

SEP 14, 2009

Air Capital Land Surveyors

1900 N. AMIDON, SUITE 209
WICHITA, KANSAS 67203
(V) 316-838-9071 ~ (F) 316-832-0216

QUICK TRANSMITTAL COVER

TO: City Engineering DATE: 9/14/09
ATTN: Scott Lindebak DEPT: _____

ADDRESS 1: _____

ADDRESS 2: _____

CITY/ST/ZIP: Wichita, KS

FROM: Erwin W. Gard JOB #: 1057-0901

PROJECT: RENTALS SALES ESTATES

RE: Drainage Plan

URGENT FOR REVIEW AS REQUESTED PLEASE REPLY YOUR INFORMATION

FOR SUBMISSION TO: _____

OTHER: _____

CC: Bounleng Kammavongsa



CITY OF
WICHITA

**Public Works, Engineering Division
Final Drainage Plan Submittal Checklist**

Reviewer: _____ Date: _____
 Subdivision Name: RENTALS SALES ESTATE Location: S. Seneca south of W 47th S
 Total Land Area Of Ownership: 2.55 Acres
 Type: Residential Commercial Industrial Recreation Municipal Other
 Applicant: BOUNLENG KAMMAVONGSA Contact: SAME Phone #: 844-7316
 Engineer: REKS & GOODNESS ENG. Contact: AL REISS Phone #: 832-0213

Please check the appropriate box: I = Included; NA = Non-Applicable; R= Required prior to development
 (If "NA" is checked, an explanation must be entered)

Tab 1. Project Narrative	Applicant			Engr	
	I	NA	Explanation / Location in Plan	I	NA
A. Site Location Map, using USGS Map	X				
B. Discussion of development, existing conditions, and proposed impacts on stormwater, wetland, riparian, and flood plain		X	Plat for one lot for single family permit		
C. Discussion of offsite conditions					
D. Summary of runoff calculations (pre/post development) No increase in peak discharge for all storm series					
E. Narrative description of the type and function of the permanent best management practices that are incorporated into the site design		X	NO SITE CHANGES		
F. Copy of the plat	X				
G. Preliminary grading plan (The final grading plan shall be sealed, signed and dated prior to Engineering receiving the final sanitary sewer plans. One plan sheet and PDF shall be submitted to the Subdivision Engineer.)	X				
H. Professional Engineer seal, signature and date on cover of report		X	No Report - See Plan		
I. CD of drainage plan in PDF format (one file) and one paper copy bound with this checklist included behind the cover		X	No Report - See Plan		

Tab 2. Existing Conditions Runoff Calculations	Applicant			Engr	
	I	NA	Explanation / Location in Plan	I	NA
A. Copy of applicable orthophoto showing proposed project boundaries (preferable in color)	X				
B. Runoff Method (Rational, Hydrograph Method, or other approved methods by Engineering)	X		Rational		
C. Existing topography (no greater than 2-foot contours, 1-foot recommend)	X				
D. Total Site Area and Total Impervious Area (acres)	X				
E. Benchmarks used for site control	X				
F. Streams, creeks, and waterway labeled		X	NONE		
G. Predominant soils from USDA soil surveys, and/or on site soil borings					
H. Location and boundaries of natural features such as wetlands, lakes, and ponds with the normal water elevation noted		X	NONE		
I. Location of existing roads, buildings, parking lots and other impervious areas.		X	NONE		



MDOT

J. Location of existing utilities (e.g., water, sewer, gas, electric) and easements	X			
K. Location of existing conveyance systems such as storm drains, inlets, catch basins, channels, swales, and areas of overland flow		X	NONE	
L. Flow paths	X			
M. Location and dimensions of existing channels, bridges or culvert crossings		X	NONE	
N. Existing conditions hydrologic analysis for runoff rates, volumes and velocities showing methodologies used and supporting calculations (2, 5, 10, 25 & 100 year, 24-hour storm events) or Critical Duration			Q = CIA $24R = 0.39 \times 3.83 \times 0.5 = 0.70 \text{ CFS}$ $1004R = 0.35 \times 7.37 \times 0.5 = 1.30 \text{ CFS}$	
O. Assumed pre-developed runoff curve numbers	X		0.35	
P. Existing time of concentrations used in calculations	X		15 Min	
Q. Evaluate immediate downstream drainage capacity, not to exceed more than 0.25 miles downstream of site	X		Existing Curbed city street & Storm Sewer	
R. Existing structural elevations (e.g., invert of pipes, manholes, etc.)		X	None on or Adjacent	
S. Cross-section data for open channels		X	NONE	
T. Ground water elevations, if applicable		X	N/A	

Tab 3. Post-Development Hydrologic Analysis	Applicant		Explanation / Location in Plan	Engr	
	I	NA		I	NA
A. Proposed (post-development) conditions hydrologic and hydraulic analysis for runoff rates, volumes, HGL, and velocities showing the methodologies used and supporting calculations for all applicable design storms (2, 5, 10, 25 & 100 year, 24-hour storm events)		X	NO CHANGE PROPOSED		
B. Proposed time of concentrations used in calculations	X		15 Min		
C. Assumed post-developed runoff curve numbers	X		0.35		
D. Proposed contours for detention facilities (to equal area used in outlet rating curves)		X	None required		
E. Preliminary sizing calculations for stormwater controls including contributing drainage area, storage, and outlet configuration		X	N/A		
F. Stage-storage-discharge or outlet rating curves and inflow and outflow hydrographs for storage facilities		X	N/A		
G. Final analysis of potential upstream/downstream impact/effects of project, where necessary		X	N/A		
H. Existing and proposed structural elevations (e.g., invert of pipes, manholes, etc.)		X	N/A		
I. Design water surface elevations and normal pool elevation for ponds.		X	N/A		
J. Typical detail for outlet structures, embankments, spillways, grade control structures, conveyance channels, etc. To include height, width, elevation, and/or diameter.		X	N/A		
K. Proposed limits of clearing and grading		X	N/A		
L. Location of existing and proposed roads, buildings, parking lots and other impervious areas.		X	NONE		
M. Location of existing and proposed utilities (e.g., water, sewer) and easements	X				
N. Location of existing and proposed conveyance systems such as storm drains, inlets, catch basins, channels, swales, and areas of overland flow		X	N/A		
O. Preliminary location and dimensions of proposed channel modifications, such as bridge or culvert crossings		X	N/A		



WICHITA

P. Preliminary selection and location of stormwater controls		X	N/A		
Q. Emergency overflow structure's flow path		X	N/A		
R. Detention facility provides one-foot of freeboard above the HWL and emergency outfall shown (top of berm elevation shown)		X	N/A		
S. The 100-year 24-hour HWL delineated on the plan for detention pond		X	N/A		
T. Lowest opening elevations table on the plat for structures located adjacent to channels or ponds		X	N/A		
U. Stormwater Management Facilities located within a Reserve		X	N/A		
V. Maintenance responsibility of stormwater management facility shall be specified in the plat text. (e.g. HOA, Lot Owners Association, or lot)		X	N/A		
W. Off-site drainage easements or agreements required, where necessary		X	N/A		

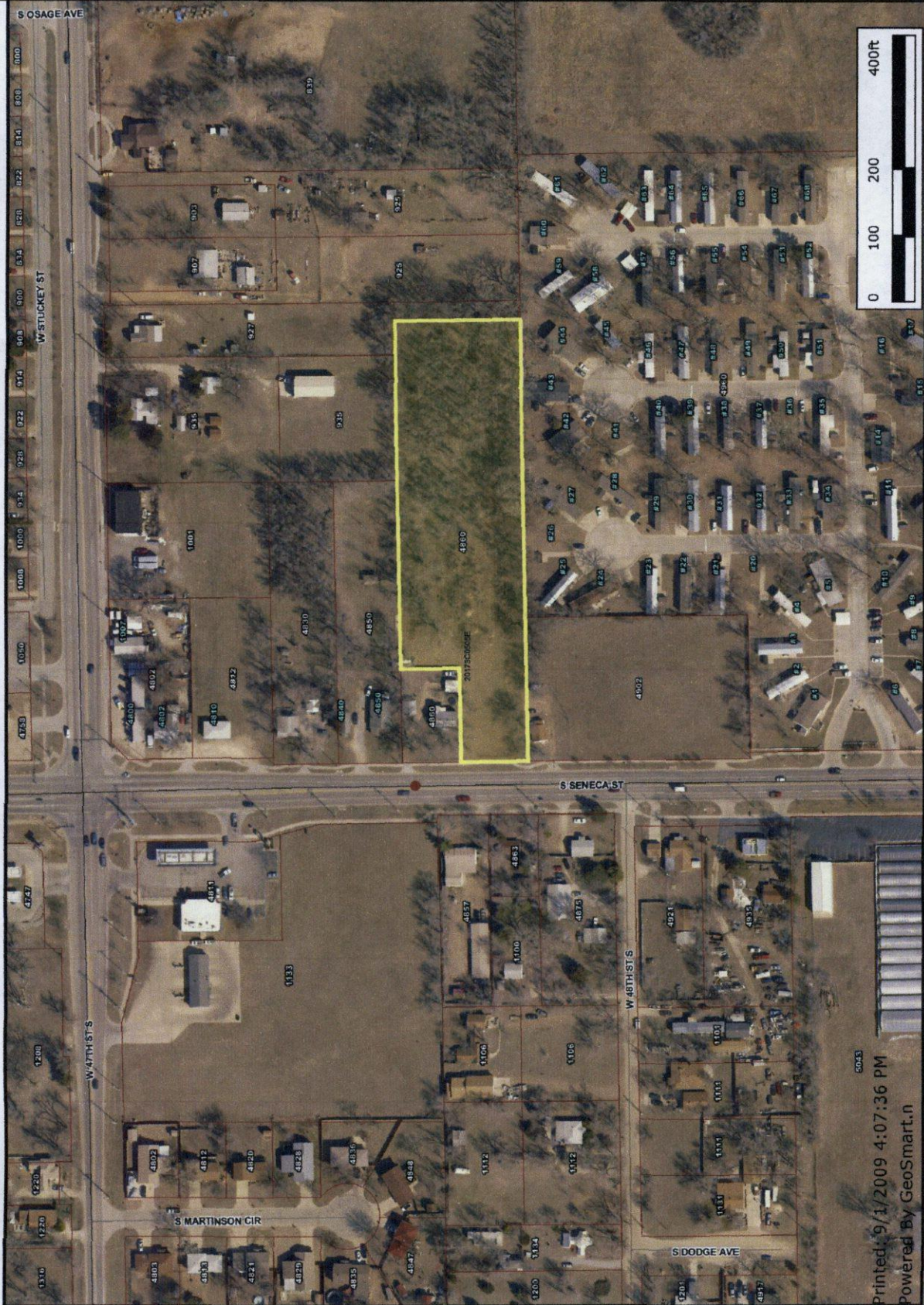
Tab 4. Floodplain Submittal	Applicant		Engr	
	I	NA	I	NA
A. Provide source of flood profile		X		
B. Nearest base flood elevations		X		
C. Delineation of pre-developed regulatory floodplain/floodway limits		X		
D. Delineation of post-developed regulatory floodplain and floodway limits		X		
E. Floodplain boundary determination per elevation (project limits shown)		X		
F. Provide source of floodway data table and discharges		X		
G. Provide all hydrologic and hydraulic study information for site-specific floodplain studies, unnumbered Zone A area elevation determinations and flood plain map revisions or required permits		X		
H. Provide regulatory floodway and four natural profile models (10,50,100, and 500-yr) for existing and future watershed conditions		X		
I. Location of floodplain/floodway limits and relationship of site to upstream/downstream properties (floodplain limits to be per elevation and scaled location)		X		
J. Flood plains and floodways located within a Reserve, where necessary		X		

Tab 5. Federal, State and Local Permits (to be provided prior to construction unless otherwise specified)	Applicant		Engr	
	I/R	NA	I/R	NA
A. US Army Corps of Engineers - Regulatory program permits (404 water quality certification)		X		
B. Kansas Department of Agriculture - Division of Water Resources Permits (Stream Obstruction, Channel Change, Flood Plain Fill, Levee, Water Appropriations, Dam safety permit, etc.)		X		
C. Federal Emergency Management Agency (FEMA) Letter of Map Changes (LOMA, LOMR, LOMR-f, CLOMR, etc.) Shall be included and approved when project modifies the limits of the floodway.		X		
D. Kansas Department of Transportation		X		
E. Sedgwick County Right-of-way Permit		X		



Erwin Gard

4860 s Seneca

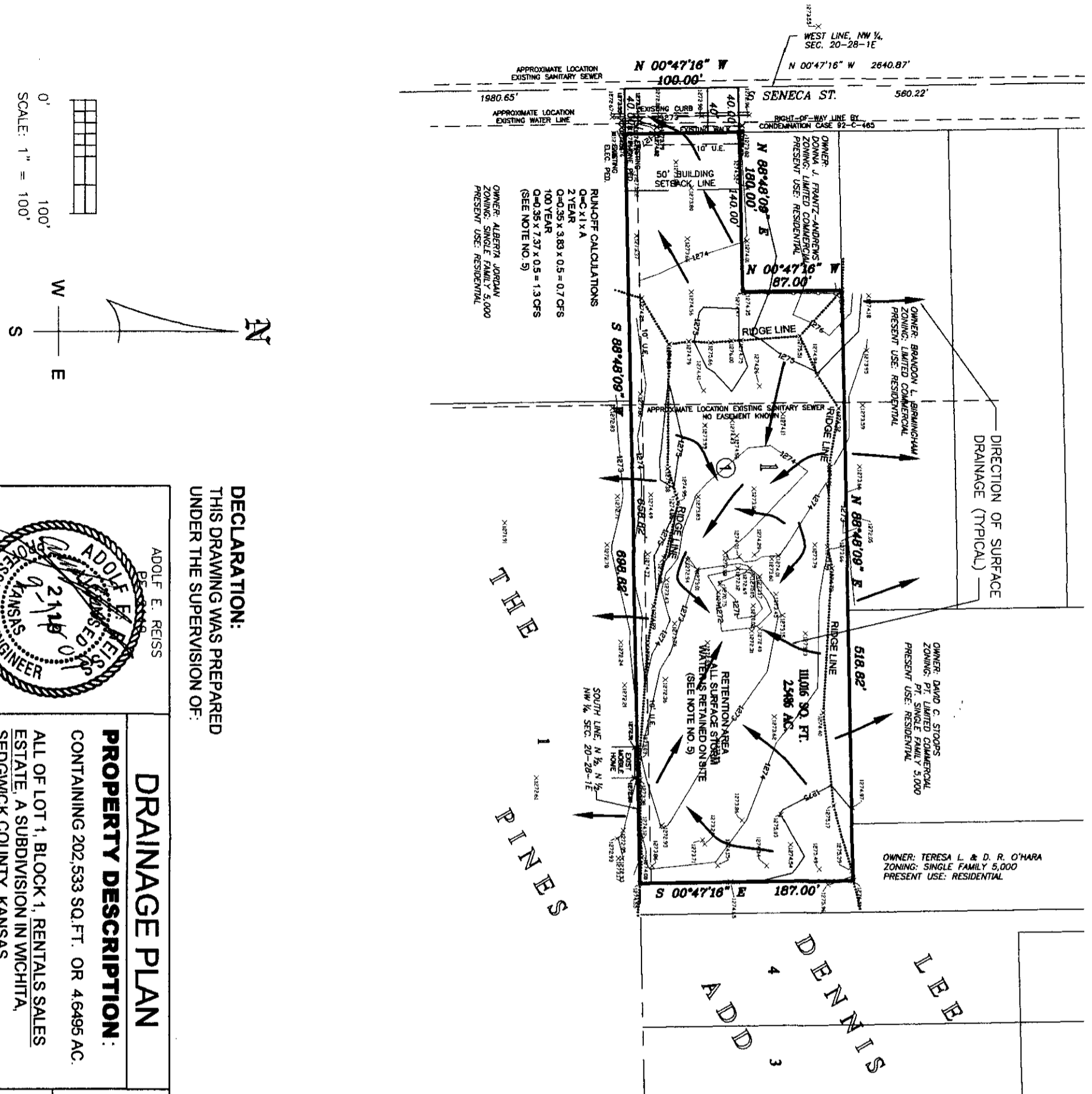


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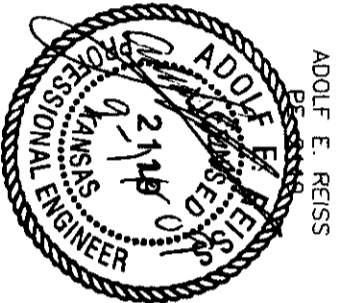
	Identified Features
	Selected Features
	Label Structure Addresses
	Label Address Property Parcels
	Roads
	State Highway
	US Federal Highway
	Interstate
	KTA
	Arterial
	Collector
	Minor
	Ramp
	Base Flood Elevations
	Cross Sections
	Flood Way
	Flood Zones
	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
	X PROTECTED BY LEVEE
	AN/AE/AO
	FIRM PANELS
	SDE RASTER S-DE DATA. ORTH-
	O
	City Limits
	Andale
	Bel Aire
	Bentley
	Cheney
	Clearwater

Every reasonable effort has been made to assure the accuracy of the maps and associated data provided herein. This information is provided with the understanding that the data are susceptible to a degree of error, and conclusions drawn from such information are the responsibility of the reader. The City of Wichita makes no warranty, representation or guaranty as to the content, accuracy, timeliness or completeness of any of the data provided herein. Some data provided here and used for the preparation of these maps has been obtained from public records not created or maintained by the City of Wichita. The City of Wichita shall assume no liability for any decisions made or actions taken or not taken by the reader in reliance upon any information or data furnished hereunder. The user should consult with the appropriate departmental staff member, e.g. Planning, Parks & Recreation, etc. to confirm the accuracy of information appearing in the visual presentations accessible through these web pages.





DECLARATION:
THIS DRAWING WAS PREPARED
UNDER THE SUPERVISION OF:



DRAINAGE PLAN

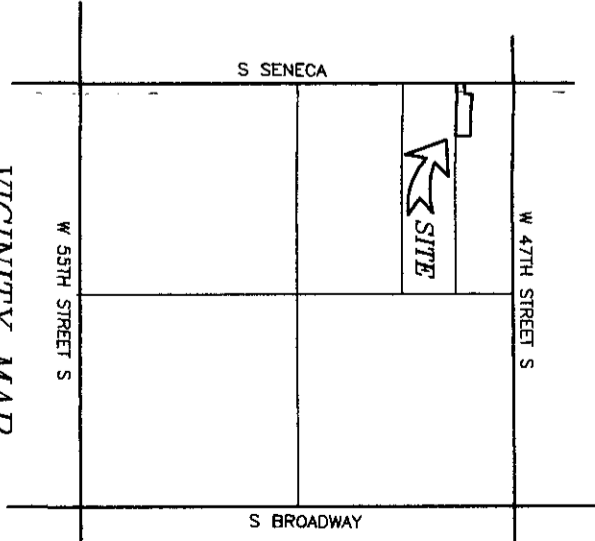
PROPERTY DESCRIPTION:

CONTAINING 202,533 SQ. FT. OR 4.6495 AC.
ALL OF LOT 1, BLOCK 1, RENTALS SALES
ESTATE, A SUBDIVISION IN WICHITA,
SEDGWICK COUNTY, KANSAS.

NOTES:

1. THIS GRADING PLAN HAS BEEN PREPARED FOR THE PROPOSED PLAT OF "RENTALS SALES ESTATES".
2. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88 BY GPS SURVEY METHODS.
3. THE HOUSE PROPOSED FOR THIS LOT IS A RANCH STYLE HOME WITH A FULL BASEMENT AND DETACHED GARAGE. NO WALKOUT OR VIEW OUT.
4. OTHER THAN WHAT IS NECESSARY FOR THE CONSTRUCTION OF THE HOME AND DRIVEWAY, NO SITE GRADING IS PROPOSED FOR THIS PLAT.
5. THE GROUND ELEVATIONS OR GRADES SHOWN ON THIS DRAINAGE PLAN SHALL NOT BE MODIFIED BY EXCAVATION OR FILL WITHOUT THE AP PROVAL OF THE APPLICABLE CITY OR COUNTY ENGINEER.

VICINITY MAP
SECTION 20-T.28S-R.1E
NOT TO SCALE



REISS & GOODNESS ENGINEERS

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Ph: (316) 838-9071 ~ Fax: (316) 832-0216 ~ Email: areiss@r-gengr.com

Bounleng Kammavongsa

4549 Brookhaven, Wichita, Kansas, 67216

REVISION:	DRAWN BY:	CHECKED BY:	PROJECT NO.	DATE	SHEET
	E. GARD	A. REISS	1057-0901	09/11/09	1 OF 1