HYDROLOGY

K22/D34

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1 PLAN

4-PLEX
CHELWOOD PARK ADDITION
LT 3 BLK 3
ZONE MAP K-22
13109 FRUIT AVE NE

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DRAINAGE REPORT - RATIONAL METHOD

$Q = C\ I\ A$

Q = QUANITY OF RUN-OFF IN CUBIC FEET / SECOND

C = COEFFICIENT OF RUN-OFF EXPRESSED IN A RATIO OF RAINFALL TO RUN-OFF

I = RAINFALL INTENSITY EXPRESSED IN INCHES / HOUR (100 YEAR DESIGN) = 2.6 INCHES

A = DRAINAGE AREA CONSIDERED IN ACRES

LOT 3 = 60' X 125 = 7500 SQ.FT. = 0.172 ACRES

BUILDING 3,016.0 SQ FT
PARKING & CONC. WALKS 3,300.0 SQ. FT.
6,316.0 SQ. FT. = 0.144 ACRES

PONDING & LANDSCAPING AREA = 0.028 ACRES

ASSUME "C" OF LAND = 0.35

$0.35 \times \frac{.028}{.17} = 0.058$

ASSUME "C" OF BUILDING & PAVING = 0.95

$0.95 \times \frac{0.144}{.17} = 0.80$

AVERAGE "C" THEN IS = 0.058
0.800
0.858 USE 0.86

ALBUQUERQUE BLUEPRINT COMPANY 10 x 10

Q = C I A

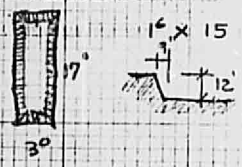
$= 0.86 \times \frac{2.6}{12} \times 0.13 \times 43{,}560 = 1055.0$ cu ft

IF "C" FOR UNDEVELOPED LAND = 0.35 THE INCREASE QUANITY FROM IMPROVEMENTS =

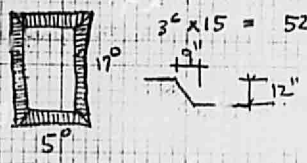
$\frac{0.86 - 0.35}{0.81} \times 1055.0 =$ **664.0 CU ft**

PONDING AREA REQUIRED

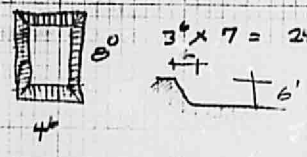
PONDS

A 

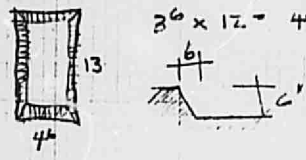
$1^6 \times 15 = 22.5' \times 12'' =$ 22.5 CU ft

B 

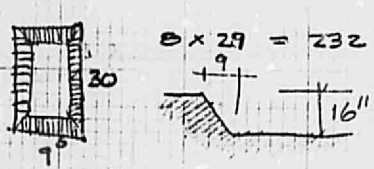
$3^6 \times 15 = 52.5 \times$ " = 52.5 CU ft

C 

$3^6 \times 7 = 24.5 \times 6'' = 12.25 \times 2 =$ 24.5 CU FT

D 

$3^6 \times 12 = 42 \times 6'' = 21.0 \times 2 =$ 42.0 CU FT

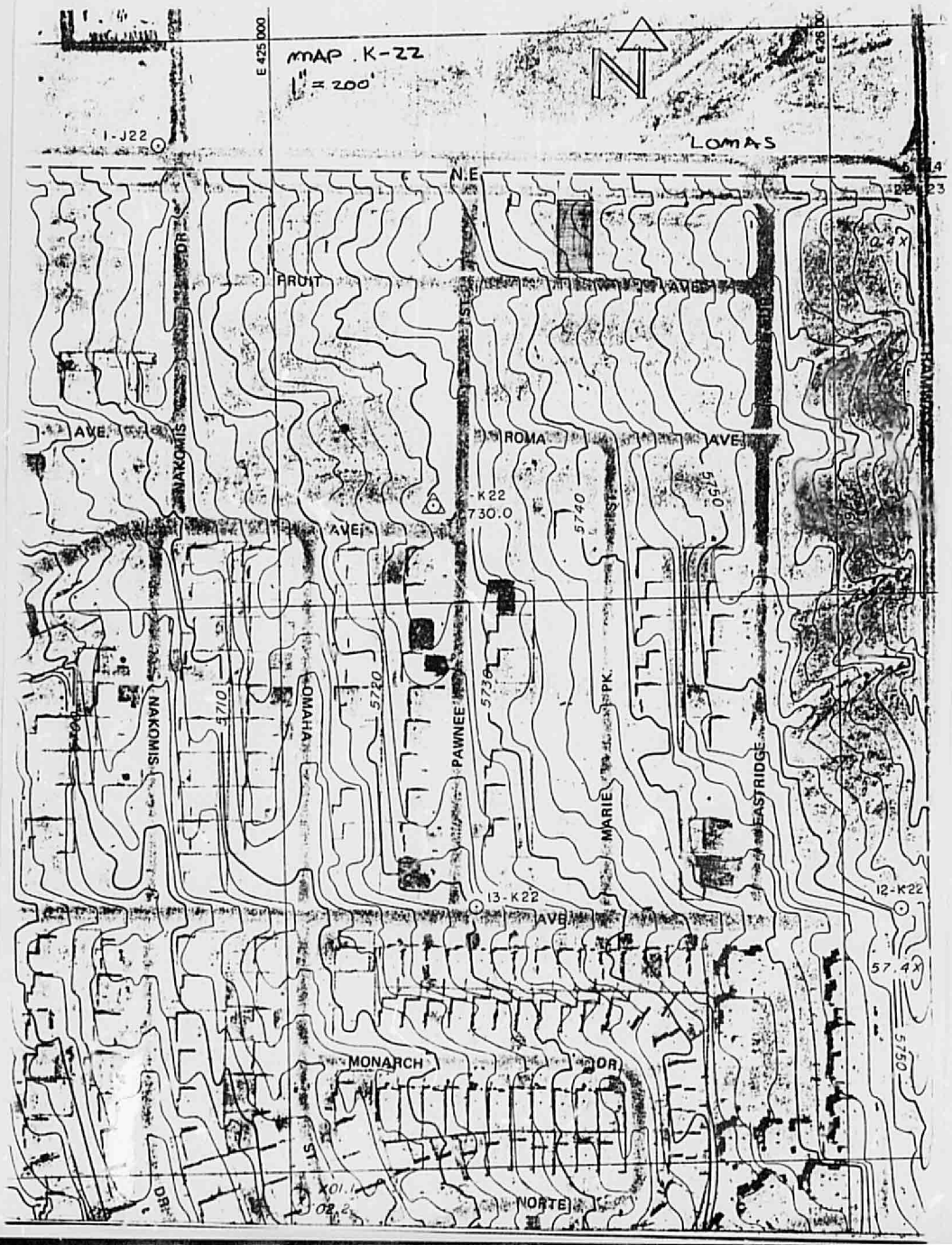
E 

$8 \times 29 = 232 \times 1.33' = 308.5 \times 2 =$ 617 CU FT

TOTALS
22.5
52.5
24.5
42.0
617.0

758.5 CU FT

ALBUQUERQUE BLUEPRINT COMPANY 10 x 10


MAP . K-22
1" = 200'
N
E 425 000
E 426 000
1-J22
LOMAS
N.E.
FRUIT
AVE.
ROMA
AVE.
NAKOMIS
DR.
AVE.
AVE.
K22
730.0
5740
5750
5710
5720
5730
OMAHA
ST.
PAWNEE
ST.
MARIE
PK.
EASTRIDGE
13-K22
12-K22
AVE.
AVE.
57.4X
5750
MONARCH
DR.
NORTE
DR.
ST.
RAMONA