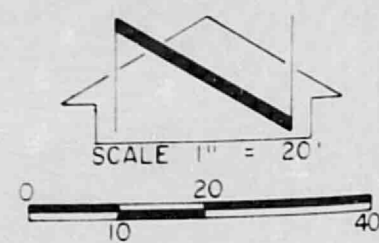
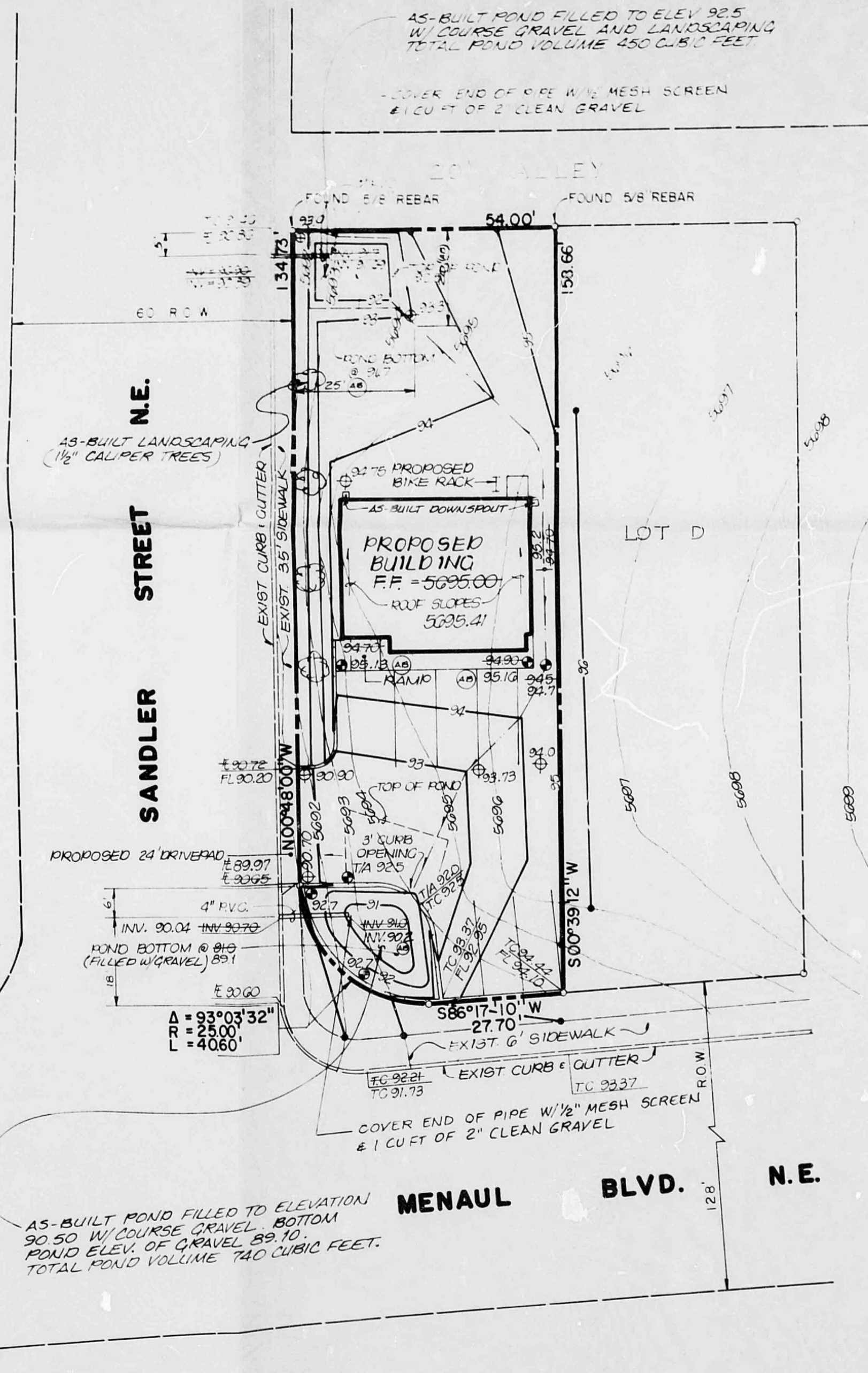


VICINITY MAP H-22
SCALE 1" = 800'



- LEGEND**
- EXISTING CONTOUR
 - - - PROPOSED CONTOUR
 - - - PROPOSED SWALE
 - AS BUILT SPOT ELEVATION
 - ⊕ AS BUILT SPOT ELEVATION
 - ⊙ INDICATES AS-BUILT CONDITION

LEGAL DESCRIPTION
LOT C, BLOCK 8, ENCHANTED MESA ADDITION
PROJECT BENCHMARK
A SQUARE W/ CENTER POINT OF THE LONG SIDE OF THE W/ 1/4 SECTION QUARTER & THE INTERSECTION OF MENAUL BLVD. NE 1/4 SECTION OF NE 1/4 QUAD. U.S. BLM 10-1-88 ELEVATION 5709.28 FEET (M.S.L.)



DRAINAGE CERTIFICATION

The plan contained hereon shows (1) design grades indicated by spot elevations, (2) as-built spot elevations at key locations, (3) locations of structural improvements. The as-built conditions have been superimposed over the improved design.

The as-built conditions of the project are in substantial compliance with the approved drainage plan. This has been determined by field visits and survey information which is the basis for the as-built plan in that the finish floor for the building was constructed 0.41' higher than the approved plan. Also, the front and rear ponds were constructed deeper and filled with 1'-2' of coarse gravel maintaining adequate ponding volumes. However, these changes do not affect the drainage patterns on the site and the basic drainage concept has not been altered.



DRAINAGE PLAN

The following items concerning the CBS Chimney Sweeps Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements as shown by the Vicinity Map are located at the northeast quadrant of the intersection of Menaul Boulevard N.E. and Sandler Street N.E., more particularly described as Lot C, Block 8, Enchanted Mesa Addition.

The site is presently undeveloped with the topography sloping from east to west. The site does not lie within a flood hazard zone as indicated by flood hazard maps prepared by the U.S. Department of H.U.D. Federal Insurance Program.

The Grading Plan shows 1) existing grades at 1' intervals, 2) proposed grades indicated by spot elevations and contours at 1' intervals, 3) continuity between proposed and existing grades, 4) limit and character of proposed improvements. A swale on the east side of the building will accept off-site flows from Lot D conveying the flows either northward through a rear yard pond and discharging into the alley, or conveying the flows southward through the parking lot and into a pond before discharging through a 4" PVC into Sandler Street.

The calculations which appear below determine the 100-year peak discharge rates and runoff volumes in both the existing and developed states based on the Rational formula.

CALCULAT

Ground Cover Information

1. From SCS Bernalillo County Soil Survey, Plate 22:
Etc - Embudo-Tijeras Complex Hydrological Soil Group "B"
2. OFFSITE BASIN:
A_{total} = 0.44 ac.
A_{imp} = 0.0 ac
Z_{imp} = 02
C = 0.34 (DPM Plate 22.2 C-1)
3. ON-SITE, DEVELOPED Rear-Yard Basin
A_{total} = 0.11 ac.
A_{imp} = 0.03 ac
Z_{imp} = 27%
C = 0.46
4. ON-SITE DEVELOPED Front Yard Basin
A_{total} = 0.09 ac.
A_{imp} = 0.07
Z_{imp} = 78%
C = 0.75

Rainfall Data

P₆ = 2.5"
T_c = 10 min.
i₆ = (2.5)(6.84)(10)^{-0.51} = 5.28" in/hr.

HYDROLOGY

1. Offsite Basin
Q₁₀₀ = C_iA = (0.34)(5.28)(0.44) = 0.80 cfs
V₁₀₀ = PCA = (2.5)(0.34)(0.44) = 1350 cf.
2. On Site, Rear Yard Basin
Q₁₀₀ = C_iA = (0.46)(5.28)(0.11) = 0.27 cfs
V₁₀₀ = PCA = (2.5)(0.46)(0.11) = 460 cf
3. On site Front Yard Basin
Q₁₀₀ = C_iA = (0.75)(5.28)(0.09) = 0.36 cfs
V₁₀₀ = PCA = (2.5)(0.75)(0.09) = 615 cf
4. Storm Flows released thru 4" PVC
Q_{release} = CA √2gh = 0.71 cfs
Where C = 0.8
A = 0.09 sf
g = 32.2 ft/sec²
h = 1.5'



NO.	DATE	BY	REVISIONS

DESIGNED BY	T.T.M.
DRAWN BY	J.M.C.
APPROVED	T.T.M.

JOB NO.	30601
DATE	5-83

GRADING & DRAINAGE PLAN
AS-BUILT CERTIFICATION
CBS CHIMNEY SWEEPS

H22/D30

FILE NO.	
SHEET	1 OF 1