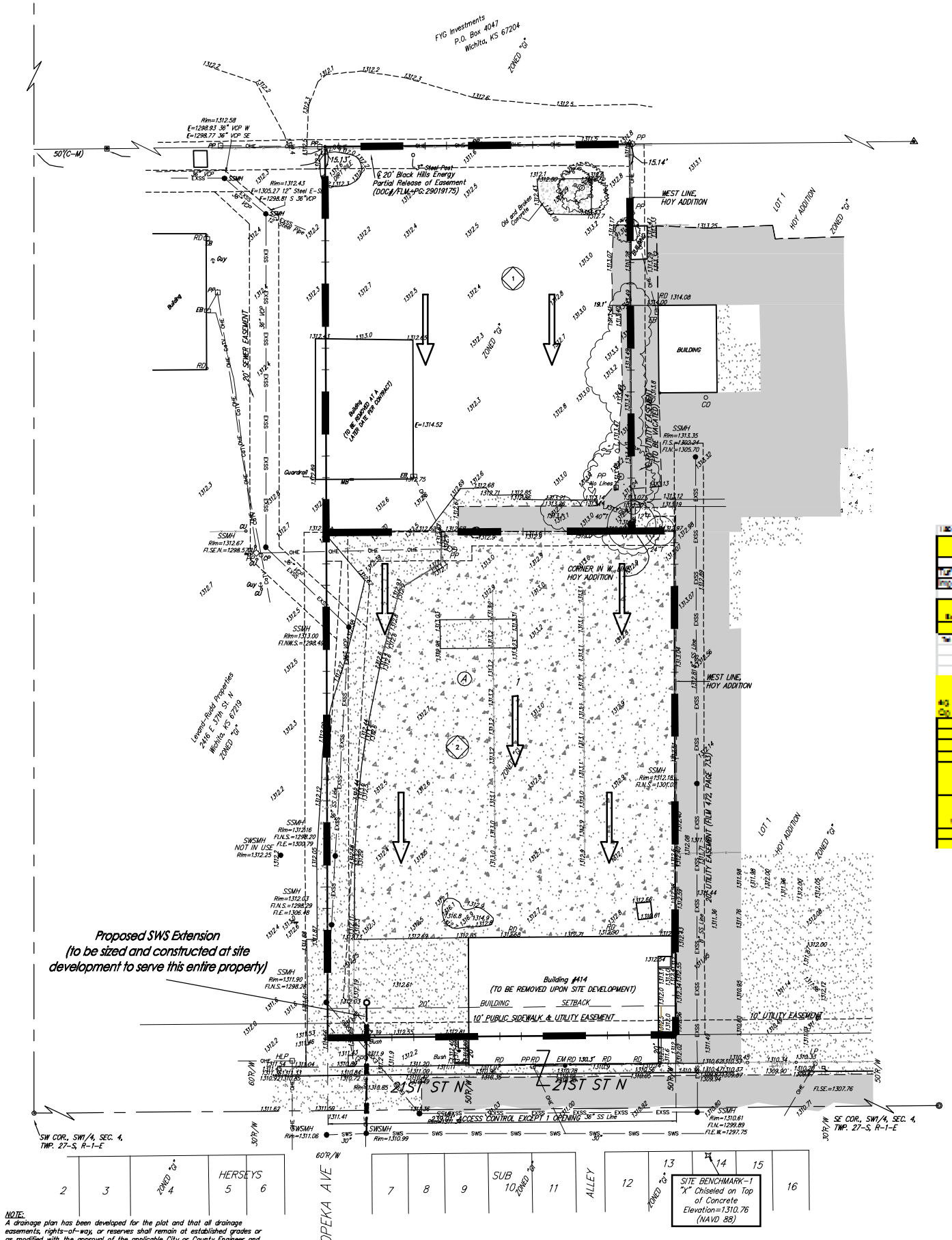
DRAINAGE PLAN

PERFEKTA ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



NOTE:
A drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer and unobstructed to allow for the conveyance of stormwater.

NORTH EXISTING
DA = 1.2 acres
Impervious = 42%
C = 0.70
Q 2 = 3.2 cfs
Q 5 = 3.8 cfs
Q 10 = 4.4 cfs
Q 100 = 6.2 cfs

SOUTH EXISTING
DA = 1.7 acres
Impervious = 98%
C = 0.98
Q 2 = 7.1 cfs
Q 5 = 8.5 cfs
Q 10 = 9.7 cfs
Q 100 = 14 cfs

Table 6-7: Volumetric Runoff Coefficients by Land Use and Hydrologic Soil Group

Land Use	Hydrologic Soil Group A	B	C	D
Undeveloped	0.02	0.15	0.24	0.34
Turf or Disturbed Soils	0.17	0.30	0.43	0.54
Impervious Cover	0.90	0.90	0.90	0.90

Land Use	Hydrologic Soil Group A	B	C	D
Undeveloped	[illegible]	[illegible]	[illegible]	[illegible]
Turf or Disturbed Soils	[illegible]	[illegible]	[illegible]	[illegible]
Impervious Cover	[illegible]	[illegible]	[illegible]	[illegible]

Weighted Volumetric Runoff Coeff. (R_v) (eq. 4.2-1):

Basin #	Undevel. (ac)	Disturb. (ac)	Res. Irrig. (ac)	Non-Irrig. (ac)	Total Area (ac)	U %	D %	Resid. %	I %	R_v %	WQ_v ac-ft (eq. 4.2-3)
Total Site	0	12.000	420.00 0	3.0.000	132.000	0.000	0.018	0.317	0.141	0.1858	2.145

Water Quality Peak Flow
POINT X

eq. 4-14:

$Q_{WQ} = q_u * A * C_{WQ} * F_D$

q_u =	360	Table 4-9
A =	0.08	
T_c =	12	min
q_u =	740	Figure 4-4
A =	126,000	ft²
	2.9	acre
	0.00458	mi²
H_w =	0.7	ft (eq. 4-16)
D =	1.2	(eq. 3a)
C_{WQ} =	0.7	(eq. 4-18)
F_D =	1.00	(eq. 4-17)
Q_{WQ} =	0.20	cfs

NOTE: Redevelopment volumetric runoff coefficient (R_v) has been reduced to 30% of the total value due to this site being a redeveloped area. Water quality peak flow should be used to size water quality units that treat on a flow charge basis; such as a

NOTE: This site is a redevelopment site. If any disturbance of 1 acre of more occurs on the subject site then water quality will be required. Water quality should be provided per the table above. The property, at the time of site plan, will need to meet Wichita Ordinance Section 16.32 as it pertains to redevelopment.

Due to the site being less than 5 acres downstream channel protection will not be provided.

We do not expect any detention on site since this is a redevelopment and the majority of the site is currently paved.

At this time, no site plans have been provided to us in order to develop specific grading and drainage plan. When the site is redeveloped, a specific grading and drainage plan will need to be provided and approved to meet this general plan.

0' 40' 80'

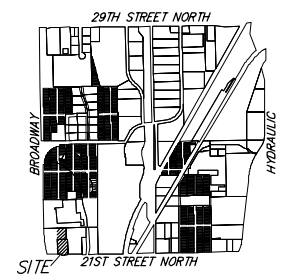
DATE OF PREPARATION: 28 APRIL 2014
DATE OF TOPOGRAPHY: 12 FEBRUARY 2014

OWNER/CONTRACT PURCHASER:
PERFEKTA, INC.
ATTN: ERIC DIEHL
480 E. 21ST ST. N.
WICHITA, KS 67214

LEGAL DESCRIPTION:
All of Lot 1, Block A, Best Supply Addition, Wichita, Sedgwick County, Kansas, TOGETHER with the following described tract: A tract in the South Half of the Southwest Quarter of the Southwest Quarter of Section 4, Township 27 South, Range 1 East of the Sixth Principal Meridian, Sedgwick County, Kansas described as follows: Beginning at the northwest corner of Lot 1, Block A, Best Supply Addition, Wichita, Sedgwick County, Kansas, thence N00°09'53"W along the extended west line of Lot 1, Block A, in said Best Supply Addition, 284.69 feet to a point on the north line of said South Half; thence N89°31'42"E along said north line, 209.28 feet to the northwest corner of Lot 1, Hoy Addition, Wichita, Kansas, Sedgwick County, Kansas; thence S00°14'00"E along the west line of Lot 1 in said Hoy Addition, 265.55 feet to a deflection corner in the north line of Lot 1, Block A, in said Best Supply Addition; thence S89°43'31"W along the north line of Lot 1, in said Block A, 209.51 feet to the point of beginning.

BENCHMARK:
Elevation and location as depicted on the face of the plat.

- = #4 REBAR W/ "BAUCHMAN" CAP (SET)
- = 1/2" IRON PIN IN THIMBLE (FOUND)
- = 3/4" IRON IN THIMBLE (FOUND)
- = #5 REBAR W/ "SRB" CAP (FOUND)
- = CROSS (FOUND)
- = MKEC DISC (FOUND)



VICINITY MAP
SEC. 4, T27S, R1E

CATV — CABLE TV
FENCE
OHE — OVERHEAD ELECTRIC LINE
EXSS — SANITARY SEWER
UGE — UNDERGROUND ELECTRIC LINE

ATT
Ped — ATT Ped = A.T.&T. Telephone Pedestal
ATTMH — ATTMH = A.T.&T. Telephone Manhole
CO — CO = Cleanout
EB — EB = Electric Box
EM — EM = Electric Meter
FH — FH = Fire Hydrant
FHT — FHT = Fire Hydrant Test
GM — GM = Gas Meter
GP — GP = Guy Pole
GT — GT = Gas Test
Guy — Guy = Guy Anchor
GV — GV = Gas Valve
HLP — HLP = High Line Pole
LP — LP = Light Pole
MW — MW = Monitoring Well
PP — PP = Power Pole
RD — RD = Roof Drain
SSMH — SSMH = Sanitary Sewer Manhole
SWSMH — SWSMH = Stormwater Sewer Manhole
TP — TP = Telephone Pole
WM — WM = Water Meter
WV — WV = Water Valve
XFMR — XFMR = Transformer
VP — VP = Vent Pipe

Asphalt Concrete Gravel/Rock

NOTES: This property lies within a FEMA Zone X-Shaded as of this date per FEMA FIRM Panel 355 of 700, for Wichita, Sedgwick County, Kansas; effective February 2, 2007.

DRAINAGE PLAN
PERFEKTA ADDITION
REV 07 MAY 2014
01 MAY 2014

Baughman Company, P.A.
315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
Baughman ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

R:\PROJECTS\PERFEKTA ADDITION_1401\PRELIM\WATER RESOURCES\PERFEKTA_D_DRAIN PLAN.DWG