9'	INLET
2						END SEC.

*CONSTR. "V" SWALE @ .4%, 6.5:1 SIDES, DEPTH .7'
 n=.030 Q=4.9 CFS V = 1.54 fps

LINE NO. 3

NO.	Q ₂	PIPE SIZE	PIPE CAPACITY	PIPE VELOCITY	Q ₁₀₀ BYPASS	STRUCTURE
1	3.0	15"	4.5			INLET
2	7.0	24"	15.0			INLET
3	11.0	24"	15.0			INLET
4	15.0	36"	46.0			DBL INLET
5	19.2	36"	46.0	2.7 fps	10.0	INLET
6						MANHOLE

LINE NO. 4

NO.	Q ₂	PIPE SIZE	PIPE CAPACITY	PIPE VELOCITY	Q ₁₀₀ BYPASS	STRUCTURE
1	4.7	15"	4.7			INLET
2	9.4	18"	9.4			INLET
3	9.4	18"	9.4	5.2 FPS	25.3	MANHOLE
4					(NORTH)	EXIST. INLET

RATIONAL FORMULA FACTORS
 T_c = 15 MIN. C₂ = .5
 I₂ = 3.83 C₁₀₀ = .76
 I₁₀₀ = 7.37

Scale 1" = 100'

DRAINAGE PLAN REVISED NOVEMBER 10, 1992
LEXINGTON
 AN ADDITION TO WICHITA, KANSAS