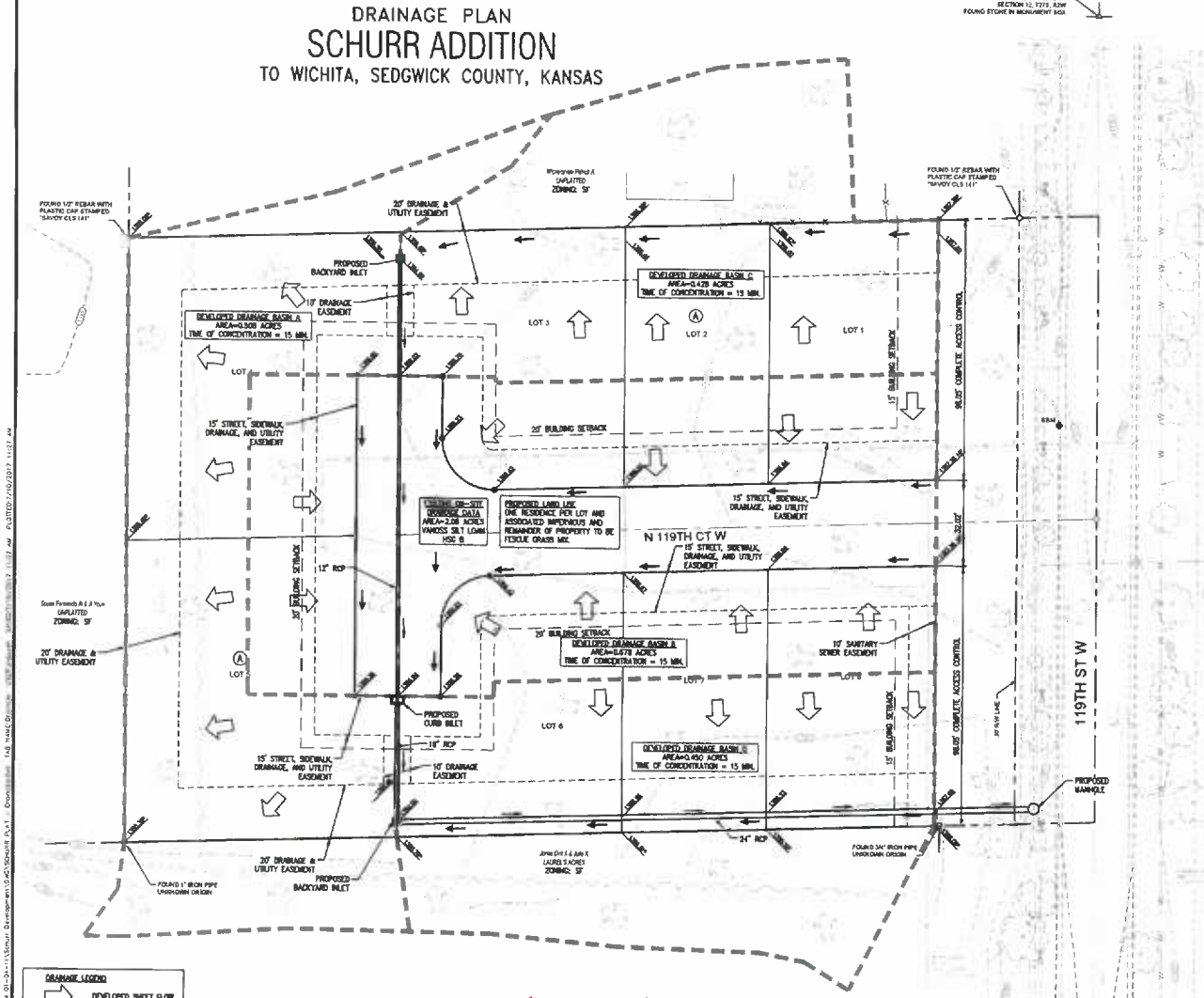
DRAINAGE PLAN
SCHURR ADDITION
TO WICHITA, SEDGWICK COUNTY, KANSAS



LEGAL DESCRIPTION:

PARCEL 1:
THE WEST 167.5 FEET OF THE FOLLOWING DESCRIBED TRACT: BEGINNING 130 FEET SOUTH OF THE NORTHEAST CORNER OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 27 SOUTH, RANGE 2 WEST OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS; THENCE WEST 335 FEET; THENCE SOUTH 130 FEET; THENCE EAST 335 FEET; THENCE NORTH 130 FEET TO THE POINT OF BEGINNING.

PARCEL 2:
BEGINNING AT A POINT 260 FEET SOUTH OF THE NORTHEAST CORNER OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 27 SOUTH, RANGE 2 WEST OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS THENCE WEST 335 FEET; THENCE SOUTH 97.5; THENCE EAST 335 FEET; THENCE NORTH 97.5 FEET TO THE POINT OF BEGINNING.

PARCEL 3:
BEGINNING 130 FEET SOUTH OF THE NORTHEAST CORNER OF THE SOUTH HALF OF NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 27 SOUTH, RANGE 2 WEST OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS; THENCE WEST 167.5; THENCE SOUTH 130 FEET; THENCE EAST 167.5 FEET; THENCE NORTH 130 FEET TO THE POINT OF BEGINNING.

PARCEL 4:
THE WEST 28.18 FEET OF THE EAST 383.18 FEET OF THE SOUTH 227.5 FEET OF THE NORTH 357.5 FEET OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 27 SOUTH, RANGE 2 WEST OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS.

GRAPHIC SCALE
20' 0 20'
(IN FEET)
1"=20'

LEGEND

△	SECTION SUBDIVISION CORNER FOUND		CLEANOUT
○	SURVEY MONUMENT FOUND		STORM WATER SEWER MANHOLE
●	SET 1/2" REBAR WITH CAP STAMPED "ALPHA CLS-184"		WATER METER
	POWER POLE		WATER VALVE
	TELEGRAPH POLE		FIRE HYDRANT
	AREA LIGHT		MONITOR WELL
	LIGHT POLE		SPRINKLER HEAD
	GUY ANCHOR		GUARD POST
	HANDICAP PARKING	— OHP —	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC BOX	— UGE —	UNDERGROUND ELECTRIC
	UNDERGROUND TELEPHONE PEDESTAL	— T —	UNDERGROUND TELEPHONE
	UNDERGROUND CABLE TELEVISION PEDESTAL	— G —	GAS LINE
	TREE / SHRUB	— TV —	UNDERGROUND TELEVISION CABLE
	GAS METER	— S —	SANITARY SEWER LINE
	MANHOLE	— W —	WATER LINE
	SANITARY SEWER MANHOLE	— X —	FENCE

N.	NORTH	R/W	RIGHT OF WAY
S.	SOUTH	C/L	CENTERLINE
E.	EAST	RCP	REINFORCED CONCRETE PIPE
W.	WEST	CMP	CORRUGATED METAL PIPE
°	DEGREES	CMPHE	CORRUGATED METAL PIPE HORIZONTAL ELLIPTICAL
'	FEET OR MINUTES		
"	INCHES OR SECONDS	TC	TOP OF CURB
SQ.	SQUARE	FL	FLOWLINE
FT.	FEET	TOP	TOP OF PAVEMENT
VOL.	VOLUME	EL	ELEVATION
PG.	PAGE	TOW	TOP OF WALL
O.R.	OFFICIAL RECORD	HC	HANDICAP
C.	CALCULATED		
R.	RECORD		
M.	MEASURED		

JOHN E. HILLE 24468 7-10-17 PROFESSIONAL ENGINEER

ENGINEERING NOTES:

1. THE RATIONAL METHOD EQUATIONS WERE USED TO COMPUTE THE PEAK DISCHARGES FOR ON-SITE DRAINAGE.
2. THE ENTIRE PROPERTY IS LOCATED IN ZONE X ON THE FEMA FLOOD MAP (FIRM #20173C0225G), EFFECTIVE DATE DECEMBER 22, 2016.
3. DETENTION IS NOT REQUIRED FOR THIS DEVELOPMENT SINCE THE INCREASE IN IMPERVIOUS AREA IS PROJECTED TO BE UNDER ONE ACRE. ANY CHANGES TO THE RESIDENTIAL IMPROVEMENTS THAT RESULT IN AN INCREASE IN DISTURBED ACREAGE OR IMPERVIOUS AREA OF ONE OR MORE ACRES WILL REQUIRE ADDITIONAL DRAINAGE ANALYSES AND A REDEVELOPED DRAINAGE PLAN INCORPORATING WATER QUALITY AND QUANTITY CONSIDERATIONS.
4. WATER QUALITY TREATMENT IS REQUIRED FOR THIS DEVELOPMENT; HOWEVER, THIS DEVELOPMENT WILL UTILIZE THE CITY OF WICHITA OFFSITE BMP PROGRAM FOR WATER QUALITY TREATMENT.

Developed Drainage Summary Chart - Rational Method

Drainage Basin	Drainage Area	Return Period	Rational C	Tc (min.)	Intensity (in/hr)	Peak Discharge (cfs)
A	0.51	2	0.40	15	3.34	0.68
		5	0.43		4.18	0.99
		10	0.47		4.81	1.15
		25	0.51		5.63	1.46
		50	0.54		6.24	1.71
		100	0.57		6.83	1.99
B	0.60	2	0.62	15	3.34	1.20
		5	0.64		4.18	1.61
		10	0.66		4.81	2.22
		25	0.71		5.63	2.71
		50	0.72		6.24	3.05
		100	0.75		6.83	3.47
C	0.43	2	0.45	15	3.34	0.64
		5	0.47		4.18	0.84
		10	0.53		4.81	1.07
		25	0.58		5.63	1.33
		50	0.58		6.24	1.54
		100	0.61		6.83	1.78
D	0.45	2	0.40	15	3.34	0.54
		5	0.42		4.18	0.76
		10	0.48		4.81	0.98
		25	0.52		5.63	1.34
		50	0.54		6.24	1.48
		100	0.58		6.83	1.69

Existing Drainage Summary Chart - Rational Method

Drainage Basin	Drainage Area	Return Period	Rational C	Tc (min.)	Intensity (in/hr)	Peak Discharge (cfs)
A	2.08	2	0.20	53	1.97	0.83
		5	0.22		2.01	0.91
		10	0.29		1.25	0.71
		25	0.32		2.60	1.85
		50	0.37		3.18	2.41
		100	0.41		[illegible]	2.98

VICINITY MAP
1"=1500'

DRAINAGE LEGEND

	DEVELOPED SHEET FLOW
	EXISTING SHEET FLOW
	CONCENTRATED FLOW
	PIPE FLOW DIRECTION
	DRAINAGE AREA
	SPOT ELEVATION
	SPOT ELEVATION MATCH EXISTING

BENCHMARK:
SBM1 - SQUARE CUT ON TOP OF CURB THAT IS APPROXIMATELY 78 FEET SOUTH AND 14 FEET WEST OF THE NORTHEAST PROPERTY CORNER.
N 1888635.8587 E 1807006.2807
SBM1 ELEV = 1,358.30 NAVD88

Approved
C.O.W.
Joe Hickle
7-12-17

OWNERS:
BARRY D. SCHURR AND JUNE SCHURR
331 N. WHISPERING PINES ST.
WICHITA, KS 67212

SURVEYOR:
ALPHA LAND SURVEYS, INC.
318 WEST SECOND AVENUE
HUTCHINSON, KANSAS 67501
(620) 728-0012

NOTE: BOUNDARY SURVEY COMPLETED BY ALPHA LAND SURVEYS, INC., ON OR ABOUT APRIL 13, 2017.

CIVIL DRAWINGS PREPARED BY:
CERTIFIED ENGINEERING DESIGN, P.A.
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WICHITA, KANSAS 67213
PH: (316) 262-8808
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SHEET 1
TOTAL 1