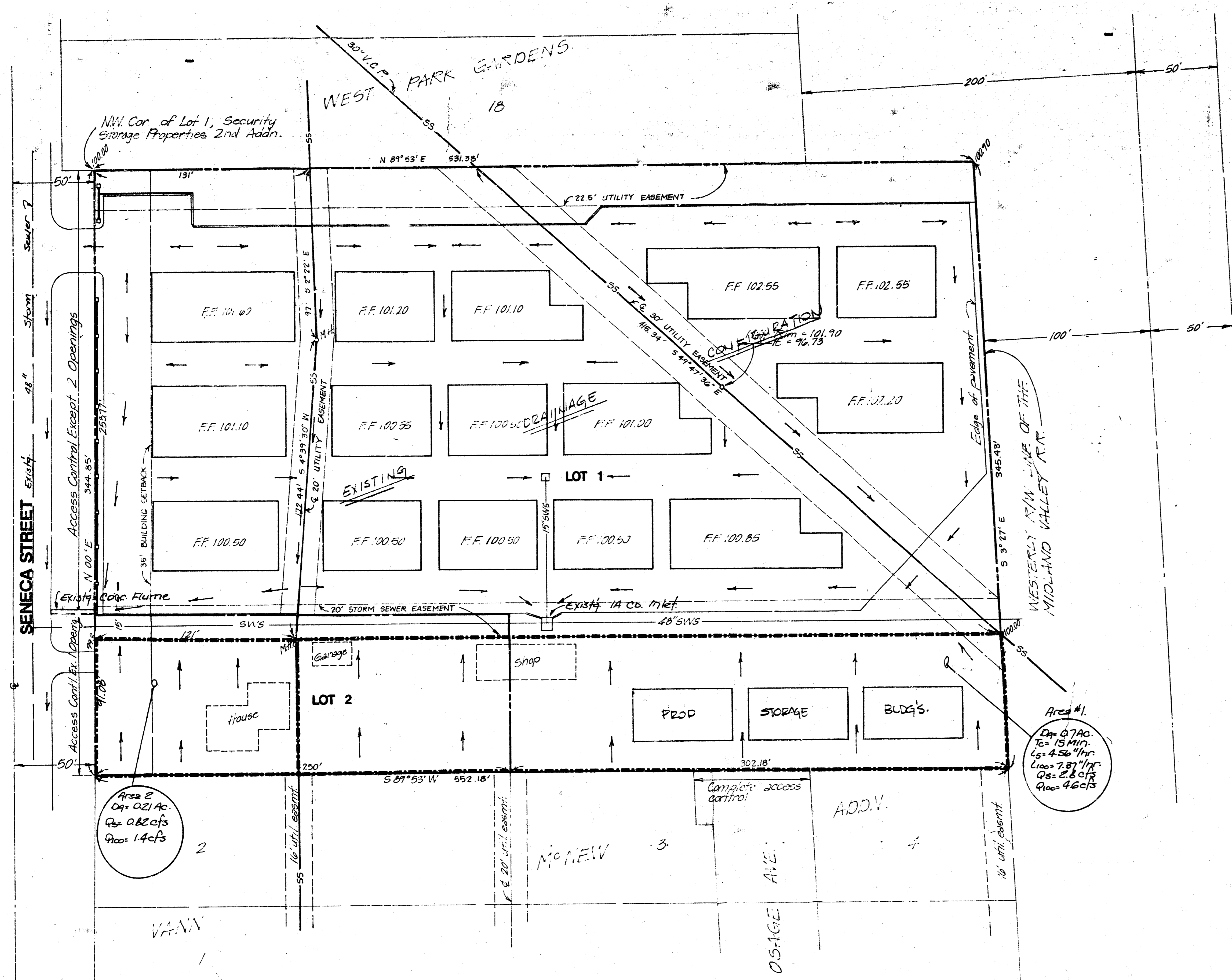


Approx Factor; From City of Wichita Drainage Manual
 Parking lots $C_s = 0.87$ $C_{100} = 0.87$
 Roofs $C_s = 0.85$ $C_{100} = 0.12$
 For storage Park Area, Assume 30% roof Area
 $C_s = 0.7(0.87) + 0.3(0.85) = 0.86$
 $C_{100} = 0.7(0.87) + 0.3(0.12) = 0.90$
 Area 1; S.E. Corner of New Plat.
 $Area = 0.7 Ac$ Use $T_c = 15 min$
 $C_s = 0.86$
 $C_{100} = 0.90$
 $C_s = 4.56 in/hr$
 $Q_s = (0.7)(0.86)(4.56) = 2.8 cfs$
 $C_{100} = 7.37 in/hr$
 $Q_{100} = (0.7)(0.9)(7.37) = 4.6 cfs$
 Drainage Handled via 1-A CU. Inlet From Drainage Plan for Sec. Storage 2nd Addn, Cap = 7 cfs @ T.C. Elev.
 size for sur storm.
 Existy Area from North to West: 1.68 Ac
 = 2.13 Ac. This Area was evaluated using the old Intensity Value of $C_s = 5.21 in/hr$ and $C_{100} = 6.98 in/hr$. Adjust for New Values.
 $Q_s total = (From North) = (2.13 Ac)(0.86)(4.56) = 8.4 cfs$
 Drop Inlet North of 1A Inlet has 5.0 cfs Cap @ 0.72 Feet of Pond Depth (existing Elev South).

Total Q_s For Both Areas = 8.4 cfs + 2.8 cfs = 11.2 cfs
 11.2 cfs - 5.0 cfs (Drop Inlet) = 6.2 cfs for 1A Inlet.
 1A Inlet Cap @ T.C. = 7.0 cfs > 6.2 cfs Overflow from North O.K.
 Total 100 yr. Runoff = $(2.13 Ac)(0.9)(7.37) + 4.6 cfs$
 $Q_{100} = 18.7 cfs$
 From Old Drainage Plan, Total $Q_{100} = 17.2 cfs$ Based on Old Values
 Excess $Q = 18.7 - 17.2 = 1.5 cfs$ Additional.
 100 yr. Inlet Cap = 16.5 cfs (From Sec. Stor. 2nd Dng. Plan)
 Excess Over Inlet Cap = 18.7 cfs - 16.5 cfs = 2.2 cfs
 This 2.2 cfs will Overflow East
 Previous Overflow East = 17.2 cfs - 16.5 cfs = 0.7 cfs
 Total Excess East Over Design Overflow = 2.2 cfs - 0.7 cfs = 1.5 cfs.
 This 1.5 cfs will flow East to E.R. Ditch then on to River. O.K.
 Area 2 S.W. Corner of New Plat.
 $DA = 0.21 Ac$
 $Q_s = (0.21)(0.86)(4.56) = 0.82 cfs$
 $Q_{100} = (0.21)(0.9)(7.37) = 1.4 cfs$
 These will flow South and West to Existy Flume to Seneca Street.

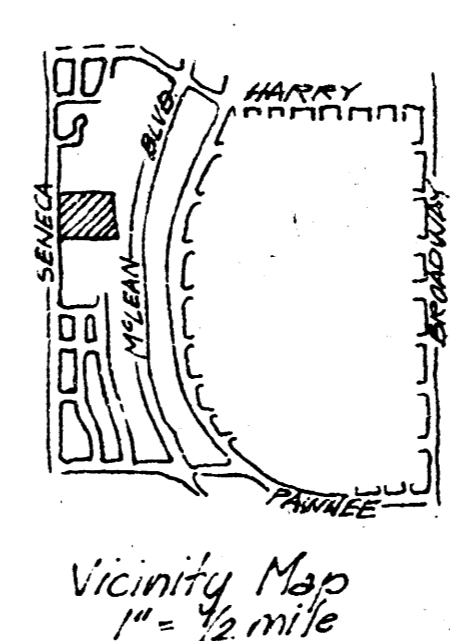
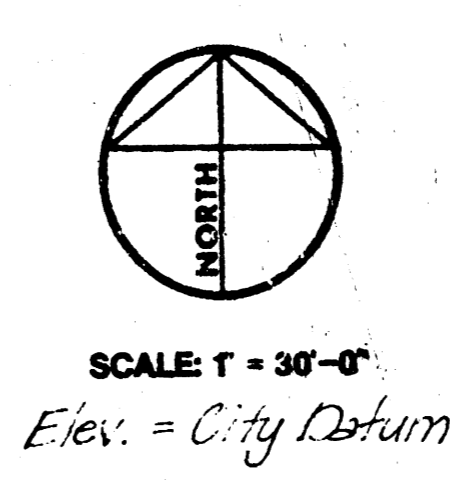
Existy Area to Flume = 0.37 Ac.
 Old $Q_s = (0.37)(0.86)(4.56) = 1.73 cfs$
 Old $Q_{100} = (0.37)(0.9)(7.37) = 2.6 cfs$
 Combined Areas for New Plat to Flume
 $Q_s = (0.37 Ac + 0.21 Ac)(0.86)(4.56) = 2.3 cfs$
 $Q_{100} = (0.37 Ac + 0.21 Ac)(0.9)(7.37) = 3.9 cfs$
 Excess Flow to Flume Based on Current Drainage Policy
 $Q_{s excess} = 2.3 cfs - 1.73 cfs = 0.6 cfs$
 $Q_{100 excess} = 3.9 cfs - 2.6 cfs = 1.3 cfs$
 The Additional under 1.0 cfs of Runoff will not affect the Flumes capacity to drain to Seneca Street.
 Summary: Since the Drainage for Security Storage 3rd Addition is at least equal to the Old Drainage Policy of $C_s = 5.21 in/hr$ and $C_{100} = 6.98 in/hr$, the Addition of the South Areas will not significantly affect the capacity of the existing Drainage Structures.

Note: 12" Water main in West side of Seneca



DRAINAGE PLAN 10/22/88
SKETCH PLAT
SECURITY STORAGE PROPERTIES 3RD ADDITION - Wichita, Kansas
 BEING A REPLAT OF LOT 1, SECURITY STORAGE PROPERTIES 2ND ADDITION, WICHITA, KANSAS
 TOGETHER WITH A TRACT IN THE SW 1/4 OF SEC. 32, TWP 27-S, R-1-E.

NOTES: SEE SECURITY STORAGE END PLAN AND ATTACHED REPORT FOR DRAINAGE CALCULATIONS TO THE NORTH.
 DRAINAGE FROM AREA 1 TO EXIST. 1A-CURB INLET.
 DRAINAGE FROM AREA 2 TO SENECA VIA EXIST. FLUME AS INDICATED.



BAUGHMAN COMPANY, P.A.
 SURVEYING & ENGINEERING
 21400-7271 - 318 ELLIOT - WICHITA, KANSAS 67211

POS INCORPORATED PLANNING DEVELOPMENT SERVICES, INC.
 SECURITY STORAGE PROPERTIES 3RD ADDITION Wichita, Kansas
 Owner: Security Storage Properties A Kansas General Partnership
 DRAWN 10-21-88
 CHECKED
 REVISED
 SHEET 1 OF ONE