

Pebblebrook Addition

Final Drainage plan

RESIDENTIAL LOT

Drainage Criteria for Design -

C_{100} Runoff Factor = 0.50 Grass Backyard
 C_{2} Runoff Factor = 0.40 Front Yard Streets & Roofs
 C_{100} Runoff Factor = 0.60 Front Yard Streets & Roofs

I_L = 38% W.H.R. @ 5 Min. T.C.
 I_{100} = 7% W.H.R. @ 5 Min. T.C.

Bypass Conditions - collect the two year runoff
 Sump Conditions - collect the 100 year runoff
 RCP used in all designs.

22141 50 SHEETS
22142 100 SHEETS
22143 150 SHEETS
22144 200 SHEETS

PEBBLEBROOK ADDITION
 DRAINAGE ROUTING FOR STORM WATER SUMP.

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	3.6	.5	8.4
R	1.00	0.50	1.9	.6	4.4
S	1.30	0.50	2.4	.6	5.7
T	0.90	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	2.4	0.6	6.6
W	1.8	0.50	3.4	0.6	8.0
X	2.6	0.40	4.0	0.5	9.6
Y	2.0	0.50	3.8	0.6	8.8
Z	3.3	0.50	6.3	0.6	14.6

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STORM WATER ROUTING

RCP M=0.013

#	NO. OF	SIZE	PIPE	SLOPE	NOTES
1	1.8+1.8	15"	0.6%	Bypass	Downs Drop
2	3.0	15"	0.5%	Sump	Catchment Drop
3	2.4+3.6	18"	0.5%	Bypass	Type 1A Duvak
4	2.4	24"	1.4%	Sump	Type 1A Duvak
5	3.4	30"	0.6%	Sump	Type 1A Duvak
6					OUTFALL STRUCTURE WITH RCP.
7	6.3	15"	0.4%	Bypass	6.3 cfs Type 1A D.
8	6.3+3.8	18"	0.2%	Bypass	10.1 cfs Type 1A D.
9	10.1	18"	0.2%	Bypass	
10	4.6+1.8	15"	0.4%	Sump	
11	4.6+10.1	24"	0.7%		
12	11.7+6.3	30"	0.5%	Bypass	
13	2.4	15"	0.5%	Bypass	
14	3.4+2.9	18"	0.5%	Bypass	
15	6.3	15"	0.6%		
16	4.6+1.8	15"	0.6%		
17	3.4+4.4	18"	0.5%	Sump	100 YR.
18	OUTFALL	42"	0.6%	Sump	100 YR DISCONNECT RCP.

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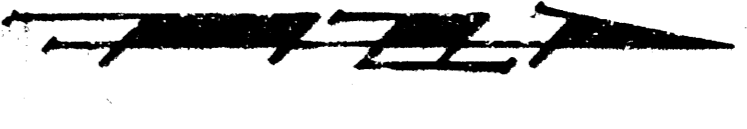
NO. OF PIPE SLOPE NOTES

20	7.7	15"	1.4%	Sump
21	17.9	24"	0.6%	Bypass
22	17.9+14	24"	1.2%	Bypass
23	31.9	30"	0.7%	Sump
24	5.3	15"	0.6%	Sump
25	CONNECTION INTO EXISTING SYSTEM - CENTER OF HOLLOW.			

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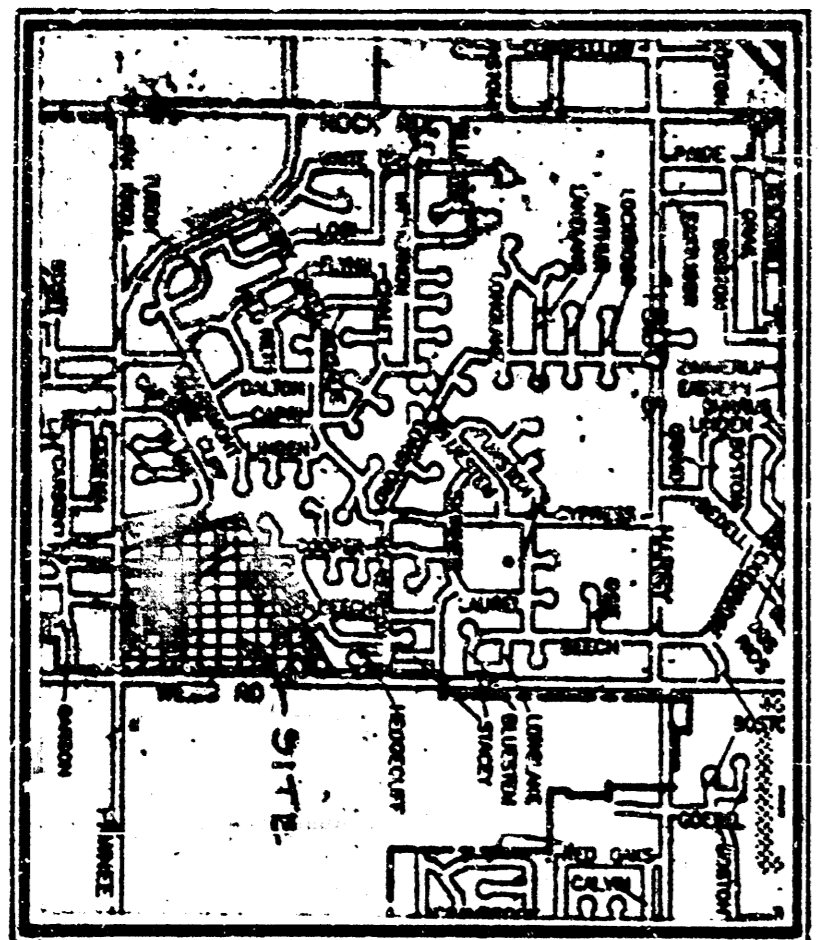
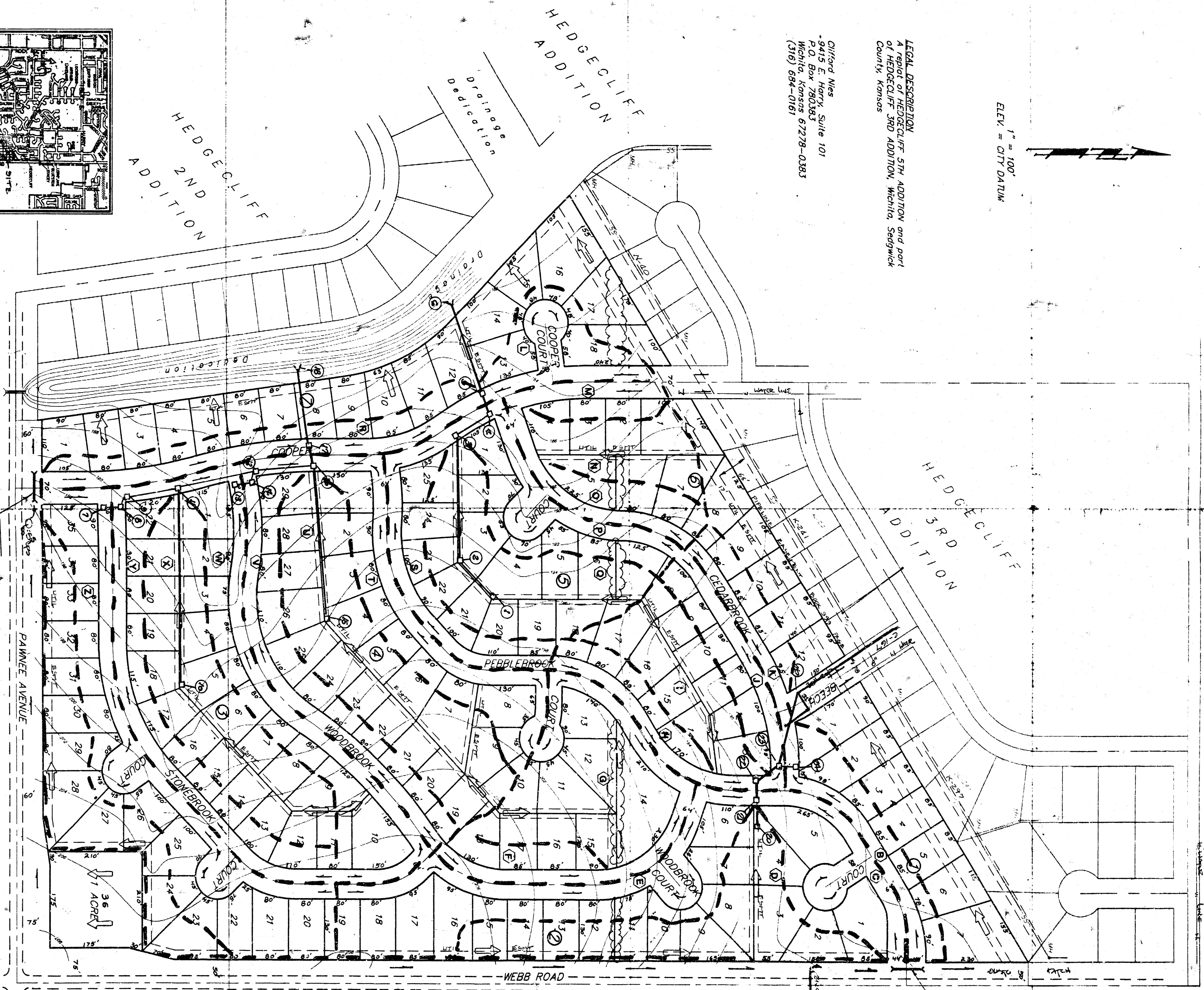
**PRELIMINARY PLAN
PEBBLEBROOK ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS**

1" = 100'
ELEV. = CITY DATUM



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

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Vicinity Map

DRAINAGE PLAN

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