

CITY OF ALBUQUERQUE



June 1, 2006

Jackie McDowell, PE
McDowell Engineering
7820 Beverly Hills NE
Albuquerque, NM 87122

**Re: Garcia Residence, Lot 10A, The Wilderness @ High Desert Grading and
Drainage Plan
Engineer's Stamp dated 4-16-06 (F23/D10A)**

Dear Ms. McDowell,

Based upon the information provided in your submittal dated 5-15-06, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

P.O. Box 1293

If you have any questions, you can contact me at 924-3986.

Albuquerque

New Mexico 87103

www.cabq.gov

Sincerely,

Bradley L. Bingham, PE
Principal Engineer, Planning Dept.
Development and Building Services

C: Lynn Mazur, AMAFCA
file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

The Wilderness @ H.D., Lot 10 A / Garcia
PROJECT TITLE: GARCIA HIGH DESERT #10A
DRB #: _____ EPC #: _____

ZONE MAP/DRG. FILE #: F-23/DIOA
WORK ORDER #: _____

LEGAL DESCRIPTION: LOT #10-A, THE WILDERNESS @ HIGH DESERT
CITY ADDRESS: 5305 HIGH DESERT PL. NE, ALBUQUERQUE, NM 87111

ENGINEERING FIRM: MCDOWELL ENGINEERING, INC.
ADDRESS: 7820 BEVERLY HILLS AVE. NE
CITY, STATE: ALBUQUERQUE, NM

CONTACT: JACKIE S. MCDOWELL
PHONE: (505) 828-2430
ZIP CODE: 87122

OWNER: LARRY & PEARLENE GARCIA
ADDRESS: P.O. BOX 1576
CITY, STATE: LOS LUNAS, NM

CONTACT: LARRY & PEARLENE GARCIA
PHONE: 459-5009
ZIP CODE: 87031

ARCHITECT: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: BOHANNA-HUSTON
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CONTRACTOR: MARK CORDOVA
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: 480-1706
ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR / LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERTIFICATION (TCL)
- ☐ ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ 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 (PERM.)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP.)
- ☒ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☒ OTHER (SPECIFY) REVIEW FOR AMAFCA ENCROACHMENT AGR.

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☒ NO
- ☐ DON'T REMEMBER

See attached Fee Waiver from D. Bringham

DATE SUBMITTED: 15-May-2006

BY: _____

Jackie S. McDowell
Jackie S. McDowell

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope of the proposed development defines the degrees of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five acres.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits, and site plans less than five acres.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five acres or more.

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/2005)

PROJECT TITLE: 10A - Wildernes @ HD ZONE MAP/DRG. FILE #: _____
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: _____
CITY ADDRESS: _____

ENGINEERING FIRM: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

OWNER: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

ARCHITECT: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: _____
ADDRESS: _____
CITY, STATE: _____

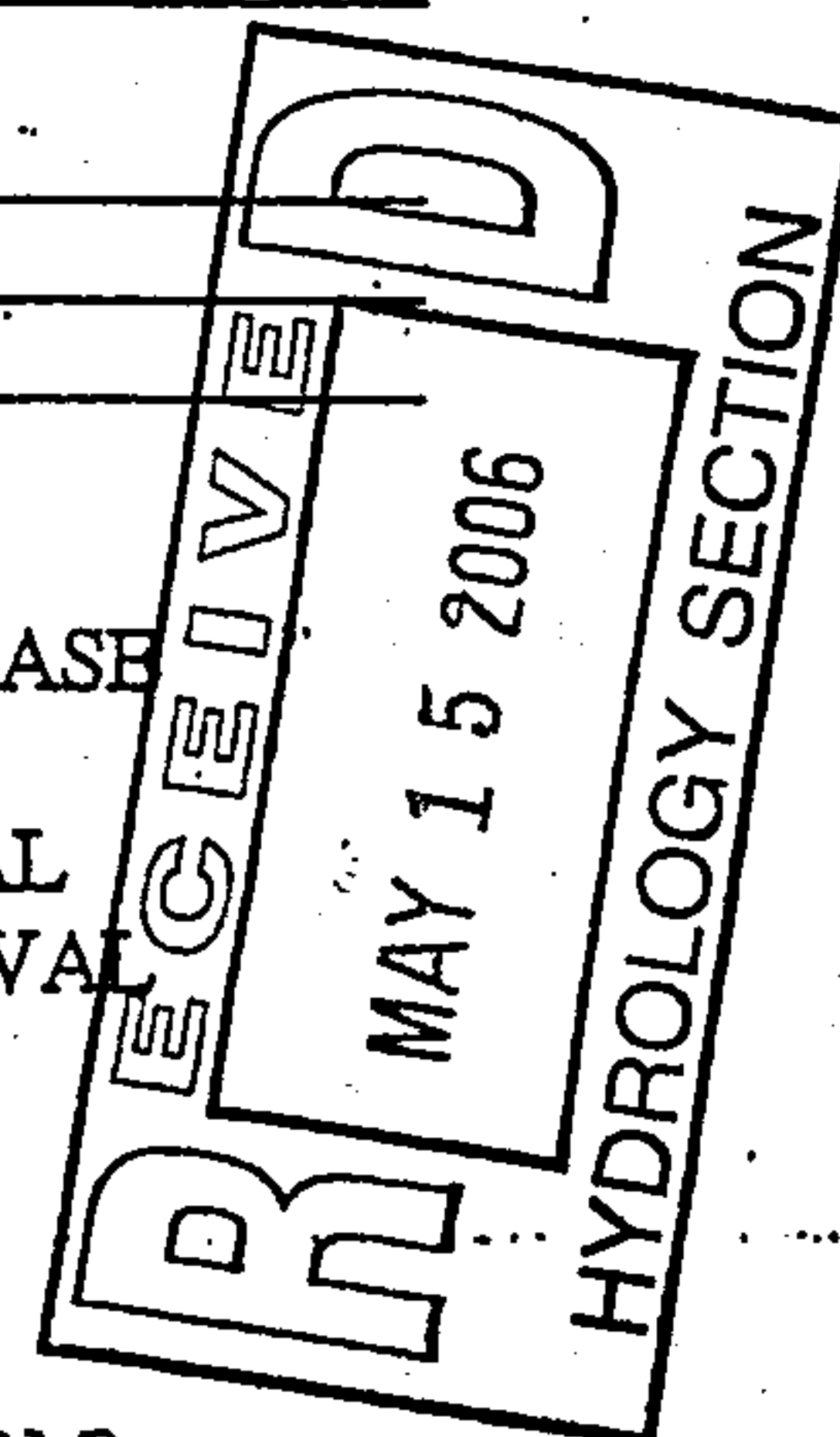
CONTACT: _____
PHONE: _____
ZIP CODE: _____

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

TYPE OF SUBMITTAL:
____ DRAINAGE REPORT
____ DRAINAGE PLAN 1st SUBMITTAL
____ DRAINAGE PLAN RESUBMITTAL
____ CONCEPTUAL G & D PLAN
____ GRADING PLAN
____ EROSION CONTROL PLAN
____ ENGINEER'S CERT (HYDROLOGY)
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT
____ ENGINEER'S/ARCHITECT'S CERT (TCL)
____ ENGINEER'S CERT (DRB SITE PLAN)
____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:
____ SIA/FINANCIAL GUARANTEE RELEASE
____ PRELIMINARY PLAT APPROVAL
____ S. DEV. PLAN FOR SUB'D APPROVAL
____ S. DEV. FOR BLDG. PERMIT APPROVAL
____ SECTOR PLAN APPROVAL
____ FINAL PLAT APPROVAL
____ FOUNDATION PERMIT APPROVAL
____ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY (PERM)
____ CERTIFICATE OF OCCUPANCY (TEMP)
____ GRADING PERMIT APPROVAL
____ PAVING PERMIT APPROVAL
____ WORK ORDER APPROVAL
____ OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED:
____ YES
____ NO
____ COPY PROVIDED

No Fees (BLB)

SUBMITTED BY: _____ DATE: _____

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

McDowell Engineering, Inc.

Jackie Sedillo McDowell, P.E.
Civil Engineering Consultant

May 15, 2006

Mr. Brad Bingham:
City Hydrology – FEMA Floodplain Administrator
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

RE: GARCIA HIGH DESERT LOT #10-A, WILDERNESS @ HIGH DESERT

Dear Mr. Bingham:

Attached are exhibits for your review as requested to be approved by you from Ms. Lynn Mazur, AMAFCA Drainage Engineer.

The items include:

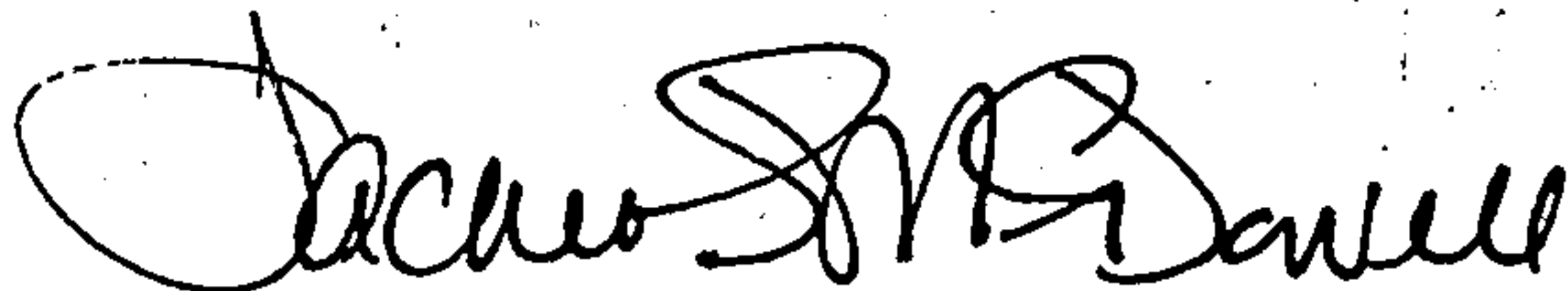
1. COA Drainage Information Sheet w/attached fee waiver sheet you signed.
2. AMAFCA Encroachment Agreement (4 pages).
3. Letter to Lynn Mazur dated February 9, 2006 requesting the Encroachment Agreement approval, since the drainage easement was granted based on the old FEMA floodplain limits and a conservative "straight line" technique.
4. Portions of the FEMA BHI LOMR report supporting the approval of this request (4 pages).
5. Cross section calculations (3 pages).
6. Sheets 1 and 2 of the approved Grading & Drainage plan (D-size).

As you can see the proposed driveway configuration does not impact the 100 year floodplain. This plan has already been reviewed and approved by High Desert and their engineer's (Bohannon-Huston, Inc., BHI – Kevin Patton). Ms. Mazur requested that you supply a letter of approval to her for the completion of the Encroachment Agreement, since a portion of the property has a 100-year floodplain encroachment which should be reviewed by the City Floodplain Administrator.

If you have any questions, please do not hesitate to call me.

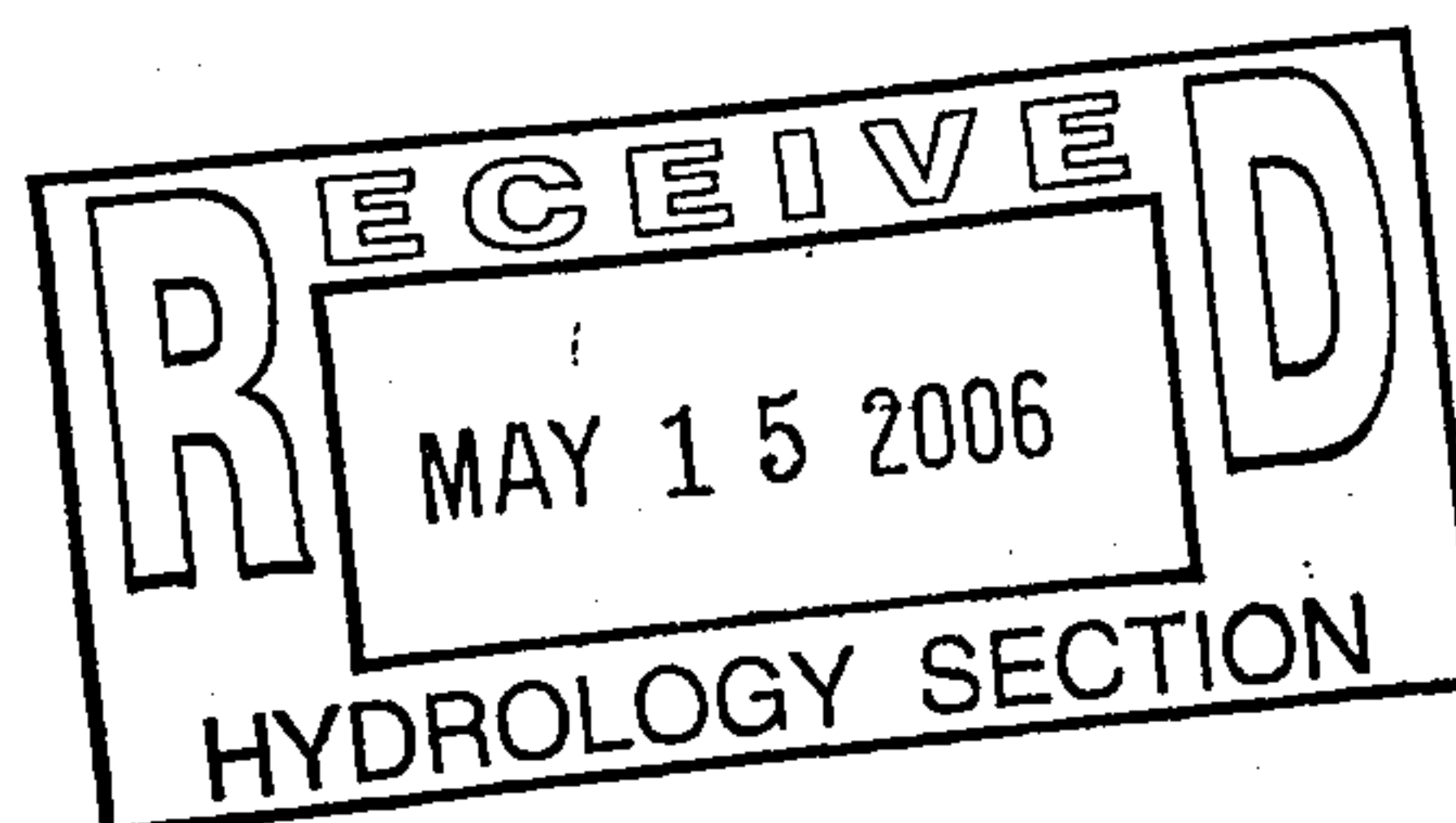
Sincerely,

MCDOWELL ENGINEERING, INC.



Jackie S. McDowell, P.E.

Copy: Owners, Lynn Mazure (AMAFCA)



Parcel _____
ZAP F-23

ENCROACHMENT PERMIT AGREEMENT
IMPROVEMENTS WITHIN FLOODWAY AND STORM DRAINAGE WORKS EASEMENT

WHEREAS, the ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY ("AMAFCA") possesses a floodplain easement within Lot 10A Block _____ Tract _____ Unit _____, (Subdivision Name) THE WILDERNESS @ HIGH DESERT as the same has been filed for public record in Bernalillo County, New Mexico on the _____ day of _____, 200__ as Document Number _____; and

WHEREAS, said easement reserves to Owner, and her/his/its successors and assigns, the right to use said lands for purposes which will not interfere with the rights and easements granted, providing that the grantor obtains written approval for such use from AMAFCA; and

WHEREAS, the owner of said lot (name(s)) LARRY & PEARLENE GARCIA
MARRIED (legal status) MARRIED - OWNERS ("OWNER") desires to encroach into said AMAFCA easement area and construct thereon certain appurtenances ("IMPROVEMENTS") with the intent that neither the present flowline, capacity, nor permeability of the present flood way shall be altered or changed.

NOW, THEREFORE, in return for the promises and covenants contained herein, AMAFCA hereby grants to OWNER, her/his/ its successors and assigns, this Permit to encroach upon the AMAFCA easement and to construct, operate and maintain the IMPROVEMENTS shown on attached Exhibit "A", subject to the following terms and conditions:

1. OWNER shall obtain AMAFCA's written approval for the following:
 - a. All pertinent plans for installation of the IMPROVEMENTS, which must be obtained prior to construction. Should such IMPROVEMENTS include a fence, plans shall include sufficient detail to assure that it will open and permit the free flow of storm water with related debris.
 - b. All changes to subject plans;
 - c. The commencement date of work within the AMAFCA easement; and
 - d. All future repair, modification, removal, or other activities affecting the completed IMPROVEMENTS.
2. OWNER shall provide AMAFCA with one set of "As Built" plans within thirty (30) days of completion of the IMPROVEMENTS.
3. AMAFCA shall have the authority to cause the installation of any of the IMPROVEMENTS to be stopped, or to require the IMPROVEMENTS removed from the easement area, if the construction does not comply with approved plans or if the IMPROVEMENTS are not maintained and the present flowline, capacity, or permeability of the present flood way has been altered or changed in such manner that prohibits or changes the continued free and unrestricted flow of storm water with related debris.

4. All construction, operation, maintenance, repair, relocation and removal of the IMPROVEMENTS shall be accomplished at OWNER's sole expense and in such a manner as shown on the plans approved by AMAFCA. The OWNER will be responsible for obtaining any additional permits as may be required.
5. OWNER shall maintain the IMPROVEMENTS as shown on the approved plans in good operating order. OWNER shall immediately repair any damage, which may occur to the IMPROVEMENTS within the arroyo. The arroyo included in this easement is a natural channel and is subject to erosion (degradation), sedimentation (aggradation), and meandering and flow path alteration by vegetation and rocks. AMAFCA does not maintain this arroyo to prevent these natural processes, and OWNER shall be responsible for protecting his property from stormwater flows in the arroyo, and any changes in the arroyo that may occur.
6. OWNER shall indemnify and hold AMAFCA harmless from all claims or judgments for damages or injury to property or persons arising from the construction, operation, maintenance, relocation or removal of the IMPROVEMENTS and related equipment, and shall defend AMAFCA against any such claim. Licensee shall reimburse AMAFCA for all costs and expenses incurred by AMAFCA resulting from the installation, operation, maintenance or removal of the IMPROVEMENTS should such activities be required to prevent damage to AMAFCA or others. Determination of whether such damage is likely shall be by AMAFCA, which determination shall be reasonable. This agreement to indemnify shall not extend to liability, claims, damages, losses or expenses, including attorney fees, arising out of: (a) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by AMAFCA, its agents or employees; or, (b) the giving of or the failure to give directions or instructions by AMAFCA, its agents or employees, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.
7. In the event that any of the IMPROVEMENTS become ineffective or endanger the flood control function of the arroyo, AMAFCA shall notify OWNER and OWNER shall promptly commence to correct such condition and restore the flood control function of the arroyo. In the event that OWNER fails to undertake or complete such repairs, AMAFCA may modify or remove the IMPROVEMENTS constructed on AMAFCA's easement, provided that AMAFCA gives OWNER thirty (30) days notice of such modification or removal.
8. Should OWNER fail to properly and timely maintain or repair any IMPROVEMENTS after timely notice from AMAFCA, AMAFCA may terminate this Permit and all rights and privileges herein granted. AMAFCA will provide the OWNER with thirty (30) days notice of such intent to terminate. Should AMAFCA need to terminate this Permit for any other reason, AMAFCA will provide OWNER with at least six (6) months notice of such.
9. If OWNER asserts that any AMAFCA action under this permit is unreasonable, OWNER shall have the right to appeal to the AMAFCA Board of Directors.
10. This permit shall be in full force and effect for 30 years from the date of signature from AMAFCA, must be renewed upon expiration, and the burden of timely renewal shall be on OWNER.

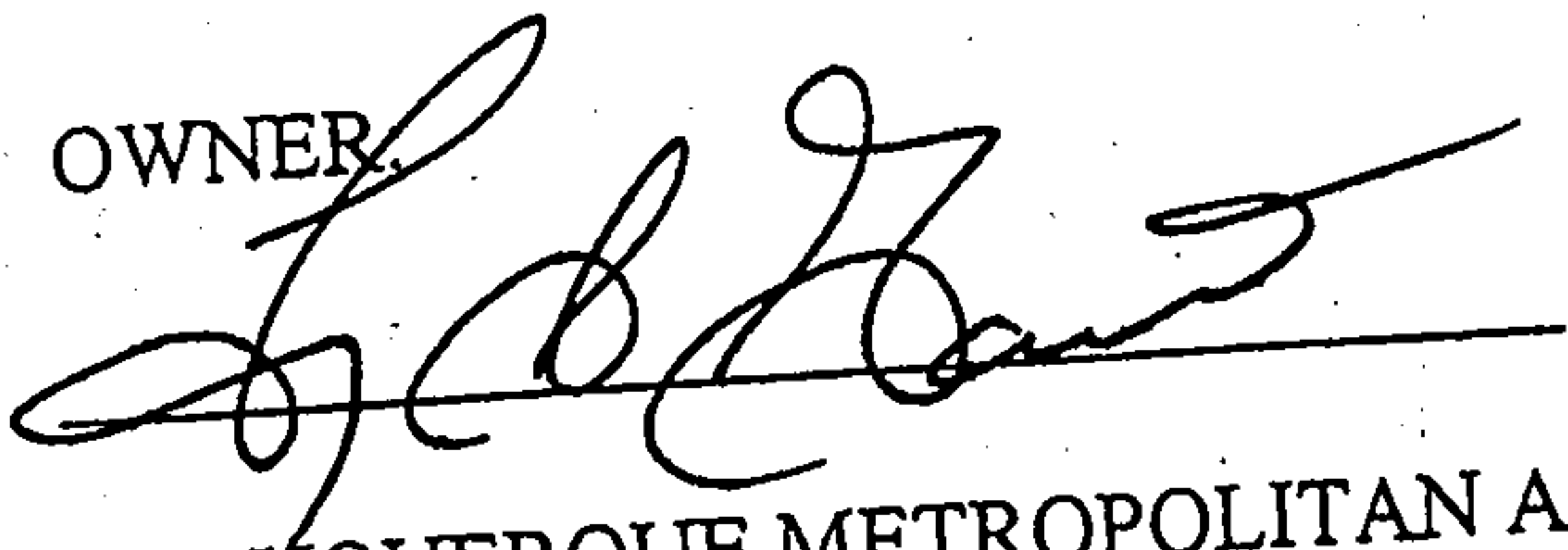
11. Nothing in this Permit shall be construed to create in any person or entity, other than AMAFCA and Owner, any rights whatsoever, including but not limited to the rights of a third party beneficiary, nor to authorize any third party to maintain a suit or any other claim.
12. OWNER covenants and warrants that they are the owners in fee simple of the property and that they have a good and lawful right to enter into this Agreement.

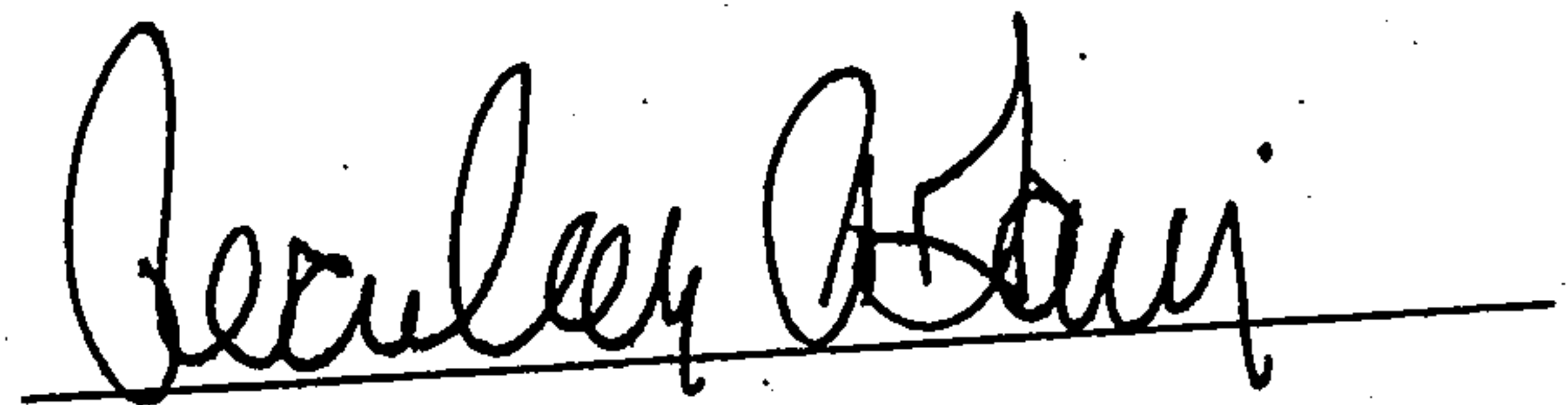
The provisions hereof shall inure to the benefit of and bind the heirs, executors, administrators, successors, and assigns of the parties hereto.

Witness our hands and seals this ____ day of _____, 200__.

TERMS AND CONDITIONS OF PERMIT AGREED TO AND ACKNOWLEDGED.

OWNER.





ALBUQUERQUE METROPOLITAN ARROYO FLOOD
CONTROL AUTHORITY:

By:

John P. Kelly, P.E., Executive Engineer

ACKNOWLEDGMENTS

STATE OF NEW MEXICO)

)s.s.

COUNTY OF BERNALILLO)

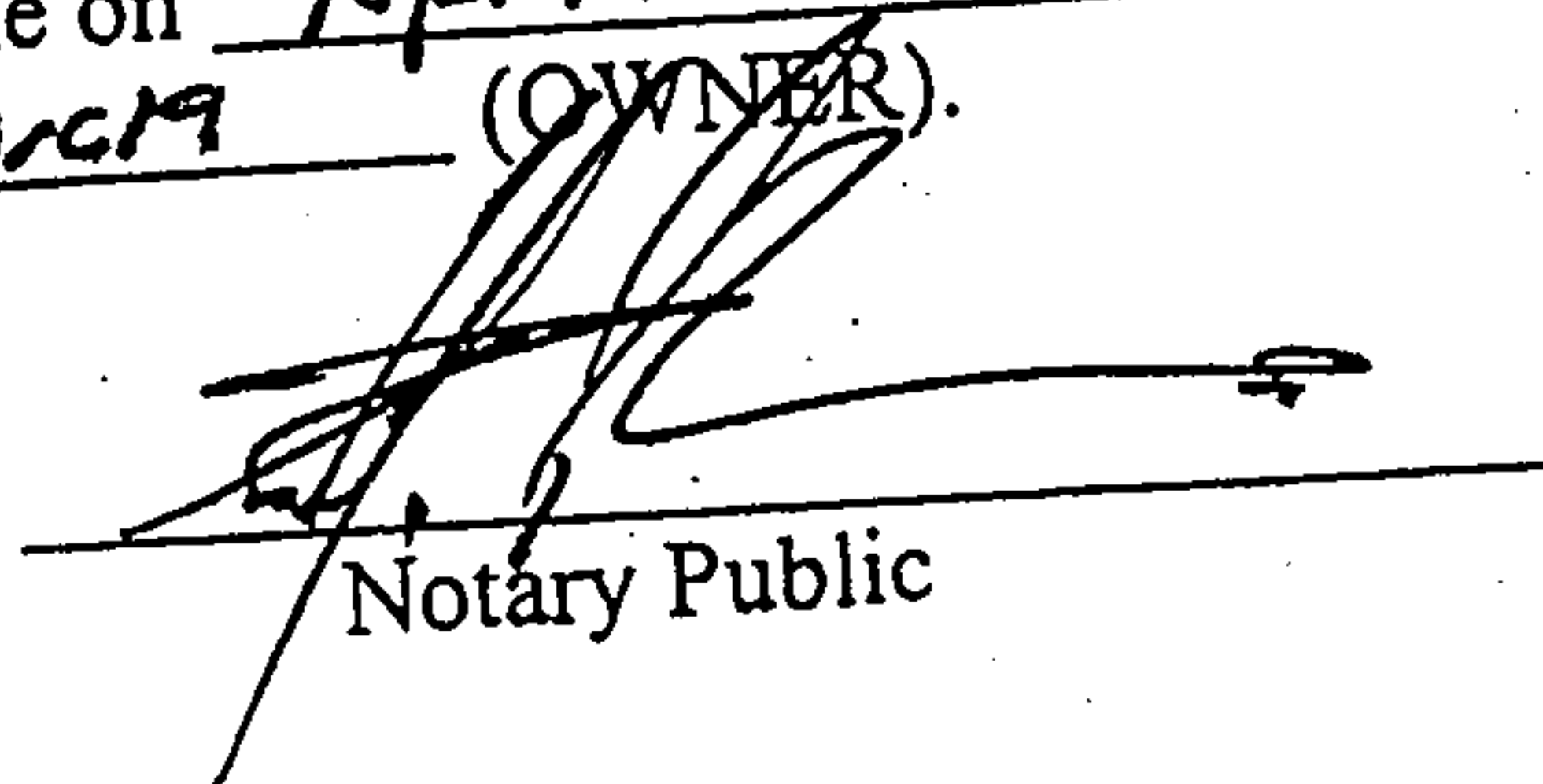


OFFICIAL SEAL
RODOLFO APOLONIO
NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: April 28, 2007

This instrument was acknowledged before me on April 26, 2006 by
Larry I Garcia Pearlene Garcia (OWNER).

My Commission Expires:
April 28, 2007
(SEAL)


Notary Public

STATE OF NEW MEXICO)

)s.s.

COUNTY OF BERNALILLO)

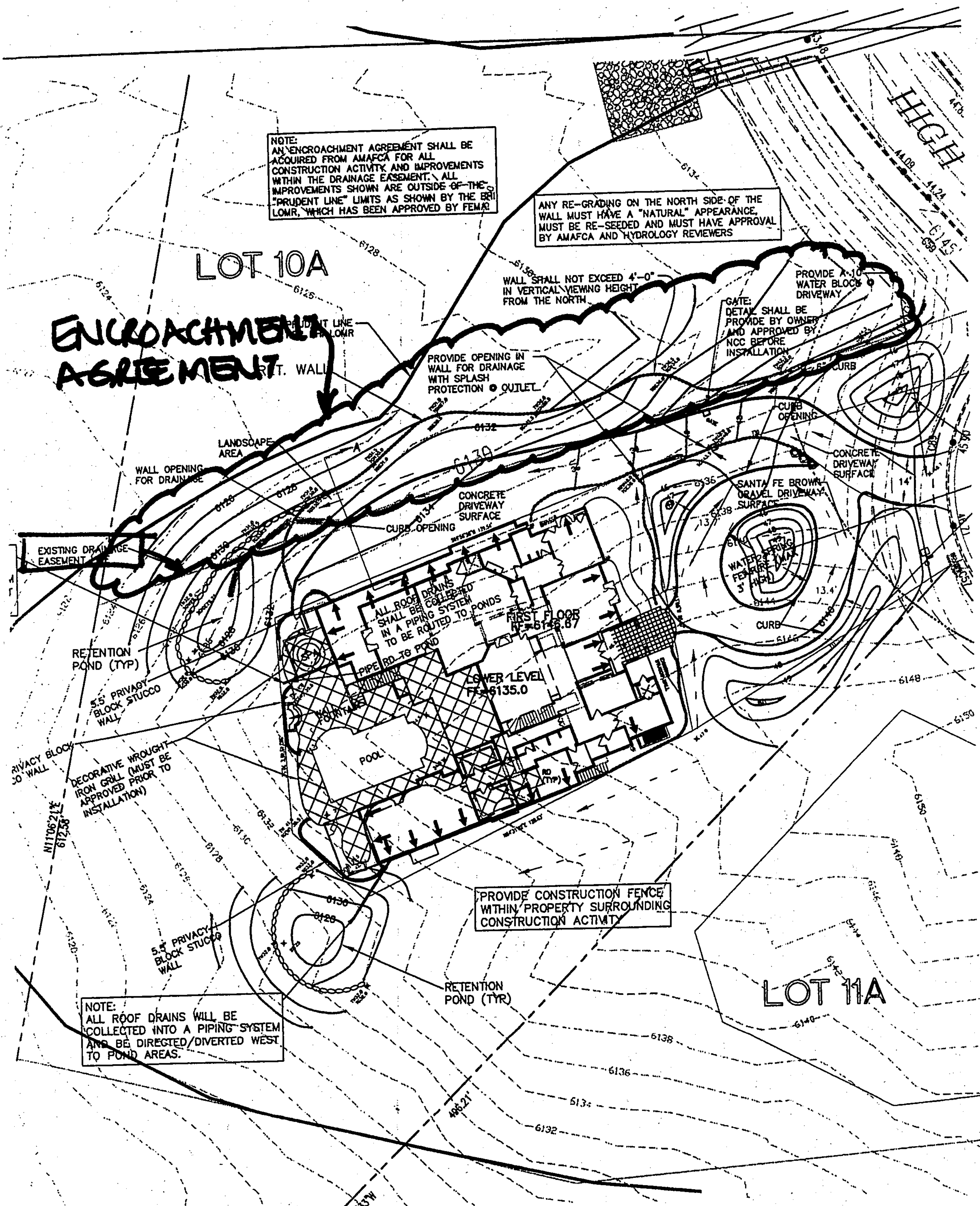
This instrument was acknowledged before me on _____, 200__ by John P. Kelly,
Executive Engineer of the Albuquerque Metropolitan Arroyo Flood Control Authority, a political
subdivision of the State of New Mexico, on behalf of said political subdivision.

My Commission Expires:

(SEAL)

Notary Public

EXHIBIT "A"



Jackie
McDowell Engineering, Inc.

Jackie Sedillo McDowell, P.E.
Civil Engineering Consultant

February 9, 2006

Ms. Lynn Mazur, P.E.
AMAFCA
2400 Prospect NE
Albuquerque, NM 87107

**RE: ENCROACHMENT AGREEMENT - GARCIA HIGH DESERT LOT #10-A,
REVISED GRADING & DRAINAGE PLAN**

Dear Ms. Mazur:

Attached is a copy of the revised Grading & Drainage plan prepared for the Owners of the subject property. Upon investigating the limitations of the providing a retaining wall along the northern portion of the proposed driveway, it was determined that the FEMA Prudent Line limitations were further north than what was originally shown on the survey provided by Bohannon-Huston, Inc. (BHI). The survey showed the drainage easement line in a very conservative "straight line" configuration not taking into consideration the recently approved FEMA Letter of Map Revision (LOMR). Through thorough research, it was determined that the prudent line is located quite a bit north of the easement line, therefore, lending more options for a driveway configuration for the subject property. The original driveway configuration did not leave enough room for a vehicle to adequately maneuver into and out of the garage area. With this new clarification of the exact prudent line location (which was transposed from BHI FEMA LOMR), we were able to reconfigure a more practical alignment of the driveway.

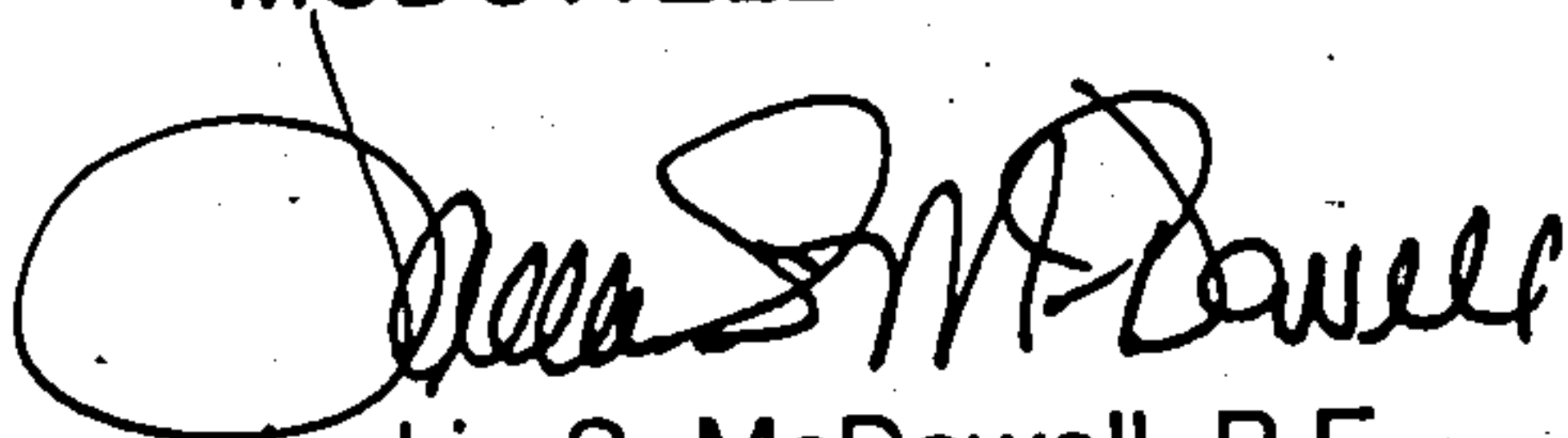
Since the drainage easement was granted for the old floodplain line, we are hereby requesting an Encroachment Agreement approval from AMAFCA.

Attached are copies from the FEMA approved BHI LOMR report showing the prudent line as transposed onto the Grading & Drainage Plan. We are currently in the review process with High Desert and once that final approval has taken place, we will inform you so that we can proceed with the formal process of acquiring an Encroachment Agreement (EA). Please begin the approval process for the EA.

If you have any questions, please do not hesitate to call me.

Sincerely,

MCDOWELL ENGINEERING, INC.


Jackie S. McDowell, P.E.

Copy: Owners, High Desert



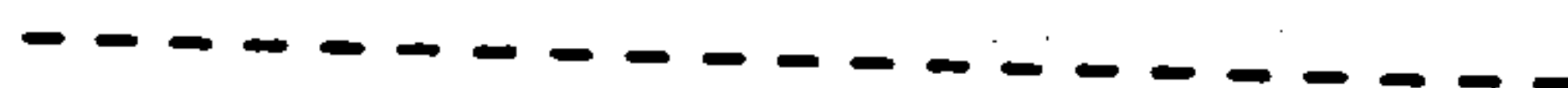
FEMA FLOODPLAIN



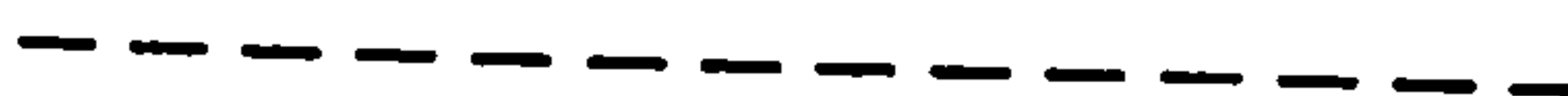
LEGEND



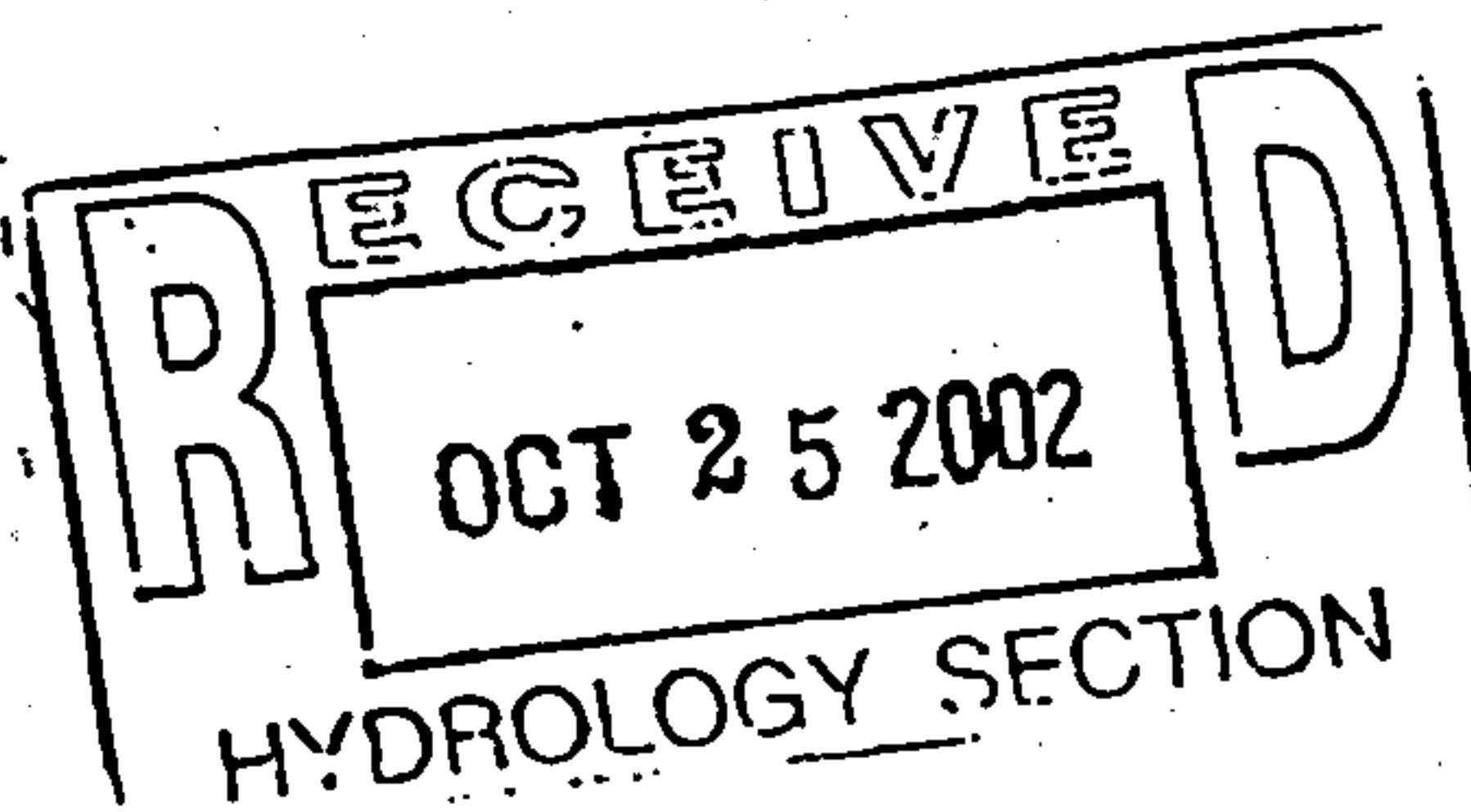
PRUDENT LINE



PROPERTY LINE



FEMA FLOODPLAIN



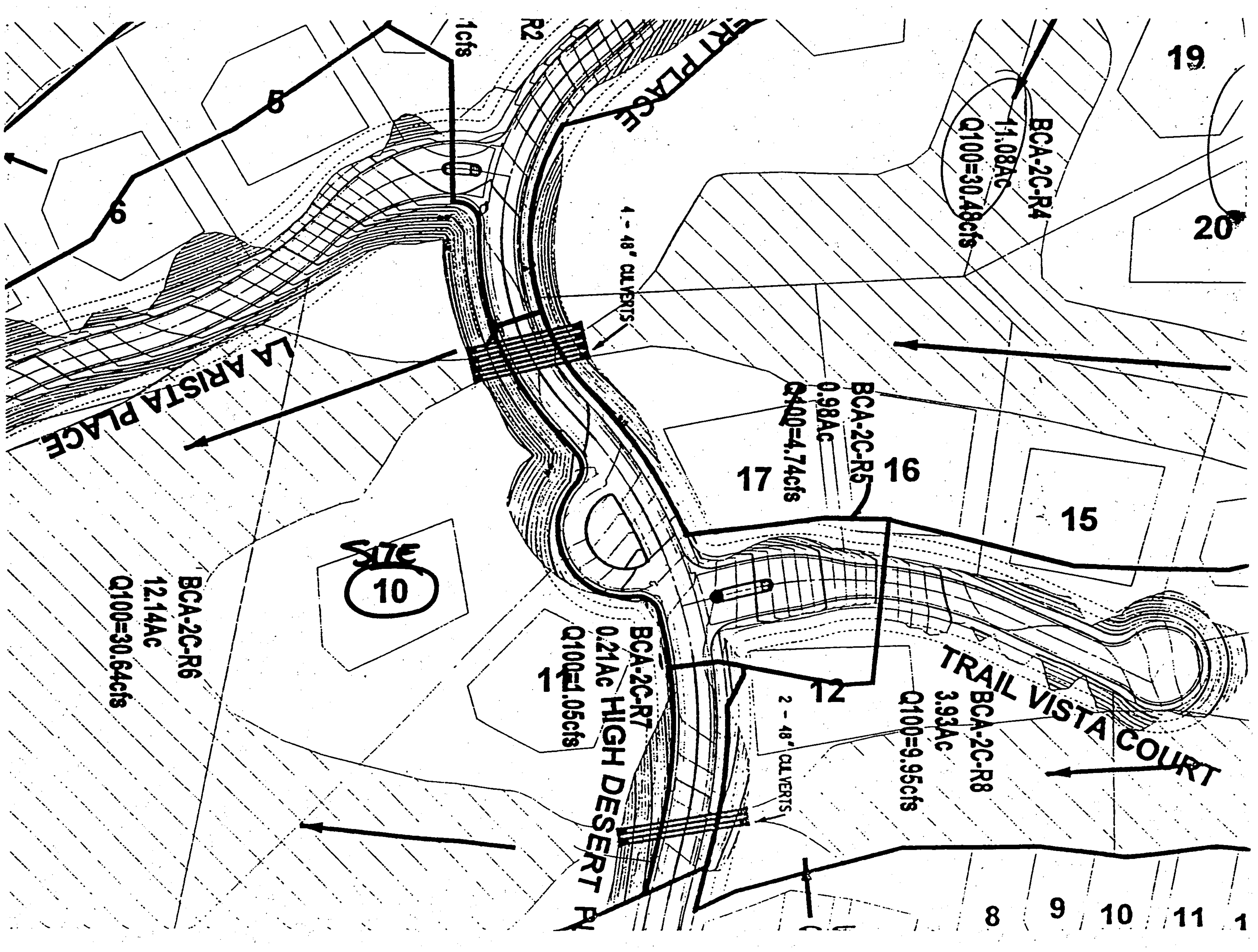
DETAILED REVISED
PRUDENT LINE MAP
EXHIBIT 7

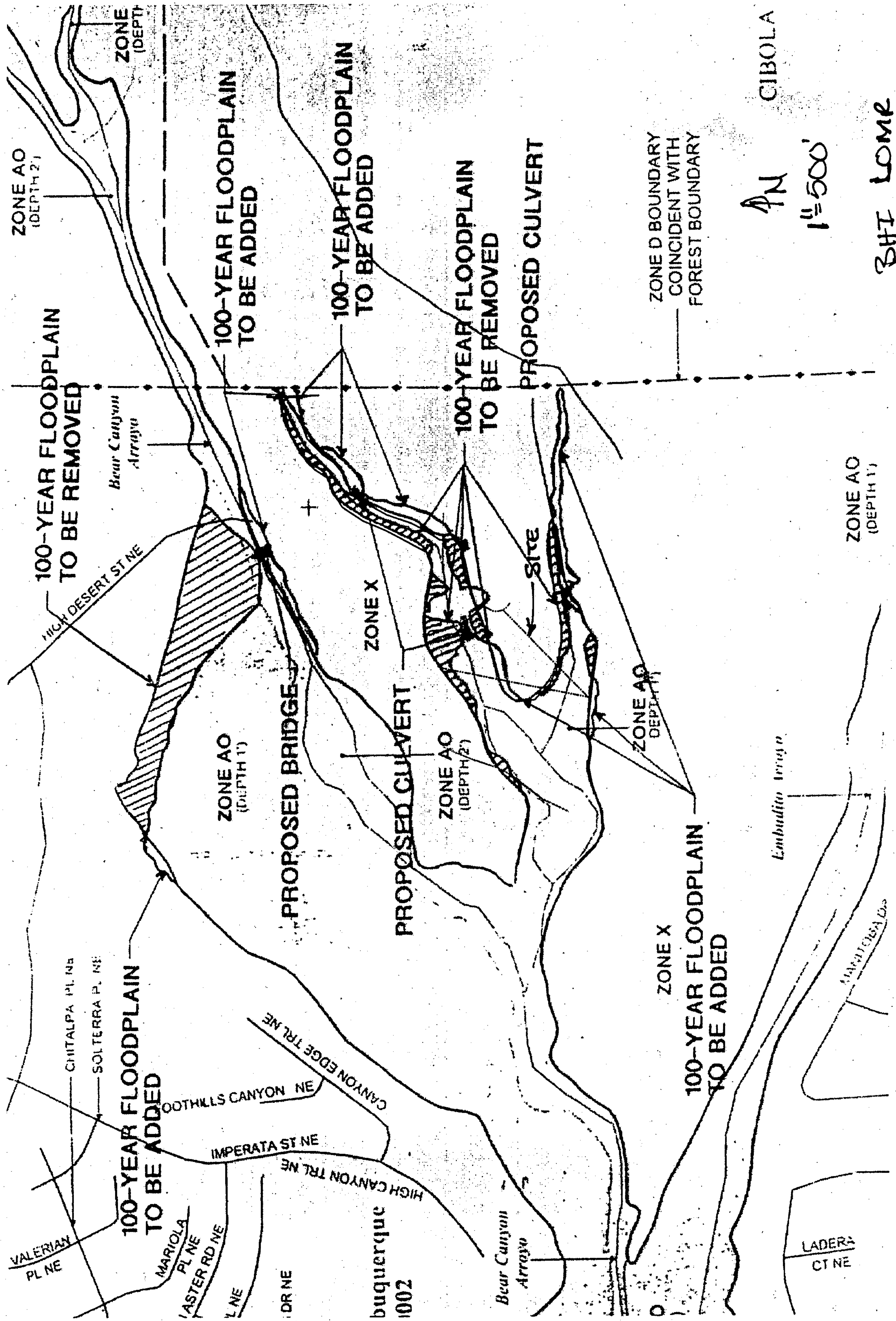
**BEAR CANYON
ARROYO**

**SOUTH BRANCH
BEAR CANYON
ARROYO**

NORTH BRANCH







AN
1450'

X-SECTION D

2 FOR DRAINING

MAINTAIN 18" SEPARATION FROM EASEMENT LINE TO EDGE OF DRIVEWAY. EASEMENT SHALL BE STAKED AND NOT ENCROACHED INTO WITH ANY CONSTRUCTION.

PROVIDE OPENING IN WALL FOR DRAINAGE WITH SPLASH PROTECTION & OUTLET.

PROVIDE 10" WATER BLOCK TO DRIVEWAY

PRUDENT LINE PER BHI EOMR

RETENTION POND (TYP)

FIRST FLOOR FF=6143.67

LOWER LEVEL FF=6135.0

FEMA FLOOD LIMITS (NEW)

COURTYARD WALL (TYP.) MAX 5.5' HIGH FROM THE OUTSIDE

PROVIDE CONSTRUCTION FENCE WITHIN PROPERTY SURROUNDING CONSTRUCTION ACTIVITY

PROVIDE COBBLE LINED SWALE (SEE DETAIL) TO FOND & ROOF DRAIN DOWNSPOUTS. COBBLE LINED SWALES SHALL HAVE A NATURAL LOOK WITH VARIABLE SIZES OF COBBLES. (TYP)

FEMA FLOODPLAIN LIMITS (OLD)

LOT 10A

RETENTION POND (TYP)

LOT 11A

Worksheet

Worksheet for Irregular Channel

Project Description	
Project File	c:\haestad\academic\fmw\project1.fm2
Worksheet	GARCIA
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Water Elevation

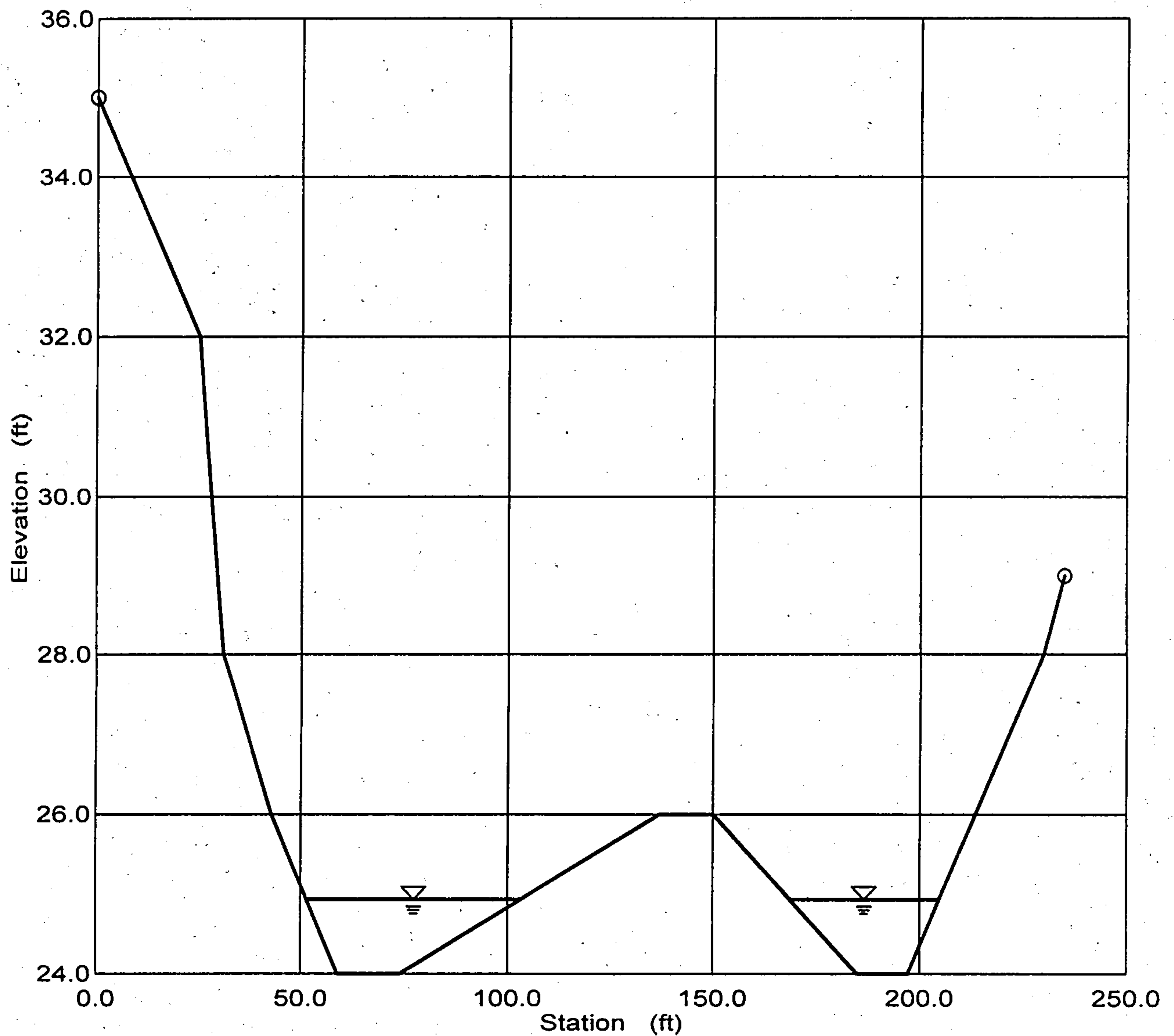
Input Data				
Channel Slope		0.054000 ft/ft		
Elevation range: 24.00 ft to 35.00 ft.				
Station (ft)	Elevation (ft)	Start Station	End Station	Roughness
0.00	35.00	0.00	235.00	0.035
25.00	32.00			
28.00	30.00			
31.00	28.00			
43.00	26.00			
59.00	24.00			
74.00	24.00			
137.00	26.00			
150.00	26.00			
185.00	24.00			
197.00	24.00			
230.00	28.00			
235.00	29.00			
Discharge	378.00	cfs		

Results		
Wtd. Mannings Coefficient	0.035	
Water Surface Elevation	24.93	ft
Flow Area	53.41	ft ²
Wetted Perimeter	87.90	ft
Top Width	87.74	ft
Height	0.93	ft
Critical Depth	25.18	ft
Critical Slope	0.019757	ft/ft
Velocity	7.08	ft/s
Velocity Head	0.78	ft
Specific Energy	25.71	ft
Froude Number	1.60	
Flow is supercritical.		
Flow is divided.		

Cross Section
Cross Section for Irregular Channel

Project Description	
Project File	c:\haestad\academic\fmw\project1.fm2
Worksheet	GARCIA
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Water Elevation

Section Data	
Wtd. Mannings Coefficient	0.035
Channel Slope	0.054000 ft/ft
Water Surface Elevation	24.93 ft
Discharge	378.00 cfs



NOTE:
AN ENCROACHMENT AGREEMENT SHALL BE
ACQUIRED FROM AMAFCA FOR ALL
CONSTRUCTION ACTIVITY AND IMPROVEMENTS
WITHIN THE DRAINAGE EASEMENT. ALL
IMPROVEMENTS SHOWN ARE OUTSIDE OF THE
"PRUDENT LINE" LIMITS AS SHOWN BY THE BHI
LOMR, WHICH HAS BEEN APPROVED BY FEMA.

ANY RE-GRADING ON THE NORTH SIDE OF THE
WALL MUST HAVE A "NATURAL" APPEARANCE.
MUST BE RE-SEEDING AND MUST HAVE APPROVAL
BY AMAFCA AND HYDROLOGY REVIEWERS.

LOT 10A

PRUDENT LINE
PER BHI LOMR

RET. WALL

WALL SHALL NOT EXCEED 4'-0"
IN VERTICAL VIEWING HEIGHT
FROM THE NORTH AND MUST BE
CONSTRUCTED OF NATURAL
MATERIALS.

PROVIDE OPENING IN
WALL FOR DRAINAGE
WITH SPLASH
PROTECTION & OUTLET

PROVIDE A 30"
WATER BLOCK &
DRIVEWAY

GATE: SHALL BE
PROVIDE BY OWNER
AND APPROVED BY
NCC BEFORE
INSTALLATION

6" CURB

CURB
OPENING

CONCRETE
DRIVEWAY
SURFACE

SANTA FE BROWN
GRAVEL DRIVEWAY
SURFACE

WATER SPRING
FEATURE (NAT)
3' HIGH

CURB

NOTE:
ALL ROOF DRAINS WILL BE
COLLECTED INTO A PIPING SYSTEM
AND BE DIRECTED/DIVERTED WEST
TO POND AREAS.

PRUDENT
LINE PER BHI
LOMR

WROUGHT IRON FENCING
SHALL BE APPROVED BY
NCC PRIOR TO INSTALLATION

EXISTING DRAINAGE
EASEMENT LINE

RETENTION
POND (TYP)

5.5' PRIVACY
BLOCK STUCCO
WALL

5.5' PRIVACY BLOCK
STUCCO WALL

DECORATIVE WROUGHT
IRON GRILL (MUST BE
APPROVED PRIOR TO
INSTALLATION)

FEMA FLOOD
PLAIN
(NEW)

FEMA
FLOODPLAIN
LIMITS (OLD)

NOTE:
ALL ROOF DRAINS WILL BE
COLLECTED INTO A PIPING SYSTEM
AND BE DIRECTED/DIVERTED WEST
TO POND AREAS.

ALL ROOF DRAINS
SHALL BE COLLECTED
IN A PIPING SYSTEM
TO BE ROUTED TO PONDS

FIRST FLOOR
N=6145.67

LOWER LEVEL
N=6135.0

POOL

RETENTION
POND (TYP)

PROVIDE CONSTRUCTION FENCE
WITHIN PROPERTY SURROUNDING
CONSTRUCTION ACTIVITY

LOT 11A