Quick TR

Executed: 16:09:31 01-06-1998

JACOBS 2ND ADDITION - RUNOFF FROM NORTH (NEW) PARCEL

* * * * * * SUMMARY OF RATIONAL METHOD PEAK DISCHARGES * * * * * *

Q = adj * C * I * A
Where: Q=cfs, C=Weighted Runoff Coefficient, I=in/hour, A=acres
adj = 'C' adjustment factor for each return frequency

RETURN FREQUENCY = 5 years
'C' adjustment, k = 1
Adj. 'C' = Wtd.'C' x 1

Subarea Descr.	Runoff 'C'	Area acres	Tc (min)	Wtd. 'C'	Adj. 'C'	I in/hr	Total acres	Peak Q (cfs)
ROOF/PVM'T	0.870	0.29						
GRASS	0.180	0.07						
			15.00	0.730	0.730	4.560	0.36	1.20

Triangular Channel Analysis & Design
Open Channel - Uniform flow

Worksheet Name: JACOBS 2ND ADD'N

Comment: **"V" BOTTOM CHANNEL - W/GRASS**

Solve For Discharge

Given Input Data:

Left Side Slope..	4.00:1 (H:V)
Right Side Slope.	4.00:1 (H:V)
Manning's n.....	0.035
Channel Slope....	0.0050 ft/ft
Depth.....	**0.60 ft**

Computed Results:

Discharge.....	**1.90 cfs**
Velocity.....	1.32 fps
Flow Area.....	1.44 sf
Flow Top Width...	4.80 ft
Wetted Perimeter.	4.95 ft
Critical Depth...	0.43 ft
Critical Slope...	0.0311 ft/ft
Froude Number....	0.42 (flow is Subcritical)

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Triangular Channel Analysis & Design
Open Channel - Uniform flow

Worksheet Name: JACOBS 2ND ADD'N

Comment: **"V" BOTTOM CHANNEL - W/GRASS**

Solve For Discharge

Given Input Data:

Left Side Slope..	4.00:1 (H:V)
Right Side Slope.	4.00:1 (H:V)
Manning's n.....	0.035
Channel Slope....	0.0050 ft/ft
Depth.....	**1.00 ft**

Computed Results:

Discharge.....	**7.41 cfs**
Velocity.....	1.85 fps
Flow Area.....	4.00 sf
Flow Top Width...	8.00 ft
Wetted Perimeter.	8.25 ft
Critical Depth...	0.73 ft
Critical Slope...	0.0260 ft/ft
Froude Number....	0.46 (flow is Subcritical)

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Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

Worksheet Name: JACOBS 2ND ADD'N

Comment: **6" P.V.C. PIPE - OUTLET CAPACITY**

Solve For Actual Discharge

Given Input Data:

Diameter.....	0.50 ft
Slope.....	0.0100 ft/ft
Manning's n.....	0.012
Depth.....	0.50 ft

Computed Results:

Discharge.....	**0.61 cfs**
Velocity.....	3.10 fps
Flow Area.....	0.20 sf
Critical Depth....	0.40 ft
Critical Slope....	0.0107 ft/ft
Percent Full.....	100.00 %
Full Capacity.....	0.61 cfs
QMAX @.94D.....	0.65 cfs
Froude Number.....	FULL

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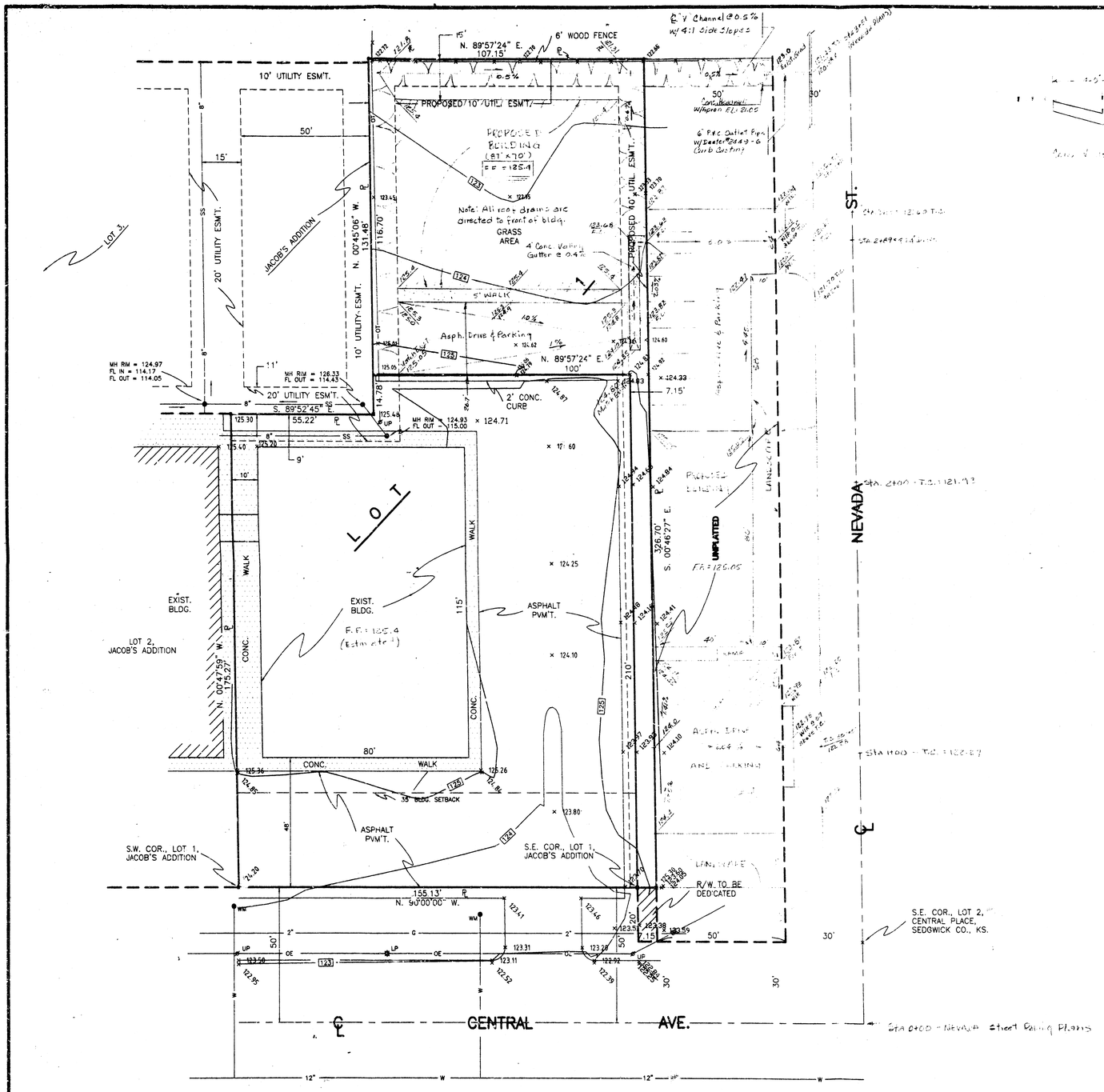

1" = 20'
#97-062-SD

LEGEND

W = WATER MAIN
WM = WATER METER
UP = UTILITY POLE
LP = LIGHT POLE
OE = OVERHEAD ELECTRIC
OT = OVERHEAD TELEPHONE
SS = SANITARY SEWER
G = GAS MAIN

PRELIMINARY PLAT

OF

JACOB'S 2ND ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

LEGAL DESCRIPTION

A REPLAT OF LOT 1, JACOB'S ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS, TOGETHER WITH A TRACT DESCRIBED AS BEGINNING AT A POINT 80 FEET WEST OF THE SOUTHEAST CORNER OF LOT 2, CENTRAL PLACE ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS; THENCE NORTH 326.7 FEET; THENCE WEST 107.15 FEET; THENCE SOUTH 326.7 FEET; THENCE EAST 107.15 FEET TO THE POINT OF BEGINNING, EXCEPT THE WEST 100 FEET OF THE SOUTH 210 FEET THEREOF.

BENCHMARK

CITY OF WICHITA BENCHMARK DISC., NW CORNER OF INTERSECTION ANNA AND CENTRAL, 34' NORTH AND 42' WEST OF CENTERLINE BOTH. ELEV. = 124.52 CITY DATUM.

SITE GRADING PLAN

MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA
Dec. 1997

DON C. MOEHRING LICENSED 3463 KANSAS PROFESSIONAL ENGINEER