

Preliminary Drainage Report for the Regency Park 3rd Addition Wichita, Sedgwick County, Kansas

Location

The subject property is in Wichita, Sedgwick County, Kansas. The site has been platted as Lot 9 of the Regency Park Addition. The proposed development is located north of K-96 and west of Greenwich Rd.

Pre-developed Conditions

Current Development

The site is currently vacant land zoned as light industrial.

Current Landform and Slope

Slopes in the site vary from 0.5% to 3.5%.

Current Drainage Conditions

The site currently drains into the K-96 right-of-way and into a pond designed for the developed Regency Park Addition.

Developed Conditions

Proposed Development

Lot 9 in the Regency Park 1st & 2nd Addition will be divided into 5 separate lots. The land use for these lots will remain light industrial.

Proposed Landform and Slope

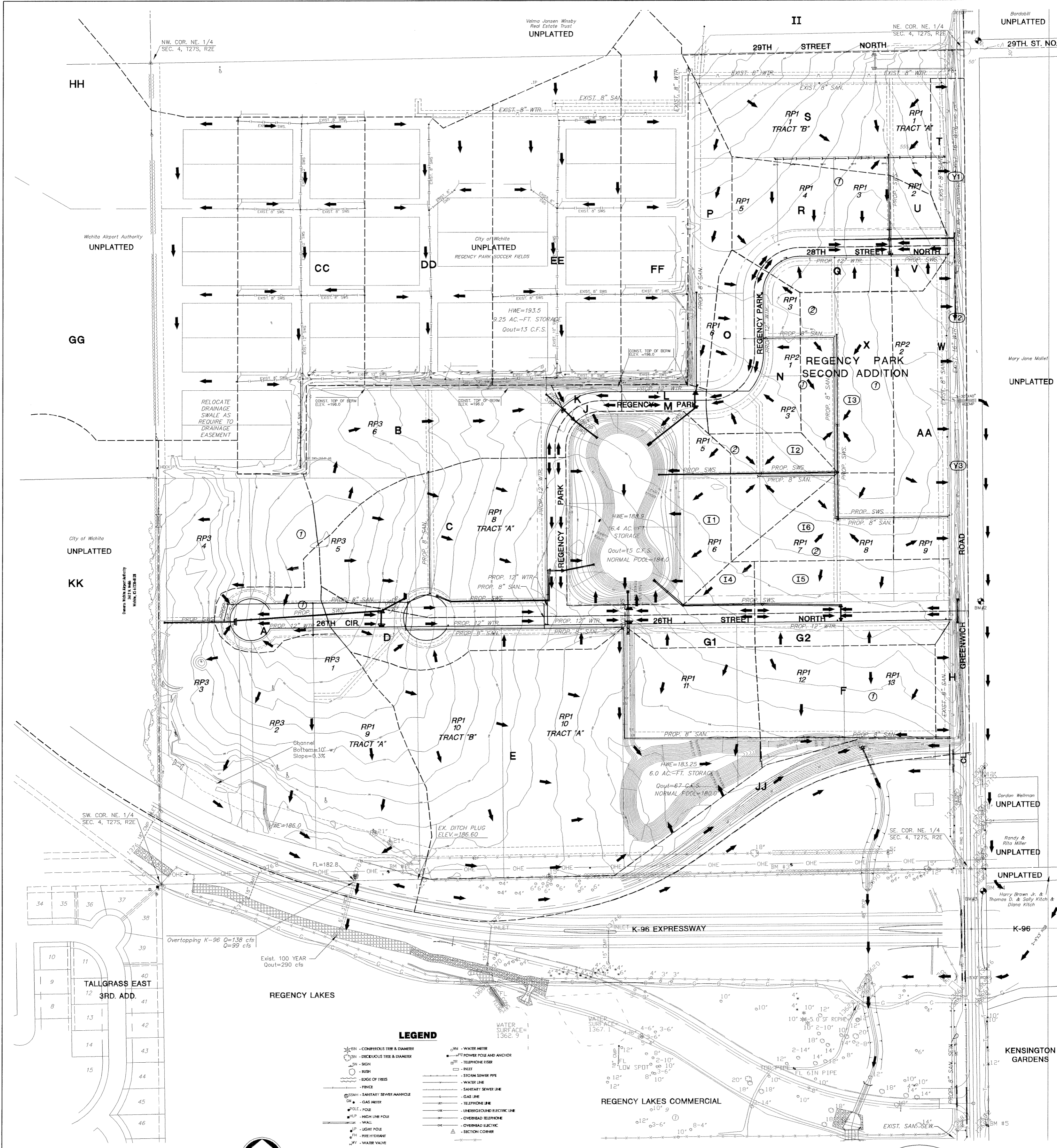
Final slopes in the development have not been determined, but the minimum will be 0.5% within street right-of-way.

Proposed Runoff Characteristics

The runoff from this site closely follows previously planned drainage paths. However a storm sewer system will be place to drain the Lot 5 Block 1 site and the extended 26th street to the south of the Lot 5 Block 1 into a drainage ditch to the west of the Regency Park Addition. The proposed utility locations as well as drainage areas for the site are shown on the drainage and utility plan, Appendix A. Pipe sizing calculations are shown in a spreadsheet in Appendix B.

Appendix A

Drainage & Utility Plan



LEGEND

- CONCRETE TREE & DIAMETER
- DIODEXIOUS TREE & DIAMETER
- SIGN
- BUSH
- EDGE OF TREES
- FENCE
- SANITARY SEWER MANHOLE
- GAS METER
- POLE
- HIGH LINE POLE
- WALL
- LIGHT POLE
- FIRE HYDRANT
- WATER VALVE
- WM - WATER METER
- PP - POWER POLE AND ANCHOR
- TR - TELEPHONE RISER
- RI - RISE
- SD - STORM DRAIN PIPE
- WL - WATER LINE
- SS - SANITARY SEWER LINE
- GL - GAS LINE
- TL - TELEPHONE LINE
- UL - UNDERGROUND ELECTRIC LINE
- OL - OVERHEAD ELECTRIC
- SC - SECTION CORNER

NOTES

SURVEYED BY MKEC JAN. 1997
 EXISTING ZONING - SF-20
 PROPOSED ZONING - LI
 MINIMUM PADS AS INDICATED

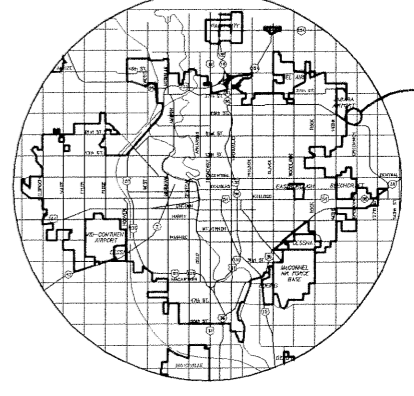
MINIMUM PAD

EACH LOT SHALL BE RESPONSIBLE FOR DETENTION OF THE 100 YEAR-2 HOUR STORM.

Lot	Block	Min. Pad Elev. (City Datum)	Min. Pad Elev. (DGSIS Datum)
6	2	192.1	1379.9
3	3	192.3	1374.7
5	3	190.3	1377.7

BENCHMARKS

BM#1 BM Step Spike in West side PP, 1st. pole North of 29th. St. on East side Greenwich Rd. Elev=201.31
 BM#2 BM Step Spike in West side PP, 6th. pole North of K-96 on East side Greenwich Rd. Elev=192.04
 BM#3 BM Step Spike in West side PP, 1st. pole North of K-96 on East side Greenwich Rd. Elev=184.45



VICINITY MAP



MID-KANSAS ENGINEERING CONSULTANTS, INC.
 411 N. WEBB ROAD
 WICHITA, KS 67208
 316.264.2800

REVISED: APRIL 2005 - REGENCY PARK 3RD
 REVISED: JUNE 2004 - SWS TO LOT 1, BLOCK 1, REGENCY PARK 1ST
 REVISED: JUNE 2004 - REGENCY PARK 2ND
 MAY 2000

DRAINAGE & UTILITY PLAN REGENCY PARK 1ST, 2ND, & 3RD ADDITIONS

OWNER / DEVELOPER: REGENCY PARK OF WICHITA, L.L.C. 8100 E. 22ND. ST., BLDG. 1000 WICHITA, KS 67226

Appendix B

Pipe sizing Calculations

COMPUTATION FORM REGENCY PARK 3RD ADDITION STORM DRAINAGE SYSTEM DESIGN BY THE RATIONAL METHOD															<input checked="" type="checkbox"/> Preliminary <input type="checkbox"/> Final Design				Drainage Area _____ Project No. _____ Design Storm <u>5 year</u> n = <u>0.013</u>					
Area ID	Area ac	Accum. Area ac	Runoff Coefficients								Rainfall Intensity				Storm Flows				Sys. Q (5 yr stm) c.f.s.	System Design				
			C2	C5	C10	C100	Tc2 min	Tc5 min	Tc10 min	Tc100 min	I2 in/hr	I5 in/hr	I10 in/hr	I100 in/hr	Q2 cfs	Q5 cfs	Q10 cfs	Q100 cfs		Pipe Size Descr. (in)	Slope		V des. f.p.s.	Cap. (all.) c.f.s.
Inlet 1	1.42	1.42	0.68	0.69	0.73	0.80	15	15	15	15	3.83	4.56	5.22	7.37	3.70	4.47	5.41	8.38	4.47	18	0.18	0.32	3.4	5.9
Inlet 2	1.05	1.05	0.68	0.69	0.73	0.80	15	15	15	15	3.83	4.56	5.22	7.37	2.74	3.31	4.00	6.19	3.31	18	0.10	0.32	3.4	5.9
Inlet 3	0.27	2.74	0.68	0.69	0.73	0.80	15	15	15	15	3.83	4.56	5.22	7.37	7.15	8.63	10.46	16.18	8.63	24	0.15	0.21	3.3	10.4
Inlet 4	1.27	4.01	0.68	0.69	0.73	0.80	15	15	15	15	3.83	4.56	5.22	7.37	10.46	12.63	15.30	23.67	12.63	30	0.09	0.21	3.8	18.8