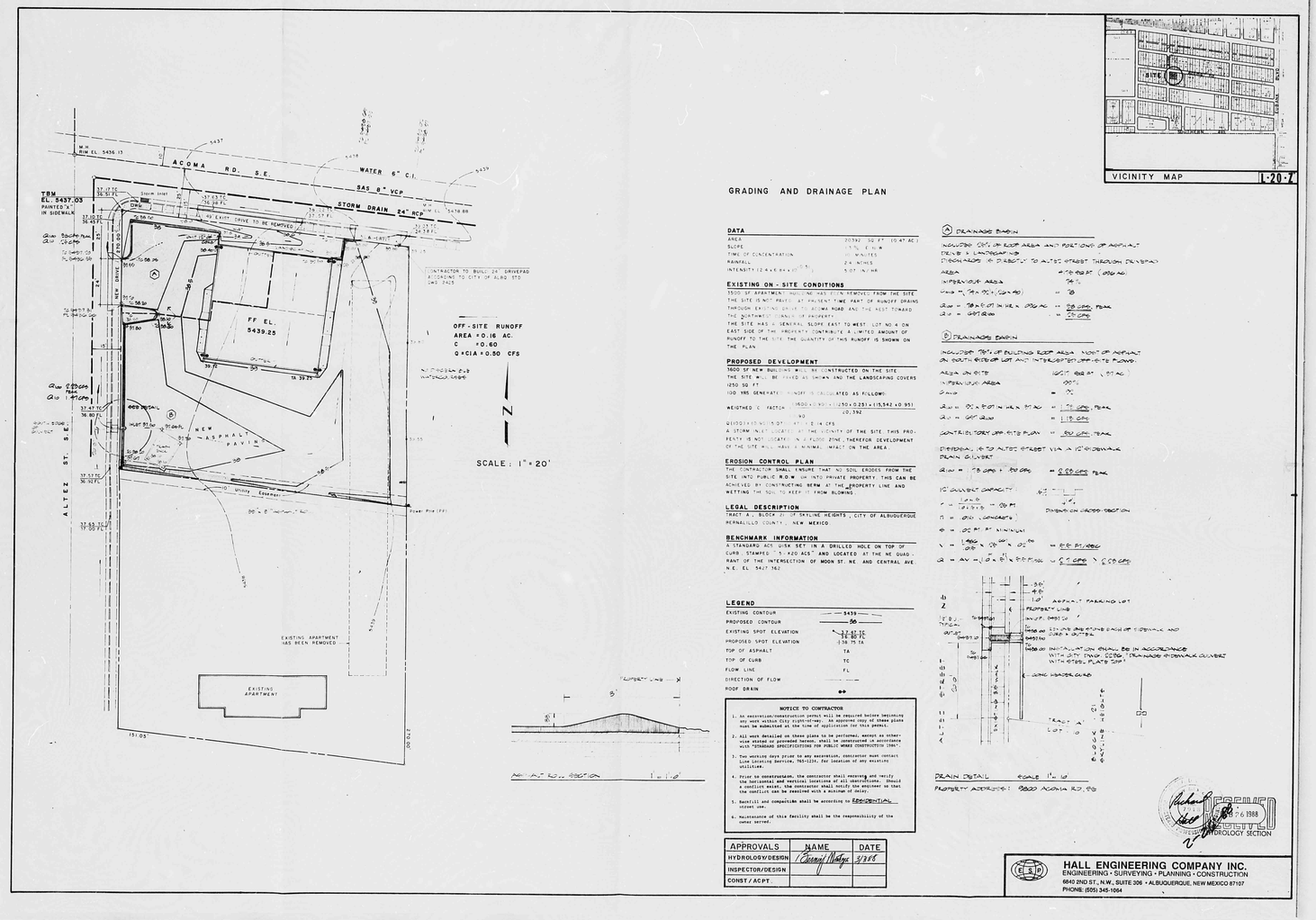

GRADING AND DRAINAGE PLAN

DATA

AREA	20392.00 FT. (0.47 AC.)
SLOPE	0.5% FLOW
TIME OF CONCENTRATION	10 MINUTES
RAINFALL	2.4 INCHES
INTENSITY (2.4 x 6.84 x 10^-3)	5.07 IN/HR

EXISTING ON - SITE CONDITIONS

3500 SF APARTMENT BUILDING HAS BEEN REMOVED FROM THE SITE. THE SITE IS NOT PAVED. AT PRESENT TIME PART OF RUNOFF DRAINS THROUGH EXISTING DRIVE TO ACOMA ROAD AND THE REST TOWARD THE NORTHWEST CORNER OF PROPERTY.

THE SITE HAS A GENERAL SLOPE EAST TO WEST. LOT NO. 4 ON EAST SIDE OF THE PROPERTY CONTRIBUTES A LIMITED AMOUNT OF RUNOFF TO THE SITE. THE QUANTITY OF THIS RUNOFF IS SHOWN ON THE PLAN.

PROPOSED DEVELOPMENT

3600 SF NEW BUILDING WILL BE CONSTRUCTED ON THE SITE. THE SITE WILL BE PAVED AS SHOWN AND THE LANDSCAPING COVERS 1250 SQ. FT.

ON THIS GENERATED RUNOFF IS CALCULATED AS FOLLOWS:

WEIGHTED C FACTOR = (3600 x 0.90) + (1250 x 0.25) / (15,342 x 0.95) = 0.392

Q(100YR) = 0.392 x 5.07 x 0.16 = 0.3 CFS

A STORM INLET LOCATED AT THE LOWEST CORNER OF THE SITE. THIS PROPERTY IS NOT LOCATED IN A FLOOD ZONE. THEREFOR DEVELOPMENT OF THE SITE WILL HAVE A MINIMAL IMPACT ON THE AREA.

EROSION CONTROL PLAN

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC R.O.W. OR INTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING BERM AT THE PROPERTY LINE AND WETTING THE SOIL TO KEEP IT FROM BLOWING.

LEGAL DESCRIPTION

TRACT A, BLOCK 27 OF SKYLINE HEIGHTS, CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO.

BENCHMARK INFORMATION

A STANDARD ACS DISK SET IN A DRILLED HOLE ON TOP OF CURB STAMPED "5-H20 ACS" AND LOCATED AT THE NE QUADRANT OF THE INTERSECTION OF MOON ST. NE AND CENTRAL AVE. N.E. EL. 5427.762

LEGEND

EXISTING CONTOUR	5439
PROPOSED CONTOUR	56
EXISTING SPOT ELEVATION	37.57 TC / 36.57 FL
PROPOSED SPOT ELEVATION	38.75 TA
TOP OF ASPHALT	TA
TOP OF CURB	TC
FLOW LINE	FL
DIRECTION OF FLOW	
ROOF DRAIN	

NOTICE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986".
3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of any existing utilities.
4. Prior to construction, the contractor shall examine and verify the dimensions of the site and the plans. If the plans should contain a conflict error, the contractor shall notify the engineer so that the conflict can be resolved with a minimum of delay.
5. Backfill and compaction shall be according to RESIDENTIAL street use.
6. Maintenance of this facility shall be the responsibility of the owner served.

APPROVALS	NAME	DATE
HYDROLOGY/DESIGN	Bernard Montoya	3/28/88
INSPECTOR/DESIGN		
CONST./ACPT.		

DRAINAGE BASIN

INCLUDES 70% OF BUILDING ROOF AREA AND 100% OF ASPHALT DRIVE & LANDSCAPING

DISCHARGES IN STREET TO ALTEZ STREET THROUGH DRIVEWAY

AREA = 0.16 AC. (7,000 SF)

IMPERVIOUS AREA = 76%

C(100 YR) = (0.90 x 0.76) + (0.25 x 0.24) = 0.8

Q(100 YR) = 0.8 x 5.07 IN/HR x .016 AC. = 0.06 CFS PEAK

Q(10 YR) = 0.07 CFS = 0.05 CFS

DRAINAGE BASIN

INCLUDES 70% OF BUILDING ROOF AREA, 100% OF ASPHALT ON SOUTH HALF OF LOT AND INTERCEPTED OFF-SITE FLOWS.

AREA ON SITE = 0.27 AC. (11,700 SF)

IMPERVIOUS AREA = 90%

C(100 YR) = 0.90

Q(100 YR) = 0.9 x 5.07 IN/HR x .27 AC. = 1.23 CFS PEAK

Q(10 YR) = 0.9 CFS = 1.12 CFS

CONTRIBUTORY OFF-SITE FLOW = 0.50 CFS PEAK

DISCHARGE INTO ALTEZ STREET VIA A 12" DRIVEWAY

PLAN Q (10 YR) = 1.12 CFS + 0.05 CFS = 0.95 CFS PEAK

12" CULVERT CAPACITY:

S = (H - D) / L = (2.5 - 1.0) / 30 = 0.05 FT/FT

n = .013 (CONCRETE)

A = .785 SF AT MINIMUM

V = 1.486 / n x (A / P)^2/3 x S^1/2 = 6.5 FT/SEC

Q = AV = 1.0 x 6.5 = 6.5 CFS > 0.95 CFS

DRAIN DETAIL SCALE 1" = 10'

PROPERTY ADDRESS: 9800 ACOMA RD. SE

HALL ENGINEERING COMPANY INC.
ENGINEERING • SURVEYING • PLANNING • CONSTRUCTION
6840 2ND ST., N.W., SUITE 306 • ALBUQUERQUE, NEW MEXICO 87107
PHONE: (505) 345-1064

APR 6 1988
HYDROLOGY SECTION

REF. 22 DATE 6/8/88 OR EXP.
CITY OF ALBUQUERQUE
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MIL15-1977).
CITY CLERK RECORDER
OFFICIAL SEAL NORBERTA SANCHEZ NOTARY PUBLIC STATE OF NEW MEXICO My Commission Expires 11/14/ 8 1992
CITY OF ALBUQUERQUE THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

PLANS/PLATS ON FILE
FILE DESC: L-20/0041
PLANS/PLATS 1

F 30 D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D F