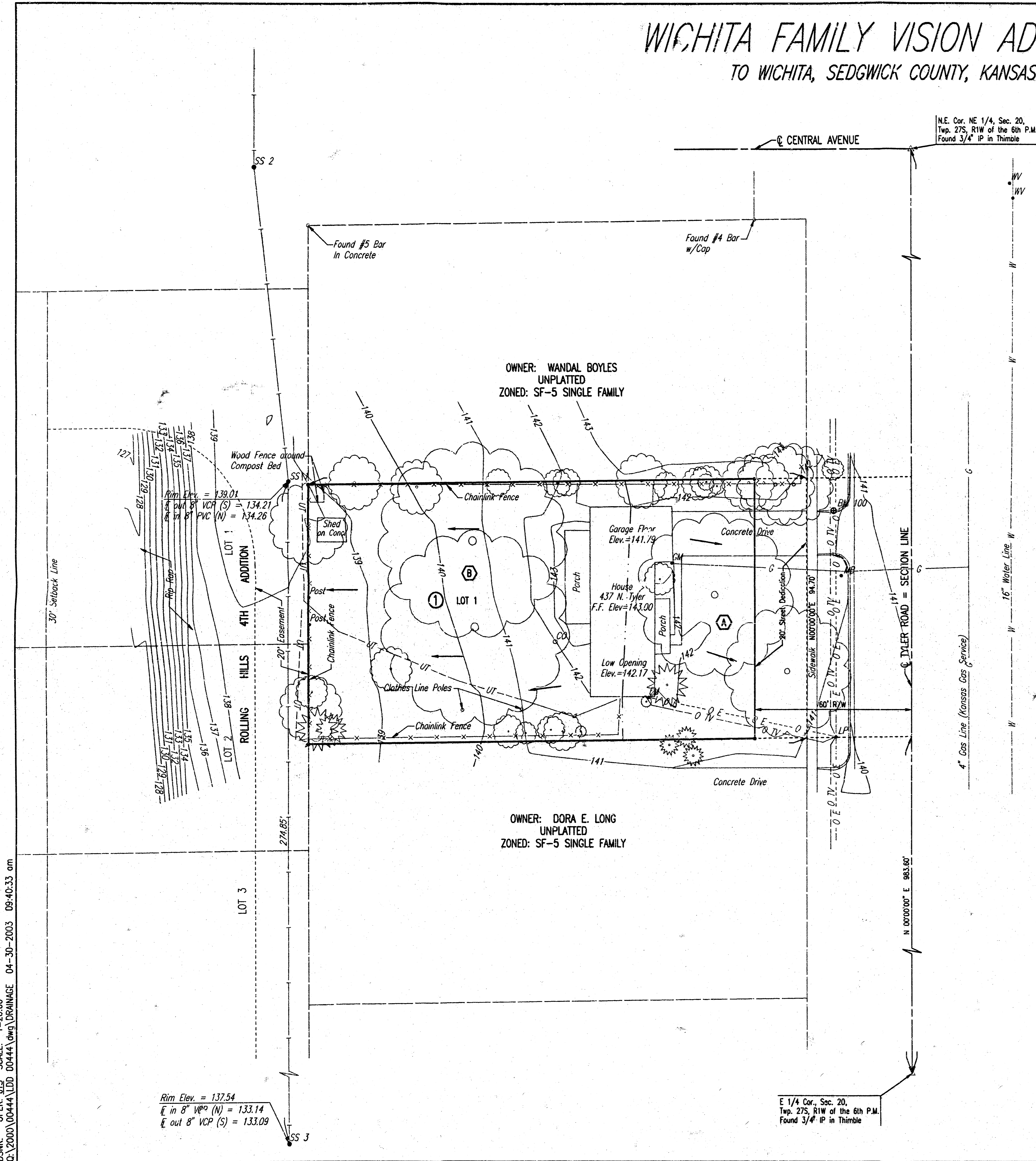


WICHITA FAMILY VISION ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



USNKS: UPRK: JIS SCALE: 1"=20' 01/2000/00444\DD\0444\DWG\DRAINAGE 04-30-2003 09:40:33 am

N.E. Cor. NE 1/4, Sec. 20,
 Twp. 27S, R1W of the 6th P.M.
 Found 3/4" IP in Thimble

E 1/4 Cor., Sec. 20,
 Twp. 27S, R1W of the 6th P.M.
 Found 3/4" IP in Thimble

DRAINAGE PLAN

UNDER EXISTING CONDITIONS, THE SITE CONSISTS OF A 0.37 ACRE LOT CONTAINING A HOUSE, A SHED, TREES, AND A FENCE. AT THE TIME OF REDEVELOPMENT, RUNOFF SHALL BE LIMITED TO EXISTING CONDITIONS. CALCULATIONS FOR EXISTING CONDITIONS ARE SHOWN BELOW.

EXISTING CONDITIONS HYDROLOGY: RATIONAL METHOD, Q=CIA
 SOIL TYPE: Ba (BLANKET SILT LOAM)
 HYDROLOGIC SOIL GROUP C

*INTENSITY: ASSUME MINIMUM TIME OF CONCENTRATION FOR ALL BASINS. THEREFORE, AT T_c=15 MINUTES:
 $i_2=3.80$ in/hr, $i_3=4.62$ in/hr, $i_{100}=7.40$ in/hr

-RUNOFF COEFFICIENTS
 RESIDENTIAL, SINGLE FAMILY (SOIL GROUP C)
 $C_1=0.43$, $C_2=0.46$, $C_{100}=0.65$

BASIN A
 -RUNOFF DRAINS EAST TO TYLER ROAD
 -AREA=0.11 AC
 -RUNOFF
 $Q_2=C_1i_2A=0.43(3.80)(0.11)=0.18$ CFS
 $Q_3=C_2i_3A=0.46(4.62)(0.11)=0.23$ CFS
 $Q_{100}=C_{100}i_{100}A=0.65(7.40)(0.11)=0.53$ CFS

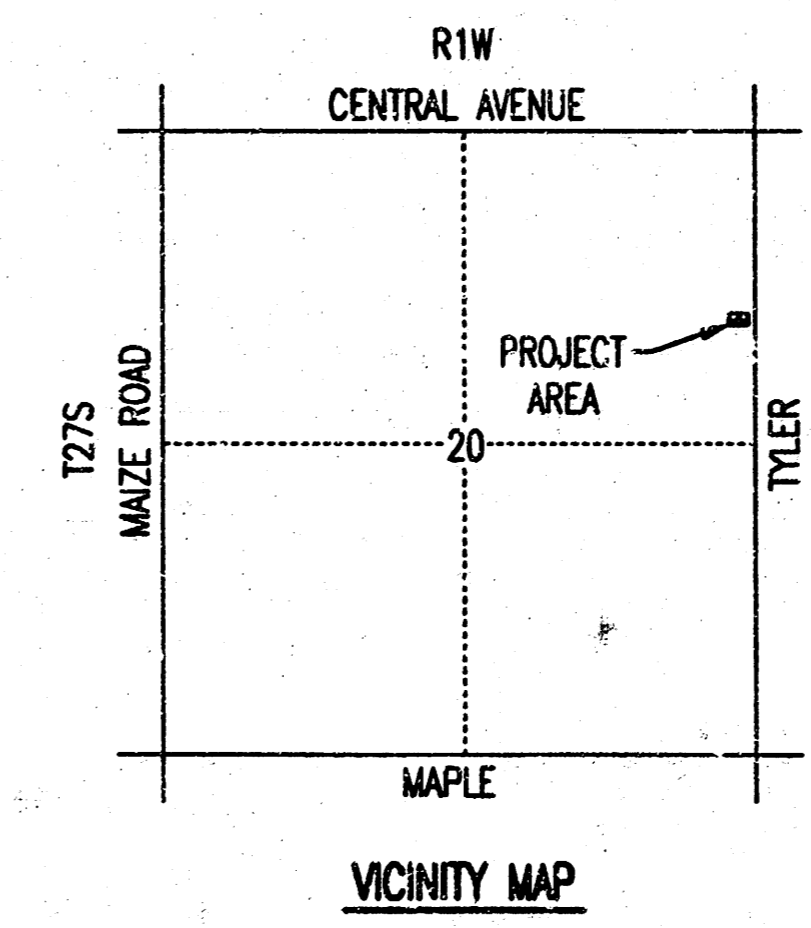
BASIN B
 -RUNOFF DRAINS WEST TO AN EXISTING CHANNEL BEHIND THE LOT
 -AREA=0.26 AC
 -RUNOFF
 $Q_2=0.43(3.80)(0.26)=0.42$ CFS
 $Q_3=0.46(4.62)(0.26)=0.55$ CFS
 $Q_{100}=0.65(7.40)(0.26)=1.25$ CFS

SCALE: 1" = 20'
 • = 1/2" REBAR W/PEC CAP UNLESS OTHERWISE NOTED

BENCHMARKS:
 PROJECT BENCHMARK:
 #100 - CHISELED SQUARE CUT ON TOP OF CURB AT 437 N. TYLER ROAD.
 ELEV. 141.555 CITY DATUM
 ELEV. 1328.955 N.G.V.D.
 C.O.N. BENCHMARK:
 WESTLINK AND CENTRAL. TOP OF NORTH HANDRAIL, AT EAST END OF RCBC.
 ELEV. 147.41 CITY DATUM
 ELEV. 1334.81 N.G.V.D.

DRAINAGE LEGEND

- A BASIN IDENTIFIER
- BASIN BOUNDARY
- STORM WATER FLOW



Rim Elev. = 137.54
 i in 8" VCP (N) = 133.14
 i out 8" VCP (S) = 133.09