P.O. Box 1293 Albuquerque, NM 87103

September 13, 1996

Martin J. Chávez, Mayor

John M. MacKenzie, PE
D. Mark Goodwin & Assoc.
P.O. Box 90606
Albuquerque, NM 87199

RE: ENGINEER'S CERTIFICATION FOR STATE BAR ASSOC (D-17/D3S)
      RECEIVED AUGUST 26, 1996 FOR CERTIFICATE OF OCCUPANCY
      ENGINEER'S STAMP DATED 8-26-96

Dear Mr. MacKenzie:

Based on the information included in the submittal referenced above, City Hydrology accepts the engineer's certification for certificate of occupancy. Contact Vicki Chavez at Code Enforcement to obtain the Certificate of Occupancy for 5121 Masthead NE.

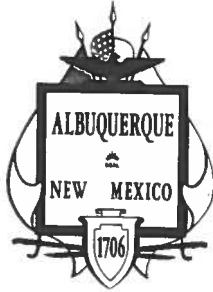If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
Civil Engineer, Hydrology

c: Andrew Garcia

City of Albuquerque

P.O. BOX 1293   ALBUQUERQUE, NEW MEXICO 87103

December 8, 1995

John MacKenzie, PE
Mark Goodwin & Assoc.
P.O. Box 90606
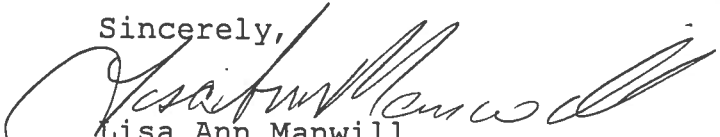Albuquerque, NM 87199

**RE: *STATE BAR ASSOCIATION (D17-D3S) DRAINAGE AND GRADING PLAN
       FOR BUILDING PERMIT APPROVAL.   ENGINEER'S STAMP DATED
       NOVEMBER 13, 1995.***

Dear Mr. MacKenzie:

Based on the information provided on your December 7, 1995
submittal, the above referenced project is approved for
Building Permit.

If I can be of further assistance, please feel free to contact me
at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Andrew Garcia
     File

PRIVATE LICENSE AGREEMENT
STORM SEWER PENETRATION
JOURNAL CENTER - ~~N.M.~~ STATE BAR ~~ASSOCIATION~~ OF NEW MEXICO (RUZ)

WHEREAS, the ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY (AMAFCA) own and maintains the North Pino Arroyo Channel within the Journal Center, a concrete lined channel from I-25 to the North Diversion Channel as shown on the Replat of the Journal Center, filed for public record on the 30th day of June 1983 in Volume C21 Folio 126, and,

STATE BAR OF NEW MEXICO (RUZ)

WHEREAS, the firm of Mark Goodwin and Associates who represents ~~NM Bar Association~~ (OWNER) (RUZ) have requested two licenses to enter on said Tract for the purpose of constructing two twelve (12) inch Storm Drains (DRAINS) within the above mentioned AMAFCA right-of-way and concrete lined channel.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged:

AMAFCA hereby grants to the OWNER, its successors and assigns, a license to enter upon the AMAFCA right-of-way in the area shown on attached Exhibit "A", and to construct, operate and maintain the DRAINS subject to the following terms and condition:

1.   The OWNER shall obtain AMAFCA's written approval for the following:

    a.   All construction drawings for installation of these facilities. These drawings, as approved, shall become a part of this license and shall be in substantial conformance with Exhibit "B" attached hereto.

    b.   Future repair, modification, removal or other activities affecting the completed DRAINS.

2.   All construction, operation, maintenance, repair, relocation and removal of the DRAINS shall be accomplished at sole expense of the OWNER and in such a manner as will not damage or interfere with the operation and maintenance of AMAFCA's flood control facilities.

3.   The OWNER shall be responsible for all damages caused by construction activities. To ensure repairs of such damages, the OWNER shall require the contractor to purchase Standard Form Owner's Protective Liability insurance naming AMAFCA as additional named insured in the amounts specified in Section 107.22 "Insurance Requirements" of the NMSHD Standard Specifications for Road and Bridge Construction, 1984 Edition.

4.   The OWNER shall notify AMAFCA in writing two days before beginning work on AMAFCA right-of-way.

5.   Construction within the AMAFCA right-of-way or any impairment to the flood-carrying ability of the arroyo within the easement, shall be restricted to the period between October 15 and May 15. At all other times, the arroyo water way shall be in original or final condition, and excavations and other land alteration shall be returned to their original contours and compacted condition.

6. Construction within the limits of the AMAFCA right-of-way shall be subject to inspection by AMAFCA's Executive Engineer or his designated representative.

7. All materials to be used in the construction within the AMAFCA right-of-way shall be subject to inspection by AMAFCA, in coordination with the OWNER's Construction Manager.

8. The OWNER shall save and hold AMAFCA harmless from all claims and judgments from damages and injury to property and persons arising from the construction, operation, maintenance, relocation and removal of such facilities and equipment, and shall reimburse AMAFCA of all costs and expenses incurred by AMAFCA arising from the installation, operation or maintenance or removal of the facilities. ~~Determination of whether damage has occurred shall be by AMAFCA.~~ (RWE)

9. The OWNER shall provide AMAFCA with two sets of "as-built" blackline copies within thirty (30) days of completion of work.

10. This license and all right and privileges herein granted may be terminated by AMAFCA should the OWNER fail to comply with provisions of this License, fail to follow approved construction drawings, or fail to make use of the premises for the purposes stated herein for a continuous period of one year.
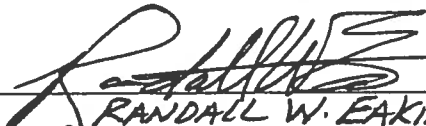
The provisions hereof shall inure to the benefit of and bind the heirs, executors, administrators, successors, and assigns of the parties hereto.

ALBUQUERQUE METROPOLITAN ARROYO
FLOOD CONTROL AUTHORITY

By: _____ 11/20/95
   Larry A. Blair, Executive Engineer   Date

OWNER (or official representative):
~~N.M.~~ STATE BAR ~~ASSOCIATION~~ OF NEW MEXICO (RWE)

By: _____ 11-10-95
   RANDALL W. EAKIN   Date
Its: PROJECT MANAGER

License Agreement
Private Storm Sewer Penetration
State Bar Association of New Mexico
North Pino Arroyo

Exhibit B to Agreement shall be:

Sheet 1 of 1, titled

"Bar Association Building, Grading & Drainage Plan"

By: D. Mark Goodwin & Associates, P.A.
      Stamped by John M. MacKenzie, N.M.P.E. # 11619
      Dated 11/13/95
      Approved by AMAFCA 11/21/95

Plan is on file at AMAFCA and OWNER

EXHIBIT B

City of Albuquerque

November 13, 1995

John MacKenzie, PE
Mark Goodwin & Assoc.
P.O. Box 90606
Albuquerque, NM 87199

**RE: *STATE BAR ASSOCIATION (D17-D3S) DRAINAGE AND GRADING PLAN
FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP DATED
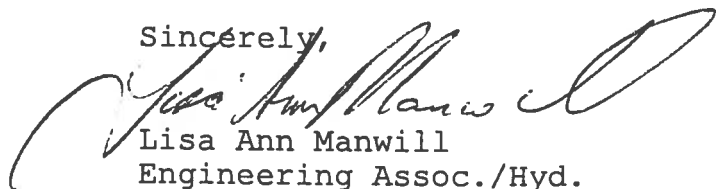NOVEMBER 7, 1995.***

Dear Mr. MacKenzie:

Based on the information provided on your November 8, 1995
submittal, the above referenced project will be approved for
Building Permit upon AMAFCA's concurrance.

Please submitt a copy of AMAFCA's approval and any drawing
changes required by AMAFCA. It would be helpful if you use
revision notes or outline in a letter any changes to the plans.

If I can be of further assistance, please feel free to contact me
at 768-3622.

Sincerely,

Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Andrew Garcia
      File

D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS & SURVEYORS

PROJECT _State Bar Assoc._
SUBJECT _Drainage_
BY _JMM_ DATE _11/6/95_
CHECKED_____ DATE _____
SHEET____OF____

SIDEWALK CULVERT

The proposed sidewalk culvert will be analyzed as follows: $Q = 4.14$ cfs from Attymia

$$L = \frac{Q}{2.9(H)^{1.5}} = \frac{4.14}{2.9(0.5)^{1.5}} = 4.03 \text{ ft}$$

use 4' opening

D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT _State ... of New Mexico_
SUBJECT _Drainage_
BY _JMM_   DATE _8/20/93_
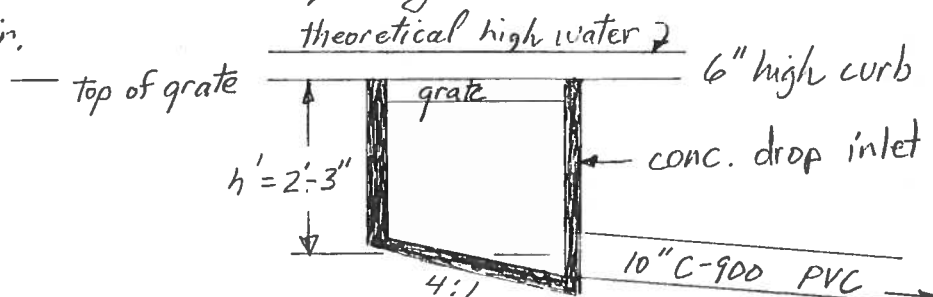CHECKED_____ DATE_____
SHEET____OF____

Type "D" Inlet Capacity

Based upon std. dwg. 2220, the grate's open area was found to be 4.438 ft

$$Q = CA\sqrt{2gh} = 0.8(4.44)\sqrt{2(32.2)(0.25)}$$

$$Q = 14.25 \text{ cfs}$$

The pipe to the North Pino Arroyo will consist of 10" diam. C-900 PVC. The opening will be the controlling factor.

top of grate

theoretical high water

6" high curb

grate

conc. drop inlet

$h' = 2'-3''$

10" C-900 PVC

4:1

SECTION
no scale

$$Q = CA\sqrt{2gh}$$

$$Q = 0.8(0.545)\sqrt{2(32.2)2.75}$$

$$Q = 5.80 \text{ cfs}$$

dmg D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT _State Bar Building_
SUBJECT _Drainage_
BY _JMN_ DATE _6/30/93_
CHECKED_____ DATE_____
SHEET____ OF____

This site will be separated into 3 drainage basins, 2 discharging into the North Pino Arroyo and a third discharging into Mast head Street N.E. Two concrete channels will be constructed to convey surface runoff into the North Pino.
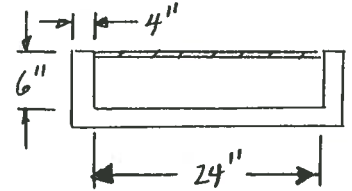
From AHYMO, the total runoff will be 2.81cfs during peak runoff of the 100year-6 hour storm. From this, the runoff reaching the 12" wide channel that serves drainage basin B will be 1.36 cfs, based upon the areal percentage of this watershed. To minimize grade changes in the western parking lot area, a small portion of the parking area at the southwest corner of the site will drain into Masthead Street NE.

A large portion of Basin B will drain directly into the North Pino via landscape and roof drain conveyance. Drainage basin A will be sloped toward the west and discharged into the North Pino via a concrete channel at the northwest corner of the site. A 24' wide concrete channel/sidewalk culvert will convey runoff from the southern parking area of drainage basin A to the western parking lot. The sizing of this and this basin's discharge channel follows.

dmg D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT Star Bar Building
SUBJECT Drainage
BY JMM   DATE 6/30/93
CHECKED_____ DATE_____
SHEET____OF____

Sidewalk Culvert in Drainage Basin A
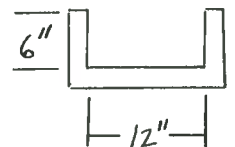

N.T.S.

$WP = 3'$ $Area = 1\ ft^2$

$r_H = \dfrac{1}{3} = 0.33$ $Slope = 0.75\%$

$Q = \dfrac{1.49}{.015}(1)(0.33)^{0.67}(.0075)^{0.5}$ $Q = 2.70(2')(.5)^{3/2} = 1.91\ cfs$

$Q = 4.12\ cfs$

Based upon the area of the south parking lot, the flow this channel need to convey relative to the total on-site runoff is 4 cfs.

Concrete Channel Discharging Basin A Runoff

N.T.S.

$WP = 2'$ $Area = 0.5\ ft^2$

$r_H = \dfrac{0.5}{2} = 0.25$ $Slope\ 17.91\%$

$Q = \dfrac{1.49}{.015}(0.5)(0.25)^{0.67}(0.1791)^{0.5}$ $Q = 2.70(1')(.5')^{3/2} = .95\ cfs$

$Q = 8.30$ This basin will discharge 5.12 cfs

The 12" wide channel discharging parking lot runoff from Basin B will have substantially more than capacity than the 1.36 cfs required.