

MID-KANSAS ENGINEERING CONSULTANTS, INC.



July 9, 1996

Vicky Huang, P.E.
City of Wichita Engineering
455 N. Main - 7th Floor
Wichita, KS 67202

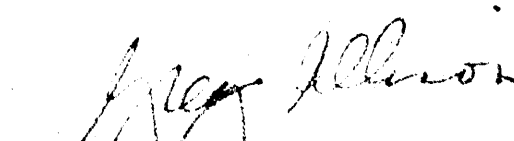
Re: Woodland Lakes Estates
Site Grading- Lots 1-16, Block 5

Dear Vicky,

Enclosed are two copies of the site grading plan for a portion of the referenced addition. We are submitting only a portion of the grading as design for the rest of the improvements are being completed. This is the area that the developer will concentrate on first. We will submit an overall site grading plan at a later date.

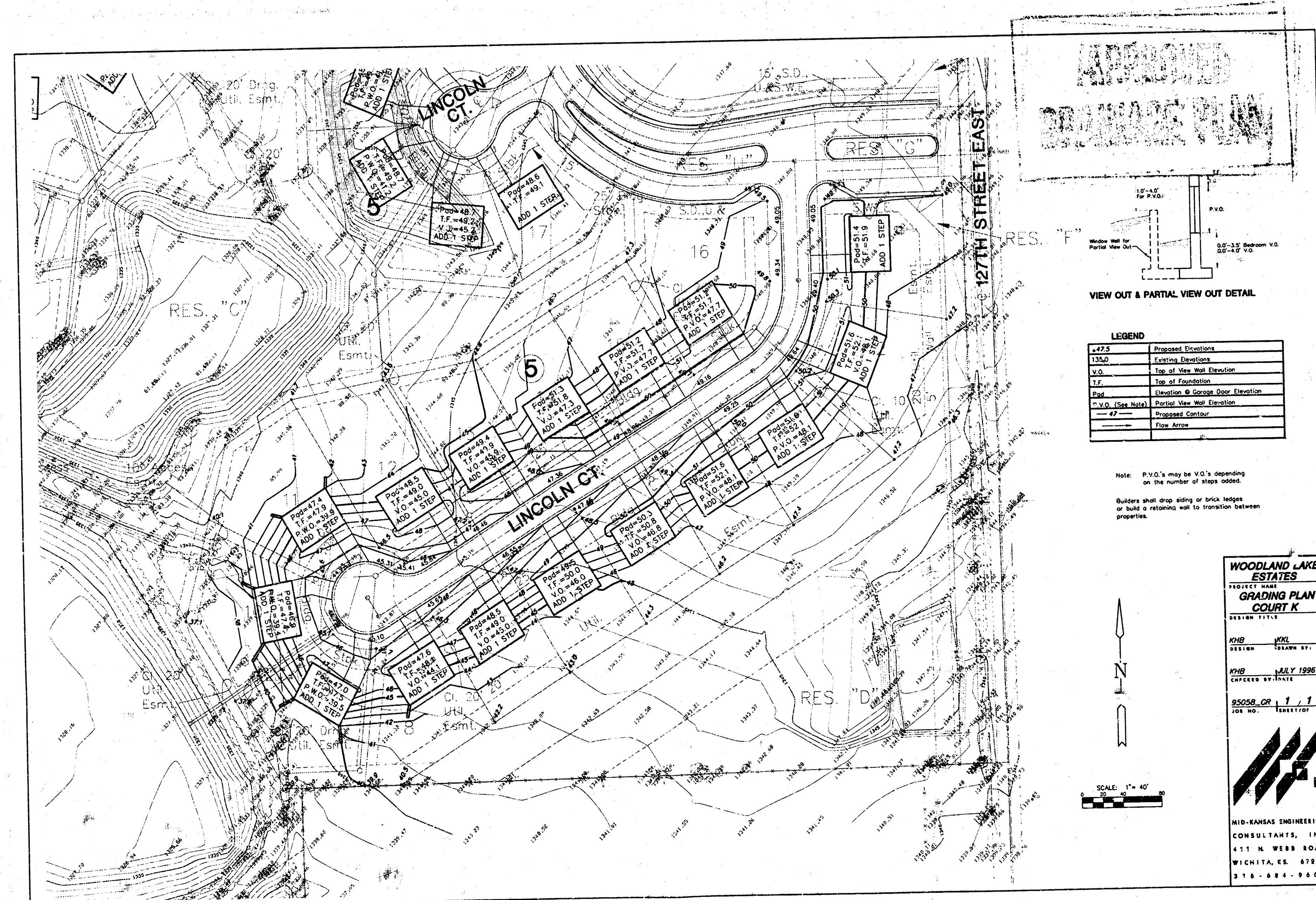
Sincerely,

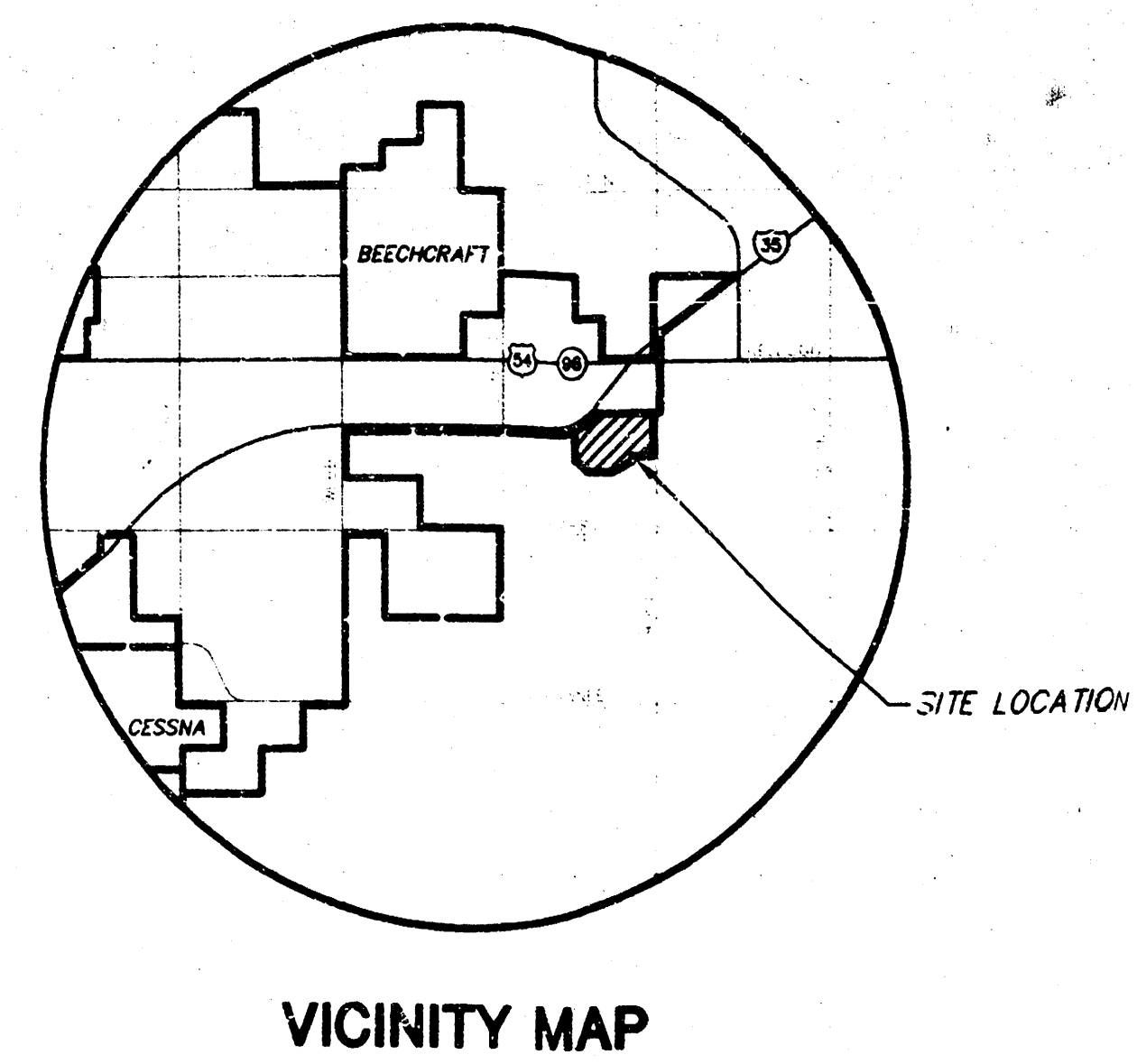
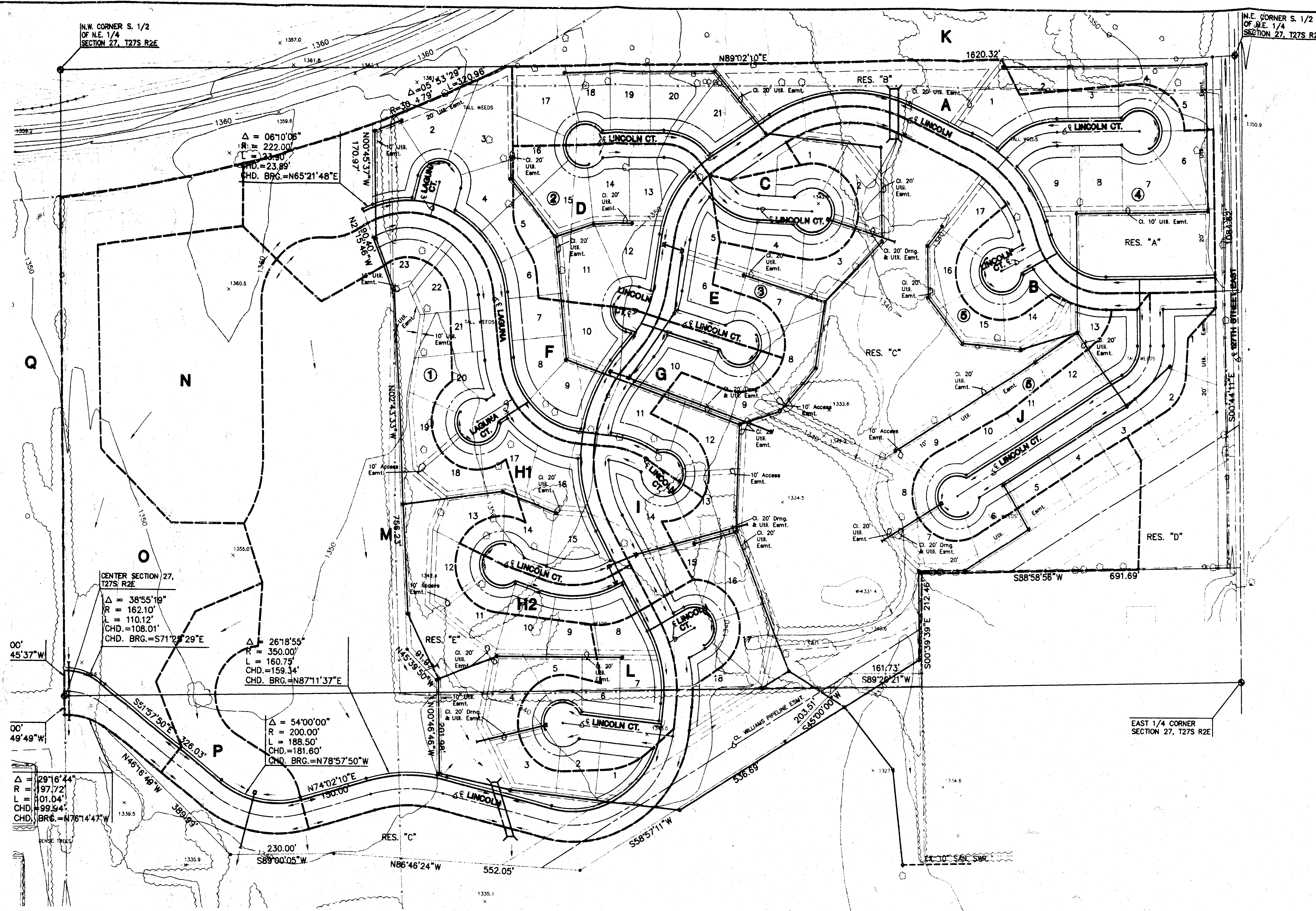
MID-KANSAS ENGINEERING CONSULTANTS, INC.


Greg Ahlsoh, P.E.

GJA/aj

411 N. WEBB ROAD • WICHITA, KS 67206 • 316-684-9600 • FAX 316-584-5100





DRAINAGE AREA	AREA	ADJAC. AREA	C2	C100	T2	TC100	I2	I100	Q2	Q100	PIPE SIZE	PIPE SLOPE	INLET	NOTES
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	8.2		0.48	0.73	44	28	2.11	5.58	8.0	33.5			L(1) = 30"	2 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	1.8		0.48	0.73	24	18	3.03	7.18	2.5	9.4			L(1) = 10"	2 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)		97	0.31	0.58	45	35	2.08	5	102.9	334.7	30 Sq. Ft.	min. slope		100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	1.2		0.48	0.73	18	15	3.51	7.37	1.9	6.5				100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	2.8		0.50	0.78	33	19	2.52	6.68	3.5	14.2			L(1) = 15"	100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	1.0		0.48	0.73	21	15	3.25	7.37	1.5	5.4			L(1) = 5"	100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)		3.5	0.19	0.75	33	19	3.52	8.68	4.7	19.0	24" RCP	min. slope		100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	5.4		0.50	0.78	38	25	2.32	5.90	6.3	24.2			L(1) = 25"	100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	1.5		0.48	0.73	21	15	3.25	7.37	2.2	8.1			L(1) = 10"	100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)		10.7	0.49	0.75	38	30	2.28	5.4	12.0	43.3	36" Dia.	min. slope		100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	0.9		0.50	0.78	20	15	3.33	7.37	1.5	5.0	18" Dia.	min. slope		100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	3.9		0.50	0.78	33	22	2.52	6.28	4.9	18.6			L(1) = 20"	100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)		4.6	0.50	0.78	33	22	2.52	6.28	6.0	22.6	27" Dia.	min. slope		100 yr. storm
TYPE C & D SOIL RESIDENTIAL (SINGLE FAMILY)	1.0		0.48	0.73	22	15	3.17	7.37	1.5	5.4			L(1) = 10"	100 yr. storm

PRELIMINARY DRAINAGE PLAN FOR PLAT PURPOSE TO PETITION
AND MUST BE UPDATED OR REFINED DURING DESIGN PROCESS.

WOODLAND LAKE ESTATES
PROJECT NAME

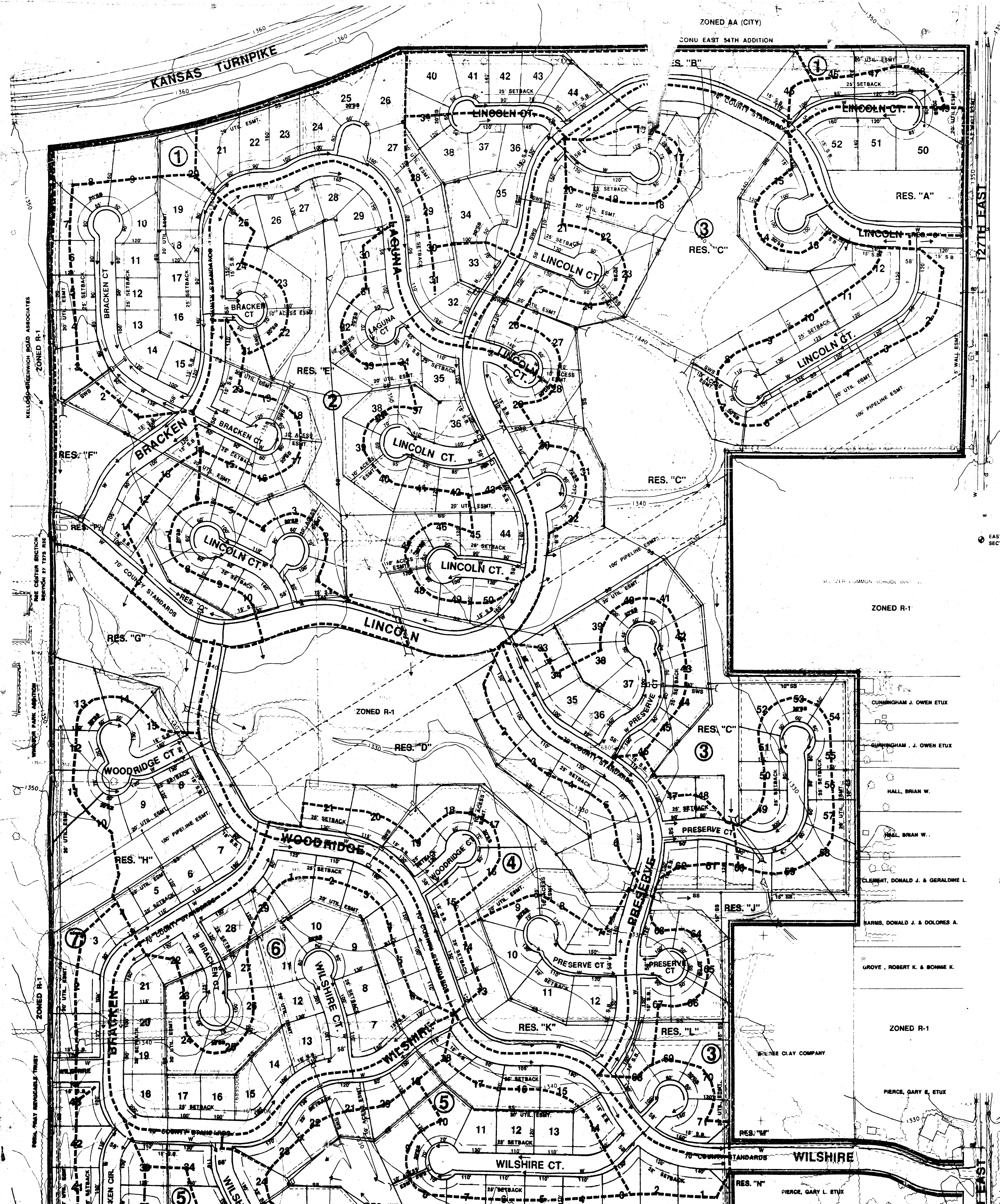
DRAINAGE & UTILITY PLAN
SHEET TITLE

WIS KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

DESIGN BY: **G.V.A.**
CHECKED BY: **B.D.W.**
DATE: **11/22/95**

DRAWN BY: **9505B**
CHECKED BY: **DRN/PLANDWG**
DATE: **11/22/95**

SHEET NO. **1** OF **1**

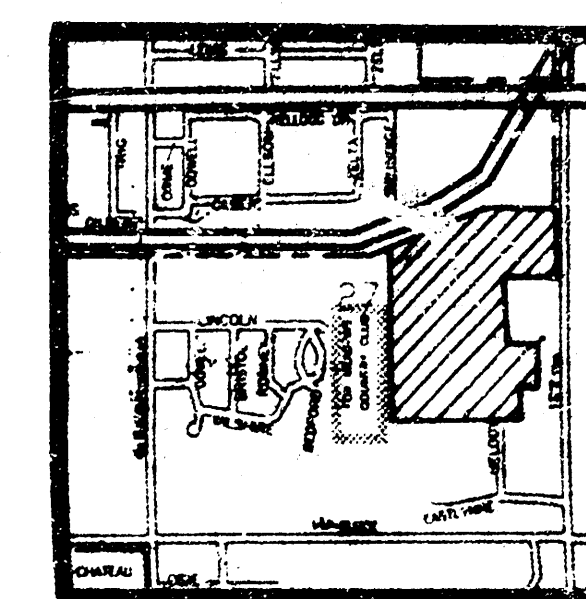


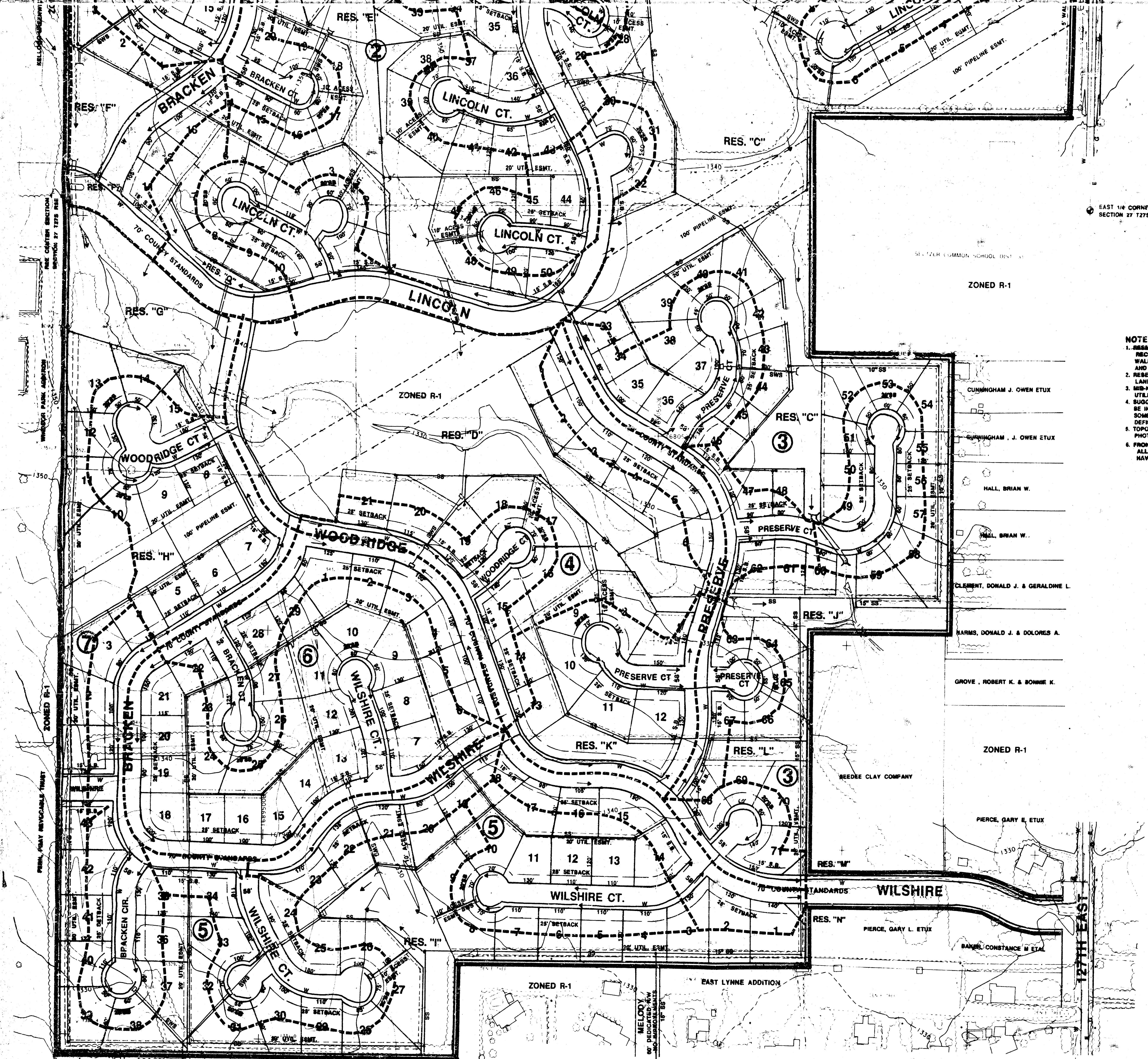
WIEDEMAN K. T. TRUST
ZONED R-1

EAST 1/4 CORNER
SECTION 27 T27S

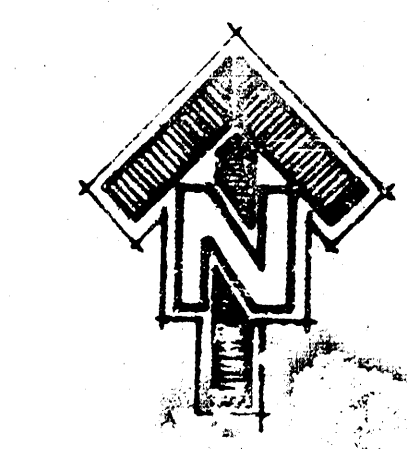
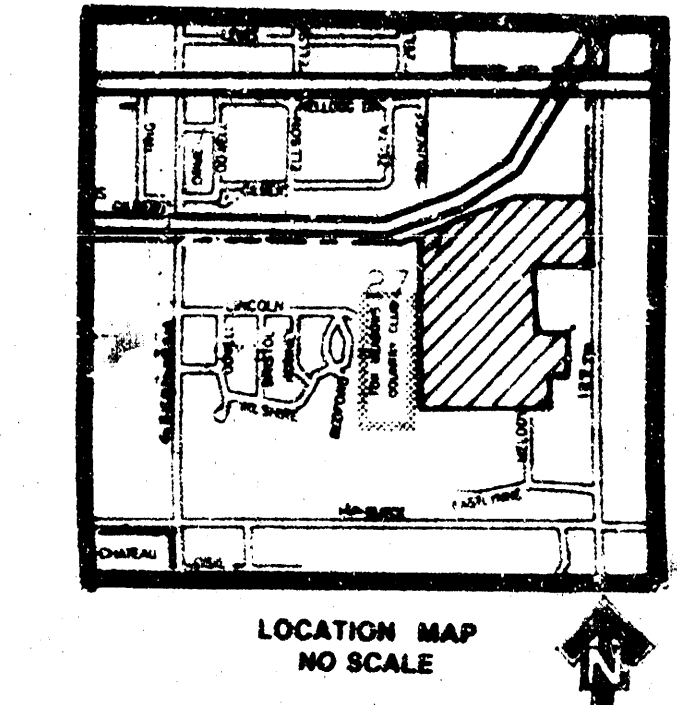
NOTES:

1. RESERVES A, L AND Q ALLOW DRAINAGE STRUCTURES, LAKES, RECREATIONAL EQUIPMENT, SWIMMING POOLS, GAZEBOS, CLUBHOUSE, WALKS, LIGHTING, LANDSCAPING, IRRIGATION, ENTRY AND PRIVATE WALLS AND UTILITIES CONFINED TO EASEMENTS.
2. RESERVES M - P ALLOW ENTRY WALLS, PROJECT SIGNS, LIGHTING, LANDSCAPING, IRRIGATION, AND UTILITIES CONFINED TO EASEMENTS.
3. MIN-KANSAS ENGINEERING CORP. WILL PREPARE DRAINAGE PLANS AND UTILITY PLANS AND PROVIDE BENCHMARKS.
4. SUGGESTED UTILITY EASEMENTS ARE SHOWN ON PLAN. FINAL LOCATION WILL BE INDICATED ON THE FINAL PLAN WHEN THE UTILITY SYSTEM IS DESIGNED. SOME AREAS WILL HAVE FRONT LOADING UTILITIES. UTILITIES WILL BE DEFINED THROUGHOUT THE RESERVES AT FINAL PLAN.
5. TOPOGRAPHY PROVIDED BY N. J. HARDEN ASSOCIATES, INC. DATE OF PHOTOGRAPHY - FEBRUARY 4, 1984 AT TWO FOOT CONTOUR INTERVAL.
6. FRONT YARD SETBACKS AT THE CIRCULAR CUL-DE-SAC SHALL BE 20'. ALL OTHER FRONT YARD SETBACKS SHALL BE 25'. CORNER LOTS SHALL HAVE ONE 15' SIDE YARD SETBACK.

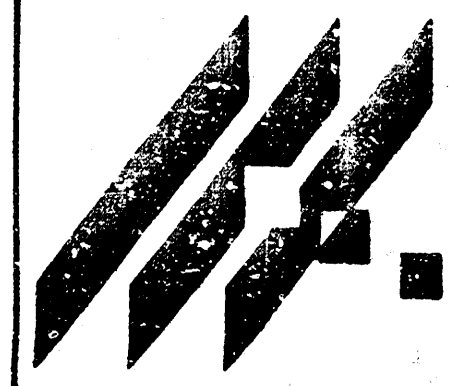




- NOTES:**
1. RESERVES L, L AND G ALLOW DRAINAGE STRUCTURES, LAKES, RECREATIONAL EQUIPMENT, SWIMMING POOLS, GAZEBOS, CLUBHOUSE, WALKS, LIGHTING, LANDSCAPING, IRRIGATION, ENTRY AND PRIVATE WALKS AND UTILITIES CONFINED TO EASEMENTS.
 2. RESERVES M - P ALLOW ENTRY WALLS, PROJECT SIGNS, LIGHTING, LANDSCAPING, IRRIGATION, AND UTILITIES CONFINED TO EASEMENTS.
 3. MID-KANSAS ENGINEERING CORP. WILL PREPARE DRAINAGE PLANS AND UTILITY PLANS AND PROVIDE SURVEILLANCE.
 4. SUGGESTED UTILITY EASEMENTS ARE SHOWN ON PLAN. FINAL LOCATION WILL BE INDICATED ON THE FINAL PLAN WHEN THE UTILITY SYSTEM IS DEFINED THROUGHOUT THE RESERVES AT FINAL PLAT.
 5. TOPOGRAPHY PROVIDED BY M. J. HARRIS ASSOCIATES, INC. DATE OF PHOTOGRAPHY - FEBRUARY 4, 1994 AT TWO FOOT CONTOUR INTERVAL.
 6. FRONT YARD SETBACKS AT THE CIRCULAR CUL-DE-SAC SHALL BE 20'. ALL OTHER FRONT YARD SETBACKS SHALL BE 25'. CORNER LOTS SHALL HAVE ONE 10' SIDE YARD SETBACK.



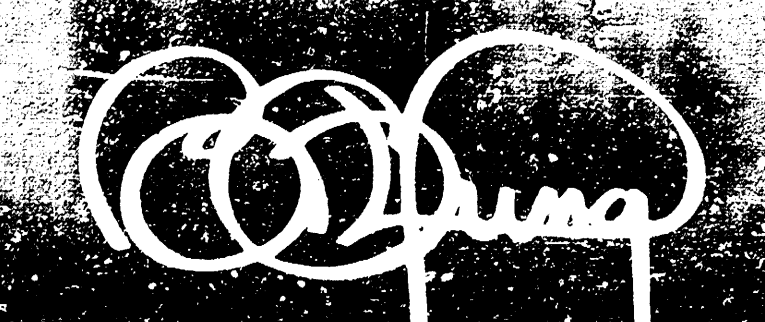
SCALE: 1" = 100'
CONTOUR INTERVAL = 2'
DATE: OCT. 19, 1995



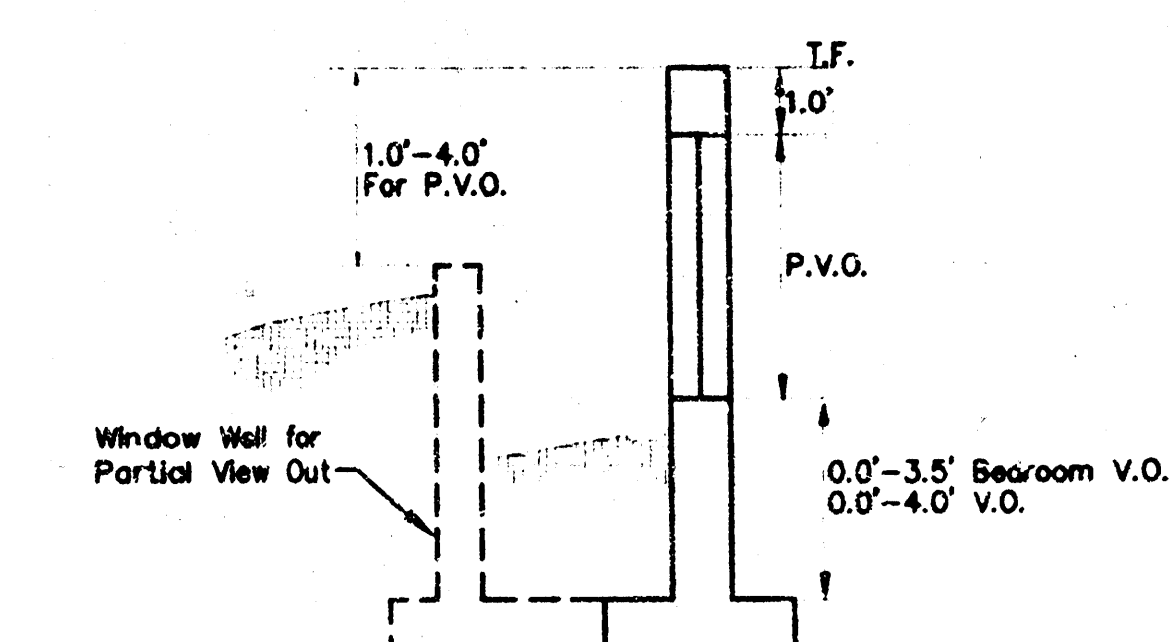
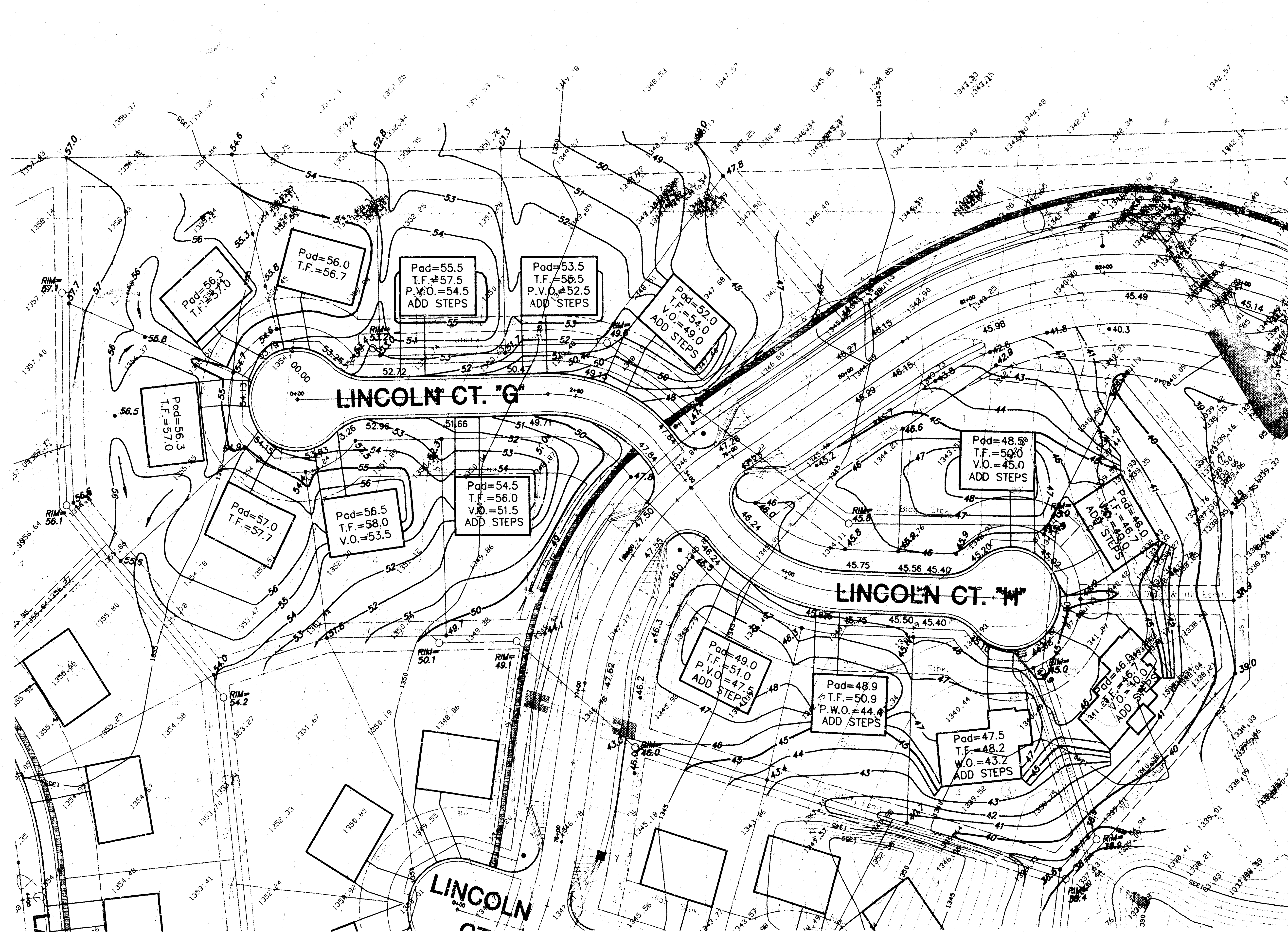
MID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

PRELIMINARY PLAT **WOODLAND LAKES ESTATES**

OWNER/SUBDIVIDER: LEEWOOD HOMES 3500 N. ROCK RD WICHITA, KS 67226
ENGINEER: MID-KANSAS ENGINEERING CONSULTANTS 411 N. WEBB RD WICHITA, KS 67206



YUNG DESIGN GROUP



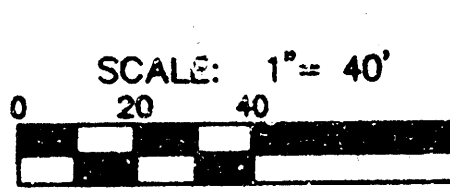
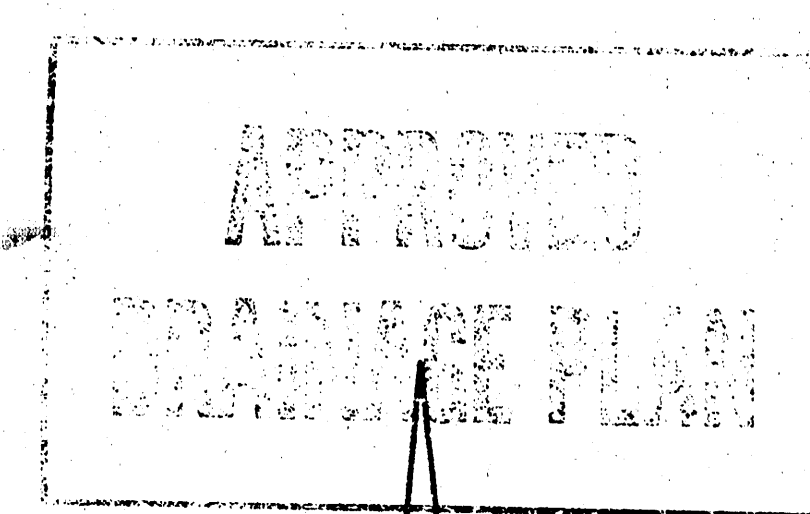
VIEW OUT & PARTIAL VIEW OUT DETAIL

LEGEND

+47.5	Proposed Elevations
135.0	Existing Elevations
V.O.	Top of View Wall Elevation
T.F.	Top of Foundation
Pad	Elevation @ Garage Door Elevation
P.V.O. (See Note)	Partial View Wall Elevation
47	Proposed Contour
→	Flow Arrow

Note: P.V.O.'s may be V.O.'s depending on the number of steps added.

Builders shall drop siding or brick ledges or build a retaining wall to transition between properties.



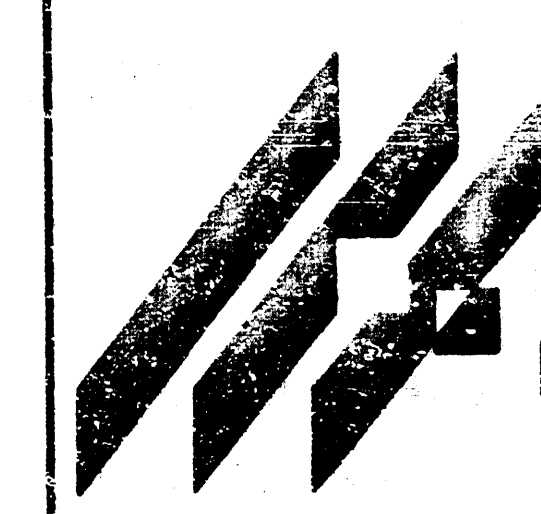
MINIMUM PAD ELEVATIONS			
Lowest opening			
Lot	Block	City Datum	USGS Datum
1	3	154.6	1342.0
2	3	154.6	1342.0
3	3	153.1	1340.5
4	3	153.1	1340.5

WOODLAND LAKES ESTATES
PROJECT NAME
GRADING PLAN
COURTS 'G' & 'H'
DESIGN TITLE

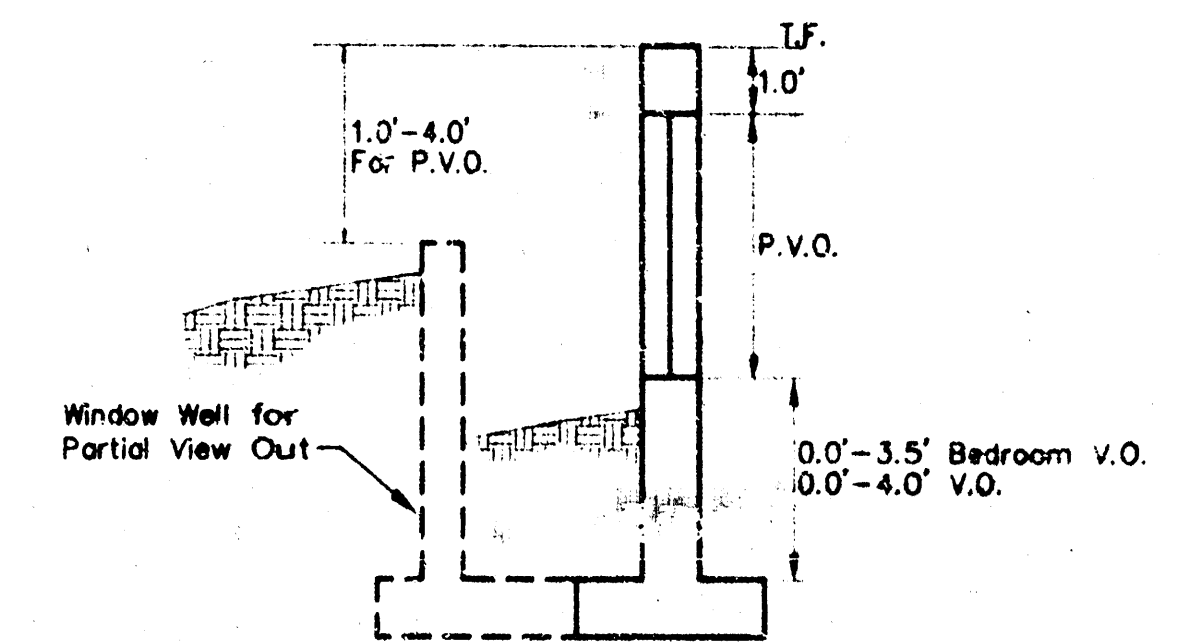
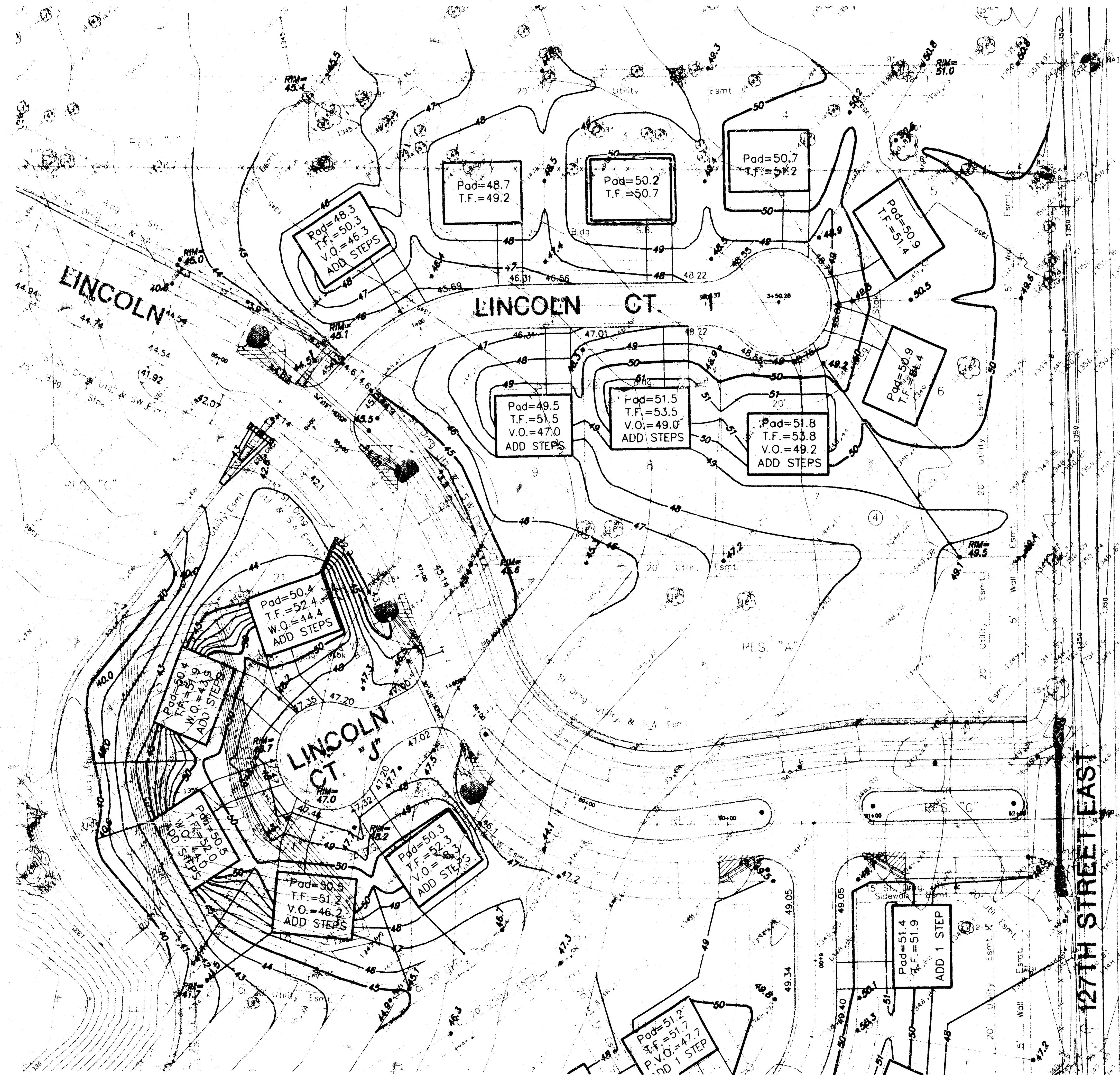
G/A KKL
DESIGN DRAWN BY

KHB NOV. 1996
CHECKED BY DATE

95058 GR 1 / 1
JOB NO. SHEET OF



KID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600



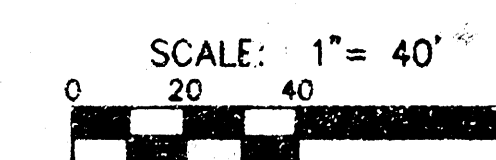
VIEW OUT & PARTIAL VIEW OUT DETAIL

LEGEND

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135.0	Existing Elevations
V.O.	Top of View Wall Elevation
T.F.	Top of Foundation
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Builders shall drop siding or brick ledges or build a retaining wall to transition between properties.



MINIMUM PAD ELEVATIONS			
Lowest opening			
Lot	Block	City Datum	USGS Datum
20	5	154.6	1342.0
21	5	154.6	1342.0
19	5	153.1	1340.5

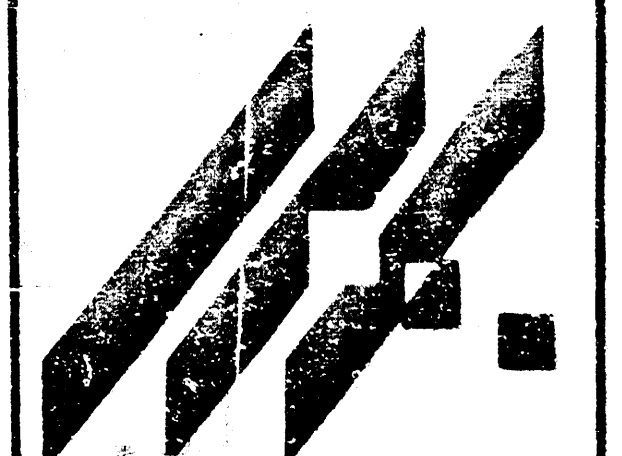
WOODLAND LAKES ESTATES

PROJECT NAME
**GRADING PLAN
COURTS 'T' & 'J'**
DESIGN TITLE

GJA KKL
DESIGN DRAWN BY

KHB NOV. 1996
CHECKED BY DATE

95058 OR 1 / 1
JOB NO. SHEET OF



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411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9400