



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 16, 1992

Richard Hall, P.E.  
Hall Engineering  
6840 Second Street, NW  
Albuquerque, New Mexico 87107

RE: REVISED DRAINAGE PLAN FOR AN ADDITION TO 6430 CENTRAL AVENUE, SW  
(K-11/D53) - ENGINEER'S STAMP DATED JANUARY 7, 1992

Dear Mr. Hall:

Based on the information provided on your resubmittal of January 9, 1992, the above referenced plan is approved for Building Permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

*Bernie J. Montoya*  
Bernie J. Montoya, C.E.  
Engineering Assistant

xc Alan Martinez

BJM/bsj  
(WP+3131)

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.  
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

HIGHLAND TIRE CENTER

PROJECT TITLE: BUCKLEY DRAINAGE ZONE ATLAS/DRNG. FILE #: K-11/D53

DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: LOT 1A HUBBELL HEIGHTS

CITY ADDRESS: 6430 CENTRAL AVENUE, SW

ENGINEERING FIRM: HALL ENGINEERING CONTACT: RICK HALL

ADDRESS: 6840 SECOND ST. NW PHONE: 345-1064

OWNER: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

ARCHITECT: BILL BUCKLEY CONTACT: \_\_\_\_\_

ADDRESS: 6930 LAS ALTURAS #6 PHONE: 263-1960

SURVEYOR: LAS CRUCES 88001 CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR: PAUL KELEOURSE CONTACT: \_\_\_\_\_

ADDRESS: 118 GRIEGOS RD, NW PHONE: 345-5200

TYPE OF SUBMITTAL:

- DRAINAGE REPORT
- DRAINAGE PLAN
- CONCEPTUAL GRADING & DRAINAGE PLAN
- GRADING PLAN
- EROSION CONTROL PLAN
- ENGINEER'S CERTIFICATION
- OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- SKETCH PLAT APPROVAL
- PRELIMINARY PLAT APPROVAL
- S. DEV. PLAN FOR SUB'D. APPROVAL
- S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- SECTOR PLAN APPROVAL
- FINAL PLAT APPROVAL
- FOUNDATION PERMIT APPROVAL
- BUILDING PERMIT APPROVAL
- CERTIFICATE OF OCCUPANCY APPROVAL
- GRADING PERMIT APPROVAL
- PAVING PERMIT APPROVAL
- S.A.D. DRAINAGE REPORT
- DRAINAGE REQUIREMENTS
- OTHER \_\_\_\_\_ (SPECIFY)

JAN 9 1992

DATE SUBMITTED: 1-9-92

BY: 



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 7, 1992

Richard Hall, P.E.  
Hall Engineering  
6840 Second Street, NW  
Albuquerque, New Mexico 87107

RE: DRAINAGE PLAN FOR AN ADDITION TO 6430 CENTRAL AVENUE, SW  
(K-11/D53) FOUNDATION ONLY - ENGINEER'S STAMP DATED DECEMBER 26, 1991

Dear Mr. Hall:

Based on the information provided on your submittal of December 26, 1991, the referenced site is approved for foundation permit only.

Please be advised that prior to Building Permit release, the following must be addressed:

1. Concurrence that curb and gutter along Central Avenue has been installed and sidewalk has been coordinated with Street Maintenance.
2. Statement on plan that runoff contribution from the addition will not reach or contribute to the flooding downstream.
3. Replat or easements will be required for cross-lot-line drainage.
4. Quantification of both developed and undeveloped flow rates.
5. Sidewalk grades must match new curb and gutter. Again coordination with Street Maintenance is of utmost importance.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

*Bernie J. Montoya*

Bernie J. Montoya, C.E.  
Engineering Assistant

xc: Alan Martinez

BJM/bsj  
(WP+3131)

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

PROJECT TITLE: BUCKLEY DRAINAGE ZONE ATLAS/DRNG. FILE #: K-11 / D53

DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: LOTS 1, 2, 3, HUBBELL HEIGHTS

CITY ADDRESS: 6430 CENTRAL AVENUE, SW (CORNER CENTRAL & 65TH)

ENGINEERING FIRM: HALL ENGINEERING CONTACT: RICK HALL

ADDRESS: 6840 2ND ST. NW 87107 PHONE: 345-1064

OWNER: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

ARCHITECT: BILL BUCKLEY AIA CONTACT: BILL BUCKLEY

ADDRESS: 5900 LAS ALTURAS #16 LAS CRUCES NM 88001 PHONE: 263-1960

SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR: PAUL KELCOURSE CONTACT: PAUL KELCOURSE

ADDRESS: 118 GREGGOS RD NW 87107 PHONE: 345 5200

TYPE OF SUBMITTAL:

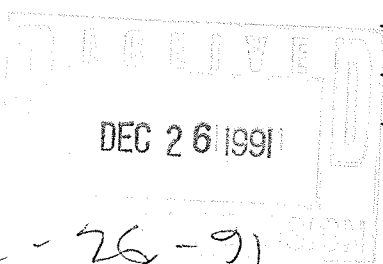
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- DRAINAGE PLAN
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- S.A.D. DRAINAGE REPORT
- DRAINAGE REQUIREMENTS
- OTHER \_\_\_\_\_ (SPECIFY)

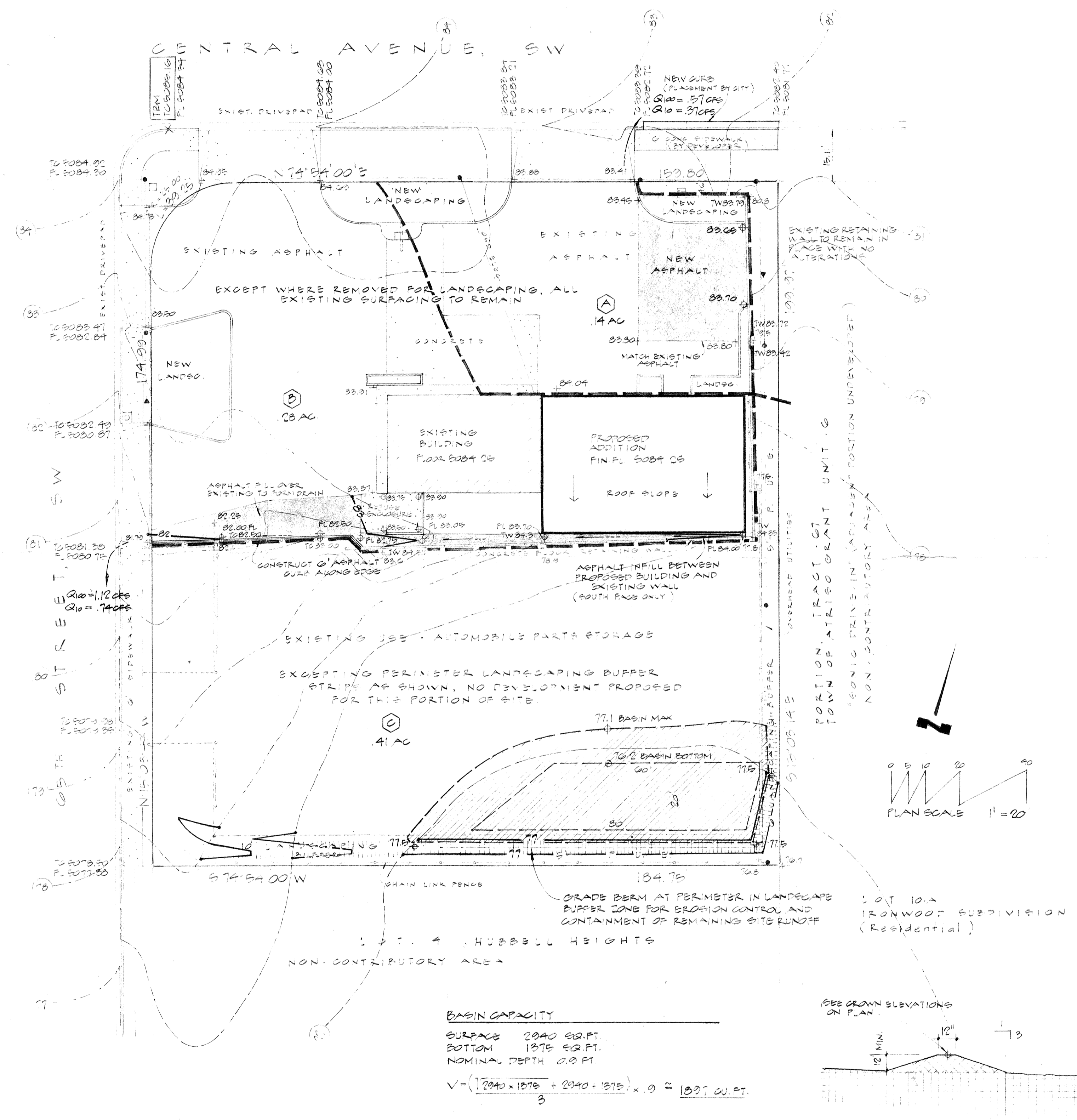
PRE-DESIGN MEETING:

- YES
- NO
- COPY PROVIDED



DATE SUBMITTED: 12-26-91

BY: [Signature]



**DISCHARGE ROUTING**

FLOODS EXISTING NORTH SIDE RUN EASTWARD AND ARE INTERCEPTED BY STORM DRAIN IN CENTRAL AVENUE.

THOSE EXISTING TO 64TH STREET RUN SOUTH TO CHURCHILL ROAD, SW, THEN EAST ALONG THAT STREET TO INITIAL DROP INLET, AT ITS INTERSECTION WITH 64TH STREET.

NEITHER DISCHARGE ROUTING WILL CONTRIBUTE TO ANY DEFINED FLOOD ZONE.



**BENCH MARK**

NH 420-01 STD NINE BRASS IN SET, STAMPED 'NINE' ON SET IN SAND, DIST. 15.5' TO CORNER N CORNER OF WEST NORTHERN INTERSECTION OF 60TH STREET, SW AND WEST CENTRAL AVENUE. ELEV. 9074.03'

**TEMP**

TOP OF CURB, SEE RETURN, INTERSECTION OF 64TH ST. SW AND WEST CENTRAL AVENUE. ELEV. 9085.10'

**LEGEND**

--- CONTOUR INTERVAL, ONE FOOT (1.0')

--- EXISTING CONTOUR

--- PROPOSED CONTOUR

+ 32.00 EXISTING FLOOD ELEVATION

+ 33.00 PROPOSED FLOOD ELEVATION

--- EXISTING RETAINING WALL

PROPOSED CONTOURS AND FLOOD ELEVATIONS SHOWN ARE TO RAISED SURFACES, CONTRACTOR SHALL DETERMINE APPROPRIATE SUBGRADES.

CONTRACTOR IS RESPONSIBLE FOR THE ADJUSTMENT OF SETBACKS ONTO ADJOINING PUBLIC RIGHTS-OF-WAY AND PRIVATE PROPERTIES DURING CONSTRUCTION.



**DATA**

AREA OF SITE	30000 SQ. FT. (.69 AC.)
SLOPE	1% TO 4%
TIME OF CONCENTRATION	10 MINUTES
100-YEAR 6-HOUR RAINFALL	2.2 INCHES
INTENSITY (2.0 IN X 6.0 IN X 10 <sup>6</sup> )	4.06 IN/HR.

**EXISTING ON-SITE CONDITIONS**

NORTH ONE-HALF OF SITE IS BUILT-UP. COVERAGE INCLUDES ONE SMALL BUILDING SURROUNDED BY ASPHALT AND CONCRETE PAVEMENT. BARE, COMPACTED SOIL OCCURS AT NORTHEAST CORNER (SEE 'NEW ASPHALT' ON PLAN) AND TO SOUTH OF EXISTING BUILDING. A CONCRETE BLOCK RETAINING WALL SEPARATES THIS PORTION FROM SOUTH HALF OF SITE AND RUNS ROUGHLY PARALLEL TO (7 TO 9 FEET) AND INSIDE THE EAST LINE. REMAINDER OF SITE TO EAST AND SOUTH OF THIS WALL IS UNDEVELOPED.

**DISCHARGE FROM THIS SITE EXITS IN FOUR DIRECTIONS:**

A. 0.13 AC., 100% OPEN, TO EAST (ONTO ADJACENT SITE);

B. 1.0 AC., 17% OPEN, 83% IMPERVIOUS, TO CENTRAL AVENUE;

C. 0.13 AC., 100% IMPERVIOUS, TO 64TH STREET, SW;

D. 0.35 AC., 50% OPEN, 50% IMPERVIOUS, TO AND ACROSS SOUTHEAST CORNER OF SITE.

**RUNOFF RATES:**

A	C = .40	Q <sub>100</sub> = .40 x 4.06 x 0.13 AC = .21 CFS, PEAK
	Q <sub>10</sub> = .067 Q <sub>100</sub>	= .14 CFS
B	C <sub>avg</sub> = (.17 x .40) + (.83 x .95) = .89	Q <sub>100</sub> = .89 x 4.06 x 1.0 AC = 3.61 CFS, PEAK
	Q <sub>10</sub> = .067 Q <sub>100</sub>	= .24 CFS
C	C = .95	Q <sub>100</sub> = .95 x 4.06 x 0.13 = .50 CFS, PEAK
	Q <sub>10</sub> = .067 Q <sub>100</sub>	= .03 CFS
D	C <sub>avg</sub> = (.50 x .40) + (.50 x .95) = .725	Q <sub>100</sub> = .725 x 4.06 x 0.35 AC = 1.05 CFS, PEAK
	Q <sub>10</sub> = .067 Q <sub>100</sub>	= .07 CFS

**TOTAL SITE RUNOFF**

Q<sub>100</sub> = 2.37 CFS

Q<sub>10</sub> = 1.52 CFS

**PROPOSED DEVELOPMENT**

ADDITION OF 6400 SQ. FT. BUILDING WITH NEW ASPHALT PAVEMENT AS INDICATED AND CREATION OF LANDSCAPE AREAS ALONG SITE PERIMETER WITH SITE GRADING FOR REDUCING AND CONTROLLING RUNOFF.

**DEVELOPED RUNOFF**

DIRECT DISCHARGE VIA DRIVEWAYS TO STREETS FROM NORTH PORTION WITH CONTINUITY OF RUNOFF ON-SITE FROM SOUTH PORTION.

(A) .14 AC. TO CENTRAL AVENUE, 12% LANDSCAPED, 88% PAVEMENT

C<sub>avg</sub> = (.12 x .40) + (.88 x .95) = .87

Q<sub>100</sub> = .87 x 4.06 x .14 AC = .49 CFS, PEAK

Q<sub>10</sub> = .067 Q<sub>100</sub> = .03 CFS

(B) .23 AC. TO 64TH STREET, 10% LANDSCAPED, 90% ROOF, 5% PAVEMENT

C<sub>avg</sub> = (.10 x .40) + (.90 x .95) = .86

Q<sub>100</sub> = .86 x 4.06 x .23 AC = 1.12 CFS, PEAK

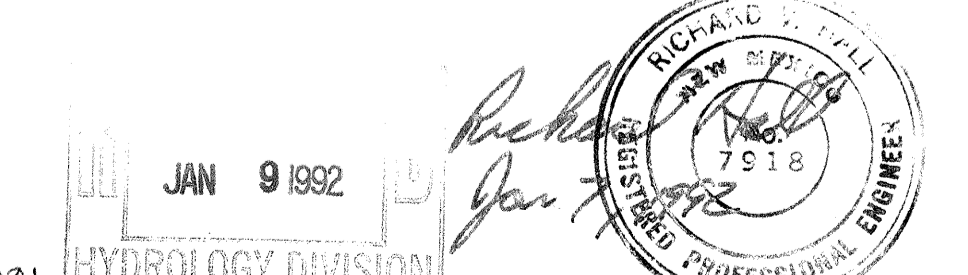
Q<sub>10</sub> = .067 Q<sub>100</sub> = .07 CFS

(C) .41 AC. (17840 SQ. FT.) SOUTH PORTION OF SITE. STORAGE YARD, MODERATELY COMPACTED SURFACE, 60% CURVE NO. 88 (HYDROLOGIC SOIL GROUP B), DIRECT RUNOFF 116 INCHES GENERATED VOLUME 1/8 x 17840 = 1710 CU. FT. THIS VOLUME CAN BE RETAINED ON-SITE BY CONSTRUCTION OF A BERM TO COINCIDE WITH INSTALLATION OF REQUIRED BUFFER LANDSCAPING.

**DESCRIPTION OF PROPERTY**

LOT 1A  
 HUBBELL HEIGHTS  
 ALBUQUERQUE NEW MEXICO

6430 CENTRAL AVENUE, SW  
 HIGHLAND TIRE CENTER  
 BILL BUCKLEY ARCHITECT  
 PAUL KELCOURSE CONTRACTOR



DECEMBER, 1991

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