

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GARDUNOS PLAZA OFFICE PARK ZONE ATLAS/DRNG. FILE #: F-21/1037F
 DRB #: _____ EPC #: Z-78-69-13 WORK ORDER #: _____
 LEGAL DESCRIPTION: MONTGOMERY BUSINESS PARK LOT 19-A-1-B
 CITY ADDRESS: 10555 MONTGOMERY BVD.

ENGINEERING FIRM: CRAWFORD DEVELOPMENT SERVICES CONTACT: STEPHEN CRAWFORD
 ADDRESS: P.O. Box 1573 LOS LUNAS, NM 87031 PHONE: 865-6442

OWNER: JUNCTION PLAZA CONTACT: _____
 ADDRESS: P.O. Box 35387 AIB, NM 87176 PHONE: 296-2121

ARCHITECT: CLAUDIO VIGIL ARCHITECTS CONTACT: TATE FISH BURN
 ADDRESS: 1305 TIJERAS AIB, NM 87102 PHONE: 842-1113

SURVEYOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

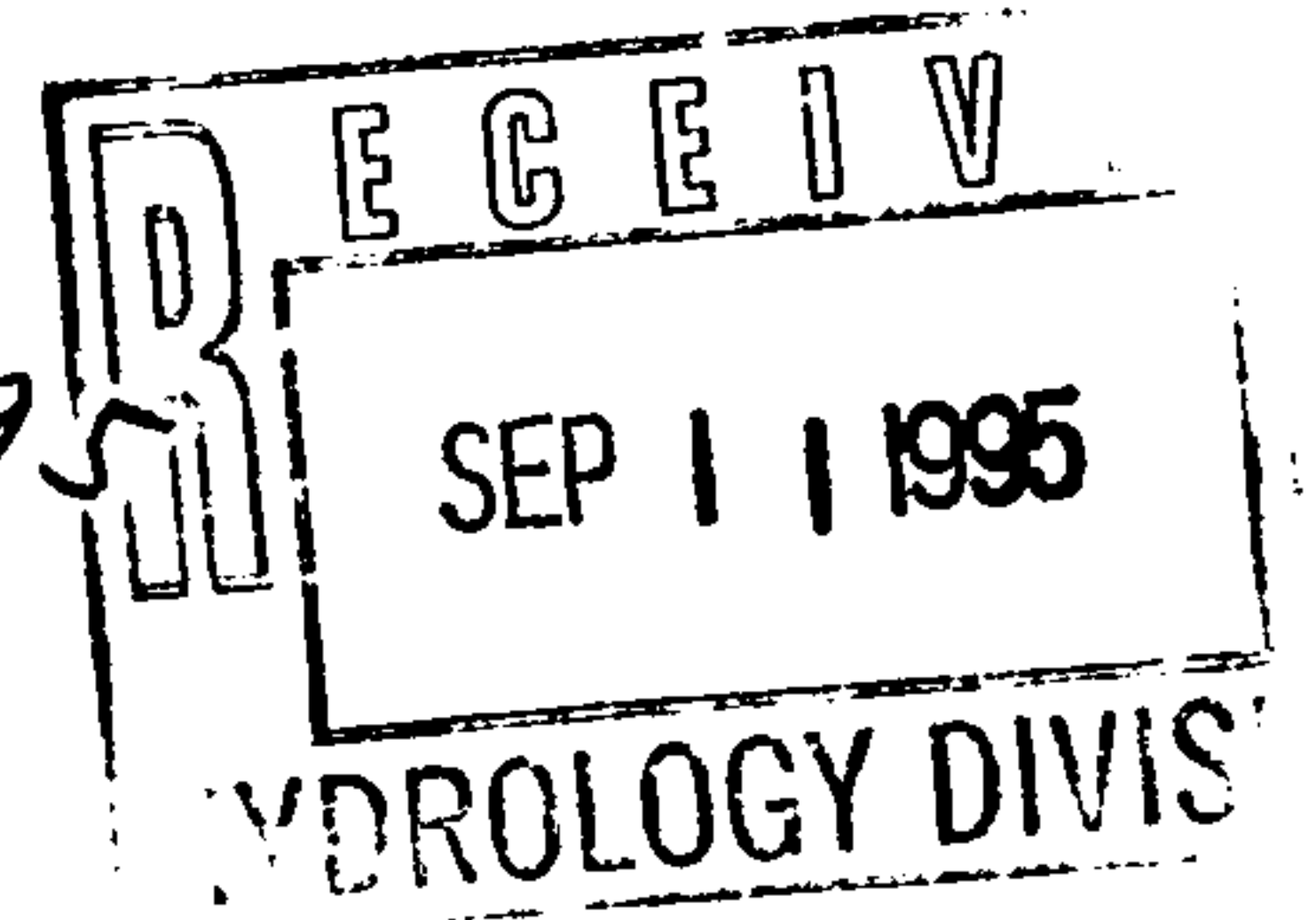
- ☒ YES
- ☐ NO
- ☒ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

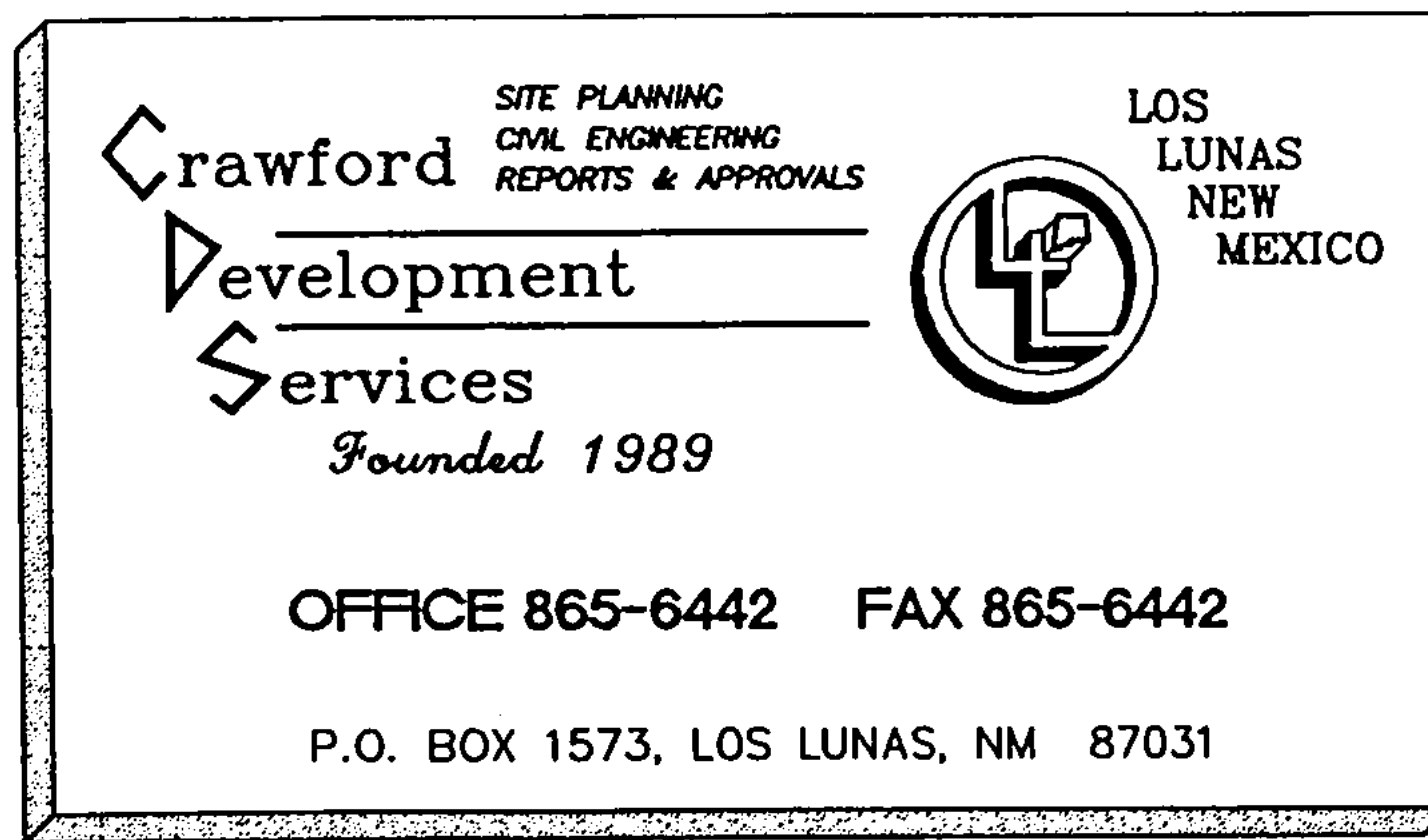
- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY APPROVAL
- ☒ GRADING PERMIT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

DATE SUBMITTED: Aug 11/95 8/29/95 9/11/95

BY: _____



LETTER OF TRANSMITTAL



SUBJECT:

GARDUNOS PLAZA OFFICE PARK

CDS # 95-003

FROM:

TREY McNABE

DATE:

9-11-95

TO:

LISA MANWILL

MEMO:

RESUBMITTAL WITH NEW POND
VOLUME CALCUCATIONS AND REGRADING
OF POND AREA

RECEIVED

SEP 11 1995

HYDROLOGY DIVISION

DRAINAGE PLAN

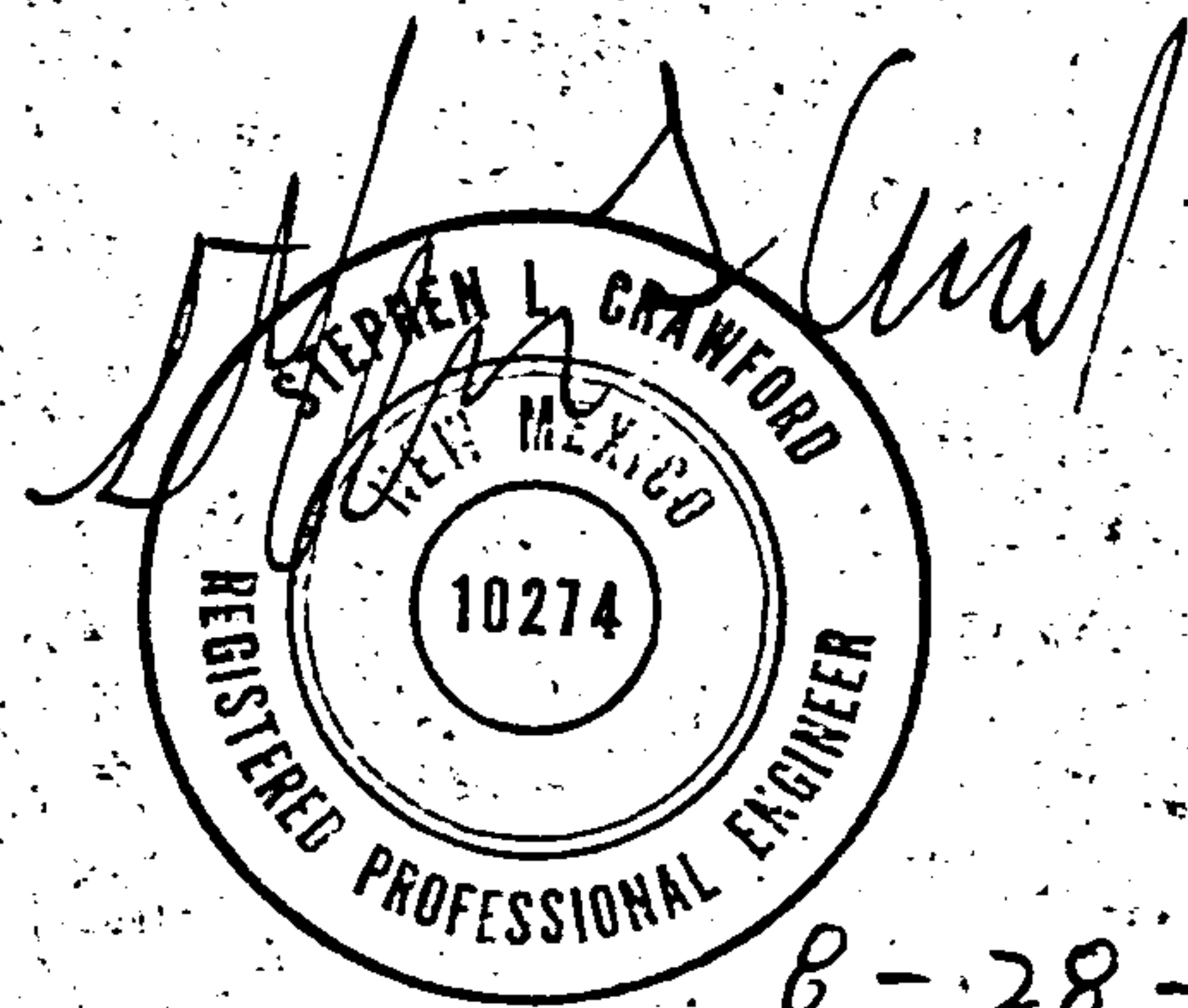
for

GARDUNOS PLAZA OFFICE PARK

10555 MONTGOMERY BLVD.
ALBUQUERQUE, NEW MEXICO

AUGUST 1995

Crawford
Development
Services
Founded 1989



8-28-95
9-10-95

SEP 11 1995

Stephen L. Crawford, P.E. HYDROLOGY DIVISION



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Exhibit A - COA Predesign Conference Sheet

Exhibit B - AHYMO Summary and Output

Exhibit C - Misc. Hydraulic Calcs

Pockets: 1 - Grading and Drainage Plan

2 - Tom Mann Drainage Plan

I. SITE LOCATION :

This site is located at Gardunos Plaza along Montgomery Blvd, on the east side of Montgomery Parkway Loop (see vicinity map on Grading and Drainage Plan in map pocket 1). This site is a portion of Gardunos Plaza Office Park and consists of the undeveloped portion of Lot 19-A-1-B, Montgomery Business Park.

II. PROPOSED PROJECT :

The proposed project consists of a 1.24+/- acre portion of Lot 19-A-1-B, Montgomery Business Park (Yesterdave's Grill). The previously approved site plan (Z-78-69-13) shows the two proposed office buildings with their parking and landscaping. This project will complete the grading and paving of the entire site and will build the northeasterly structure.

III. OFF-SITE DRAINAGE :

Programmed previously in the master drainage report by Bohannon and Huston on 3-22-83, (COA Hydrology file F21/D37) was 15.0cfs crossing a portion of our site. This off-site flow coming from Hahn Park will not be significantly changed by our development and will discharge at the originally planned point of discharge.

IV. EXISTING CONDITIONS :

The site was previously designed by Tom Mann Associates 6-14-88 (COA Hydrology file F21/D37, see map pocket 2), and only a portion was constructed, that portion being Yesterdave's Grill and its adjacent parking lot, landscaping and detention ponding areas. There is an existing Grading Certification for this development in COA Hydrology file F21/D37. Basin B of the Mann report is adjacent to our site and is planned to accept a portion of our site's flow. Basin B and its detention pond, from inspection, were built in accordance with the approved drainage plan and all of its ponds and outlet structures are currently functioning in accordance with this plan. The remainder of our site is graded earth presently being used for overflow parking for Gardunos Plaza sites and Hahn Park.

The existing hydrology was not analyzed since this is the final phase of a drainage master plan.

V. PROPOSED CONDITIONS:

Under proposed conditions the site will have two Basins, A and B. Basin B, being a portion of the original Mann Basin B, will surface flow through the parking lot as previously planned in the Mann report. The roof portion of the original Mann Basin B will be redirected into Basin A, and the remainder of the Mann Basin B was not reanalyzed per discussion in the 8-18-95 COA Hydrology Predesign Conference (see Exhibit A). Basin A was reanalyzed using AHYMO (see Exhibit B for AHYMO summary and output), with the additional roof area. The west parking area will be used for detention ponding with an orifice controlled outlet discharging to Montgomery Parkway Loop at the preplanned Mann point of discharge at the master planned discharge rate of 0.5cfs. See hydraulic calculations in Exhibit C for pond volume data and orifice calculations.

VI. SUMMARY / CONCLUSION :

The development of this site will not significantly change any portion of the master plan drainage design. It will bring Basin A up to current standards and design methods (using AHYMO), with a discharge equal to the master planned discharge for this site. Off-site and Basin B flows will continue to drain as master planned.



Exhibit A

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DEVELOPMENT DIVISION/HYDROLOGY SECTION

PRE-DESIGN CONFERENCE

DRAINAGE FILE/ZONE ATLAS PAGE NO.: F21-D37M DATE: 8-18-95

EPC NO.: _____ DRB NO.: _____ ZONE: _____

SUBJECT: GARDENOS PLAZA OFFICE PARK (BUDG A, B & C)

STREET ADDRESS: _____

LEGAL DESCRIPTION: _____

APPROVAL REQUESTED: _____ PRELIMINARY PLAT _____ FINAL PLAT
_____ SITE DEVELOPMENT PLAN ☒ BUILDING PERMIT
_____ GRADING/PAVING PERMIT _____ OTHER

ATTENDANCE: Steve Crawford WHO REPRESENTING
Tray McNabb

FINDINGS:

- An updated drainage plan for Basin A and a portion of Basin B (i.e. Building C and ~~the~~ accompanying parking lot to the east). The update will include the new hydrology for all of Basin A. Roof area of Bld. C shall be incorporated into Basin A if feasible. (note: run the discussion needed if not possible). Concept previously approved will be followed. ~~See~~ See certified drainage plan.
- Verify required detention pond volume for Basin "B" is still in compliance with the certified volume in drainage file.
- This pre-design is based on the assumption the site plan ~~is~~ for the ~~the~~ proposed development is approved and there are no special conditions that may affect the drainage requirements referenced above.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: John Dugan

TITLE: _____

DATE: 8/18/95

SIGNED: [Signature]

TITLE: Proprietor

DATE: 8-18-95

****NOTE**** PLEASE PROVIDE A COPY OF THIS PRE-DESIGN FORM WITH THE DRAINAGE SUBMITTAL.

Exhibit B

RUN DATE (MON/DAY/YR) =09/08/1995

RUN DATE (MON/DAY/YR) =09/08/1995

RUN DATE (MON/DAY/YR) =09/08/1995

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994

RUN DATE (MON/DAY/YR) = 09/08/1995

START TIME (HR:MIN:SEC) = 14:41:47

INPUT FILE = 95003.dat

*S GARDUNOS PLAZA
*S PROPOSED SITE
START TIME=0.0 HR PUNCH CODE=0
RAINFALL TYPE=2 RAIN QUARTER=0.0
RAIN ONE=2.23 IN RAIN SIX=2.90 IN
RAIN DAY=3.65 IN DT=0.0333 HRS

COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.

DT = .033300 HOURS END TIME = 19.946700 HOURS

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.0881	.0957	.1034	.1114	.1196	.1281	.1369
.1459	.1553	.1651	.1752	.1858	.1968	.2083
.2204	.2331	.2465	.2529	.2594	.2665	.2810
.3143	.3657	.4396	.5406	.6734	.8430	1.0542
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```

*
*****
*S      COMPUTE HYDROGRAPH BASIN B-1
*      *****
COMPUTE NM HYD      ID=1 HYD NO=101.00 DA=0.00117 SQ MI
                    PER A=0.00 PER B=23.00 PER C=0.00 PER D=77.00
                    TP=-0.1333 HR MASS RAIN=-1

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RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

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K = .134742HR      TP = .133300HR      K/TP RATIO = 1.010815      SHAPE CONSTANT, N = 3.492236
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AREA = .000269 SQ MI      IA = .50000 INCHES      INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

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PRINT HYD

ID=1 CODE=1

PARTIAL HYDROGRAPH 101.00

RUNOFF VOLUME = 2.75686 INCHES = .1720 ACRE-FEET
PEAK DISCHARGE RATE = 3.55 CFS AT 1.499 HOURS BASIN AREA = .0012 SQ. MI.

* ROUTE HYDROGRAPH 101.00 THROUGH POND *

* ROUTE RESERVOIR ID=2 HYD NO=101.00 INFLOW ID=1 CODE=5 *

OUTFLOW (CFS)	STORAGE (AC FT)	ELEV (FT)
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0.230	0.0099	77.60
0.376	0.0465	78.10
0.479	0.0932	78.60

* * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
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.17	.00	77.13	.000	.00
.33	.00	77.13	.000	.00
.50	.00	77.13	.000	.00
.67	.06	77.14	.000	.01
.83	.12	77.19	.001	.03
1.00	.16	77.25	.003	.06
1.17	.14	77.31	.004	.09
1.33	1.03	77.51	.008	.19
1.50	3.55	77.96	.036	.34
1.67	1.83	78.34	.069	.42
1.83	1.14	78.48	.082	.45
2.00	.81	78.56	.089	.47
2.16	.39	78.58	.091	.47
2.33	.20	78.55	.089	.47
2.50	.13	78.51	.084	.46
2.66	.09	78.45	.080	.45
2.83	.07	78.40	.074	.44
3.00	.06	78.34	.069	.43
3.16	.05	78.29	.064	.42
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7.33	.03	77.21	.002	.04
7.49	.03	77.21	.002	.04
7.66	.03	77.20	.002	.04
7.83	.03	77.20	.002	.04
7.99	.03	77.20	.002	.04
8.16	.03	77.20	.002	.03
8.33	.03	77.20	.002	.03
8.49	.03	77.20	.001	.03
8.66	.03	77.20	.001	.03
8.82	.03	77.19	.001	.03
8.99	.03	77.19	.001	.03
9.16	.03	77.19	.001	.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
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9.49	.03	77.19	.001	.03
9.66	.03	77.19	.001	.03
9.82	.03	77.19	.001	.03
9.99	.03	77.19	.001	.03
10.16	.03	77.19	.001	.03
10.32	.03	77.19	.001	.03
10.49	.03	77.19	.001	.03
10.66	.03	77.19	.001	.03
10.82	.03	77.19	.001	.03
10.99	.03	77.19	.001	.03
11.16	.03	77.19	.001	.03
11.32	.03	77.19	.001	.03
11.49	.03	77.18	.001	.03
11.66	.03	77.18	.001	.03
11.82	.03	77.18	.001	.03
11.99	.03	77.18	.001	.03
12.15	.03	77.18	.001	.03
12.32	.03	77.18	.001	.03
12.49	.03	77.18	.001	.03
12.65	.03	77.18	.001	.03
12.82	.03	77.18	.001	.03
12.99	.03	77.18	.001	.03
13.15	.02	77.18	.001	.03
13.32	.02	77.18	.001	.03
13.49	.02	77.18	.001	.03
13.65	.02	77.18	.001	.03
13.82	.02	77.18	.001	.02
13.99	.02	77.18	.001	.02
14.15	.02	77.18	.001	.02
14.32	.02	77.18	.001	.02
14.49	.02	77.18	.001	.02
14.65	.02	77.18	.001	.02
14.82	.02	77.18	.001	.02
14.99	.02	77.18	.001	.02

15.15	.02	77.18	.001	.02
15.32	.02	77.18	.001	.02
15.48	.02	77.18	.001	.02
15.65	.02	77.18	.001	.02
15.82	.02	77.18	.001	.02
15.98	.02	77.17	.001	.02
16.15	.02	77.17	.001	.02
16.32	.02	77.17	.001	.02
16.48	.02	77.17	.001	.02
16.65	.02	77.17	.001	.02
16.82	.02	77.17	.001	.02
16.98	.02	77.17	.001	.02
17.15	.02	77.17	.001	.02
17.32	.02	77.17	.001	.02
17.48	.02	77.17	.001	.02
17.65	.02	77.17	.001	.02
17.82	.02	77.17	.001	.02
17.98	.02	77.17	.001	.02
18.15	.02	77.17	.001	.02
18.32	.02	77.17	.001	.02
18.48	.02	77.17	.001	.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.65	.02	77.17	.001	.02
18.81	.02	77.17	.001	.02
18.98	.02	77.17	.001	.02
19.15	.02	77.17	.001	.02
19.31	.02	77.17	.001	.02
19.48	.02	77.17	.001	.02
19.65	.02	77.17	.001	.02
19.81	.02	77.17	.001	.02

PEAK DISCHARGE = .475 CFS - PEAK OCCURS AT HOUR 2.13
MAXIMUM WATER SURFACE ELEVATION = 78.580
MAXIMUM STORAGE = .0914 AC-FT INCREMENTAL TIME= .033300HRS

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 101.00

RUNOFF VOLUME = 2.74403 INCHES = .1712 ACRE-FEET
PEAK DISCHARGE RATE = .47 CFS AT 2.131 HOURS BASIN AREA = .0012 SQ. MI.

★ *****
FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 14:41:53

Exhibit C

POND VOLUME

CONTOUR	AREA ^{SF}	VOLUME ^{CF}	Σ VOLUMES	AC-FT
77.13	0	431	431	.0099
77.60	2753	1593	2024	.0465
78.10	3617	2037	4061	.0932
78.60	4532			

ORIFICE CALCULATIONS

$$Q = .60 A \sqrt{2gh}$$

$$Q = .60 (.0873) \sqrt{64.4 (1.30)}$$

$$Q = .479 \text{ CFS}$$

@ contour 78.6 $Q = .479 \text{ CFS}$

78.1 $Q = .376 \text{ CFS}$

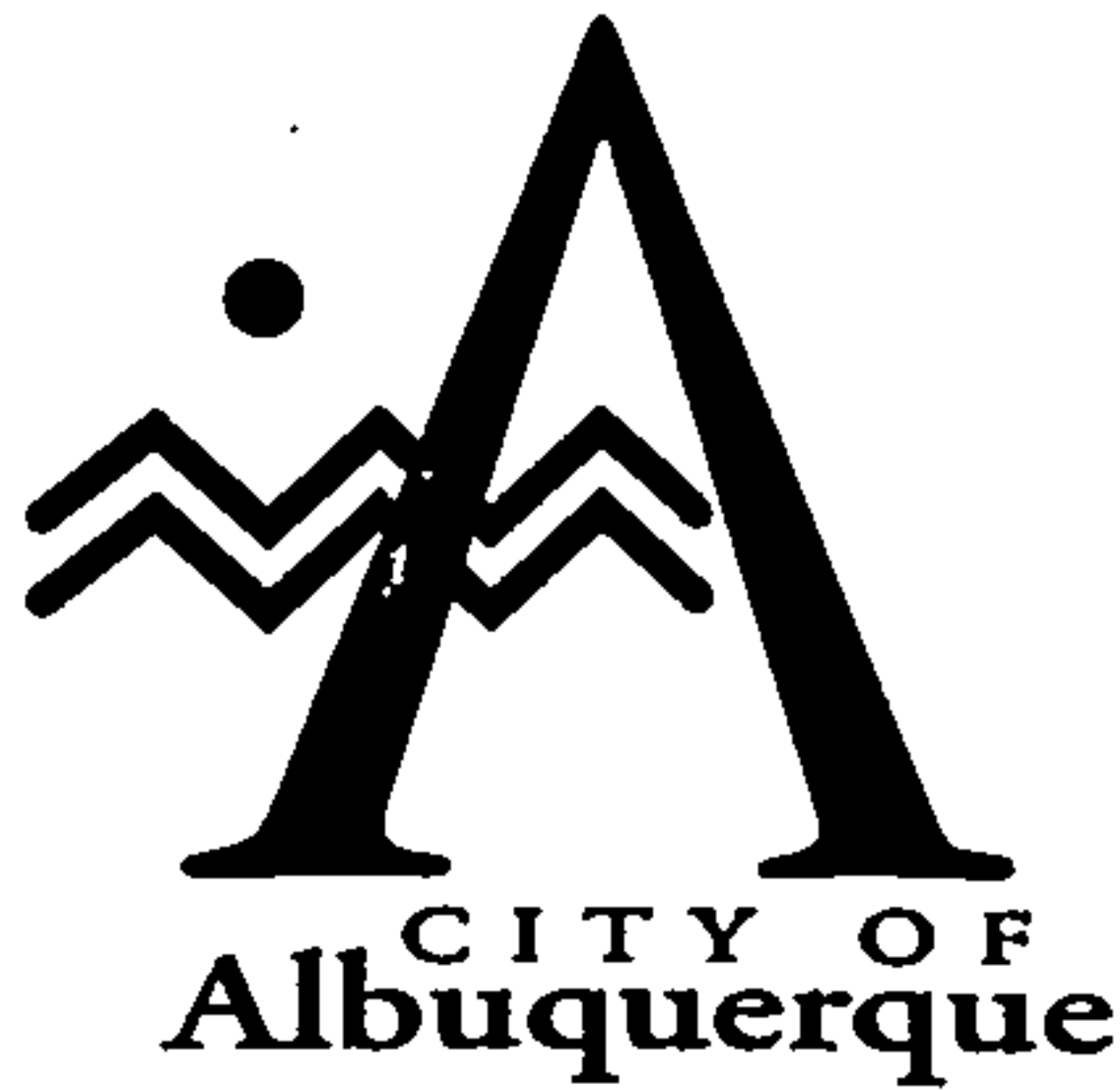
77.6 $Q = .230 \text{ CFS}$

WIER FOR OFFSITE (BLOCK WALL KNOTCH)

$$Q = CLH^{3/2}$$

$$15 = 3.09 L .67^{3/2}$$

$$8.85' = L \Rightarrow 9.33' \text{ OR } 7-16'' \text{ BLOCKS}$$



July 21, 1996

Martin J. Chávez, Mayor

Stephen Crawford
Crawford Development Services
P.O. Box 1573
Los Lunas, NM 87031

**RE: GARDUNOS PLAZA OFFICE PARK (F21-D37F) ENGINEER'S
CERTIFICATION FOR CERTIFICATE OF OCCUPANCY APPROVAL.
ENGINEER'S CERTIFICATION DATED 6-27-96.**

Dear Steve:

Based on the information provided on your July 1, 1996 submittal, the above referenced project is approved for Certificate of Occupancy.

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



DRAINAGE INFORMATION SHEET

PROJECT TITLE: Gardanos Plaza Office Park ZONE ATLAS/DRNG. FILE #: F-21/1037F
 DRB #: _____ EPC #: 2-78-69-13 WORK ORDER #: _____
 LEGAL DESCRIPTION: Montgomery Business Park Lot 19-A-1-B
 CITY ADDRESS: 10555 Montgomery Blvd
 ENGINEERING FIRM: Crawford Development Serv. CONTACT: Steve Crawford
 ADDRESS: 8634 Highway 47, Peralta, NM PHONE: 865-6442
 OWNER: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 ARCHITECT: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 SURVEYOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CONTRACTOR: Take Eskow CONTACT: _____
 ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
 ____ DRAINAGE PLAN
 ____ CONCEPTUAL GRADING & DRAINAGE PLAN
 ____ GRADING PLAN
 ____ EROSION CONTROL PLAN
☒ 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
☒ CERTIFICATE OF OCCUPANCY APPROVAL
 ____ GRADING PERMIT APPROVAL
 ____ PAVING PERMIT APPROVAL
 ____ S.A.D. DRAINAGE REPORT
 ____ DRAINAGE REQUIREMENTS
 ____ SUBDIVISION CERTIFICATION
 ____ OTHER _____ (SPECIFY)

DATE SUBMITTED: _____

BY: _____



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 19, 1995

Stephen Crawford
Crawford Development Services
P.O. Box 1573
Los Lunas, NM 87031

**RE: GARDUNOS PLAZA OFFICE PARK (F21-D37F) DRAINAGE PLAN FOR
BUILDING PERMIT, GRADING PERMIT, AND PAVING PERMIT APPROVAL.
ENGINEER'S STAMP DATED 9-10-95.**

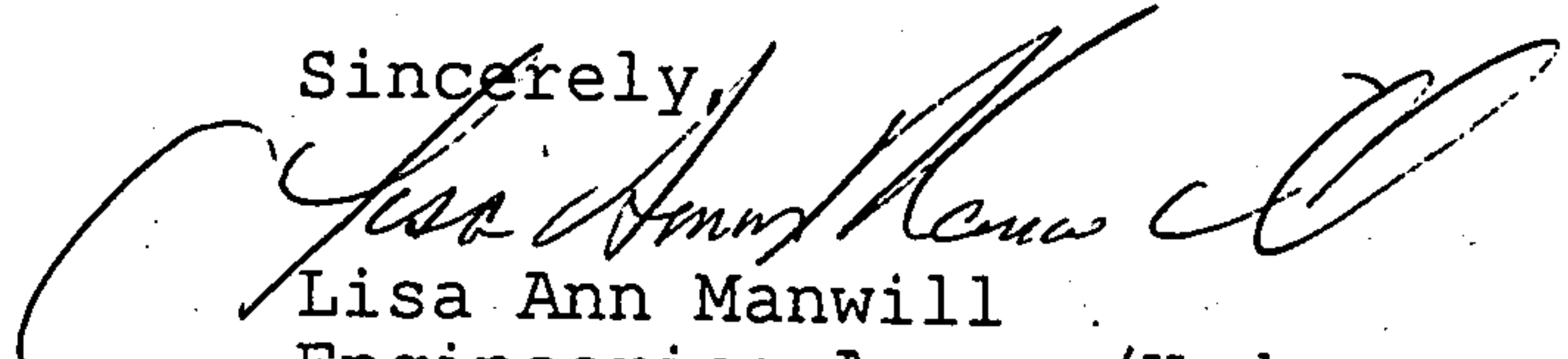
Dear Steve:

Based on the information provided on your September 11, 1995
submittal, the above referenced project is approved for Building
Permit, Grading Permit, and Paving Permit.

Prior to Certificate of Occupancy Approval, an Engineer's
Certification for the approved plans is required.

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

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GARDUNOS PLAZA OFFICE PARK ZONE ATLAS/DRNG. FILE #: F-21/1037F

DRB #: _____ EPC #: 2-78-69-13 WORK ORDER #: _____

LEGAL DESCRIPTION: Montgomery Business Park Lot 19-A-1-B

CITY ADDRESS: 10555 Montgomery Blvd

ENGINEERING FIRM: Crawford Development Service CONTACT: Stephen Crawford

ADDRESS: P.O. Box 1573 Las Lunas, NM. 87031 PHONE: 865-6442

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: Jake Eskew CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

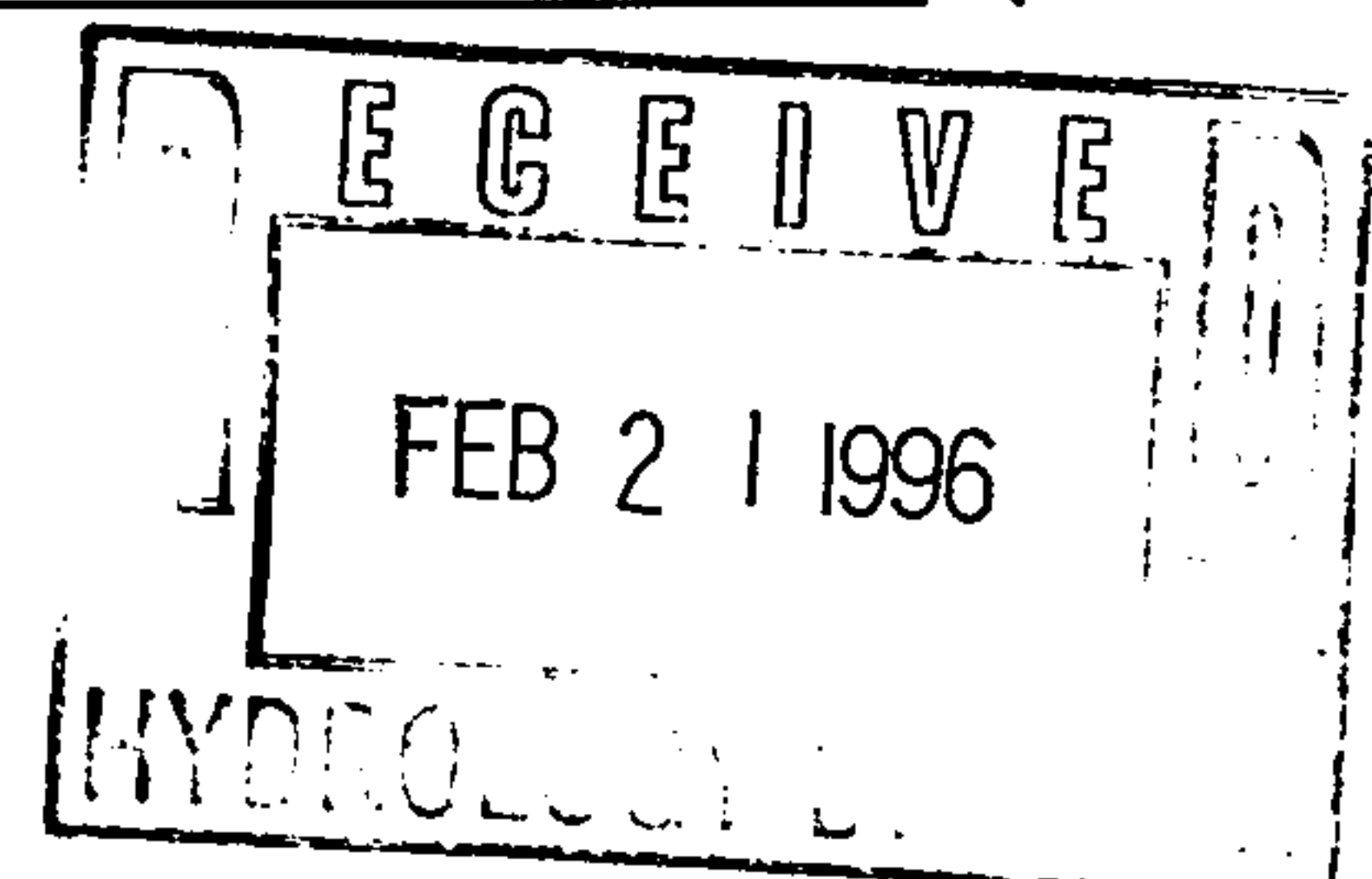
- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

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
- ☒ CERTIFICATE OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☐ SUBDIVISION CERTIFICATION
- ☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: _____

BY: _____





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 28, 1996

Stephen Crawford
Crawford Development Services
P.O. Box 1573
Los Lunas, NM 87031

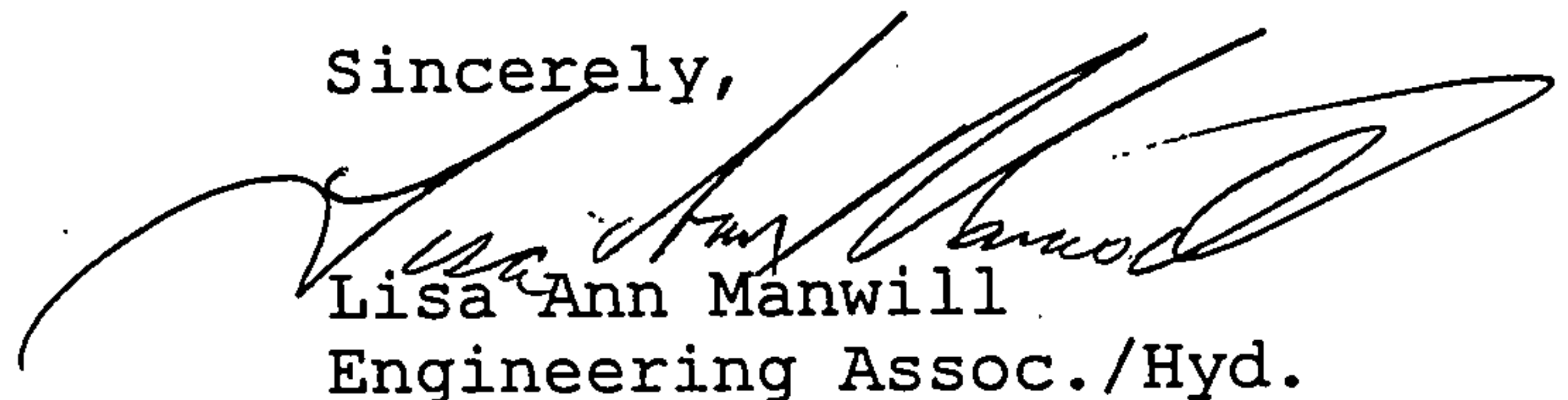
**RE: GARDUNOS PLAZA OFFICE PARK (F21-D37F) ENGINEER'S
CERTIFICATION FOR CERTIFICATE OF OCCUPANCY APPROVAL.
ENGINEER'S CERTIFICATION DATED 2-20-96.**

Dear Steve:

Based on the information provided on your February 21, 1996
submittal, the above referenced project is approved Certificate
of Occupancy.

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

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GARDUNOS PLAZA OFFICE PARK ZONE ATLAS/DRNG. FILE #: F-21 / 037F

DRB #: _____ EPC #: Z-78-69-13 WORK ORDER #: _____

LEGAL DESCRIPTION: MONTGOMERY BUSINESS PARK LOT 19-A-1-B

CITY ADDRESS: 10555 MONTGOMERY BLVD.

ENGINEERING FIRM: CRAWFORD DEVELOPMENT SERVICE CONTACT: STEPHEN CRAWFORD

ADDRESS: P.O. Box 1573 LOS LUNAS, NM 87031 PHONE: 865-6442

OWNER: JUNCTION PLAZA CONTACT: _____

ADDRESS: P.O. Box 35387 AIB, NM 87176 PHONE: 296-2121

ARCHITECT: CLAUDIO VIGIL ARCHITECTS CONTACT: TATE FISH BURN

ADDRESS: 1305 TIJERAS AIB, NM 87102 PHONE: 842-1113

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

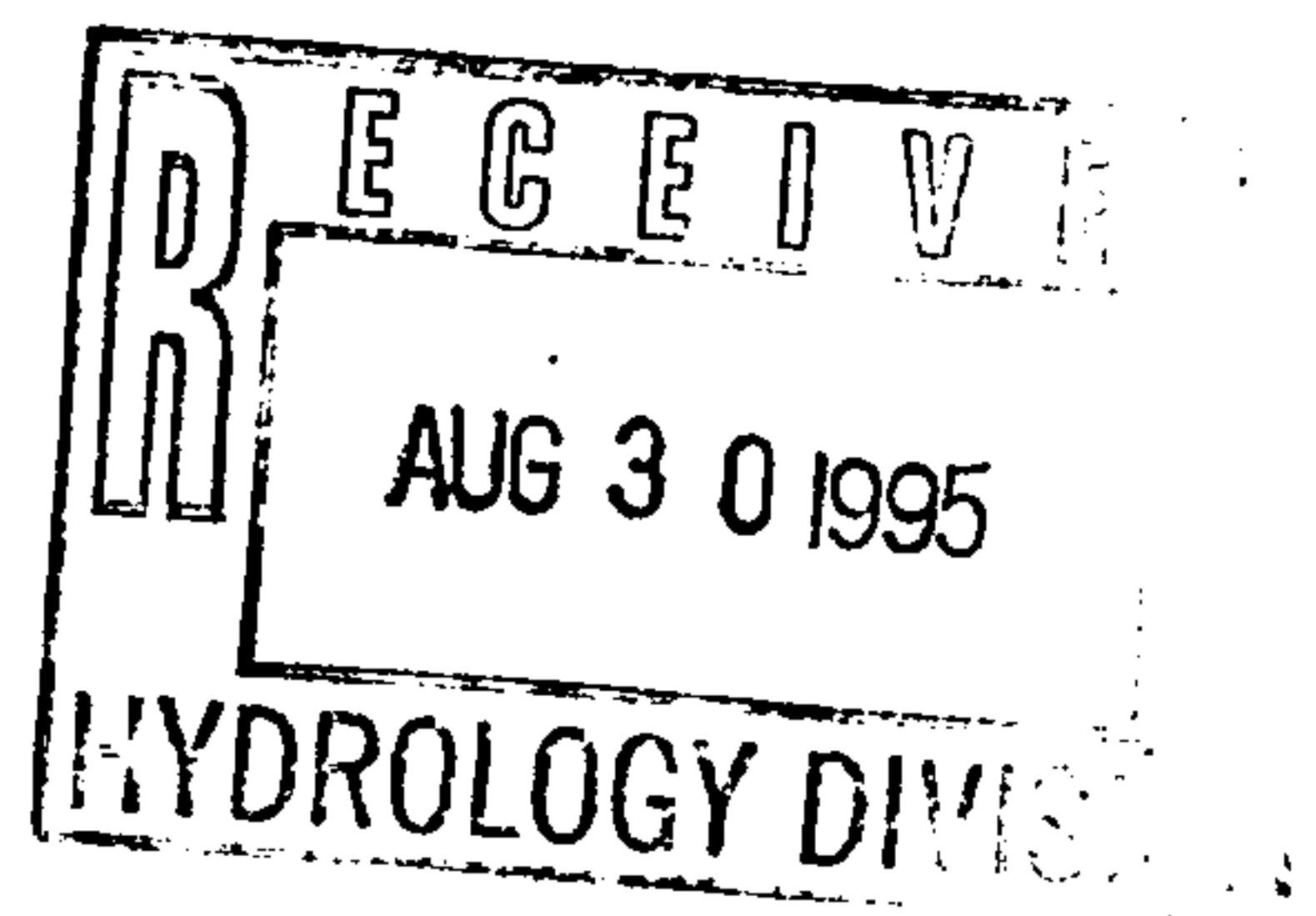
ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

- ☒ YES
- ☐ NO
- ☒ COPY PROVIDED



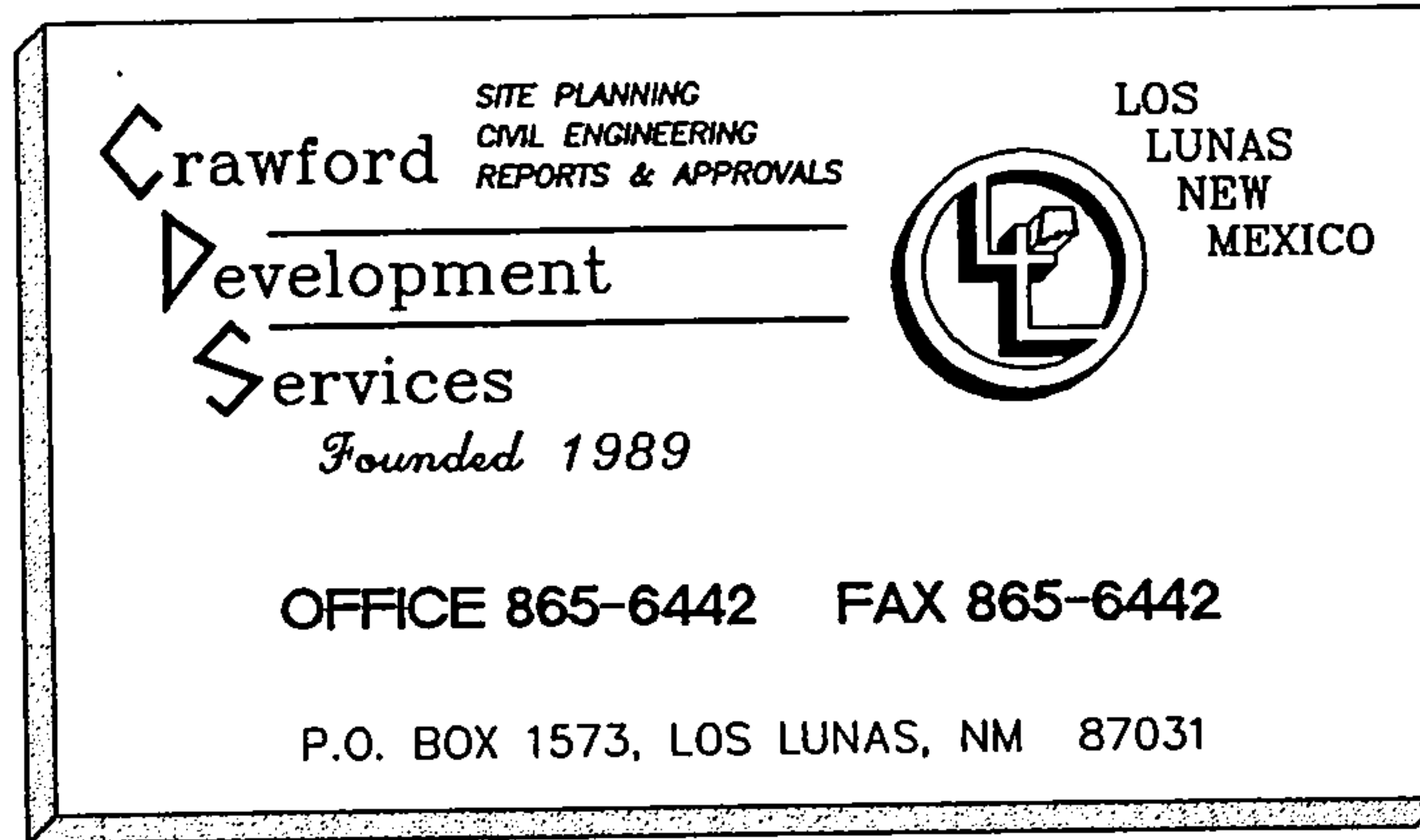
CHECK TYPE OF APPROVAL SOUGHT:

- ☐ 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
- ☐ CERTIFICATE OF OCCUPANCY APPROVAL
- ☒ GRADING PERMIT APPROVAL
- ☒ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☐ SUBDIVISION CERTIFICATION
- ☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 8/29/95
BY: _____

Spoke w/ Steve 8/23/95
9-8-95
Verbal - Repeat
He is going to
resubmit on
Monday w/
new pond
calculation

LETTER OF TRANSMITTAL



SUBJECT: GARDUNOS PLAZA
CDS # 95-003

FROM: TREY MCNABT
DATE: 8-29-95

TO: COA Hydrology

MEMO: PLEASE ROUTE FOR REVIEW

ATTACHED:

DRAINAGE INFORMATION SHEET

DRAINAGE PLAN

RECEIVED

AUG 30 1995

HYDROLOGY DIVISION

DRAINAGE PLAN

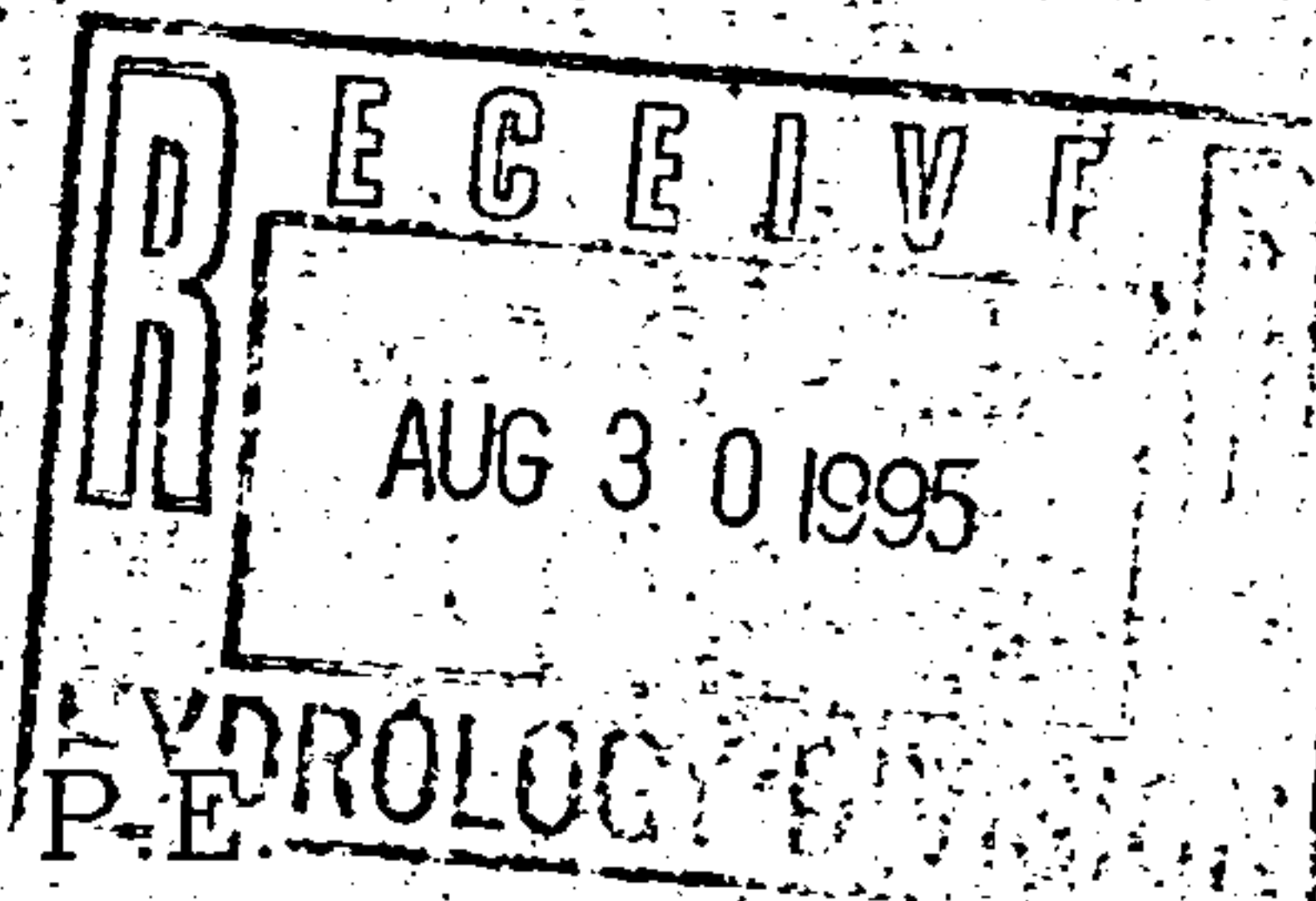
for

GARDUNOS PLAZA OFFICE PARK

10555 MONTGOMERY BLVD.
ALBUQUERQUE, NEW MEXICO

AUGUST 1995

Crawford
Development
Services
Founded 1989



Stephen L. Crawford, P.E.

Table of Contents

I.	Site Location	page 1
II.	Proposed Project	page 1
III.	Off-Site Drainage	page 1
IV.	Existing Conditions	page 2
V.	Proposed Conditions	page 2
VI.	Summary / Conclusions	page 2

Exhibit A - COA Predesign Conference Sheet

Exhibit B - AHYMO Summary and Output

Exhibit C - Misc. Hydraulic Calcs

Pockets: 1 - Grading and Drainage Plan

2 - Tom Mann Drainage Plan

I. SITE LOCATION :

This site is located at Gardunos Plaza along Montgomery Blvd, on the east side of Montgomery Parkway Loop (see vicinity map on Grading and Drainage Plan in map pocket 1). This site is a portion of Gardunos Plaza Office Park and consists of the undeveloped portion of Lot 19-A-1-B, Montgomery Business Park.

II. PROPOSED PROJECT :

The proposed project consists of a 1.24+/- acre portion of Lot 19-A-1-B, Montgomery Business Park (Yesterdave's Grill). The previously approved site plan (Z-78-69-13) shows the two proposed office buildings with their parking and landscaping. This project will complete the grading and paving of the entire site and will build the northeasterly structure.

III. OFF-SITE DRAINAGE :

Programmed previously in the master drainage report by Bohannon and Huston on 3-22-83, (COA Hydrology file F21/D37) was 15.0cfs crossing a portion of our site. This off-site flow coming from Hahn Park will not be significantly changed by our development and will discharge at the originally planned point of discharge.

IV. EXISTING CONDITIONS :

The site was previously designed by Tom Mann Associates 6-14-88 (COA Hydrology file F21/D37, see map pocket 2), and only a portion was constructed, that portion being Yesterdave's Grill and its adjacent parking lot, landscaping and detention ponding areas. There is an existing Grading Certification for this development in COA Hydrology file F21/D37. Basin B of the Mann report is adjacent to our site and is planned to accept a portion of our site's flow. Basin B and its detention pond, from inspection, were built in accordance with the approved drainage plan and all of its ponds and outlet structures are currently functioning in accordance with this plan. The remainder of our site is graded earth presently being used for overflow parking for Gardunos Plaza sites and Hahn Park.

The existing hydrology was not analyzed since this is the final phase of a drainage master plan.

V. PROPOSED CONDITIONS:

Under proposed conditions the site will have two Basins, A and B. Basin B, being a portion of the original Mann Basin B, will surface flow through the parking lot as previously planned in the Mann report. The roof portion of the original Mann Basin B will be redirected into Basin A, and the remainder of the Mann Basin B was not reanalyzed per discussion in the 8-18-95 COA Hydrology Predesign Conference (see Exhibit A). Basin A was reanalyzed using AHYMO (see Exhibit B for AHYMO summary and output), with the additional roof area. The west parking area will be used for detention ponding with an orifice controlled outlet discharging to Montgomery Parkway Loop at the preplanned Mann point of discharge at the master planned discharge rate of 0.5cfs. See hydraulic calculations in Exhibit C for pond volume data and orifice calculations.

VI. SUMMARY / CONCLUSION :

The development of this site will not significantly change any portion of the master plan drainage design. It will bring Basin A up to current standards and design methods (using AHYMO), with a discharge equal to the master planned discharge for this site. Off-site and Basin B flows will continue to drain as master planned.

Exhibit A

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DEVELOPMENT DIVISION/HYDROLOGY SECTION

PRE-DESIGN CONFERENCE

DRAINAGE FILE/ZONE ATLAS PAGE NO.: F21-D37M DATE: 8-18-95
EPC NO.: _____ DRB NO.: _____ ZONE: _____
SUBJECT: GARDUNOS PLAZA OFFICE PARK (Bldgs A, B & C)
STREET ADDRESS: _____
LEGAL DESCRIPTION: _____

APPROVAL REQUESTED: _____ PRELIMINARY PLAT _____ FINAL PLAT
_____ SITE DEVELOPMENT PLAN X BUILDING PERMIT
_____ GRADING/PAVING PERMIT _____ OTHER

ATTENDANCE: Steve Crawford WHO REPRESENTING
Tray McNabb _____

FINDINGS:

- An updated drainage plan for Basin A and a portion of Basin B (i.e. Bldg C and ~~the~~ accompanying parking lot to the east). The update will include the new hydrology for all of Basin A. Roof area of Bld. C shall be incorporated into Basin A if feasible. (Note: Run the discussion needed if not possible). Concept previously approved will be followed. ~~See~~ certified drainage plan.
- Verify required detention pond volume for Basin "B" is still in compliance with the certified volume in drainage file.
- This pre-design is based on the assumption the site plan ~~is~~ for the ~~the~~ proposed development is approved and there are no special conditions that may affect the drainage requirements referenced above.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Tray McNabb SIGNED: Steve Crawford
TITLE: _____ TITLE: Proprietor
DATE: 8/18/95 DATE: 8-18-95

****NOTE**** PLEASE PROVIDE A COPY OF THIS PRE-DESIGN FORM WITH THE DRAINAGE SUBMITTAL.

Exhibit B

RUN DATE (MON/DAY/YR) =08/28/1995
USER NO.= DAGGETTK.S94

```

TIME=          .00
RAIN24=       3.650

```

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994

RUN DATE (MON/DAY/YR) = 08/28/1995

START TIME (HR:MIN:SEC) = 10:25:01 USER NO.= DAGGETTK.S94

INPUT FILE = 95003.dat

*S GARDUNOS PLAZA
 *S PROPOSED SITE
 START TIME=0.0 HR PUNCH CODE=0
 RAINFALL TYPE=2 RAIN QUARTER=0.0
 RAIN ONE=2.23 IN RAIN SIX=2.90 IN
 RAIN DAY=3.65 IN DT=0.0333 HRS

COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.

DT =	.033300 HOURS			END TIME = 19.946700 HOURS		
.0000	.0055	.0110	.0167	.0225	.0284	.0344
.0406	.0469	.0534	.0600	.0667	.0737	.0808
.0881	.0957	.1034	.1114	.1196	.1281	.1369
.1459	.1553	.1651	.1752	.1858	.1968	.2083
.2204	.2331	.2465	.2529	.2594	.2665	.2810
.3143	.3657	.4396	.5406	.6734	.8430	1.0542
1.3121	1.5597	1.6613	1.7468	1.8227	1.8918	1.9553
2.0143	2.0694	2.1210	2.1697	2.2155	2.2588	2.2998
2.3386	2.3755	2.4104	2.4436	2.4751	2.4845	2.4923
2.4998	2.5070	2.5139	2.5206	2.5271	2.5334	2.5396
2.5456	2.5514	2.5571	2.5627	2.5681	2.5734	2.5786
2.5837	2.5887	2.5937	2.5985	2.6032	2.6079	2.6125
2.6170	2.6215	2.6258	2.6301	2.6344	2.6386	2.6427
2.6468	2.6508	2.6548	2.6588	2.6626	2.6665	2.6703
2.6740	2.6777	2.6814	2.6850	2.6886	2.6921	2.6957
2.6991	2.7026	2.7060	2.7094	2.7127	2.7160	2.7193
2.7226	2.7258	2.7290	2.7322	2.7354	2.7385	2.7416
2.7447	2.7477	2.7507	2.7537	2.7567	2.7597	2.7626
2.7655	2.7684	2.7713	2.7741	2.7770	2.7798	2.7826
2.7854	2.7881	2.7909	2.7936	2.7963	2.7990	2.8017
2.8043	2.8069	2.8096	2.8122	2.8148	2.8173	2.8199
2.8225	2.8250	2.8275	2.8300	2.8325	2.8350	2.8375
2.8399	2.8423	2.8448	2.8472	2.8496	2.8520	2.8544
2.8567	2.8591	2.8614	2.8637	2.8661	2.8684	2.8707
2.8730	2.8752	2.8775	2.8798	2.8820	2.8842	2.8865
2.8887	2.8909	2.8931	2.8953	2.8974	2.8996	2.9017
2.9038	2.9059	2.9080	2.9101	2.9122	2.9142	2.9163
2.9184	2.9204	2.9225	2.9245	2.9266	2.9286	2.9306
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2.9607	2.9626	2.9646	2.9665	2.9685	2.9704	2.9724
2.9743	2.9763	2.9782	2.9801	2.9821	2.9840	2.9859
2.9878	2.9897	2.9916	2.9935	2.9954	2.9973	2.9992
3.0011	3.0030	3.0048	3.0067	3.0086	3.0105	3.0123
3.0142	3.0160	3.0179	3.0197	3.0216	3.0234	3.0253
3.0271	3.0289	3.0308	3.0326	3.0344	3.0362	3.0380
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3.0524	3.0542	3.0560	3.0577	3.0595	3.0613	3.0630
3.0648	3.0666	3.0683	3.0701	3.0718	3.0736	3.0753
3.0770	3.0788	3.0805	3.0822	3.0840	3.0857	3.0874
3.0891	3.0908	3.0925	3.0943	3.0960	3.0977	3.0994
3.1011	3.1027	3.1044	3.1061	3.1078	3.1095	3.1112
3.1128	3.1145	3.1162	3.1178	3.1195	3.1212	3.1228
3.1245	3.1261	3.1278	3.1294	3.1311	3.1327	3.1343
3.1360	3.1376	3.1392	3.1409	3.1425	3.1441	3.1457

3.1473	3.1489	3.1506	3.1522	3.1538	3.1554	3.1570
3.1586	3.1601	3.1617	3.1633	3.1649	3.1665	3.1681
3.1697	3.1712	3.1728	3.1744	3.1759	3.1775	3.1791
3.1806	3.1822	3.1837	3.1853	3.1868	3.1884	3.1899
3.1915	3.1930	3.1946	3.1961	3.1976	3.1991	3.2007
3.2022	3.2037	3.2052	3.2068	3.2083	3.2098	3.2113
3.2128	3.2143	3.2158	3.2173	3.2188	3.2203	3.2218
3.2233	3.2248	3.2263	3.2278	3.2293	3.2307	3.2322
3.2337	3.2352	3.2366	3.2381	3.2396	3.2410	3.2425
3.2440	3.2454	3.2469	3.2483	3.2498	3.2512	3.2527
3.2541	3.2556	3.2570	3.2585	3.2599	3.2613	3.2628
3.2642	3.2656	3.2670	3.2685	3.2699	3.2713	3.2727
3.2742	3.2756	3.2770	3.2784	3.2798	3.2812	3.2826
3.2840	3.2854	3.2868	3.2882	3.2896	3.2910	3.2924
3.2938	3.2952	3.2965	3.2979	3.2993	3.3007	3.3021
3.3034	3.3048	3.3062	3.3076	3.3089	3.3103	3.3117
3.3130	3.3144	3.3157	3.3171	3.3184	3.3198	3.3211
3.3225	3.3238	3.3252	3.3265	3.3279	3.3292	3.3306
3.3319	3.3332	3.3346	3.3359	3.3372	3.3385	3.3399
3.3412	3.3425	3.3438	3.3452	3.3465	3.3478	3.3491
3.3504	3.3517	3.3530	3.3543	3.3556	3.3569	3.3582
3.3595	3.3608	3.3621	3.3634	3.3647	3.3660	3.3673
3.3686	3.3699	3.3712	3.3725	3.3737	3.3750	3.3763
3.3776	3.3788	3.3801	3.3814	3.3827	3.3839	3.3852
3.3865	3.3877	3.3890	3.3902	3.3915	3.3928	3.3940
3.3953	3.3965	3.3978	3.3990	3.4003	3.4015	3.4028
3.4040	3.4053	3.4065	3.4077	3.4090	3.4102	3.4114
3.4127	3.4139	3.4151	3.4164	3.4176	3.4188	3.4200
3.4213	3.4225	3.4237	3.4249	3.4261	3.4273	3.4286
3.4298	3.4310	3.4322	3.4334	3.4346	3.4358	3.4370
3.4382	3.4394	3.4406	3.4418	3.4430	3.4442	3.4454
3.4466	3.4478	3.4490	3.4502	3.4513	3.4525	3.4537
3.4549	3.4561	3.4573	3.4584	3.4596	3.4608	3.4620
3.4631	3.4643	3.4655	3.4666	3.4678	3.4690	3.4701
3.4713	3.4725	3.4736	3.4748	3.4760	3.4771	3.4783
3.4794	3.4806	3.4817	3.4829	3.4840	3.4852	3.4863
3.4875	3.4886	3.4898	3.4909	3.4920	3.4932	3.4943
3.4954	3.4966	3.4977	3.4988	3.5000	3.5011	3.5022
3.5034	3.5045	3.5056	3.5067	3.5079	3.5090	3.5101
3.5112	3.5123	3.5135	3.5146	3.5157	3.5168	3.5179
3.5190	3.5201	3.5212	3.5224	3.5235		

*

 *S COMPUTE HYDROGRAPH BASIN B-1
 *

 COMPUTE NM HYD ID=1 HYD NO=101.00 DA=0.00117 SQ MI
 PER A=0.00 PER B=23.00 PER C=0.00 PER D=77.00
 TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 3.5568 CFS UNIT VOLUME = .9960 B = 526.28 P60 = 2.2300
 AREA = .000901 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .134742HR TP = .133300HR K/TP RATIO = 1.010815 SHAPE CONSTANT, N = 3.492236
 UNIT PEAK = .64552 CFS UNIT VOLUME = .9786 B = 319.76 P60 = 2.2300
 AREA = .000269 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

PRINT HYD

ID=1 CODE=1

PARTIAL HYDROGRAPH 101.00

7492CF

RUNOFF VOLUME = 2.75686 INCHES = .1720 ACRE-FEET
PEAK DISCHARGE RATE = 3.55 CFS AT 1.499 HOURS BASIN AREA = .0012 SQ. MI.

* ROUTE HYDROGRAPH 101.00 THROUGH POND *

ROUTE RESERVOIR ID=2 HYD NO=101.00 INFLOW ID=1 CODE=5
OUTFLOW (CFS) STORAGE (AC FT) ELEV (FT)
0.001 0.0001 77.13
0.230 0.0166 77.60
0.376 0.0769 78.10
0.479 0.1523 78.60

* * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	77.13	.000	.00
.17	.00	77.13	.000	.00
.33	.00	77.13	.000	.00
.50	.00	77.13	.000	.00
.67	.06	77.14	.000	.00
.83	.12	77.17	.001	.02
1.00	.16	77.21	.003	.04
1.17	.14	77.25	.004	.06
1.33	1.03	77.39	.009	.13
1.50	3.55	77.78	.038	.28
1.67	1.83	78.05	.071	.36
1.83	1.14	78.16	.086	.39
2.00	.81	78.21	.094	.40
2.16	.39	78.23	.097	.40
2.33	.20	78.22	.095	.40
2.50	.13	78.20	.092	.40
2.66	.09	78.17	.088	.39
2.83	.07	78.14	.083	.38
3.00	.06	78.11	.079	.38
3.16	.05	78.08	.075	.37
3.33	.05	78.04	.070	.36
3.50	.04	78.01	.066	.35
3.66	.04	77.97	.062	.34
3.83	.04	77.94	.058	.33
4.00	.04	77.91	.054	.32
4.16	.04	77.88	.050	.31
4.33	.04	77.85	.046	.30
4.50	.04	77.82	.043	.29
4.66	.04	77.79	.039	.28
4.83	.04	77.76	.036	.28
5.00	.04	77.73	.033	.27
5.16	.04	77.71	.029	.26
5.33	.04	77.68	.026	.25
5.49	.04	77.66	.023	.25
5.66	.04	77.63	.021	.24

5.83	.04	77.61	.018	.23
5.99	.04	77.56	.015	.21
6.16	.04	77.50	.013	.18
6.33	.04	77.45	.011	.16
6.49	.04	77.41	.010	.14
6.66	.04	77.37	.009	.12
6.83	.04	77.34	.007	.10
6.99	.03	77.32	.007	.09
7.16	.03	77.30	.006	.08
7.33	.03	77.28	.005	.07
7.49	.03	77.26	.005	.07
7.66	.03	77.25	.004	.06
7.83	.03	77.24	.004	.06
7.99	.03	77.23	.004	.05
8.16	.03	77.23	.004	.05
8.33	.03	77.22	.003	.05
8.49	.03	77.22	.003	.04
8.66	.03	77.21	.003	.04
8.82	.03	77.21	.003	.04
8.99	.03	77.21	.003	.04
9.16	.03	77.20	.003	.04

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.32	.03	77.20	.003	.04
9.49	.03	77.20	.003	.03
9.66	.03	77.20	.002	.03
9.82	.03	77.20	.002	.03
9.99	.03	77.19	.002	.03
10.16	.03	77.19	.002	.03
10.32	.03	77.19	.002	.03
10.49	.03	77.19	.002	.03
10.66	.03	77.19	.002	.03
10.82	.03	77.19	.002	.03
10.99	.03	77.19	.002	.03
11.16	.03	77.19	.002	.03
11.32	.03	77.19	.002	.03
11.49	.03	77.19	.002	.03
11.66	.03	77.19	.002	.03
11.82	.03	77.19	.002	.03
11.99	.03	77.18	.002	.03
12.15	.03	77.18	.002	.03
12.32	.03	77.18	.002	.03
12.49	.03	77.18	.002	.03
12.65	.03	77.18	.002	.03
12.82	.03	77.18	.002	.03
12.99	.03	77.18	.002	.03
13.15	.02	77.18	.002	.03
13.32	.02	77.18	.002	.03
13.49	.02	77.18	.002	.03
13.65	.02	77.18	.002	.03
13.82	.02	77.18	.002	.03
13.99	.02	77.18	.002	.03
14.15	.02	77.18	.002	.02
14.32	.02	77.18	.002	.02
14.49	.02	77.18	.002	.02
14.65	.02	77.18	.002	.02
14.82	.02	77.18	.002	.02
14.99	.02	77.18	.002	.02

15.15	.02	77.18	.002	.02
15.32	.02	77.18	.002	.02
15.48	.02	77.18	.002	.02
15.65	.02	77.18	.002	.02
15.82	.02	77.18	.002	.02
15.98	.02	77.18	.002	.02
16.15	.02	77.18	.002	.02
16.32	.02	77.17	.002	.02
16.48	.02	77.17	.002	.02
16.65	.02	77.17	.002	.02
16.82	.02	77.17	.002	.02
16.98	.02	77.17	.002	.02
17.15	.02	77.17	.002	.02
17.32	.02	77.17	.002	.02
17.48	.02	77.17	.002	.02
17.65	.02	77.17	.002	.02
17.82	.02	77.17	.002	.02
17.98	.02	77.17	.002	.02
18.15	.02	77.17	.002	.02
18.32	.02	77.17	.002	.02
18.48	.02	77.17	.002	.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.65	.02	77.17	.002	.02
18.81	.02	77.17	.002	.02
18.98	.02	77.17	.002	.02
19.15	.02	77.17	.002	.02
19.31	.02	77.17	.001	.02
19.48	.02	77.17	.001	.02
19.65	.02	77.17	.001	.02
19.81	.02	77.17	.001	.02

PEAK DISCHARGE = .403 CFS - PEAK OCCURS AT HOUR 2.16
 MAXIMUM WATER SURFACE ELEVATION = 78.231
 MAXIMUM STORAGE = .0967 AC-FT INCREMENTAL TIME= .033300HRS

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 101.00

RUNOFF VOLUME = 2.73496 INCHES = .1707 ACRE-FEET
 PEAK DISCHARGE RATE = .40 CFS AT 2.164 HOURS BASIN AREA = .0012 SQ. MI.

* *****
 FINISH
 NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 10:25:03

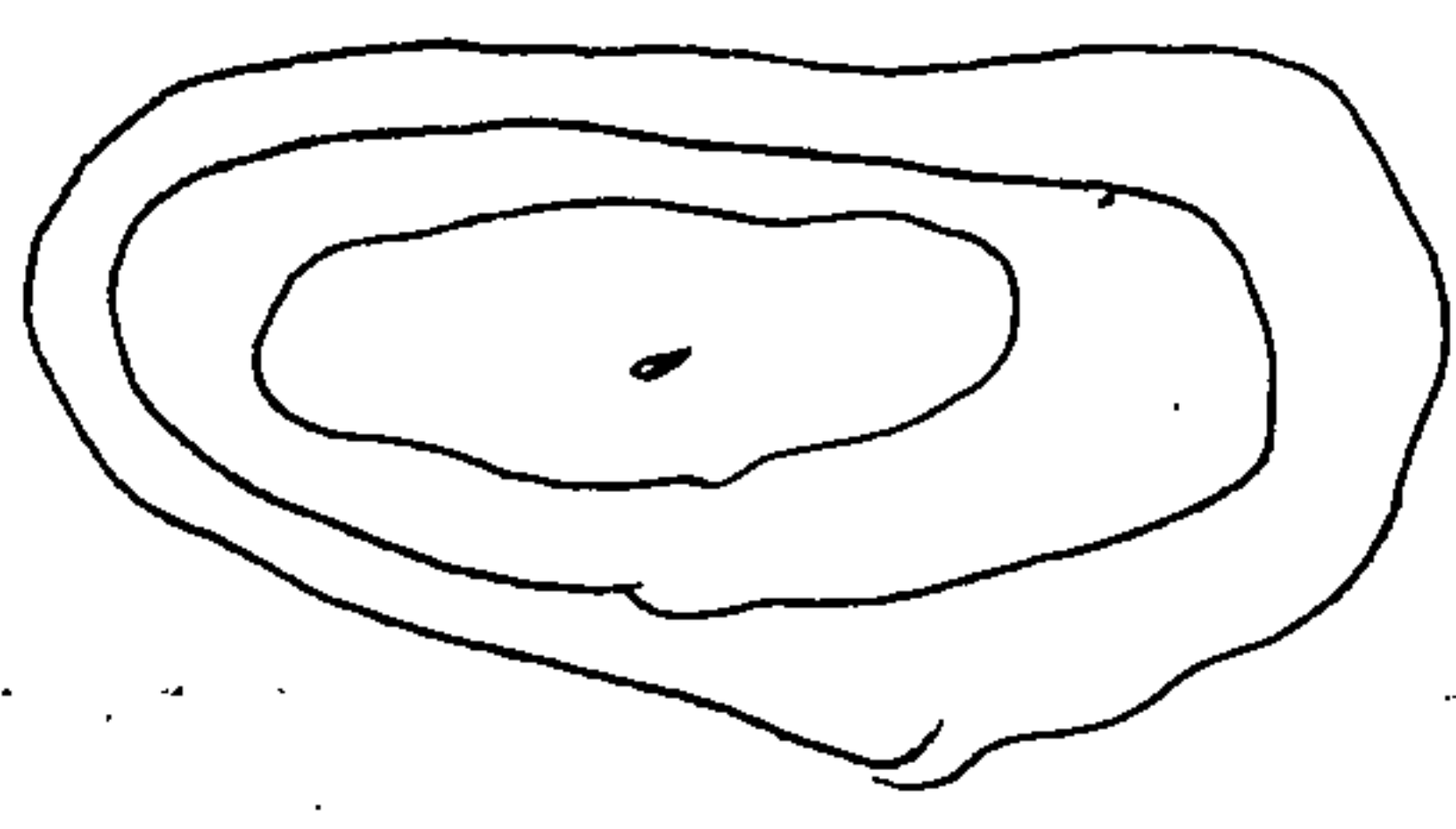
Exhibit C

POND VOLUME

Contour
 77.13
 77.60
 78.10
 78.60

AREA (SF)
 0
 2163
 3097
 3467

VOLUME (CF)
 721 x 8.47 = 339
 2630 x .5 = 1315
 3282 x .5 = 1641
 Σ = 6633 x .5 = 3295



OFFICE CALCULATIONS

$Q = .60 \ A \ \sqrt{2gh}$

$Q = 160 \ (.0873) \sqrt{64.4 \ (1.30)}$

$Q = .479 \ \text{CFS}$

@ contour 78.6 $Q = .479 \ \text{CFS}$

78.1 $Q = .376 \ \text{CFS}$

77.6 $Q = .230 \ \text{CFS}$

WATER FOR OFFSITE
 (BLOCK WALL KNOTCH)

$Q = CLH^{3/2}$

$15 = 3.09 \ L \ .67^{3/2}$

$8.85' = L \Rightarrow 9.33' \text{ or } 7-16'' \text{ blocks}$

of pipe
 to
 top of
 manhole
 OK



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

March 11, 1985

Mark D. Goodwin
Molzen-Corbin & Associates
Post Office Box 3632
Albuquerque, New Mexico 87190

RE: DRAINAGE & GRADING PLAN FOR GARDUNO PLAZA OFC. BLDG.
PARKING LOT (F-21/D37F) RECEIVED FEBRUARY 19, 1985

Dear Mr. Goodwin:

The referenced plan dated February 19, 1985, is approved.

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

If you have any questions or comments regarding this project, please call me at 766-7644.

Cordially,

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

MOLZEN-CORBIN

& Associates

ENGINEERS/PLANNERS/CONSULTANTS

Craddock Commerce Center
2301 Yale Boulevard Southeast
Post Office Box 3632
Albuquerque, New Mexico 87190
Telephone 505/242-5700

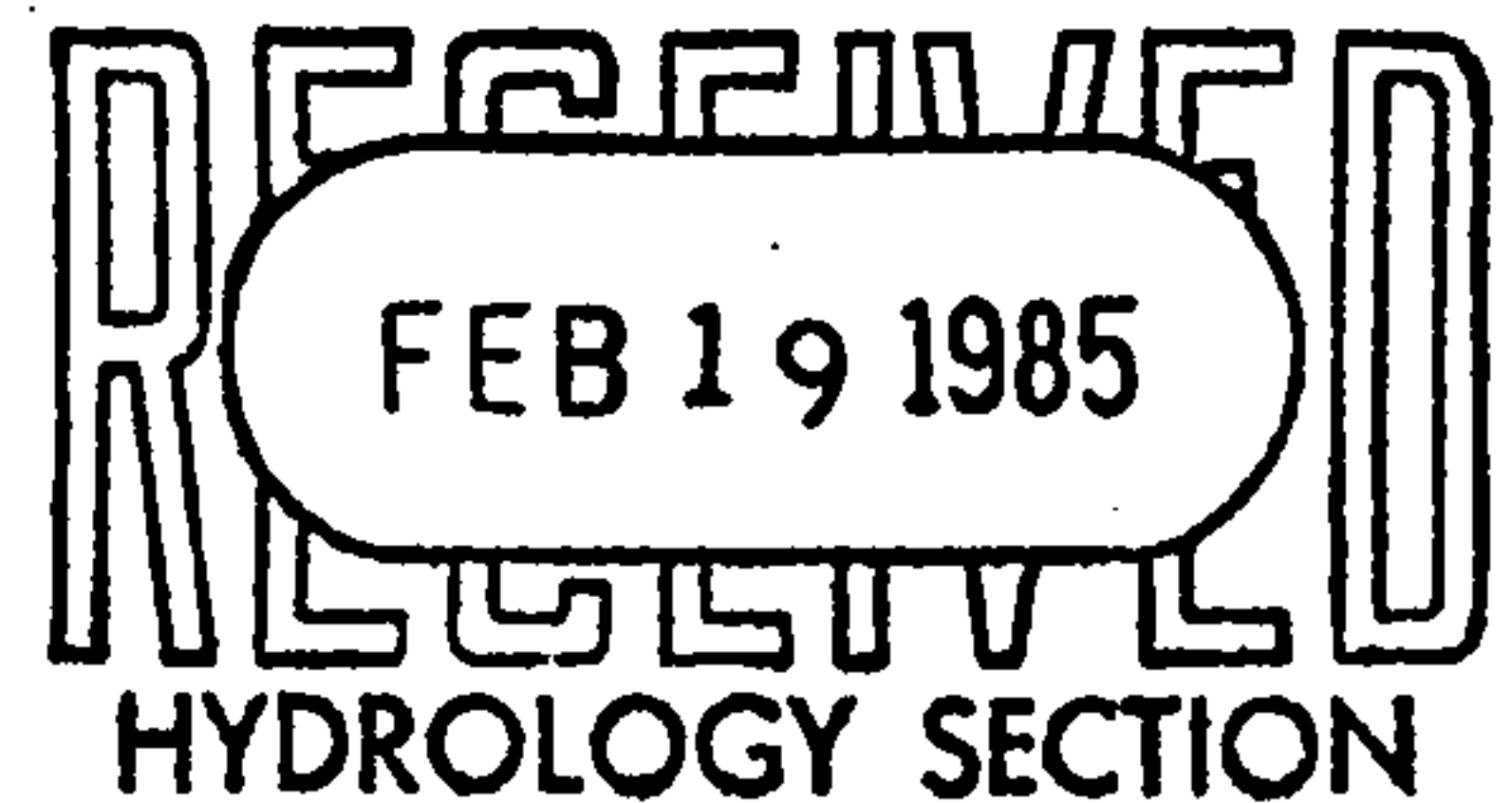


February 19, 1985

City of Albuquerque
Hydrology Department
P. O. Box 1293
Albuquerque, New Mexico 87103

Attention: Billy Goolsby, P.E.

RE: Drainage & Grading Plan, Garduno Plaza
Zone Atlas F-21 D 37 ~~F~~



Dear Mr. Goolsby:

Attached please find two (2) copies of the Drainage and Grading Plan for the new Garduno Plaza Office Building for City approval, and two (2) copies of the Drainage and Grading Plan for a parking lot site. These plans are in conformance with the previously approved Master Plan prepared by Bohannon/Huston (City File No. F21-D37).

I will be happy to work with the City on any steps necessary to facilitate the approval of these plans. If you have any questions, please call me.

Sincerely,

MOLZEN-CORBIN & ASSOCIATES

Mark D. Goodwin

Mark D. Goodwin, P.E.

JBP:MDG:cm
Attachments

Approve Form 1

Carbor

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Garduno Plaza Office Bldg. ZONE ATLAS/DRNG. FILE #: F-21-Z

LEGAL DESCRIPTION: Lots #8, 17, & 18, Montgomery Business Park

CITY ADDRESS: 10555 Montgomery Boulevard, N.E.

ENGINEERING FIRM: Molzen-Corbin & Associates CONTACT: Mark Goodwin, P.E.

ADDRESS: 2301 Yale Blvd., S.E. PHONE: 242-5700

OWNER: Junction Plaza-A Partnership CONTACT: Dave Garduno

ADDRESS: 4617 Osuna Court, N.E. PHONE: 821-3030

ARCHITECT: Claudio Antonio Vigil & Associates CONTACT: Mark Levine

ADDRESS: 2340 Alamo, S.E. PHONE: 247-1000

SURVEYOR: Hall Surveying Company CONTACT: Verlon Hall, P.E.

ADDRESS: 2625 Pennsylvania, N.E. PHONE: 884-6200

CONTRACTOR: N/A CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☒ YES for adjacent lot

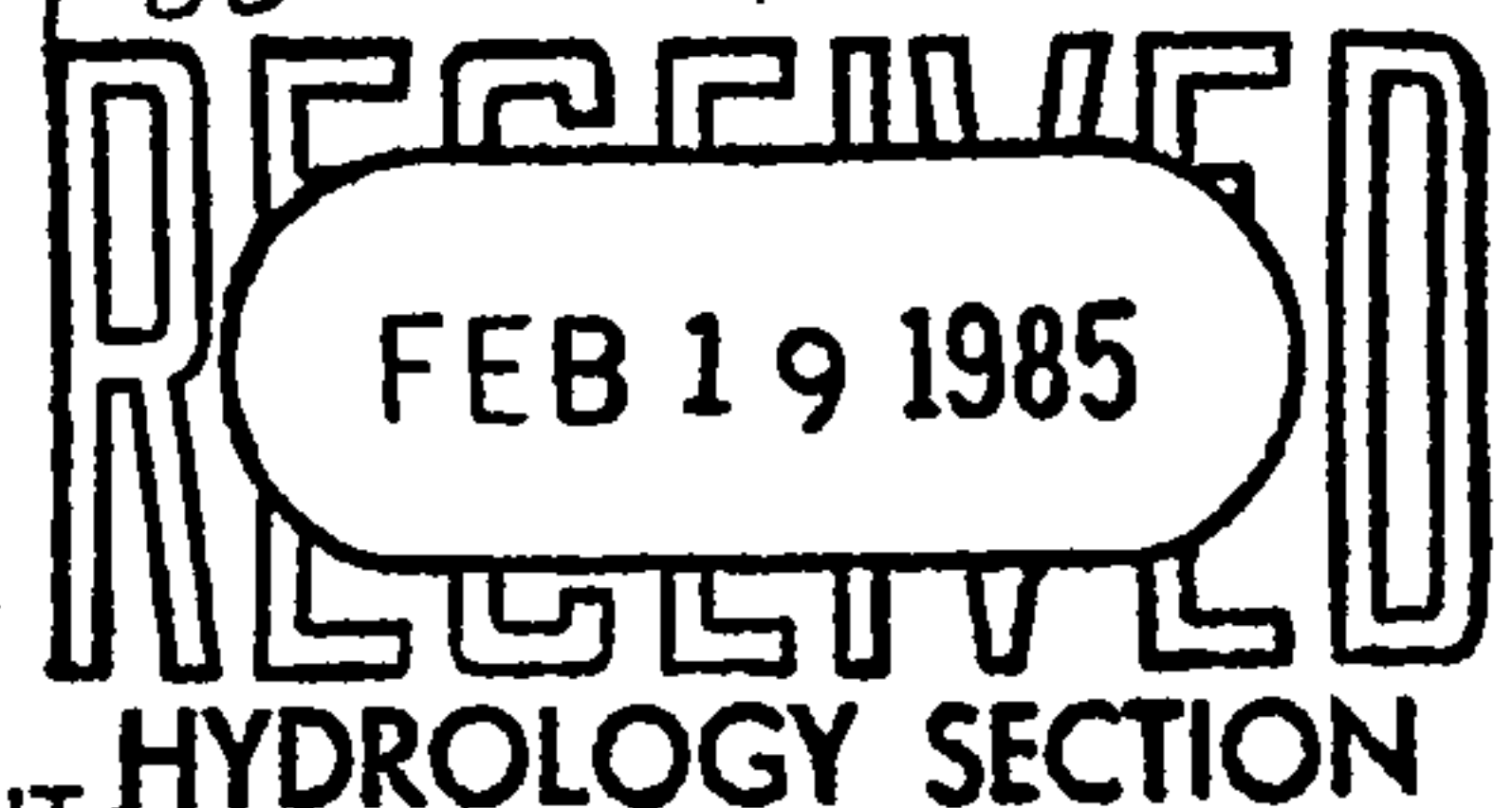
☐ NO

☒ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 85-109 2/12/85

EPC NO. 278-69-3 4/15/82

PROJ. NO. _____



TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☒ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☒ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 2/19/85

BY: Mark Goodwin

Mark Goodwin, P.E.



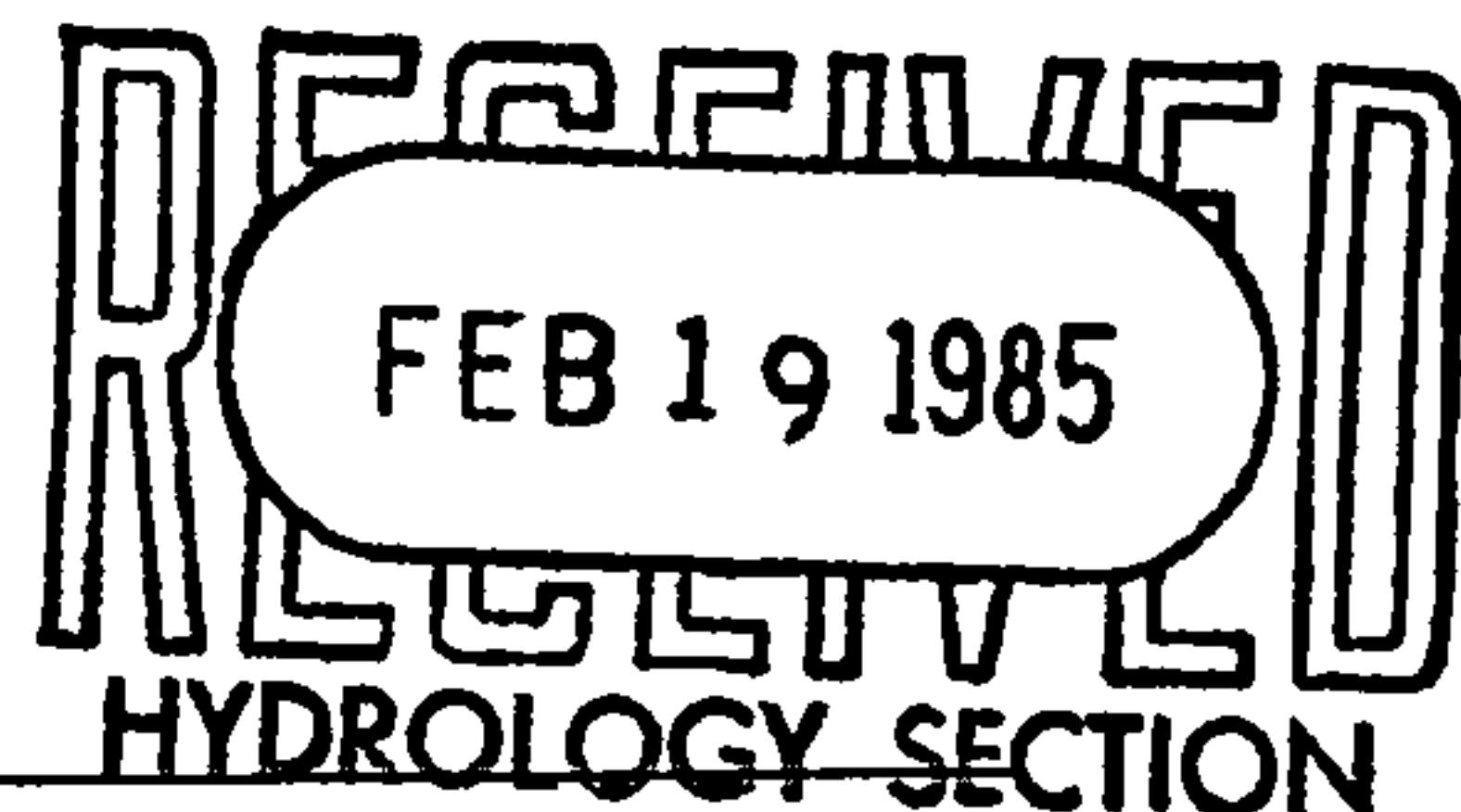
CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION



HYDROLOGY SECTION PROJ. NO. F-21 DATE: 6/18/84

PLANNING DIVISION NO. _____

CONFERENCE RECAP



SUBJECT: Gardunos Restaurant

WHO

REPRESENTING

ATTENDANCE: Jerry Paz
Billy Gooksky

Moltzen-Corbin
City

FINDINGS: ① Approved Drainage Plan to show that the site will be developed in accordance with the approved Master Plan for the area.

② Detailed Grading Plan to be submitted for review & approval prior to inclusion in the Construction Plans.

③ Erosion Control Plan required per the DPM.

④ Off-site flows to be addressed, quantified and accepted.

* Please provide a copy of recap w/submittal.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy J. Gooksky

SIGNED: Jerry B. Paz

TITLE: CE/Hydrology

TITLE: V.C.E. / Moltzen-Corbin

DATE: 6/18/84

DATE: _____