

22-141 50 SHEETS
22-142 100 SHEETS
22-143 150 SHEETS
22-144 200 SHEETS

Pebblebrook Addition

Final Drainage plan

Residential lot

Drainage Criteria for Design -

$C_{\text{runoff factor}} = 0.40$ Grassed Backyard
 $C_{\text{runoff factor}} = 0.50$ Frontyard (springs & roofs)

$C_{100 \text{ runoff factor}} = 0.50$ Grassed Backyard
 $C_{100 \text{ runoff factor}} = 0.60$ Frontyard (springs & roofs)

$I_L = 383 \text{ W.H.R. @ 5 min. T.E.}$

$I_{100} = 751 \text{ W.H.R. @ 5 min. T.E.}$

Express conditions - collect the two year runoff

Sump conditions - collect the 100 year runoff

Rip up road in all directions.

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Storm Sewer Routing

Rcp 11-0.013

#	Node	Q ₁₀₀	Q ₂	Slope	Notes
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1	1.8+1.8	15"	0.6%	Bypass	Downs Drop
2	3.0+	15"	0.5%	Sump	Circle Drop.
3	2.4+3.6	18"	0.5%	Bypass	Type 1A Single
4	2.4	24"	1.4%	Sump	Type 1A Downs
5	3.4	30"	0.6%	Sump	Type 1A Down
6					outfall structure w/rip rap.

7	6.3	15"	0.94%	Bypass	6.3 cfs Type 1A D.
8	6.3+3.8	18"	0.92%	Bypass	10.1 cfs Type 1A D.
9	10.1	18"	0.92%	Bypass	
10	9.6+10.1	18"	0.90%	Sump	
11	19.7	24"	0.76%	Bypass	
12	19.7+6.3	24"	0.50%	Bypass	
13	26.0	15"	0.50%	Bypass	
14	3.4+2.9	18"	0.50%	Bypass	
15	6.3	15"	0.60%		
16	9.6+10.1	18"	0.50%	Sump	100 yr.
17	19.7+6.3	24"	0.60%	Sump	100 yr. Discharge
18	26.0	24"	0.60%	Rip rap	

11/22/02

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Pebblebrook Addition Drainage Routing for Storm Water Sewer.

Area #	DA AC	C ₂	Q ₂ cfs	C ₁₀₀	Q ₁₀₀ cfs
A	1.14	0.40	2.7	.50	6.4
B	1.21	0.50	2.3	.60	5.3
C	1.44	0.50	2.8	.6	6.6
D	2.10	0.40	3.2	.5	7.7
E	2.75	0.50	3.3	.6	12.1
F	0.90	0.50	1.7	.6	4.0
G	2.60	0.50	4.4	.6	11.8
H	0.80	0.50	1.5	.6	3.5
I	1.60	0.40	2.4	.5	5.9
J	0.90	0.50	1.7	.6	4.0
K	1.60	0.50	3.0	.6	7.1
L	0.40	0.50	1.7	.6	4.0
M	0.60	0.50	1.1	.6	2.6
N	0.85	0.40	1.3	.5	3.1
O	1.20	0.50	2.3	.6	5.3
P	1.60	0.50	3.0	.6	7.1
Q	2.30	0.40	3.10	.5	8.4
R	1.00	0.50	1.9	.6	4.4
S	1.30	0.50	1.4	.6	5.7
T	0.80	0.50	1.7	.6	4.0

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Area #	DA AC	C ₂	Q ₂ cfs	C ₁₀₀	Q ₁₀₀ cfs
U	2.7	0.40	4.1	0.5	9.9
V	1.5	0.50	2.0	0.6	4.6
W	1.8	0.50	3.4	0.6	8.0
X	2.0	0.40	4.0	0.5	9.6
Y	2.0	0.50	3.8	0.6	8.8
Z	2.3	0.50	4.3	0.6	14.6

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#	Node	Q	Pipe	Slope	Notes
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1					
20	1.7	15"	1.4%	Sump	
21	17.9	24"	0.60%	Bypass	
22	17.9+1.4	24"	1.25%	Bypass	
23	19.3+1.4	30"	0.70%	Sump	
24	20.7	30"	0.60%	Sump	
25	contingency into existing system - center of Hwy.				

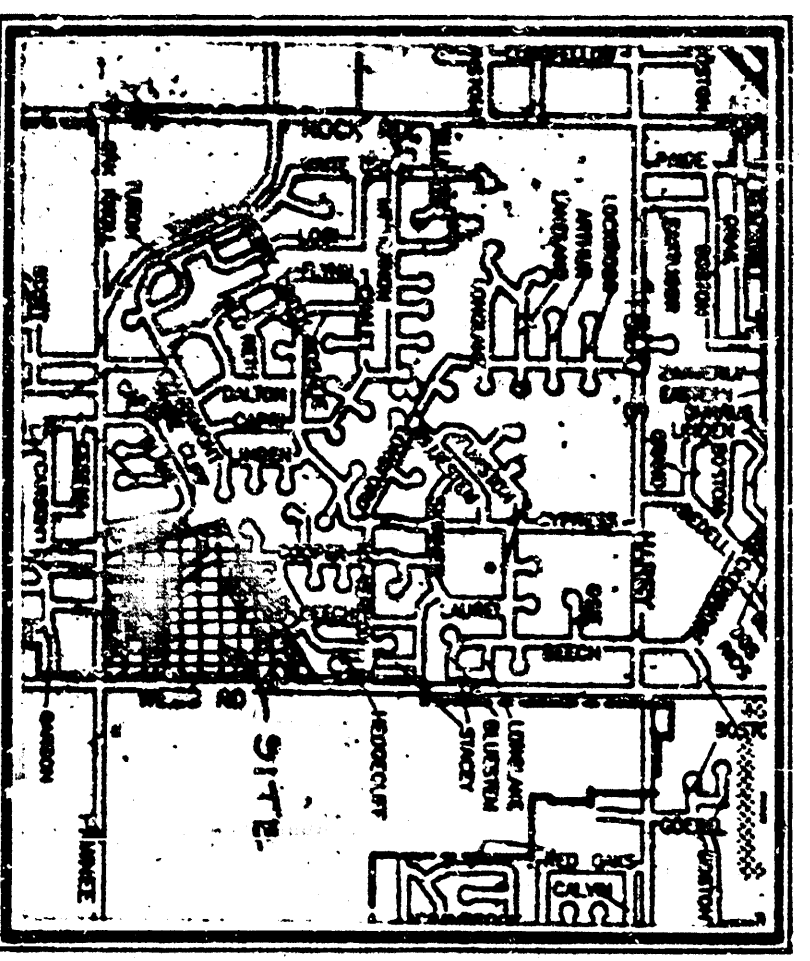
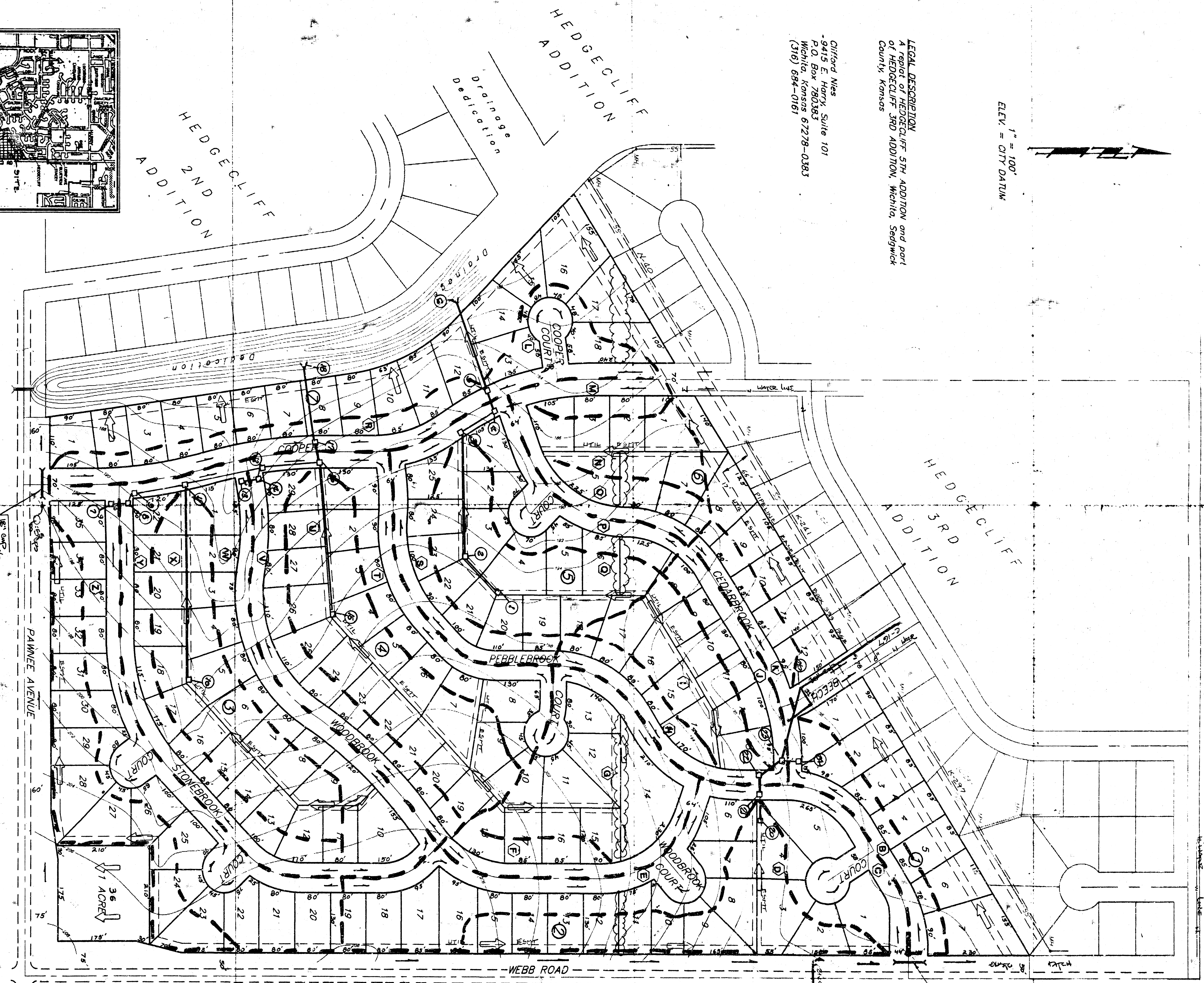
PRELIMINARY PLAT **PEBBLEBROOK ADDITION** WICHITA, SEDGWICK COUNTY, KANSAS



1" = 100'
 ELEV. = CITY DATUM

LEGAL DESCRIPTION
 A REPLAT OF HEDGECLIFF 5TH ADDITION and part
 of HEDGECLIFF 3RD ADDITION, WICHITA, SEDGWICK
 COUNTY, KANSAS

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Vicinity Map

DRAINAGE PLAN

October 23, 1992
BAUGHMAN COMPANY P. A.
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