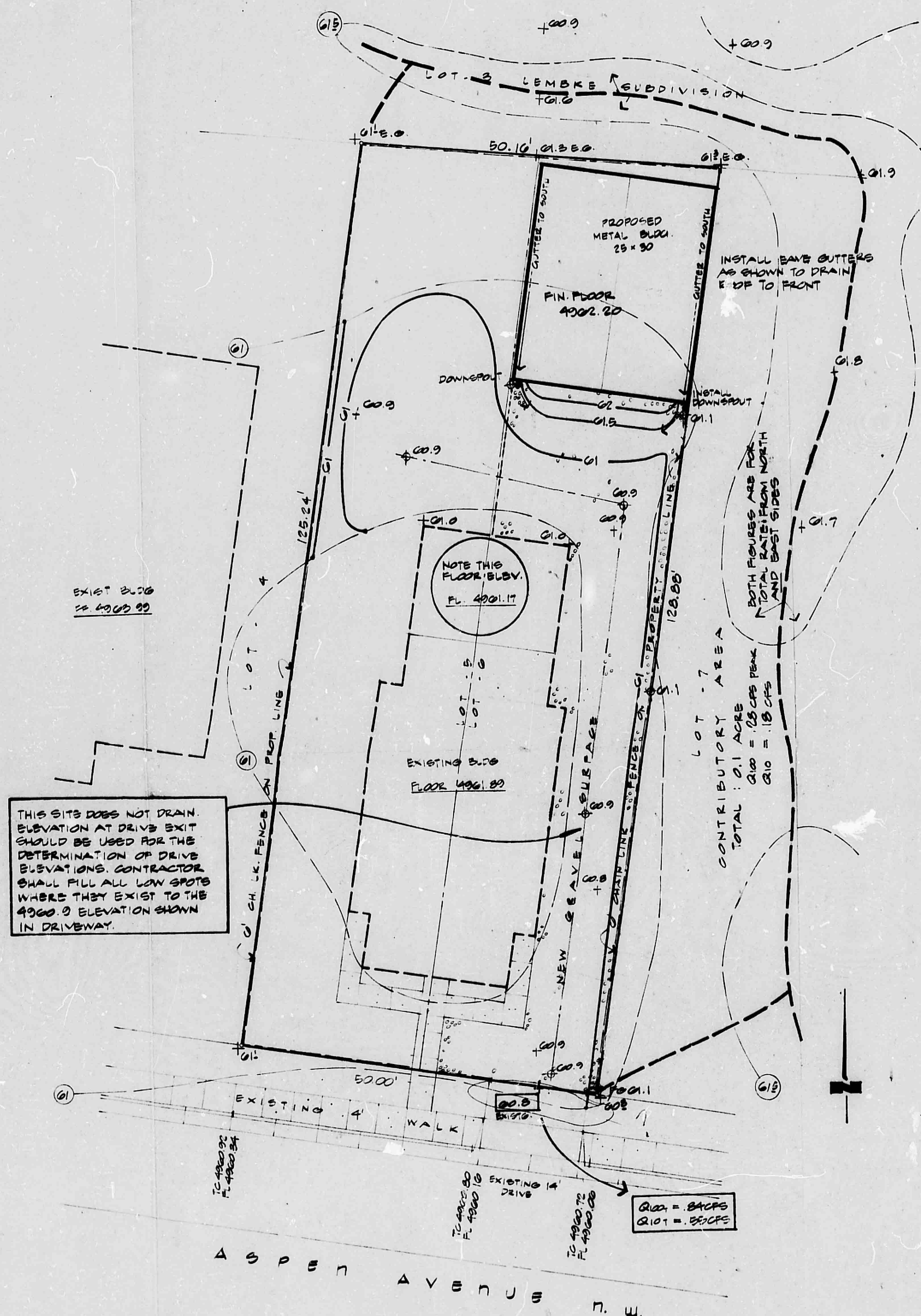




BENCH MARK
 10'14" SQUARE, 12" CHISELED ON TOP OF CONCRETE CURB & NNE CURB RETURN AT INTERSECTION OF 4TH STREET & CONSTITUTION NW
 ELEV 4000.104

TBM
 TOP OF CURB ON NORTH SIDE OF ASPEN AVENUE ADJACENT TO SW CORNER OF 6TH
 ELEV 4000.0

LEGEND
 CONTOUR INTERVAL - ONE-HALF FOOT
 (---) EXISTING CONTOUR
 (---) PROPOSED CONTOUR
 +000 EXISTING SPOT ELEVATION
 +000 PROPOSED SPOT ELEVATION
 PROPOSED CONTOURS AND SPOT ELEVATIONS ARE TO FINISH SURFACES.
 CONTRACTOR SHALL DETERMINE APPROPRIATE SUBGRADES.
 --- INTERNAL DIVISION OF FLOWS

PLAN SCALE 1" = 10'

CALCULATIONS
 AREA OF SITE 0.00368 AC (1.18 AC)
 SLOPE 2.0%
 SOIL GROUP B
 DEVELOPED COVERAGE 41%
 (REMAINDER GRAVELLED DRIVE)
 MODIFIED C FACTOR .81
 100-YR RAINFALL 2.0 IN.
 TIME OF CONCENTRATION 10 MINUTES
 INTENSITY 4.0 IN/HR

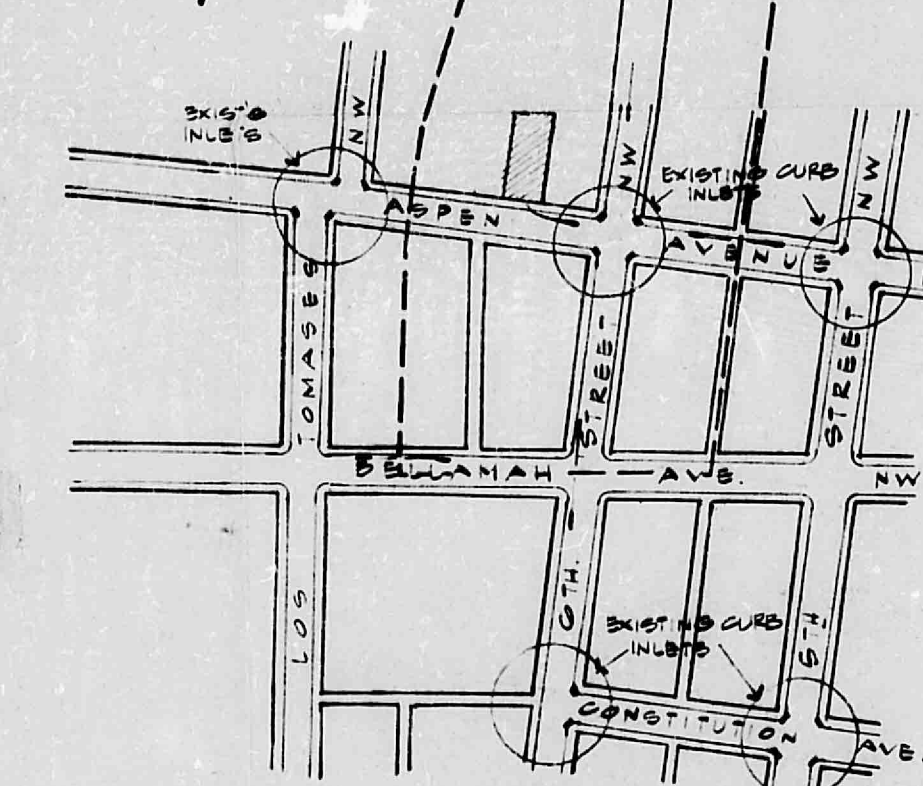
ON-SITE RUNOFF
 $Q_{100} = .81 \times 4.0 \times .18 = .58 \text{ CFS PEAK}$
 $Q_{10} = .007 Q_{100} = .004 \text{ CFS}$

OFF-SITE CONTRIBUTORY RUNOFF
 NO DISPERSED FLOWLINES. POTENTIAL CONTRIBUTORY AREA 0.1 ACRES. C.F. 60
 $Q_{100} = .28 \text{ CFS FROM EAST}$
 $Q_{10} = .018 \text{ CFS}$

DISPOSAL
 PROPOSED CONSTRUCTION IS URBAN INFILL. FREE DISCHARGE TO ASPEN AVENUE ALLOWABLE. FLOWS CONTRIBUTE TO A DEFINED 100-YEAR FLOOD ZONE IN ASPEN AVENUE AS IT APPEARS ON FLOOD BOUNDARY MAP, CITY OF ALBUQUERQUE, NEW MEXICO, PANEL 28 OF 30.

FINISH FLOOR SHOWN FOR NEW BUILDING, 4002.20, IS PER FLOODPROOFING REQUIREMENT AS OUTLINED IN PRE-DESIGN CONFERENCE

TOTAL DISCHARGE TO STREET
 $Q_{100} = .58 \text{ CFS} + .28 \text{ CFS} = .86 \text{ CFS}$
 $Q_{10} = .004 \text{ CFS} + .018 \text{ CFS} = .022 \text{ CFS}$

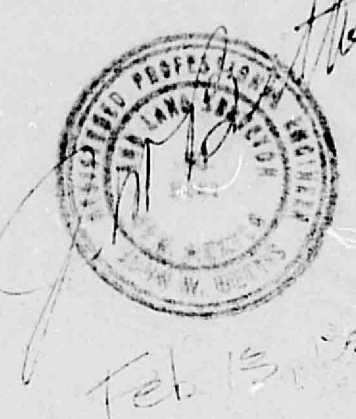


ANALYTICAL AREA CONTRIBUTING TO CURB DRAIN INLETS AT 6TH & ASPEN
 IS 0.2 ACRES MORE OR LESS. STREETS HAVE ESSENTIALLY NO SLOPE. THEREFORE, CONTRIBUTORY AREA LIMIT HAS BEEN SET EQUIDISTANT BETWEEN DRAIN LOCATIONS. C (URBAN, DEVELOPED) = .70 To = 10 MIN. 1.48 IN/HR
 $Q = .70 \times 1.48 \times 0.2 = .207 \text{ CFS}$ TO = 10 MIN. 1.48 IN/HR
 $Q = .70 \times 1.48 \times 0.2 = .207 \text{ CFS}$ TO = 10 MIN. 1.48 IN/HR

DRAIN INLETS ARE IN PAGES 7 CURBS (NOT OUTLETS) EACH HAS 1.750 FT. OF TOTAL OPENING. GIVEN A 1.0' FLOW DEPTH (PER P.H.B.M.), EACH HAS A CAPACITY OF (22.7) X (1.0 X 1.0) = 22.7 CFS PEAK X 4 = 90.8 CFS (23.8 CFS). DRAINAGE EXIST BUT ARE OF LESS CAPACITY THAN PEAK EXPECTED FLOW.

DRAINAGE PLAN
 000 ASPEN AVENUE, NW
 LOTS 5 & 6
 BLOCK 9
 INES ADDITION
 ALBUQUERQUE, NEW MEXICO

FOR
 M & T AUTO



JANUARY 23, 1985



TECH Inc
 333 East Main
 Farmington
 New Mexico

DRAINAGE PLAN

M & T AUTO

drawn
E.W. KESS

Project no.
9999 000 000

date
02.01.85

sheet
01