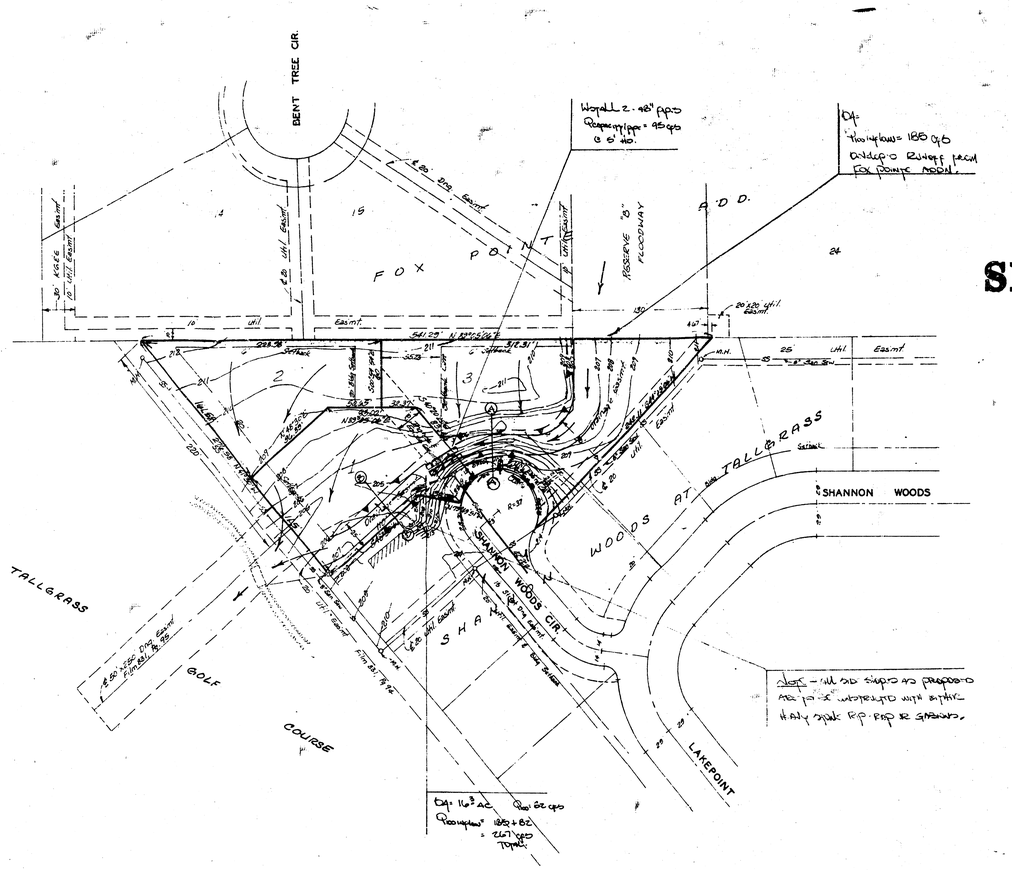
SHANNON WOODS SECOND AT TALLGRASS

AN ADDITION TO WICHITA SEDGWICK COUNTY, KANSAS

Reserve "E", Shannon Woods at Tallgrass, an Addition to Wichita, Sedgwick County, Kansas.

Shannon Woods, Inc. Jay W. Russell, President.



1" = 50'
Elev = City Datum

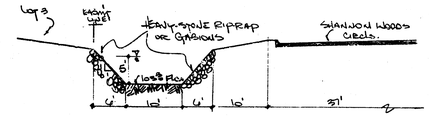
DRAINAGE PLAN

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/682-7271 • 315 ELLIS • WICHITA, KANSAS 67211

4 May 1990

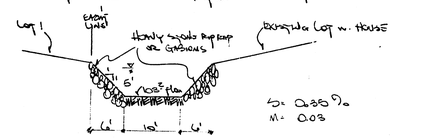
Shannon Woods Second at Tallgrass
AEW 5/8/90
BAUGHMAN COMPANY, P.A.

Section AA Q inflow = 185 cfs.
100



S = 0.35 % M = 0.03
Capacity @ 5' depth = 468 cfs.
- Design section proposed is adequate.
- 10' Bottom could be reduced to 6' or 8'.

Section BB Q inflow = 247 cfs.



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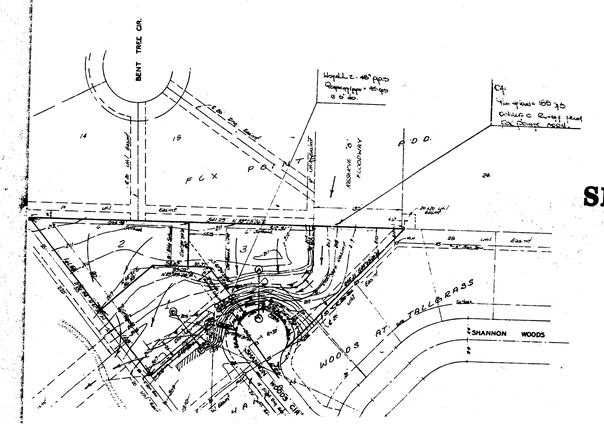

SE

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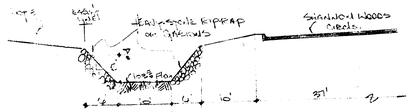

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FROM THE DESK OF MEMO

PROJECT: SHANNON WOODS SECOND AT TALLGRASS
JOB NO.:
DATE: May 8, 1990
TO: Vicky Huang, P.E. 7th Floor City
COPIES TO:
FROM: N. Brent Wooten, P.E.
REFERENCE: Drainage Plan

Enclosed herein is the final drainage plan for the referenced plat. Please review and advise.

Thank you.

RECEIVED
MAY 9 1990
ENGINEERING DIVISION

SOLUTION FOR A TRAPEZOIDAL CHANNEL

SHANNON WOODS DESIGN SECTION

DISCHARGE	467.93 CFS	BASE WIDTH	10.00 FEET
VELOCITY	6.24 FPS	SIDE SLOPE	1.00 TO 1
NORMAL DEPTH	5.00 FEET	AREA	75.00 SQ.FT.
BOTTOM SLOPE	0.00350	TOP WIDTH	20.00 FEET
MANNING'S N	0.0300		
CRITICAL DEPTH	3.60 FEET	VELOCITY HEAD	0.61 FEET
FROUDE NUMBER	0.97	P + M	16063 POUNDS
CRITICAL SLOPE	0.01145		

DO YOU WANT TO PRINT OUT THE RESULTS? (Y/N)

SOLUTION FOR A TRAPEZOIDAL CHANNEL

SHANNON WOODS 8' BOTTOM DITCH

DISCHARGE	390.52 CFS	BASE WIDTH	8.00 FEET
VELOCITY	6.01 FPS	SIDE SLOPE	1.00 TO 1
NORMAL DEPTH	5.00 FEET	AREA	65.00 SQ.FT.
BOTTOM SLOPE	0.00350	TOP WIDTH	18.00 FEET
MANNING'S N	0.0300		
CRITICAL DEPTH	3.59 FEET	VELOCITY HEAD	0.56 FEET
FROUDE NUMBER	0.56	P + M	13391 POUNDS
CRITICAL SLOPE	0.01190		

DO YOU WANT TO PRINT OUT THE RESULTS? (Y/N)

SOLUTION FOR A TRAPEZOIDAL CHANNEL

SHANNON WOODS 6' BOTTOM DITCH

DISCHARGE	314.87 CFS	BASE WIDTH	6.00 FEET
VELOCITY	5.72 FPS	SIDE SLOPE	1.00 TO 1
NORMAL DEPTH	5.00 FEET	AREA	55.00 SQ.FT.
BOTTOM SLOPE	0.00350	TOP WIDTH	16.00 FEET
MANNING'S N	0.0300		
CRITICAL DEPTH	3.59 FEET	VELOCITY HEAD	0.51 FEET
FROUDE NUMBER	0.54	P + M	10777 POUNDS
CRITICAL SLOPE	0.01249		

DO YOU WANT TO PRINT OUT THE RESULTS? (Y/N)