

# CITY OF ALBUQUERQUE



April 16, 2012

Verlyn A. Miller, PE  
Miller Engineering Consultants  
3500 Comanche Blvd. NE Bldg F  
Albuquerque, NM 87107

**Re: Snow Vista Substation PNM  
Grading and Drainage Plan  
Engineer Stamp dated 4-5-2012 (M09/D028)**

Dear Mr. Miller,

Based upon the information provided in your submittal received 4-05-12, the above referenced plan is approved for Grading Permit and Paving Permit. This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

**Upon completion of the project, provide an Engineer Certification for our files.**

**Albuquerque's MS4 Permit became effective March 1<sup>st</sup>, 2012. Grading and Drainage Plans and Drainage Reports will have to comply with the requirements of the new permit. The permit is available online at [www.cabq.gov/Planning/landcoord/Hydrology.html](http://www.cabq.gov/Planning/landcoord/Hydrology.html)**

If you have any questions, you can contact me at 924-3421 or Rudy E. Rael at 924-3977.

Sincerely,

Curtis Cherne, P.E., CFM  
Principal Engineer, Planning Dept.  
Development and Building Services

RER/CAC  
C: Kathy Verhage, DMD  
email

PO Box 1293

Albuquerque

NM 87103

[www.cabq.gov](http://www.cabq.gov)

**Rael, Rudy E.**

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**From:** Mazur, Lynn [lmazur@amafca.org]  
**Sent:** Monday, April 16, 2012 4:07 PM  
**To:** Rael, Rudy E.  
**Cc:** Verlyn Miller  
**Subject:** RE: Snow vista subdivision

I would like a note added on the structural sheets that if excavation for the retaining wall footing encroaches into the AMAFCA right-of-way, a permit from AMAFCA will be required.

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**From:** Mazur, Lynn  
**Sent:** Monday, April 16, 2012 3:57 PM  
**To:** 'Rael, Rudy E.'  
**Cc:** Verlyn Miller  
**Subject:** RE: Snow vista subdivision

Re: Public Service Company of New Mexico Substation by the Amole Channel, ZAP m-9  
 Engineer's Stamp Dated April 5, 2012

AMAFCA approves the grading and drainage plan for the subject project. The spillways from the retention ponds are for emergency overflow and, therefore, will not require additional riprap lining in the AMAFCA right-of-way.

*10041-24 hr-6 hr*

**Albuquerque Metropolitan Arroyo  
 Flood Control Authority**

Lynn M. Mazur, P.E., C.F.M.  
 Development Review Engineer  
 Phone: (505) 884-2215  
 Mobile: (505) 362-1273  
[www.amafca.org](http://www.amafca.org)

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The unauthorized disclosure or interception of e-mail is a federal crime. See 18 U.S.C. § 2517(4). This e-mail is intended only for the use of those to whom it is addressed and may contain information which is privileged, confidential and exempt from disclosures under the law. If you have received this e-mail in error, do not distribute or copy it. Return it immediately with attachments, if any, and notify me by telephone at (505) 884-2215.

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**From:** Rael, Rudy E. [mailto:RRael@cabq.gov]  
**Sent:** Monday, April 16, 2012 3:42 PM  
**To:** Mazur, Lynn  
**Subject:** Snow vista subdivision

Hello Lynn, is everything okay with you on this site? Thank you, sincerely; Rudy

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No virus found in this message.

Checked by AVG - [www.avg.com](http://www.avg.com)

Version: 2012.0.1913 / Virus Database: 2411/4940 - Release Date: 04/16/12

4/16/2012



## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

M-09/2028

(Rev. 01/06)

PROJECT TITLE: SNOW VISTA SUBSTATION ZONE MAP/DRG. FILE # 1A-09-7  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: TL E-5-A-1, Plat of E-5-A-1 & 2, All South, Unit 3 Block 10C, Pg 90, 8/3/2010  
CITY ADDRESS: NORTHEAST OF SNOW VISTA AND GIBSON

ENGINEERING FIRM: MILNER ENGINEERING CONSULTANTS  
ADDRESS: 3500 COMANCHE BLVD BLDG F  
CITY, STATE: ALBUQUERQUE, NM

CONTACT: VERLYN MILLER  
PHONE: 388-7500  
ZIP CODE: 87107

OWNER: PUBLIC SERVICE CO OF NEW MEXICO  
ADDRESS: ALVARADO SQUARE  
CITY, STATE: ALBUQUERQUE, NM

CONTACT: CHRIS MAESTAS  
PHONE: 241-0853  
ZIP CODE: 87158

ARCHITECT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_

SURVEYOR: TIERRA LAND SURVEYS  
ADDRESS: PO BOX 2532  
CITY, STATE: CORRALES, NM

CONTACT: CHRIS MEDINA  
PHONE: 797-0513  
ZIP CODE: 87043

PROFESSIONAL LICENSED SURVEYOR SIGNATURE

LICENSE NO.

DATE

CONTRACTOR: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

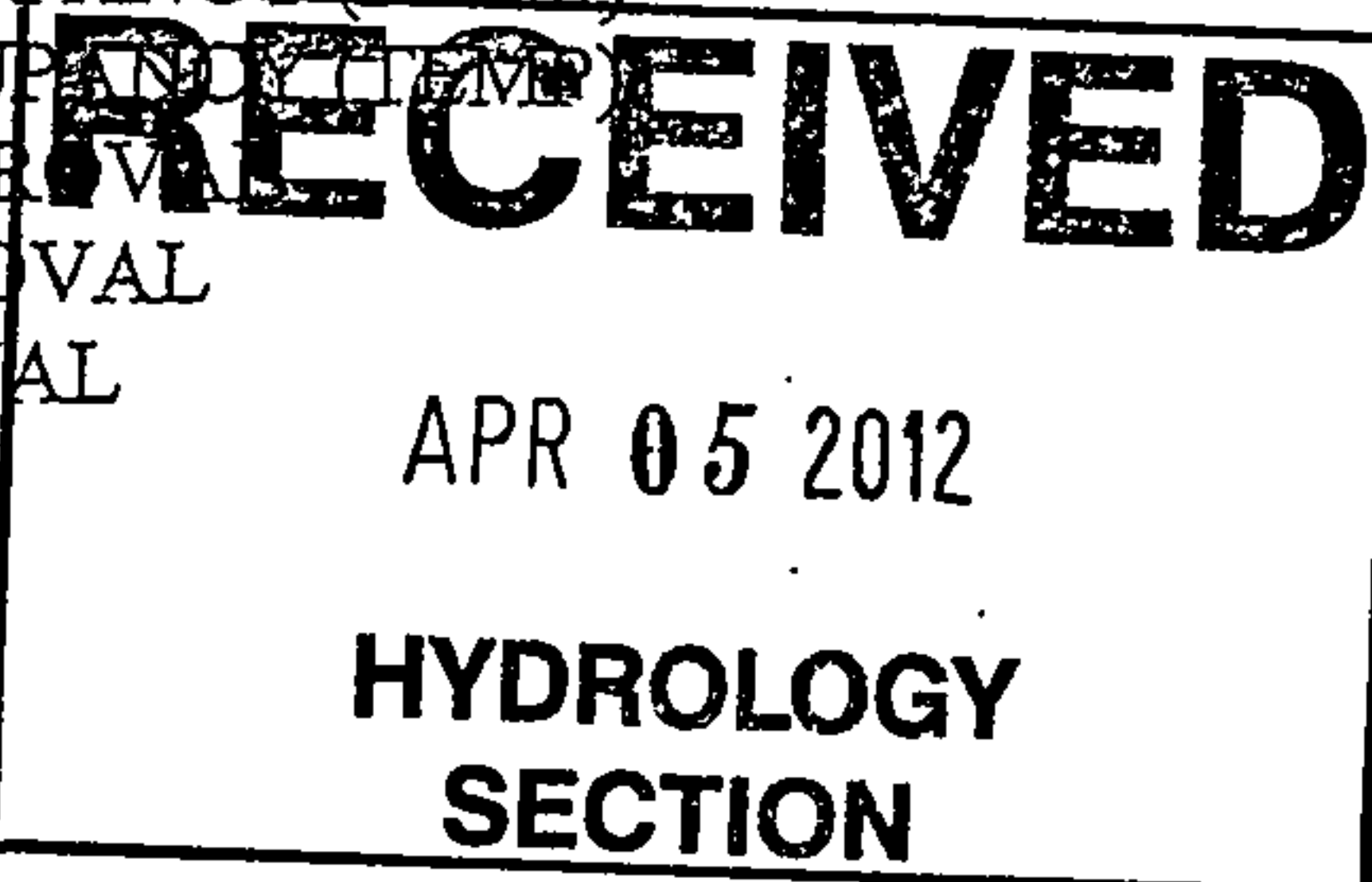
- ☒ DRAINAGE REPORT  
☒ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL  
☐ DRAINAGE PLAN RESUBMITTAL  
☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERT (HYDROLOGY)  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT  
☐ ENGINEER/ARCHITECT CERT (TCL)  
☐ ENGINEER/ARCHITECT (DRB 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:

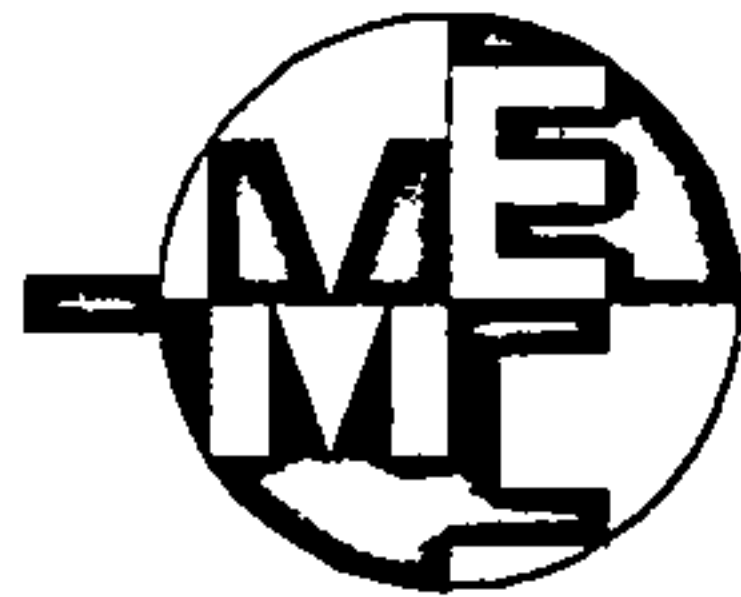
- ☒ YES  
☒ NO  
☐ COPY PROVIDED



SUBMITTED BY: [Signature] DATE: 4/5/12

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 define 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.



MILLER ENGINEERING CONSULTANTS

Engineers • Planners

April 5, 2012

Mr. Curtis Cherne, P.E.  
Principal Engineer, Planning Dept.  
Development and Building Services  
City of Albuquerque  
P.O. Box 1293  
Albuquerque, NM 87103

**RE: PNM Snow Vista Substation, Grading and Drainage Plan  
Engineering Stamp dated 04/05/2012**

Dear Mr. Cherne:

Please find enclosed the Grading and Drainage Plan for the above referenced project for your review. We have already sent a copy of this Plan to A.M.A.F.C.A. for their review, as well.

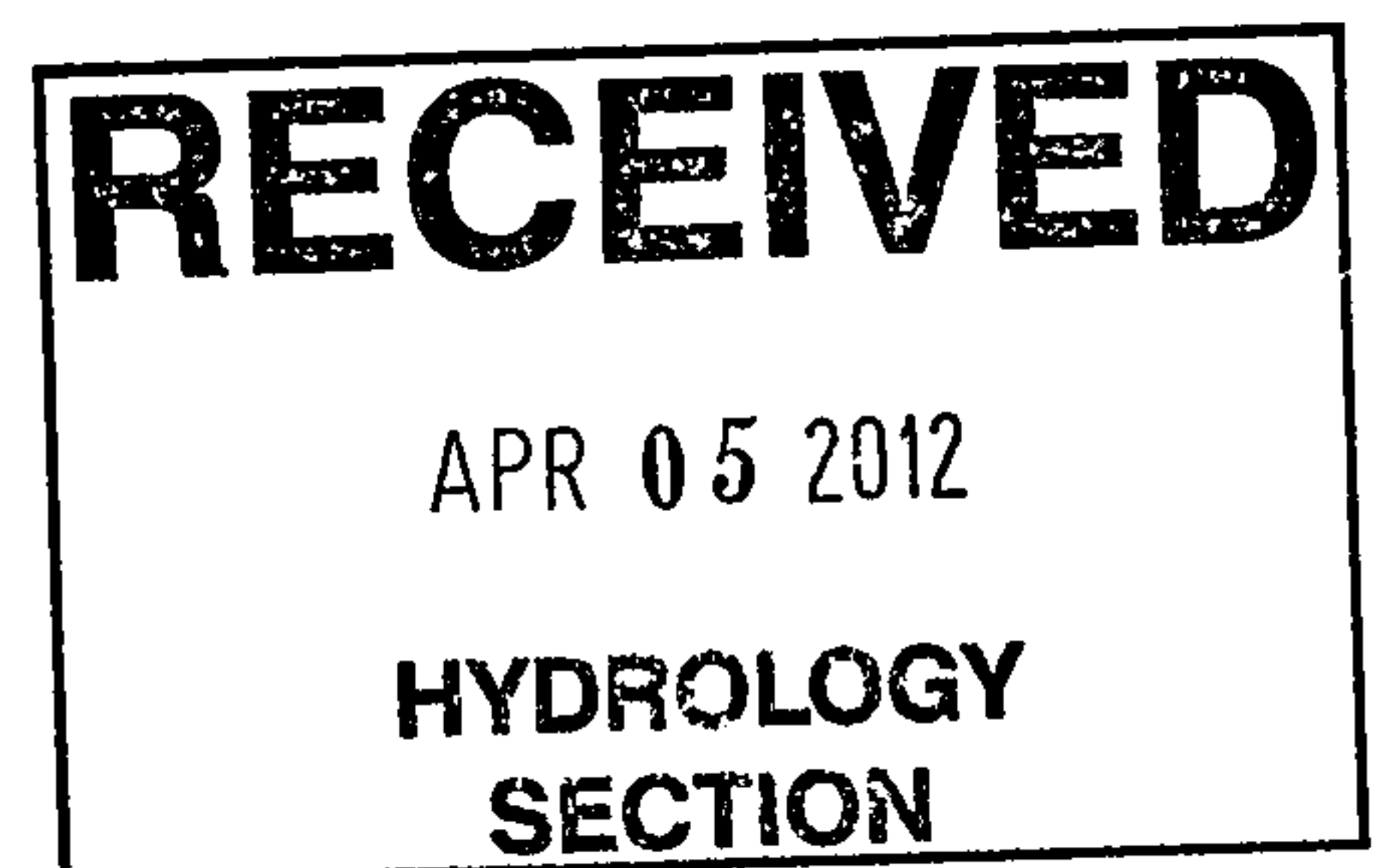
We are looking forward to your review and comments regarding this project. If you have any questions or comments, please feel free to contact our office or email John Jacquez ([jjacquez@mecnm.com](mailto:jjacquez@mecnm.com)) or myself ([vmiller@mecnm.com](mailto:vmiller@mecnm.com))

**MILLER ENGINEERING CONSULTANTS, INC.**

Verlyn A. Miller, P.E.  
President

VAM:vam  
Enclosures

Cc: Ms. Lynn Mazur, Development Review Engineer, AMAFCA  
Mr. Chris Maestas, Project Manager, PNM



# SUPPLEMENTAL DRAINAGE CALCULATIONS

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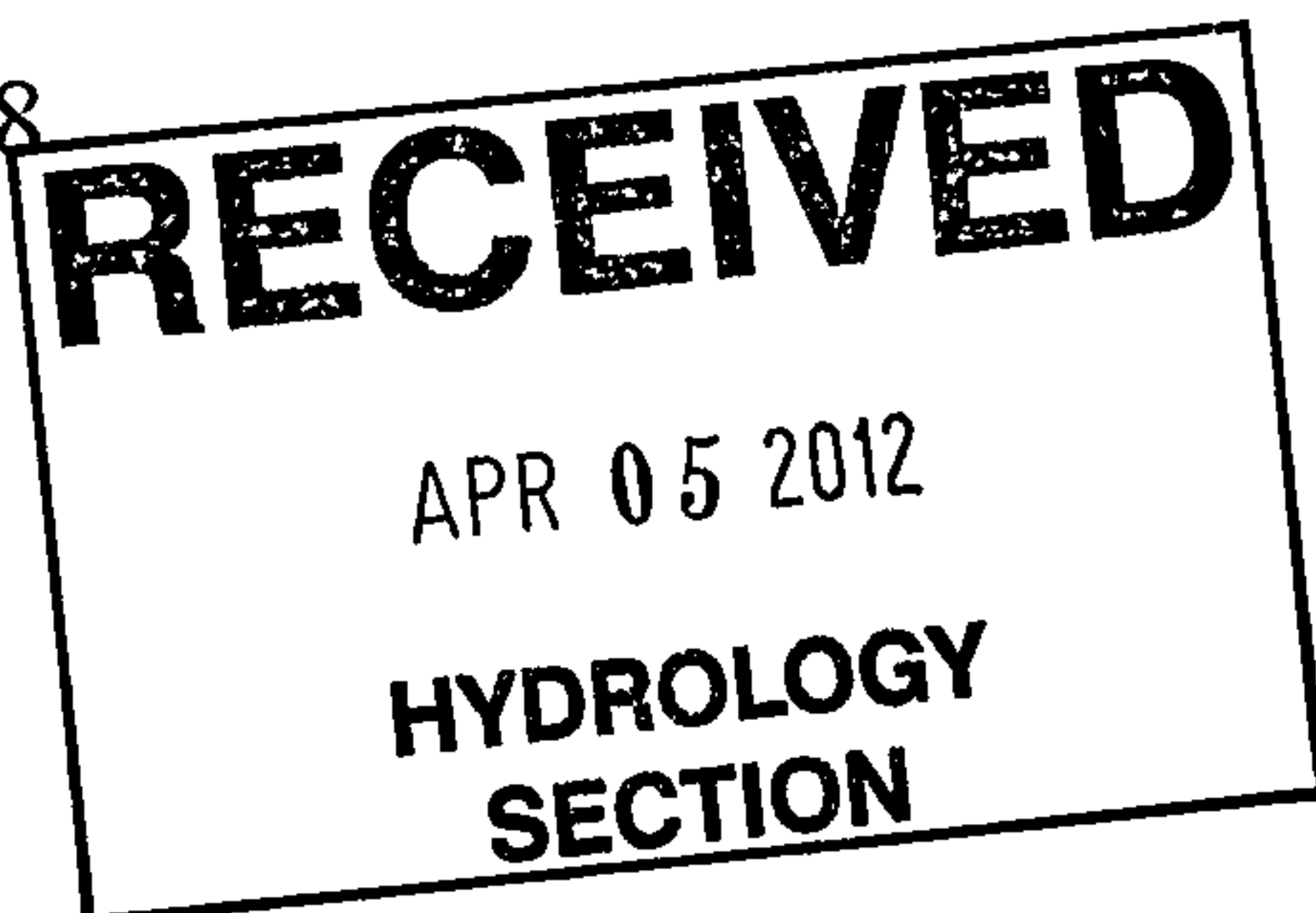
PNM Snow Vista Substation  
Grading & Drainage Plan

Albuquerque, New Mexico

April 5, 2012  
(Submittal #1)

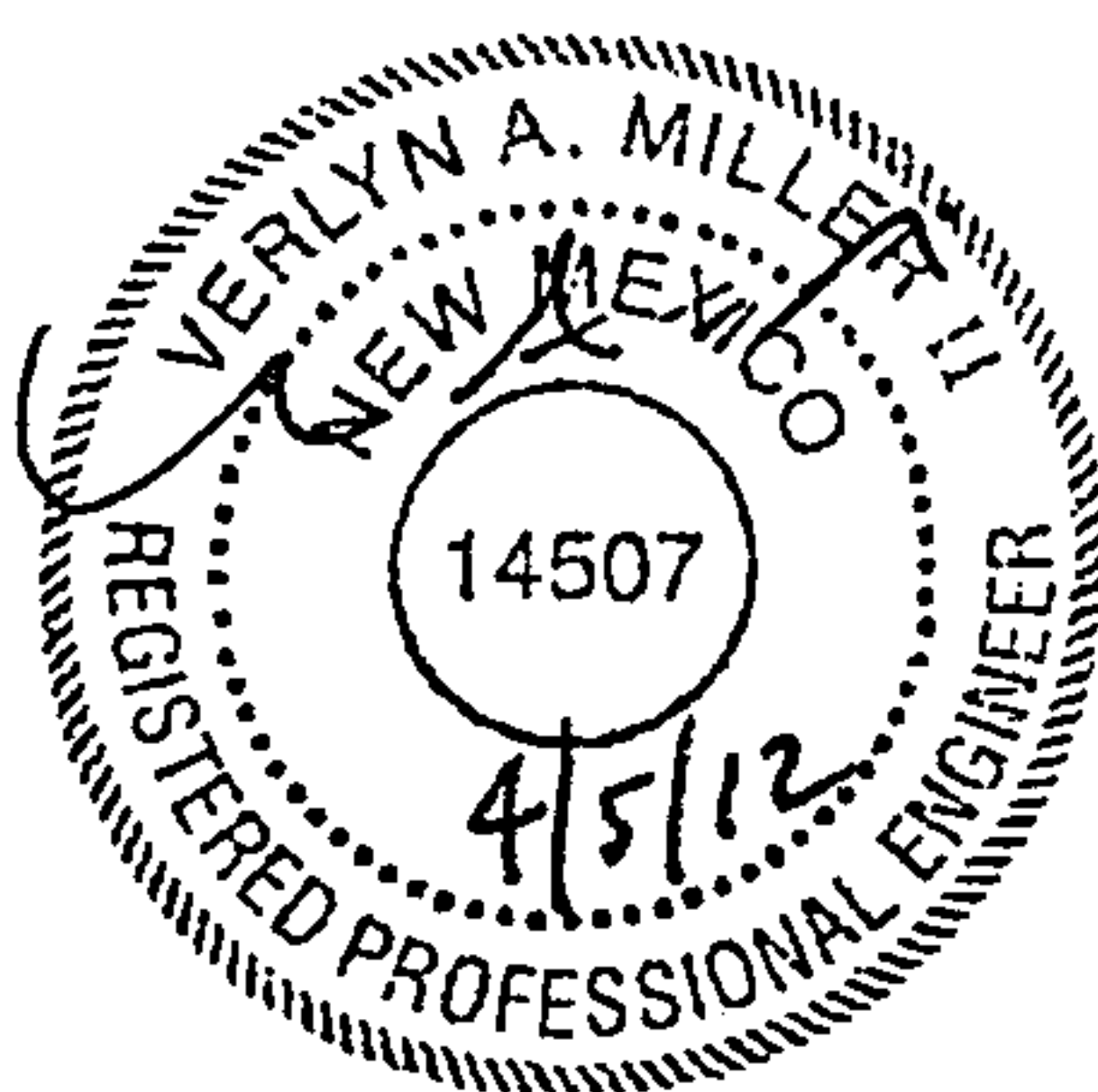
Prepared For: Public Service Company of New Mexico  
Alvarado Square  
Albuquerque, New Mexico, 87158

Prepared By:



*MILLER ENGINEERING CONSULTANTS*

*Engineers • Planners*



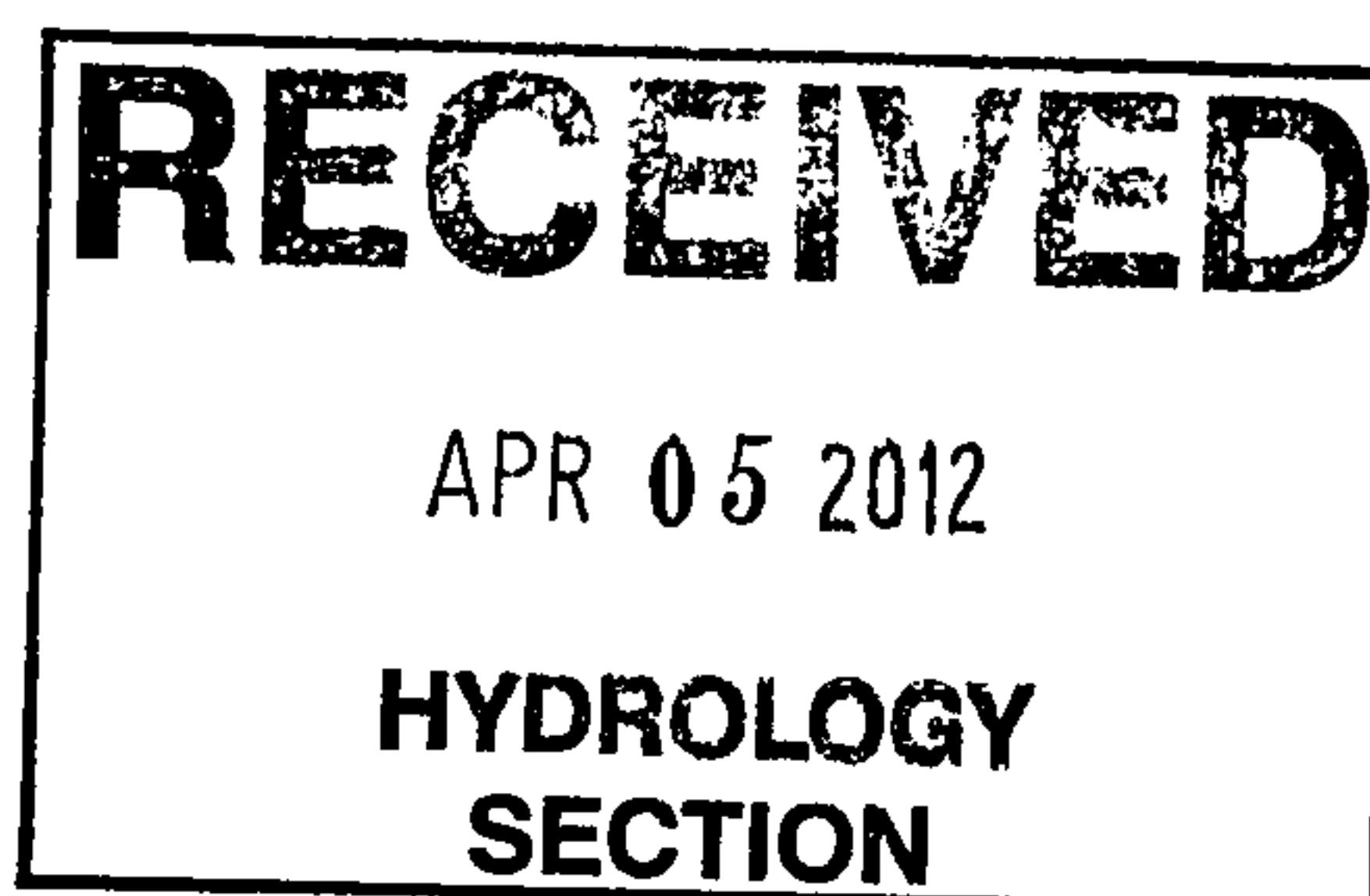
*3500 Comanche NE, Bldg. F*  
*Albuquerque, New Mexico 87107*  
*Phone: (505) 888-7500*  
*Fax: (505) 888-3800*



WATER HARVEST AREA 1				
Pond Rating Table				
Side Slope		3:1		
Depth	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
5128	682	0.016	0.000	0.000
5129	1071	0.025	0.020	0.020
5129.5	1291	0.030	0.014	0.034

←Storage

BASIN A  
 $(V_{100-24}) = 0.016 \therefore OK$

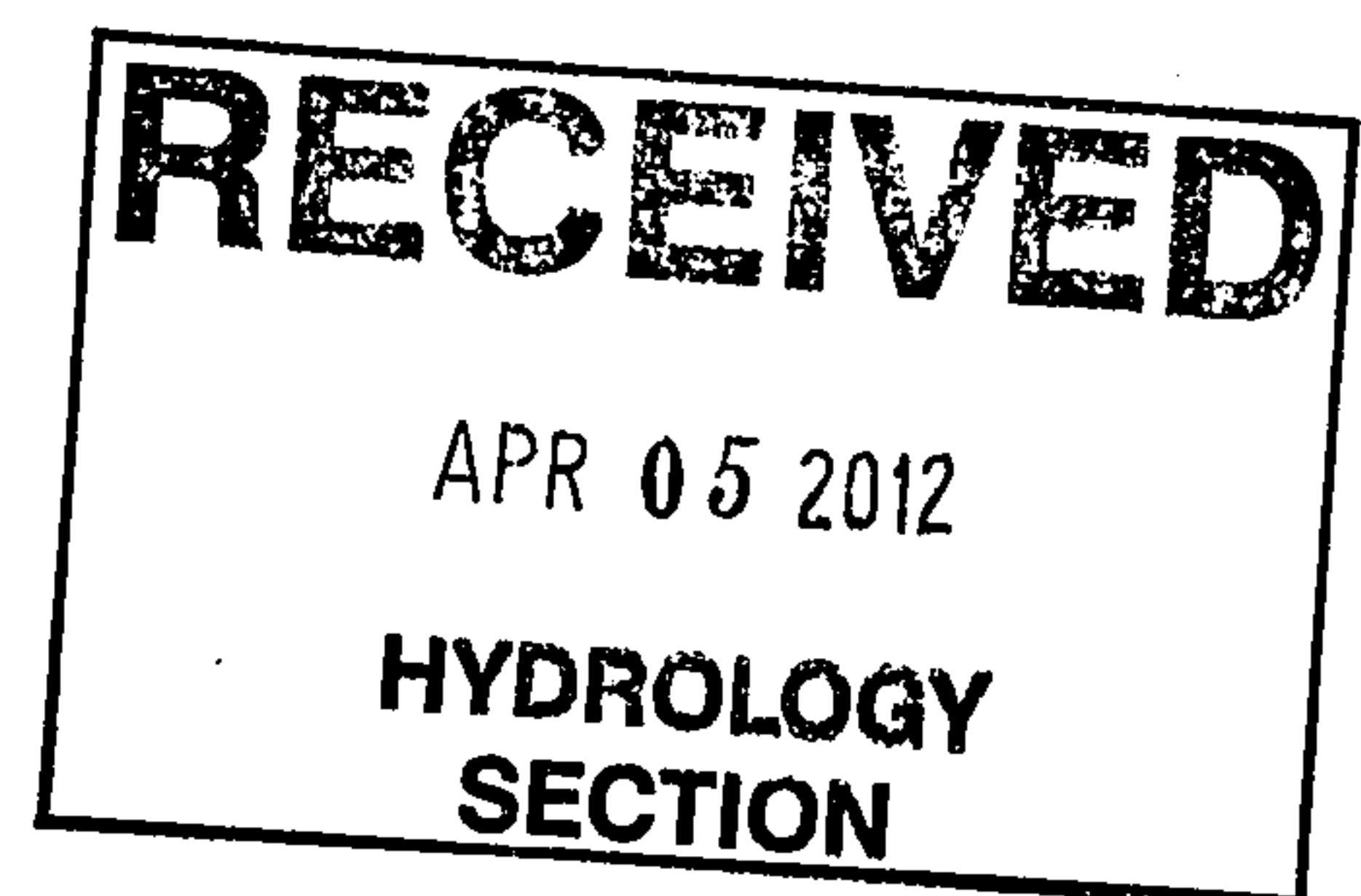


WATER HARVEST AREA 2				
Pond Rating Table				
Side Slope		3:1		
Depth	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
5123	262	0.006	0.000	0.000
5124	620	0.014	0.010	0.010
5125	1057	0.024	0.019	0.029
5125.5	1308	0.030	0.014	0.043

←Storage

BASIN C

$$V_{(100-24)} = 0.043 \text{ AF} \therefore \text{OK}$$



## Worksheet for WATER HARVEST AREA 1-Basin A

### Project Description

Flow Element: Broad Crested Weir  
Solve For: Discharge

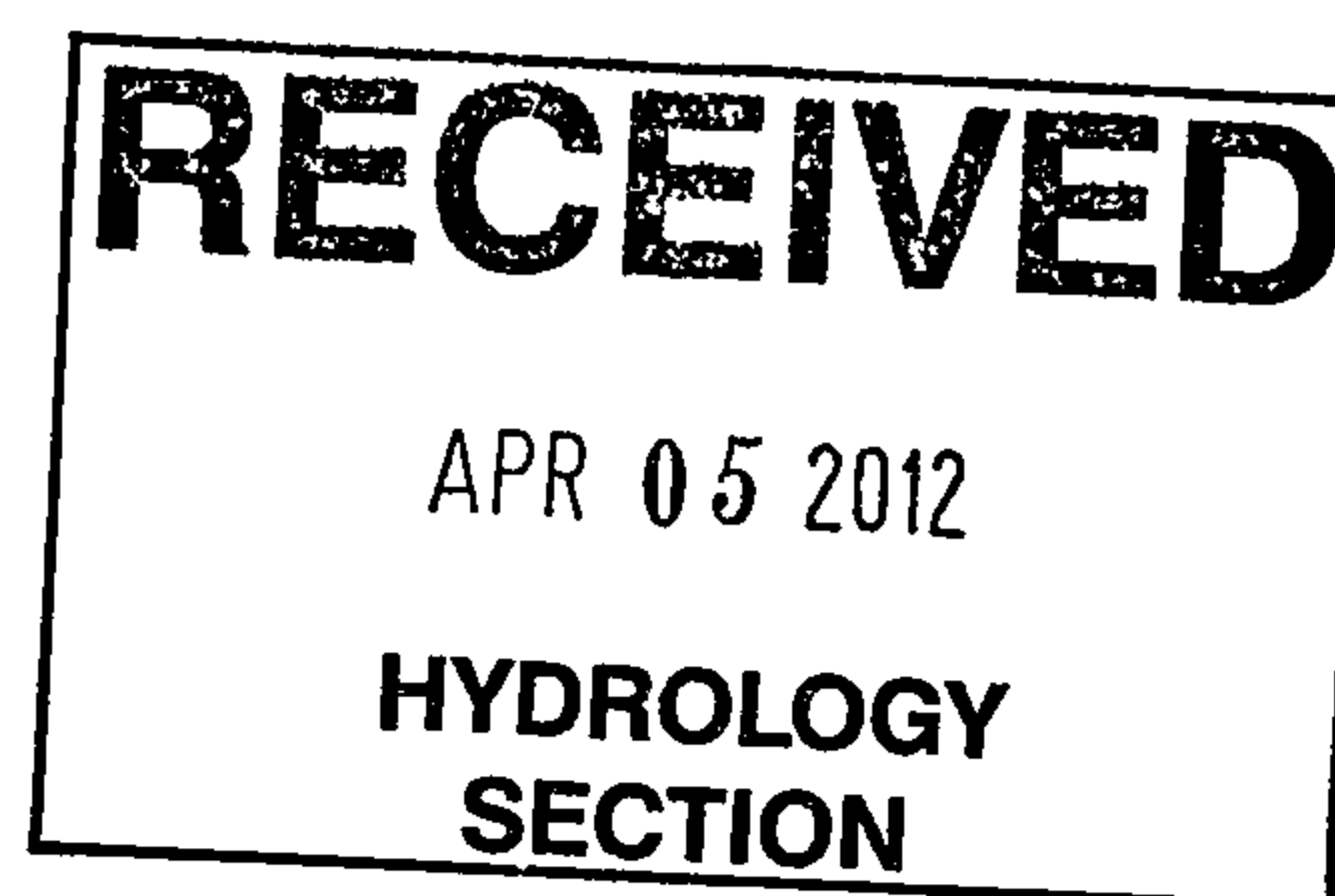
### Input Data

Headwater Elevation: 5130.00 ft  
Crest Elevation: 5129.00 ft  
Tailwater Elevation: 5128.00 ft  
Crest Surface Type: Gravel  
Crest Breadth: 5.00 ft  
Crest Length: 5.00 ft

### Results

Discharge: 15.00  $Q_{100} = 0.57 \text{ cfs}$  ft<sup>3</sup>/s  
Headwater Height Above Crest: 1.00 ft  
Tailwater Height Above Crest: -1.00 ft  
Weir Coefficient: 3.00 US  
Submergence Factor: 1.00  
Adjusted Weir Coefficient: 3.00 US  
Flow Area: 5.00 ft<sup>2</sup>  
Velocity: 3.00 ft/s  
Wetted Perimeter: 7.00 ft  
Top Width: 5.00 ft

∴ OK





## Worksheet for WATER HARVEST AREA 2-Basin C

### Project Description

Flow Element: Broad Crested Weir

Solve For: Discharge

### Input Data

Headwater Elevation: 5126.50 ft

Crest Elevation: 5125.50 ft

Tailwater Elevation: 5123.00 ft

Crest Surface Type: Gravel

Crest Breadth: 5.00 ft

Crest Length: 5.00 ft

### Results

Discharge: 15.00  $Q_{100} = 1.21 \text{ cfs}$  ft<sup>3</sup>/s

Headwater Height Above Crest: 1.00 ft

Tailwater Height Above Crest: -2.50 ft

Weir Coefficient: 3.00 US

Submergence Factor: 1.00

Adjusted Weir Coefficient: 3.00 US

Flow Area: 5.00 ft<sup>2</sup>

Velocity: 3.00 ft/s

Wetted Perimeter: 7.00 ft

Top Width: 5.00 ft

