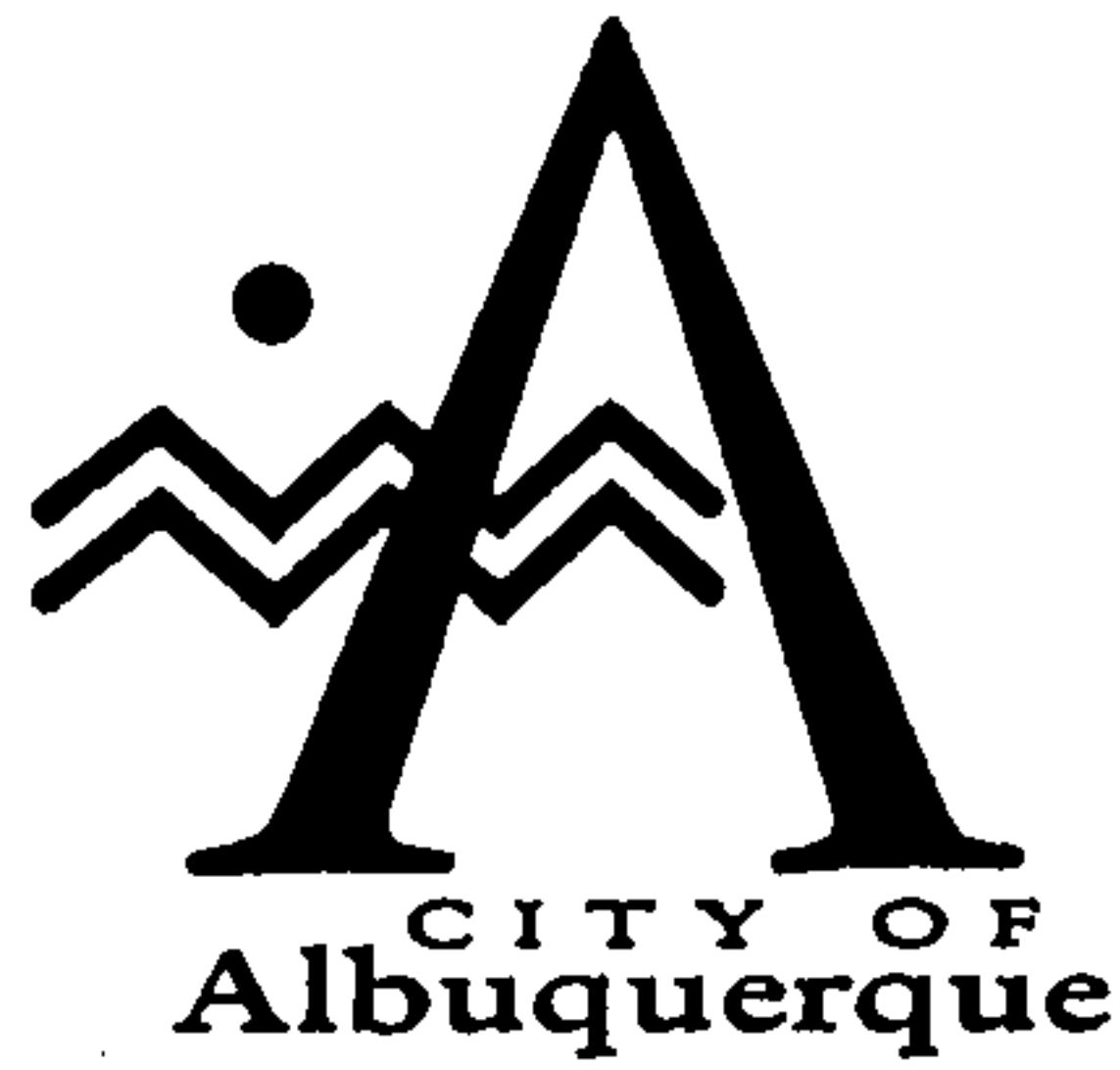




October 9, 1998

Gilbert Aldaz
Aldaz Engineering & Surveying
1605 Blair Dr. NE
Albuquerque, New Mexico 87112

RE: ENGINEER CERTIFICATION FOR LOT 35 RICHFIELD PARK SUBDIVISION
(C17-D2A26) CERTIFICATION STATEMENT DATED 9/28/98

Dear Mr. Aldaz:

Based on the information provided on your October 1, 1998 submittal, Engineer Certification for the above referenced site is acceptable.

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia

~~File~~

Sincerely

Bernie J. Montoya CE
Associate Engineer

Good for You, Albuquerque!





Martin J. Chávez, Mayor

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

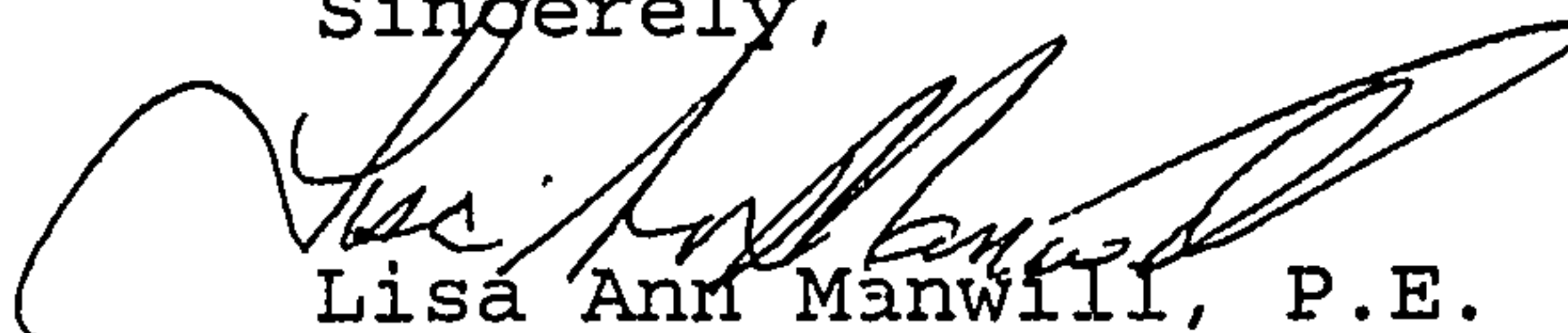
**RE: RICHFIELD PARK TRACT C-1 (C17-D2A26). GRADING AND DRAINAGE PLAN FOR
PRELIMINARY PLAT AND SITE DEVELOPMENT FOR SUBDIVISION APPROVAL.
ENGINEER'S STAMP DATED JULY 21, 1997.**

Dear Mr. MacKenzie:

Based on the information provided on your August 7, 1997 the above referenced project is approved for Site Development for Subdivision and Preliminary Plat.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,



Lisa Ann Manwill, P.E.
Engineering Assoc./Hyd.

c: Andrew Garcia
File



4/2/20

ENGINEERING FIRM:	Mark Goodwin & Associates, PA	CONTACT:	John M. MacKenzie, PE
ADDRESS:	P.O. Box 90606 Albuquerque, NM 87199	PHONE:	(505) 828-2200
OWNER:	Thomas Roffman	CONTACT:	Mark Schiff
ADDRESS:	105 4th Street SW Albuquerque, NM 87104	PHONE:	(505) 843-9639
ARCHITECT:	DCSW	CONTACT:	Marc Schiff
ADDRESS:	105 4th Street SW Albuquerque, NM 87104	PHONE:	(505) 843-9639
SURVEYOR:		CONTACT:	
ADDRESS:		PHONE:	
CONTACTOR:		CONTACT:	
ADDRESS:		PHONE:	

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

YES
X NO
COPY PROVIDED

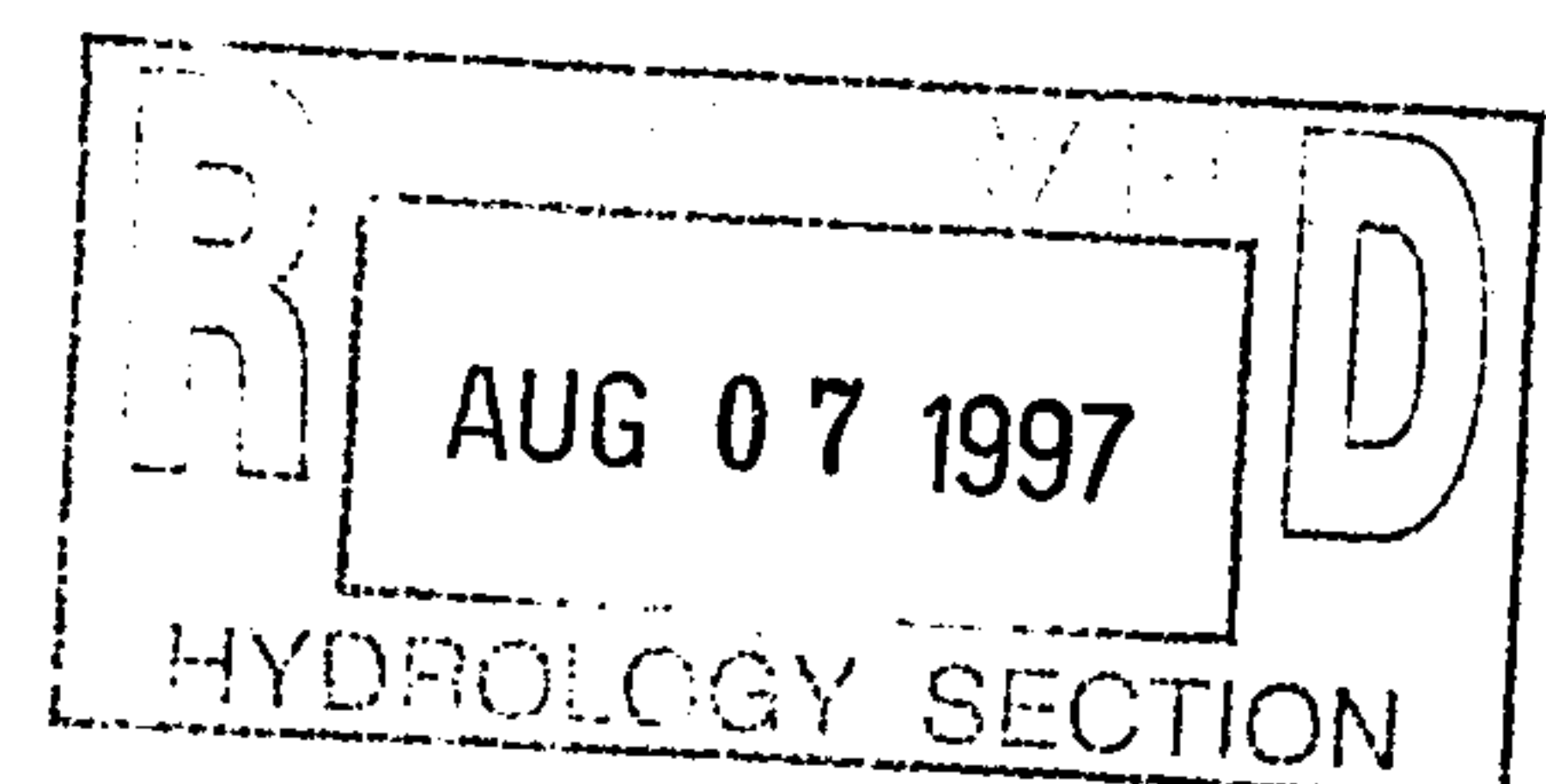
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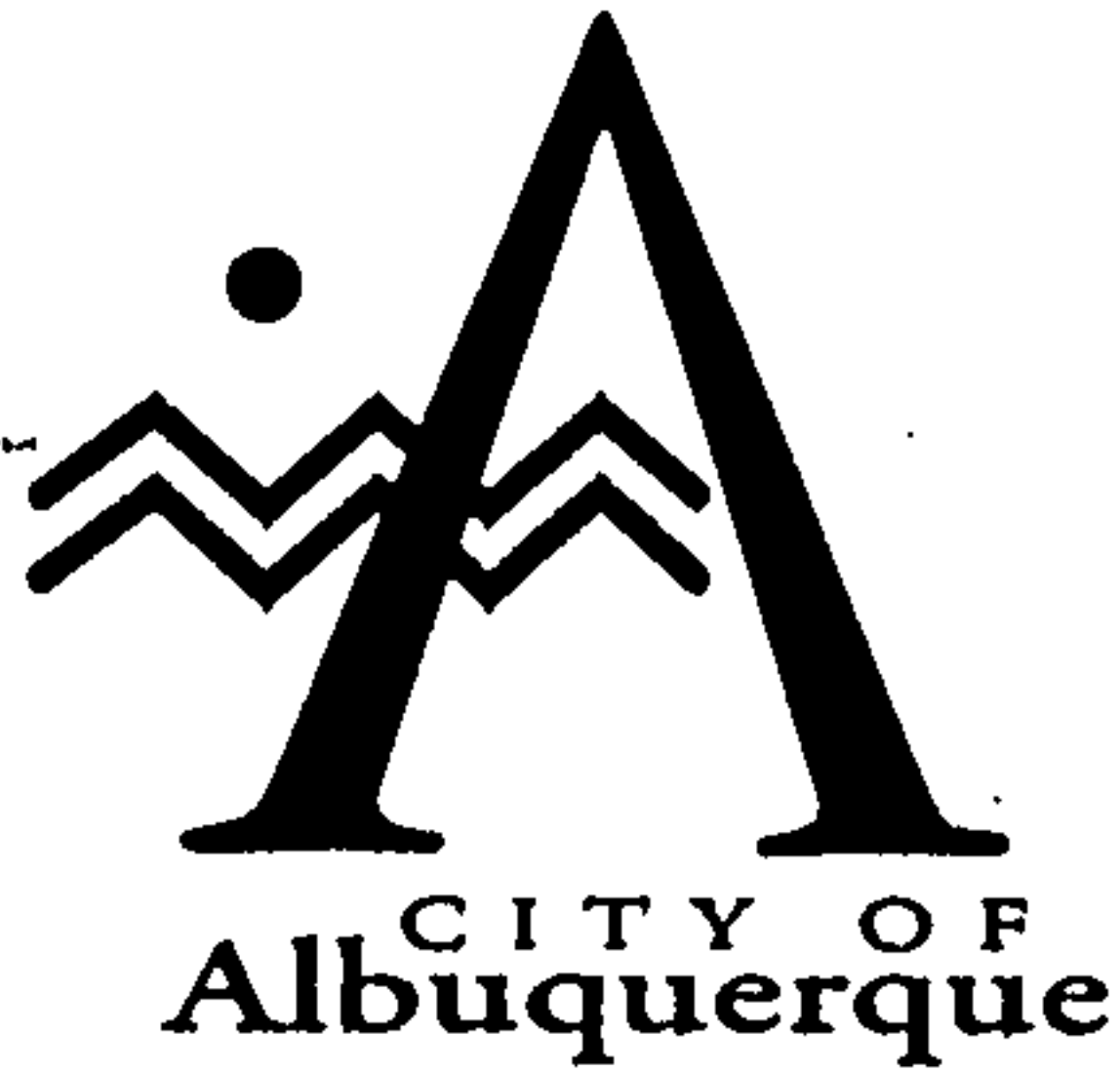
	SKETCH PLAT APPROVAL
X	PRELIMINARY PLAT APPROVAL
X	S. DEV. PLAN FOR SUB'D APPROVAL
	S. DEV. PLAN FOR BLDG PERMIT APPROVAL
	SECTOR PLAN APPROVAL
	FINAL PLAT APPROVAL
	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
	CERTIFICATION OF OCCUPANCY APPROVAL
	GRADING PERMIT APPROVAL
	PAVING PERMIT APPROVAL
	S.A.D. DRAINAGE REPORT
	DRAINAGE REQUIREMENTS
	OTHER

DATE SUBMITTED: 8/6/97

BY:

John M. MacKenzie, PE





July 22, 1997

Martin J. Chávez, Mayor

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

**RE: RICHFIELD PARK TRACT C-1 (C17-D2A26). GRADING AND DRAINAGE PLAN FOR
PRELIMINARY PLAT AND SITE DEVELOPMENT FOR SUBDIVISION APPROVAL.
ENGINEER'S STAMP DATED JULY 21, 1997.**

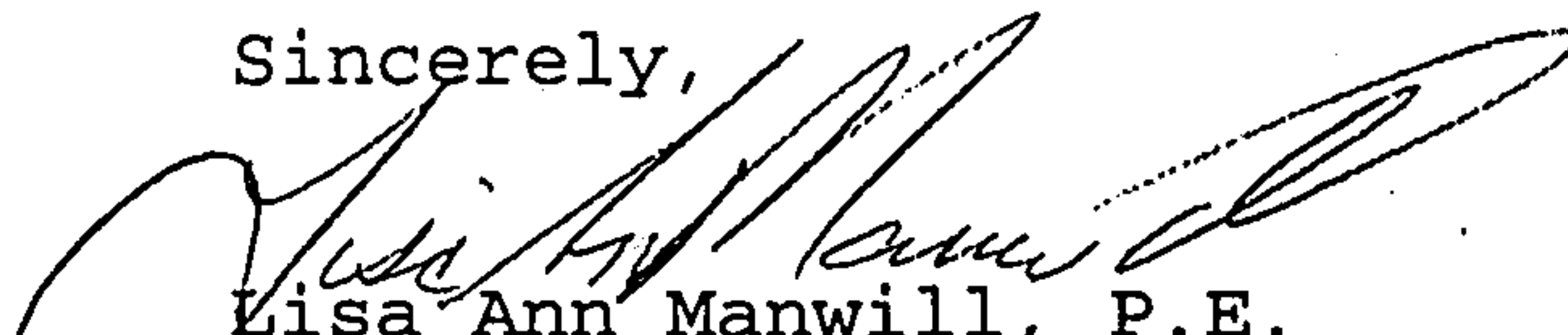
Dear Mr. MacKenzie:

Based on the information provided on your July 21, 1997 the above referenced project is approved for Site Development for Subdivision and Preliminary Plat.

Prior to further approval, please raise the grade at the south end of the drive located adjacent to Jefferson. The flow line grade in Jefferson is 24.83 feet, and the grade at the back of the drive is 24.83 feet.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,



Lisa Ann Manwill, P.E.
Engineering Assoc./Hyd.

c: Andrew Garcia
File

Good for You, Albuquerque!

P.O. Box 1293, Albuquerque, New Mexico 87103





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

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 828-2200 FAX 797-9539
e-mail: dmgs@swcp.com

July 15, 1997

Ms. Lisa Ann Manwill, PE
Hydrology Department
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

Re: C17-D2A26

Dear Ms. Manwill:

Thank you for responding to our submittal in a prompt fashion. With regard to your comments on the conceptual grading and drainage plan submittal, I respond as follows:

1. Portions of the referenced report by Espey, Huston and Associates (1986) have been copied and attached. Please refer to page 2 of the calculations to find that the peak Q_{100} is 93.7 cfs from the original 31 ac. basin B using "old" hydrology.
2. By allocating areal percentages, the allowable discharge for this basin is 3.03 cfs/ac. Each site's allowable discharge has been revised accordingly.
3. The drainage easement on tract C1-C is to be built and maintained by the owner(s) of tract C1-B. A note has been added to the plan further limiting its usage to tract C1-B.
4. The appropriate portion of the FEMA map has been added to the plan.
5. Let's assume that all driveways are to be constructed now. As shown on the attached portion of the more detailed grading and drainage plan for tract C1-B, there is a 3' water block along Alameda Blvd. For the driveway on Jefferson, please note the flowline elevation 25.12 along the extreme west gutter of southbound Jefferson. From this high point street runoff flows both north and south in the driving lanes. Combined with runoff from the median and the sidewalks along the west side of Jefferson, the area of the drainage basin producing runoff that flows in front of the Jefferson driveway is approximately 6,000 SF, producing a discharge of 0.63 cfs, according to a AHYMO. This barely justifies any water block, but a six inch water block will be constructed as shown.
6. As discussed, I am removing the word conceptual from the title. *I don't see any water block on South side.*
7. All AHYMO calculations are attached hereto.
8. The proposed plat is still being prepared. I will forward the plat to your office as soon as possible.

If I can be of further assistance please contact me.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

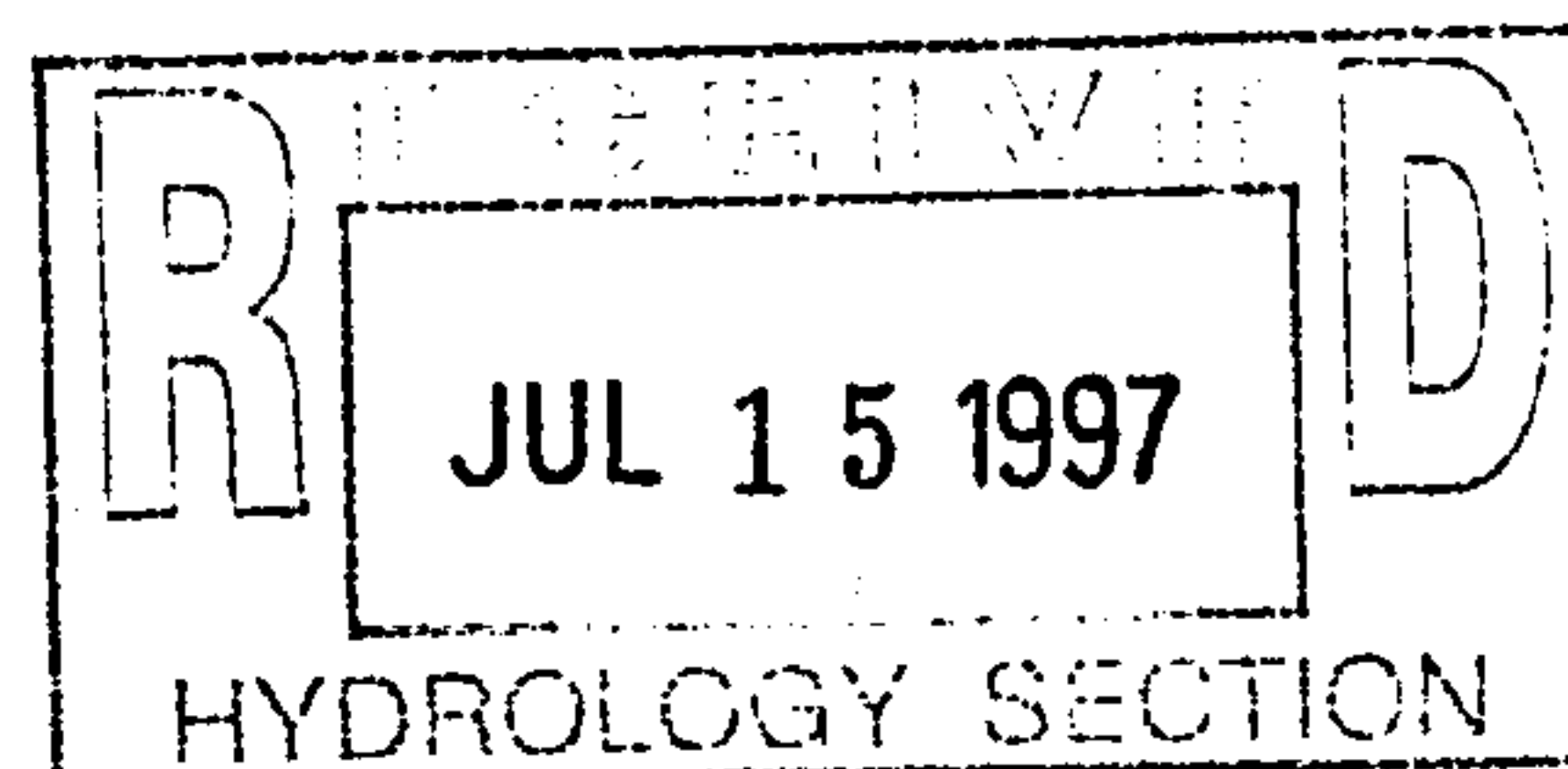
John M. MacKenzie
John M. MacKenzie, PE

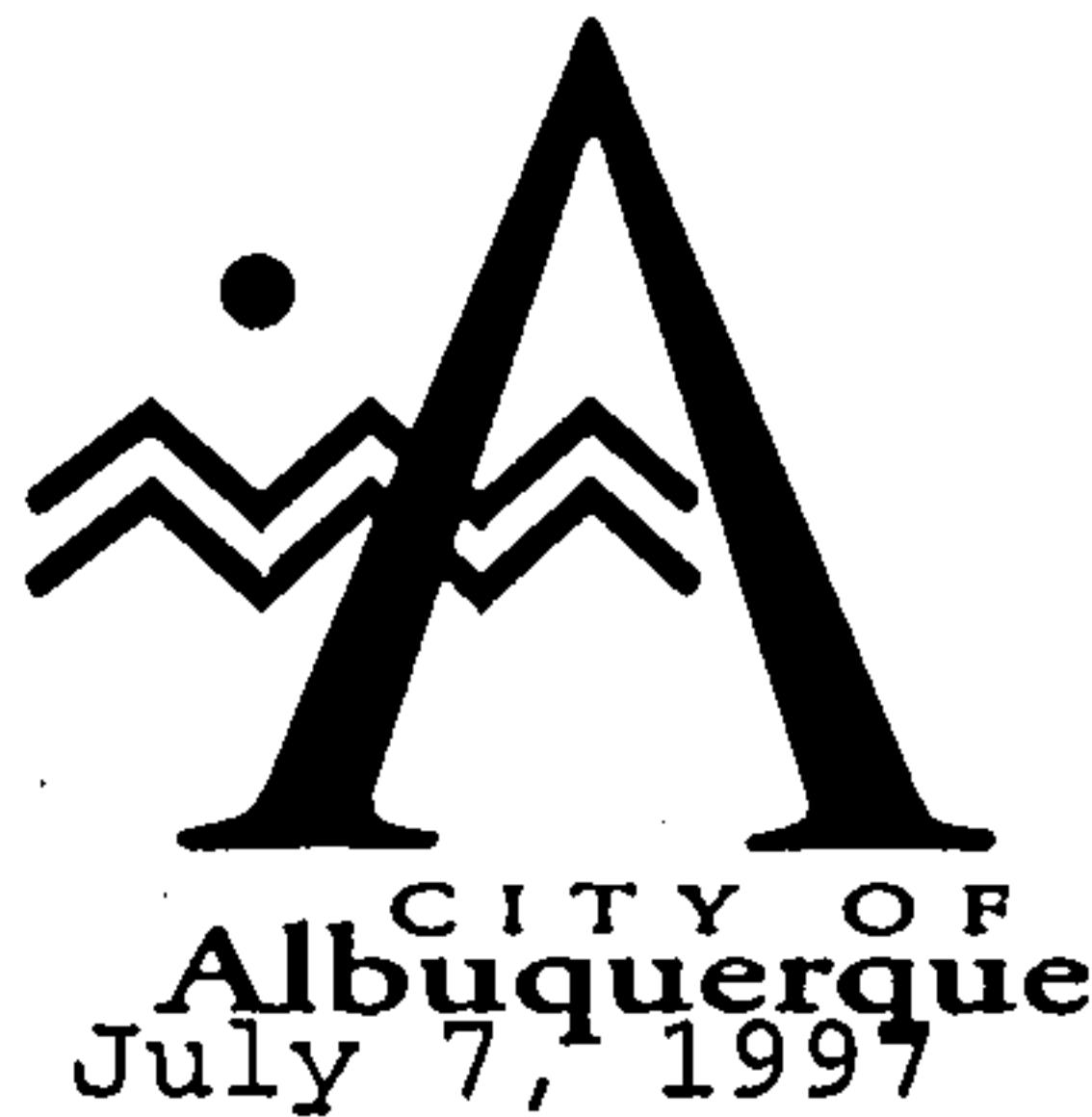
JMM/sb

Why, SD for BP, FP and BP?

I think they want SD SUB'D.

PP
FP





Martin J. Chávez, Mayor

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

RE: RICHFIELD PARK TRACT C-1 (C17-D2A26). CONCEPTUAL GRADING AND DRAINAGE FOR PRELIMINARY PLAT AND SITE DEVELOPMENT FOR SUBDIVISION APPROVAL. ENGINEER'S STAMP DATED JUNE 30, 1997.

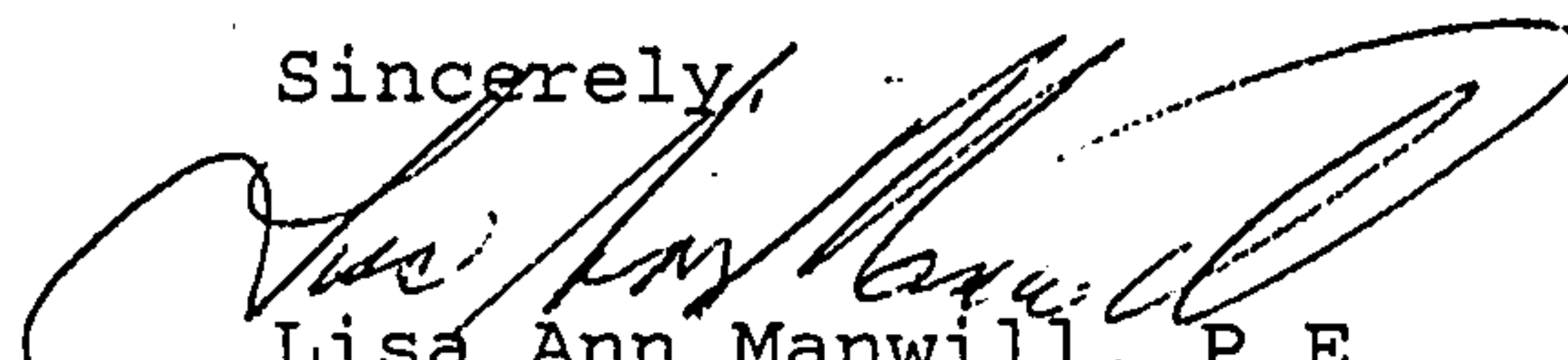
Dear Mr. MacKenzie:

Based on the information provided on your July 2, 1997 I offer the following comments:

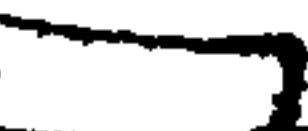
1. Please supply copies of relevant information from the approved subdivision master plan.
2. Provide an amount of allowable flow in cfs/acre. Using the amount of 69% of peak developed discharge is too ambiguous.
3. If the drainage easement shown on Tract C1-C is to be built for and maintained by Tract C1-C, than the flow from Tract C1-B should not enter the easement.
4. Provide a copy of the current FEMA floodplain vicinity map.
5. Are you proposing to construct the drives now? Provide spot elevations at proposed drives. A 1-foot water block is required.
6. A conceptual grading and drainage plan is not sufficient for preliminary plat approval.
7. Provide all AHYMO calculations for preliminary plat approval.
8. Submit a copy of the proposed plat.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,



Lisa Ann Manwill, P.E.
Engineering Assoc./Hyd.

c: Andrew Garcia
File 

Good for You, Albuquerque!

P.O. Box 1293, Albuquerque, New Mexico 87103



DRAINAGE INFORMATION SHEET

Sealed
CD C-17/DA26

PROJECT TITLE: Richfield Park Tract C-1 ZONE/ATLAS/DRNG, FILE#: C-17/2A26
DRB#: _____ EPC# _____ WORK ORDER#: _____
LEGAL DESCRIPTION: Tract C-1, Richfield Park
CITY ADDRESS: _____

ENGINEERING FIRM:	<u>Mark Goodwin & Associates, PA</u>	CONTACT:	<u>John M. MacKenzie, PE</u>
ADDRESS:	<u>P.O. Box 90606 Albuquerque, NM 87199</u>	PHONE:	<u>(505) 828-2200</u>
OWNER:	<u>Thomas Roffman</u>	CONTACT:	<u>Mark Schiff</u>
ADDRESS:	<u>105 4th Street SW Albuquerque, NM 87104</u>	PHONE:	<u>(505) 843-9639</u>
ARCHITECT:	<u>DCSW</u>	CONTACT:	<u>Marc Schiff</u>
ADDRESS:	<u>105 4th Street SW Albuquerque, NM 87104</u>	PHONE:	<u>(505) 843-9639</u>
SURVEYOR:	_____	CONTACT:	_____
ADDRESS:	_____	PHONE:	_____
CONTRACTOR:	_____	CONTACT:	_____
ADDRESS:	_____	PHONE:	_____

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

____ YES
☒ NO
____ COPY PROVIDED

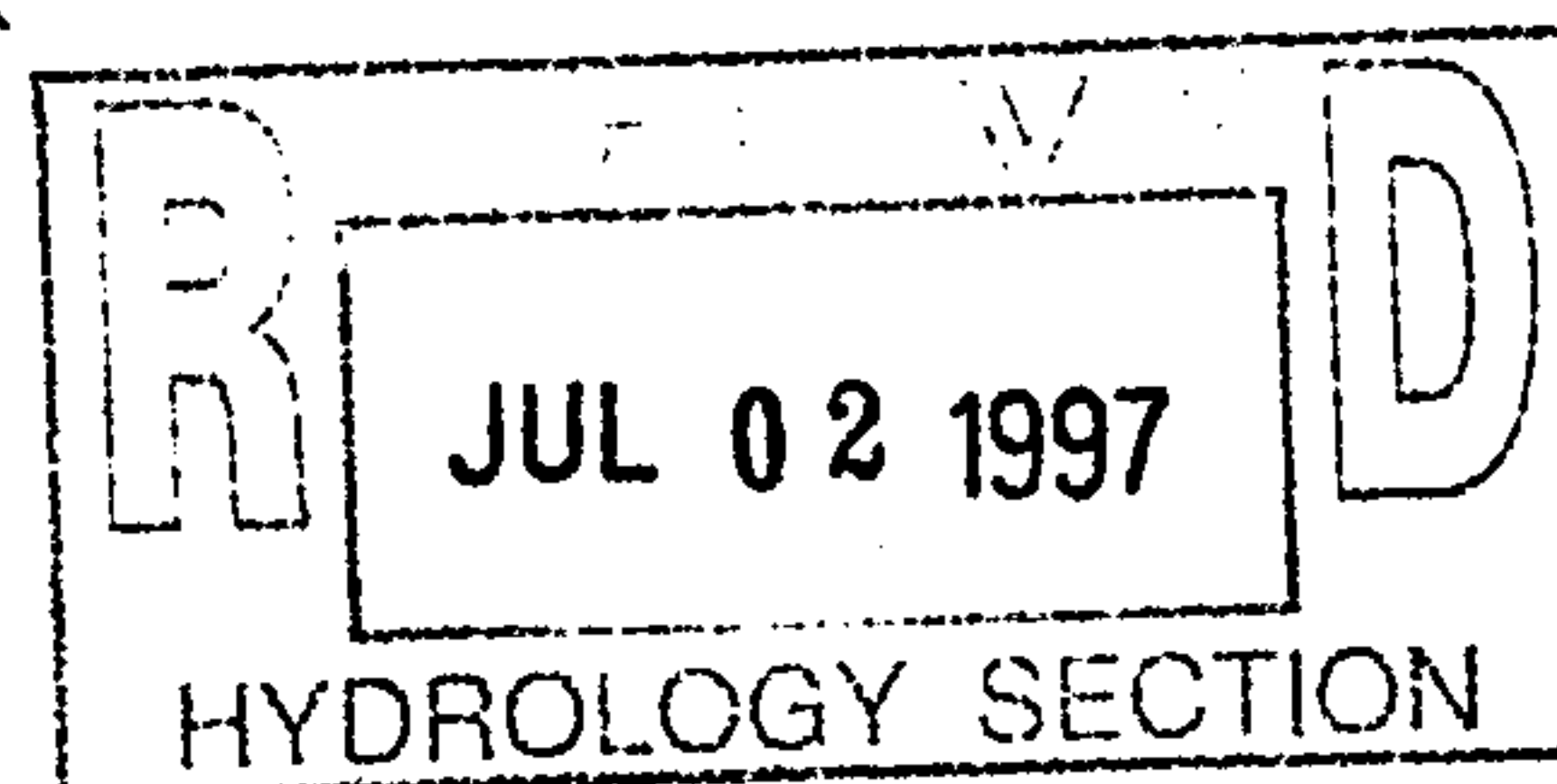
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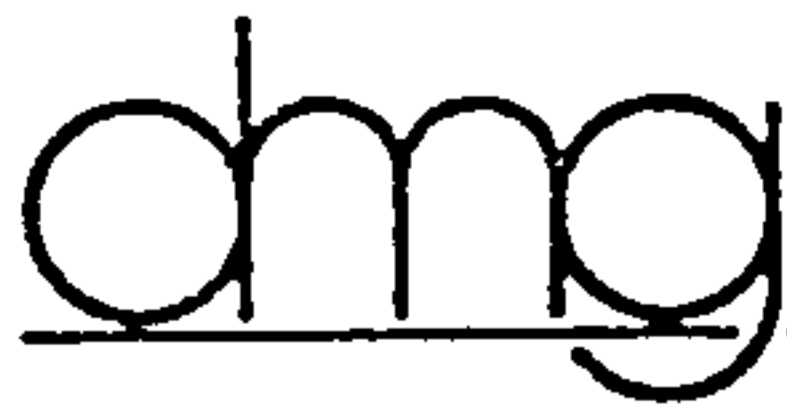
____ SKETCH PLAT APPROVAL
☒ PRELIMINARY PLAT APPROVAL
☒ S. DEV. PLAN FOR SUB'D APPROVAL
____ S. DEV. PLAN FOR BLDG PERMIT APPROVAL
____ SECTOR PLAN APPROVAL
____ FINAL PLAT APPROVAL
____ FOUNDATION PERMIT APPROVAL
____ BUILDING PERMIT APPROVAL
____ CERTIFICATION OF OCCUPANCY APPROVAL
____ GRADING PERMIT APPROVAL
____ PAVING PERMIT APPROVAL
____ S.A.D. DRAINAGE REPORT
____ DRAINAGE REQUIREMENTS
____ OTHER

DATE SUBMITTED: July 2, 1997

BY: _____

John M. MacKenzie, PE



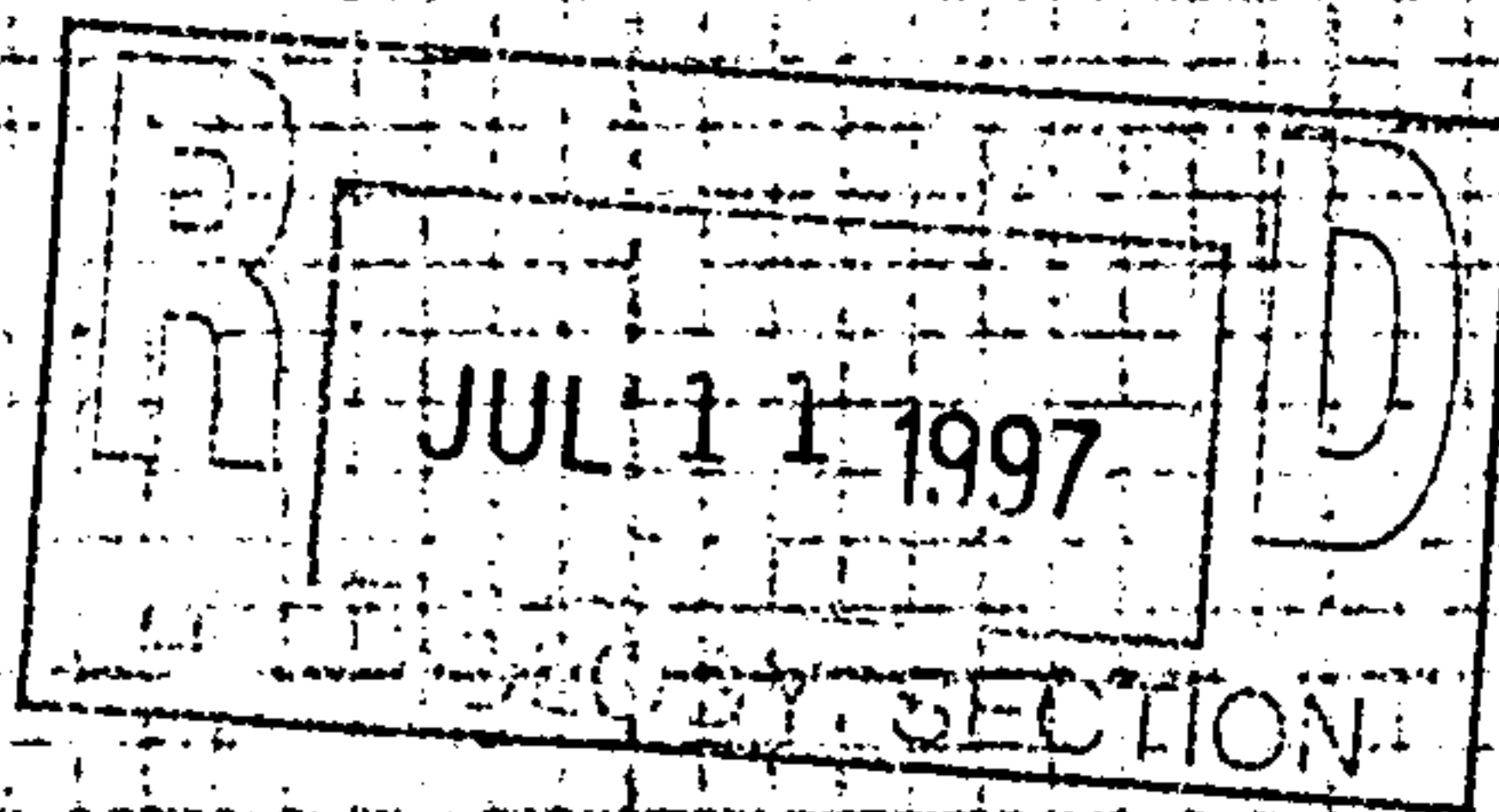


D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT Richfield Park C-1-B
SUBJECT Drainage
BY gmm DATE _____
CHECKED _____ DATE _____
SHEET _____ OF _____

In accordance with the original Richfield Park Subdivision Master Drainage Plan by Espey, Huston and Assoc. (1986) and the drainage plan submitted by Mark Goodwin & Assoc. (July 97), the maximum allowable discharge from this tract is 6.18 cfs. With on-site detention ponding shown hereon, A11MD predicts a maximum discharge of 5.59 cfs during the 100 year 6 hour storm. Maximum anticipated water surface elevation would be 5120.88 ft.

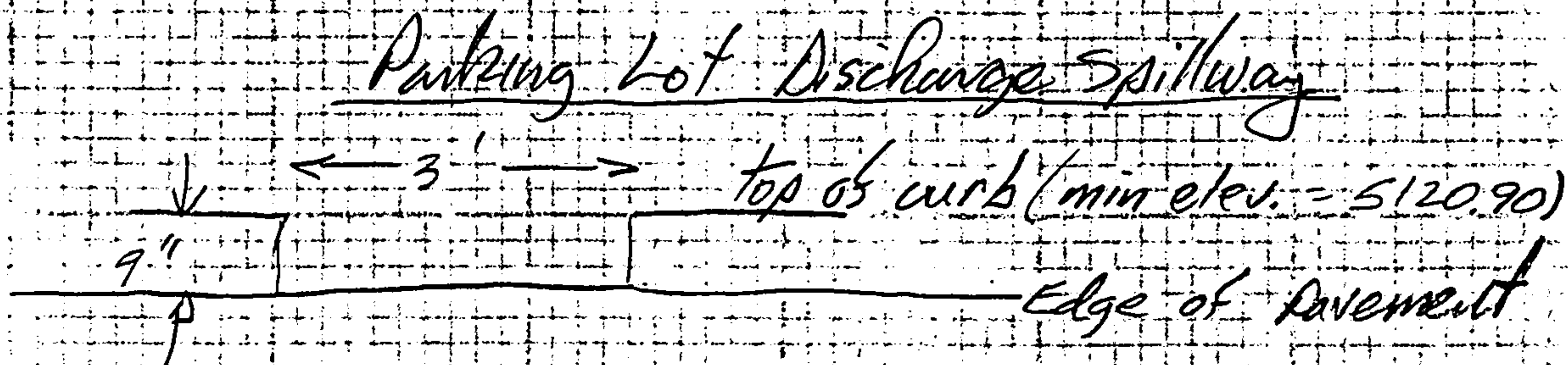
Outfall from the site will be to Columbine Ave. via a concrete channel and a 24"/12" sidewalk culvert combination.





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

PROJECT Richfield Park
SUBJECT Drainage
BY JMM DATE 6-30-97
CHECKED _____ DATE _____
SHEET _____ OF _____



Ponding Calcs. / Weir

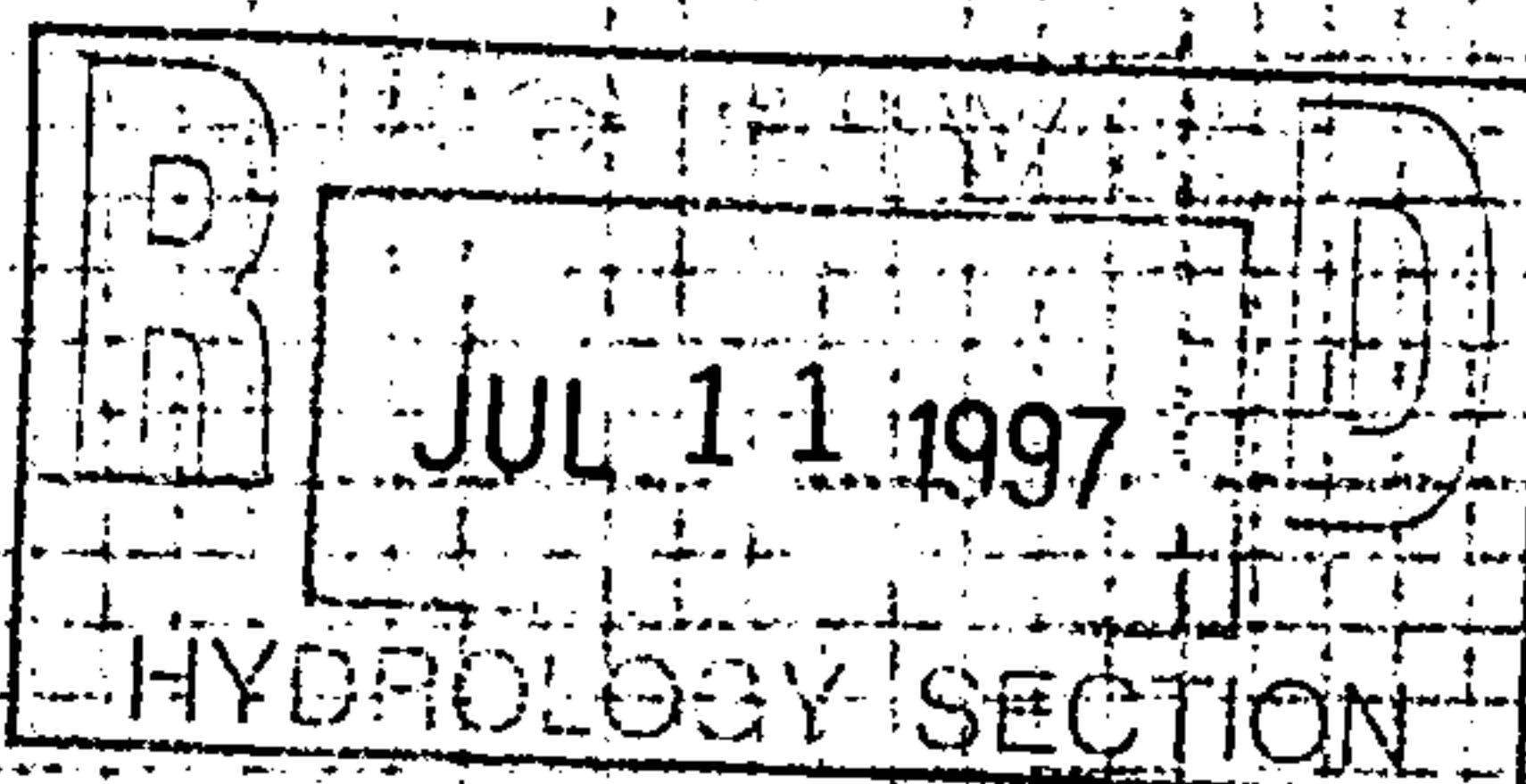
@ 9" $Q = 2.9 L(H)^{3/2} = 2.9(3')(0.75)^{1.5} = 5.64 \text{ cfs}$

@ 6" $Q = 2.9(3)(.5)^{3/2} = 3.07 \text{ cfs}$

@ 3" $Q = 2.9(3)(0.25)^{3/2} = 1.09 \text{ cfs}$

Ponding Area

Elev	Area	Avg Area	Depth	Vol.
20.13	0	1060	0.25	0.006
20.38	2120	3060	0.50	0.0351
20.63	4000	4555	0.75	0.0784
20.88	5110			





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

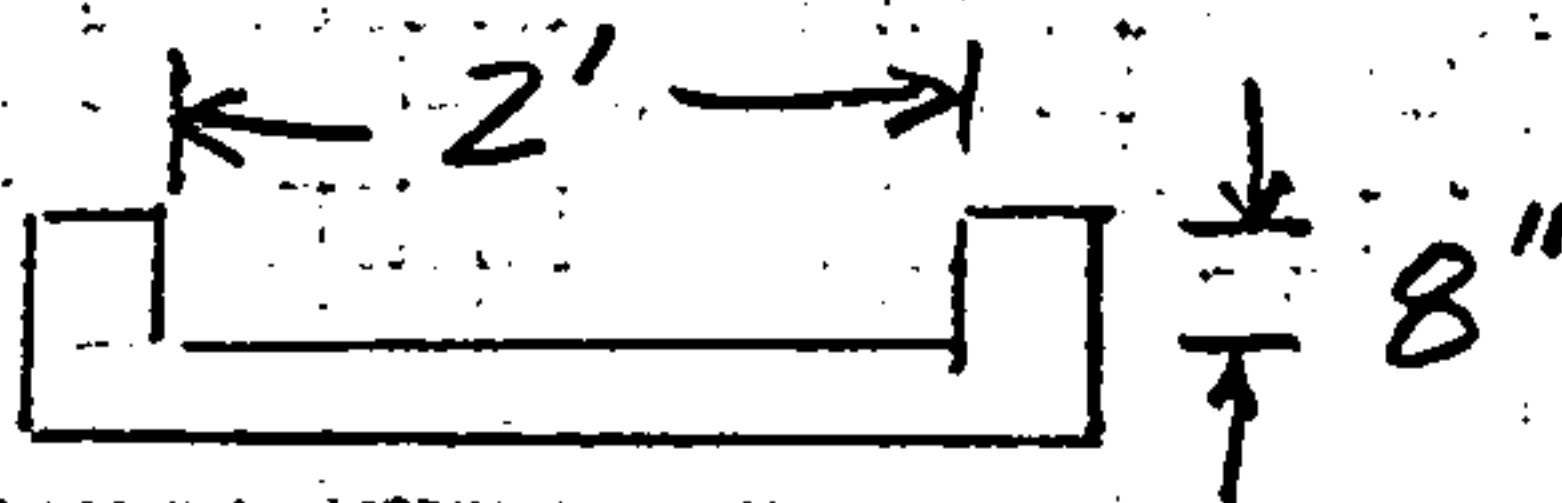
PROJECT Richfield Park
SUBJECT Drainage
BY JMM DATE 6-30-97
CHECKED _____ DATE _____
SHEET _____ OF _____

24" sidewalk Culvert @ 8" high

$$Q = 2.9(2)(0.67)^{1.5} = 5.35 \text{ cfs}$$

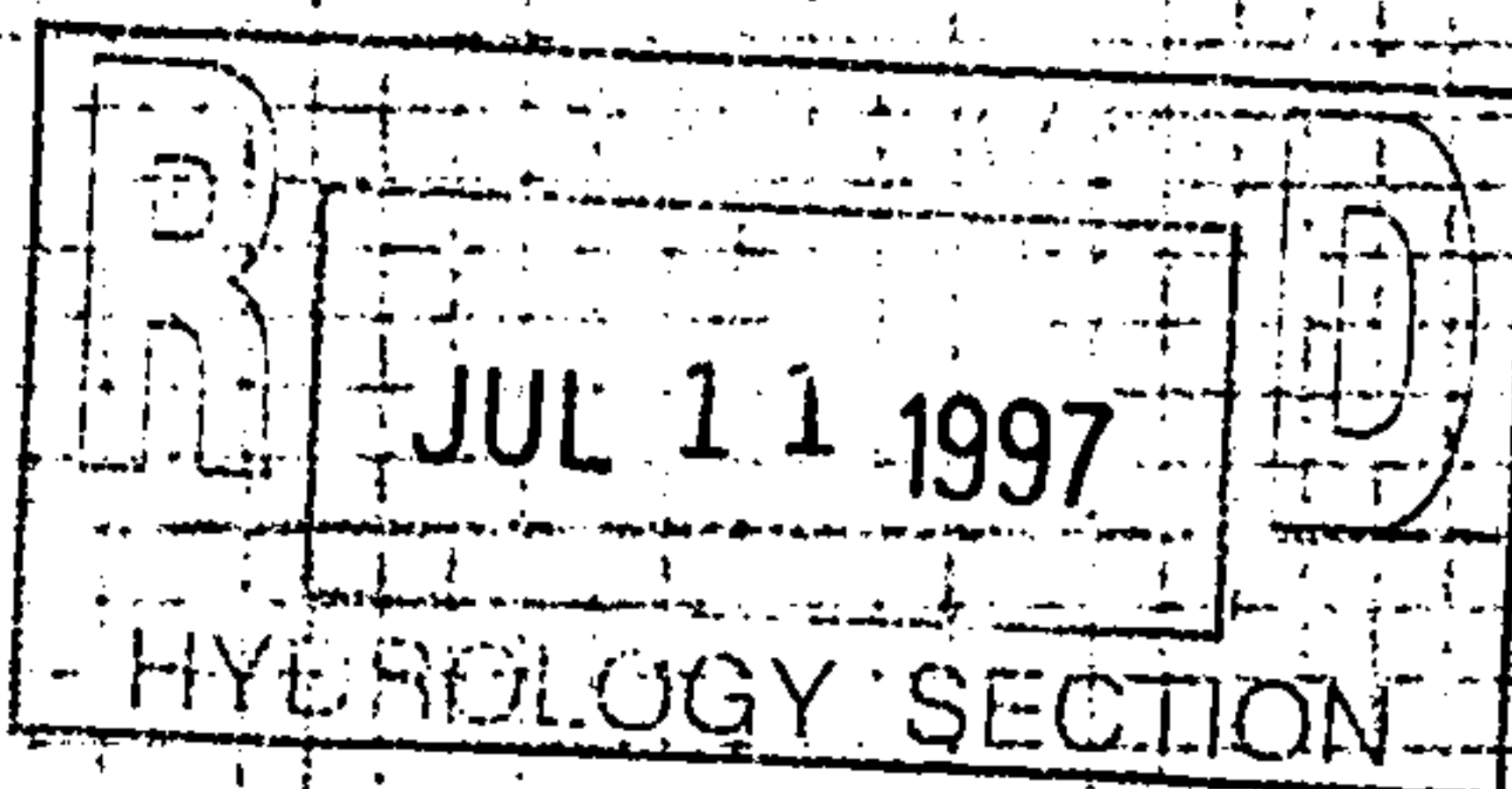
use this in addition to 12" culvert to
accommodate 5.59 cfs of anticipated discharge.

Concrete Channel Capacity to Columbine



$$Q = \frac{1.49}{0.014} (1.34) \left(\frac{1.34}{3.34} \right)^{0.67} (0.0128)^{0.50} = 8.76 \text{ cfs}$$

OK 8.76 cfs > 5.59 cfs



DRAINAGE INFORMATION SHEET

PROJECT TITLE: Richfield Park Tract C-1 ZONE/ATLAS/DRNG, FILE#: C-17-D2A26
 DRB#: 97-270 EPC# Z-97-51 WORK ORDER#: _____
 LEGAL DESCRIPTION: Tract C-1, Richfield Park
 CITY ADDRESS: _____

ENGINEERING FIRM: <u>Mark Goodwin & Associates, PA</u>	CONTACT: <u>John M. MacKenzie, PE</u>
ADDRESS: <u>P.O. Box 90606 Albuquerque, NM 87199</u>	PHONE: <u>(505) 828-2200</u>
OWNER: <u>Thomas Roffman</u>	CONTACT: <u>Mark Schiff</u>
ADDRESS: <u>105 4th Street SW Albuquerque, NM 87104</u>	PHONE: <u>(505) 843-9639</u>
ARCHITECT: <u>DCSW</u>	CONTACT: <u>Marc Schiff</u>
ADDRESS: <u>105 4th Street SW Albuquerque, NM 87104</u>	PHONE: <u>(505) 843-9639</u>
SURVEYOR: _____	CONTACT: _____
ADDRESS: _____	PHONE: _____
CONTACTOR: _____	CONTACT: _____
ADDRESS: _____	PHONE: _____

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

☐ YES
☒ NO
☐ COPY PROVIDED

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
☐ CERTIFICATION OF OCCUPANCY APPROVAL
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ OTHER

DATE SUBMITTED: 8/6/97

BY: John M. MacKenzie
 John M. MacKenzie, PE

