



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 31, 2000

John C. Wilson, P.E.
Wilson Surveying Co.
809 Copper Ave., NW
Albuquerque, NM 87102

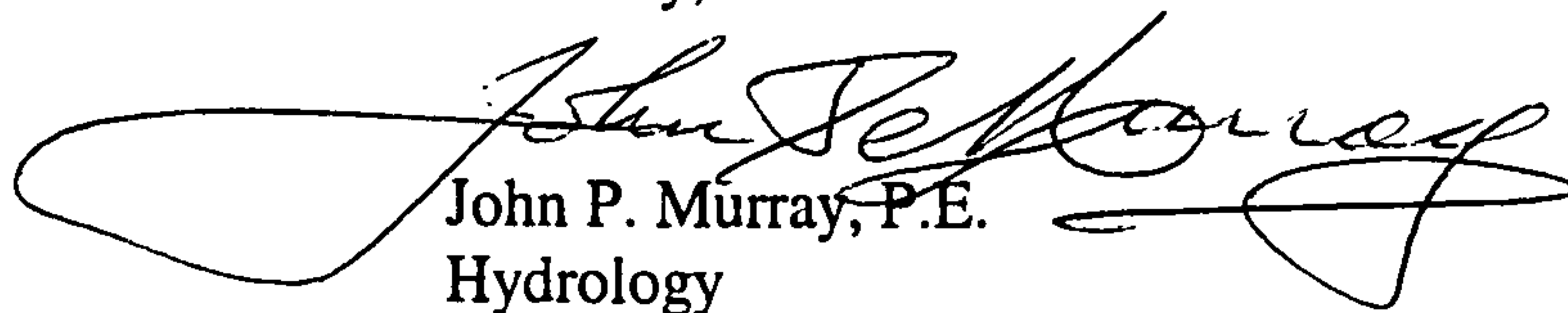
***RE: PNM - GAS COMPANY OF NEW MEXICO (G15-D30). GRADING AND DRAINAGE
PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP (2nd REV)
DATED JANUARY 7, 2000. (Rev) DATED NOVEMBER 23, 1999. Originally Stamped
September 2, 1999.***

Dear Mr. Wilson:

Based on the information provided on your latest submittal of January 10, 2000, the above referenced project is approved for Building Permit.

Be advised, however, that the PNM Gas Company plan must be closely coordinated with the PNM Electric Company plan by Brasher & Lorenz if these projects by PNM's sister companies are to succeed.

Sincerely,


John P. Murray, P.E.
Hydrology

c:

WR
File
Brasher & Lorenz

DRAINAGE INFORMATION SHEET

APPLICANT'S NAME: PNM GAS SVCS. ZONE ATLAS/DRNG. FILE #: G-15 / D030

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: _____

CITY ADDRESS: 4625 EDITH NE

ENGINEERING FIRM: WILSON SURVEYING CONTACT: JOHN C. WILSON, P.E.

ADDRESS: 809 COPPER AV. NW PHONE: 243-6434

OWNER: PNM CONTACT: _____

ADDRESS: 4625 EDITH NE PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

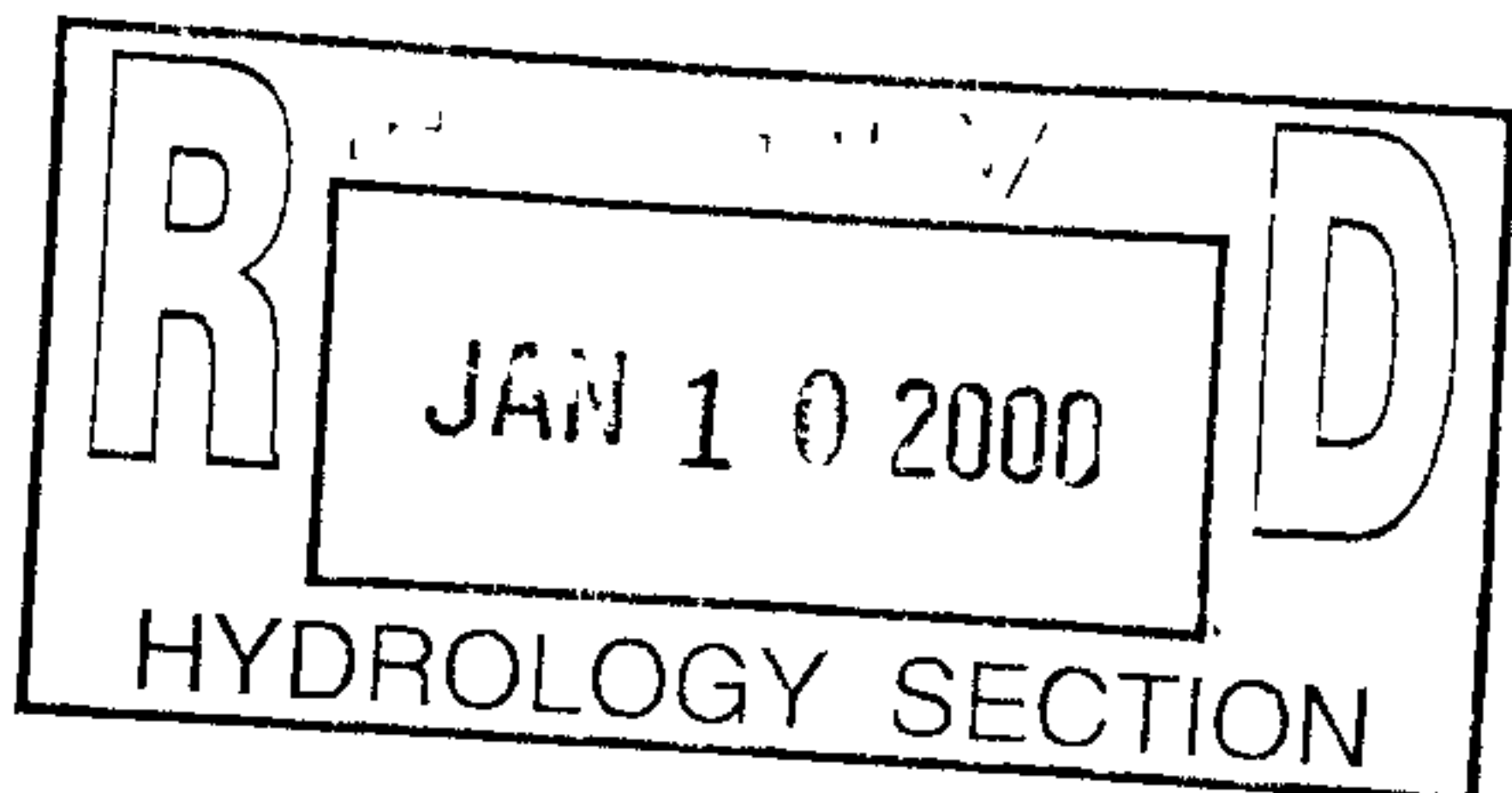
ADDRESS: _____ PHONE: _____

- 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: 1/10/00
 BY: John C. Wilson





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

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 345-2010

August 19, 1994

*Mr. Bernie Montoya
Hydrology Division
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87199*

Re: Gas Company Facility

Dear Mr. Montoya:

Attached please find a copy of the revised Grading Plan for the referenced project. The revision entails removing an existing paved area and placing a small classroom.

If we can be of further assistance please contact our office.

Sincerely,

MARK GOODWIN AND ASSOCIATES, P.A.


Mark Goodwin, P.E.

DMG:smr

Attachment

AUG 30 1994

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GAS CO OF NM. ZONE ATLAS/DRNG. FILE #: G-15-1030
DRB #: _____ EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: TRACT 23 MAP 33 MRGLD. Projected Section 4, T.10N, R.3E.
CITY ADDRESS: 4625 EDITH BLVD NE ALB NM 87107
ENGINEERING FIRM: D MARK Goodwin & Assoc. CONTACT: MARK Goodwin
ADDRESS: P.O. Box 90606 ALB 87199 PHONE: 395 2010
OWNER: GAS CO OF NM. CONTACT: _____
ADDRESS: 4625 EDITH NE 87107 PHONE: 761 7761
ARCHITECT: JOHN VANDER B1 CONTACT: JOHN VANDER B1
ADDRESS: 1408 Los Arboles NW. PHONE: 344 1494
SURVEYOR: ✓ CONTACT: /
ADDRESS: _____ PHONE: _____
CONTRACTOR: FIRST AMERICAN CONST. CONTACT: HANK MARSFIELD
ADDRESS: 1905 SAN MATEO NE PHONE: 265 0065

TYPE OF SUBMITTAL:

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

CHECK TYPE OF APPROVAL SOUGHT:

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☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D. APPROVAL
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
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☐ 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
☐ OTHER _____ (SPECIFY)

PRE-DESIGN MEETING:

☐ YES
☐ NO
☐ COPY PROVIDED

DATE SUBMITTED: 8-30-94BY: John Vander B1

AUG 30 1994



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 7, 1994

Mark Goodwin
D. Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: DRAINAGE PLAN FOR GAS COMPANY FACILITY TRAINING CENTER (G15-D30)
ENGINEER'S STAMP DATED 8/19/94.

Dear Mr. Goodwin:

Based on the information provided on your August 30, 1994 submittal, the above referenced site is approved for Building Permit.

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

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/3730

c: Andrew Garcia
File



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 25, 1994

Mark Goodwin
D. Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: DRAINAGE PLAN FOR AN ADDITION TO THE GAS COMPANY OF NEW MEXICO
(G15-D30) ENGINEER'S STAMP DATED 4/13/94.

Dear Mr. Goodwin:

Based on the information provided on your April 18, 1994 submittal, the above referenced site is approved for Building Permit.

Please be advised that no further development will be allowed until the Master Drainage Plan has been resubmitted and approved.

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

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/3730

c: Andrew Garcia
Tim Cynova
Jim Lewis
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Gas Company Facility ZONE ATLAS/DRNG, FILE#: G-15 D30
LEGAL DESCRIPTION: Tract 23, MAP 33 MEGCO
CITY ADDRESS: Edith and Griegos
ENGINEERING FIRM: D. Mark Goodwin & Assoc., PA CONTACT: Mark Goodwin
ADDRESS: P.O. Box 90606 PHONE: 828-2200
OWNER: Gas Company of New Mexico CONTACT: Tim Cynova
ADDRESS: 4625 Edith, NE PHONE: 761-7775
ARCHITECT: SLNB, Inc. CONTACT: Jim Lewis
ADDRESS: 1620 Central, SE PHONE: 247-1529
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING

☒ YES
☐ NO
☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. _____
EPC NO. _____
PROJ. NO. _____

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT
☒ DRAINAGE PLAN
☐ CONCEPTUAL GRADING AND
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☒ GRADING PLAN
☐ EROSION PLAN
☐ ENGINEER'S CERTIFICATION

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☐ PRELIMINARY PLAT APPROVAL
☐ SITE DEVELOPMENT PLAN
APPROVAL
☐ FINAL PLAT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ FOUNDATION PERMIT-APPROVAL
☐ CERTIFICATION OF OCCUPANCY
APPROVAL
☐ ROUGH GRADING PERMIT
APPROVAL
☐ GRADING/PAVING PERMIT
APPROVAL
☐ OTHER _____ SPECIFY

DATE SUBMITTED: 8/19/94

BY: Mark Goodwin
Mark Goodwin, PE

AUG 30 1994



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 23, 1992

Mark Goodwin
D. Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: MASTER DRAIN PLAN FOR GAS COMPANY FACILITY @ EDITH & GRIEGOS
(G15-D30) ENGINEER'S STAMP DATED 9/21/92.

Dear Mr. Goodwin:

Based on the information provided on your September 21, 1992 submittal, the above referenced site is approved for Rough Grading.

Please be advised that no field grading will be allowed contingent on verification from the Gas Co. of progress with negotiations with the A.T. & S.F. Railroad and the private property owners to the west for allowing a license agreement and easement across the properties.

The Concept for the Master Plan is also acceptable and all back up calculations. If for some reason negotiations are not favorable, new concept will need to be evaluated.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

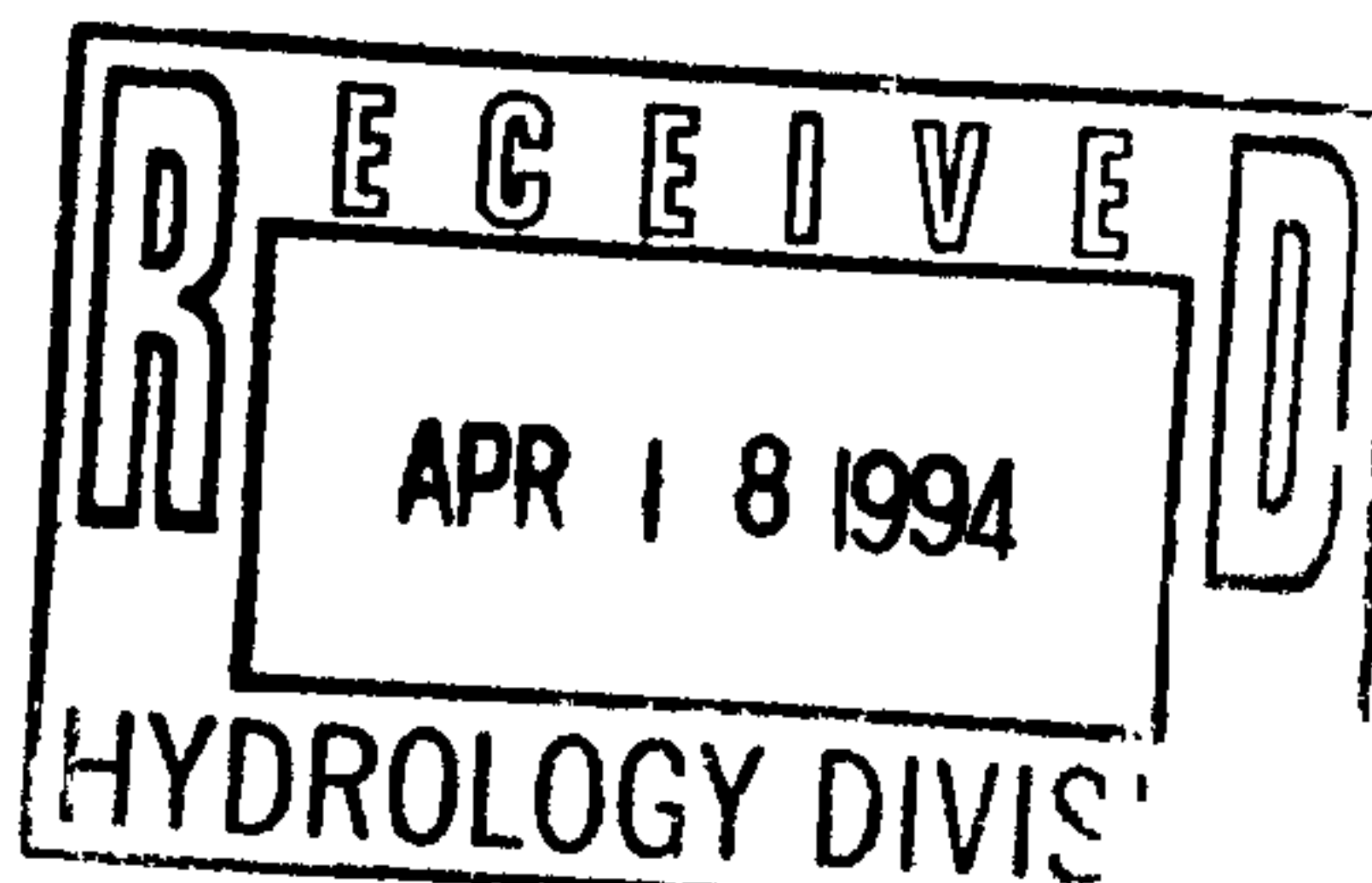
Bernie J. Montoya
Bernie J. Montoya, CE
Engineering Assistant

BJM/d1/WPHYD/3730

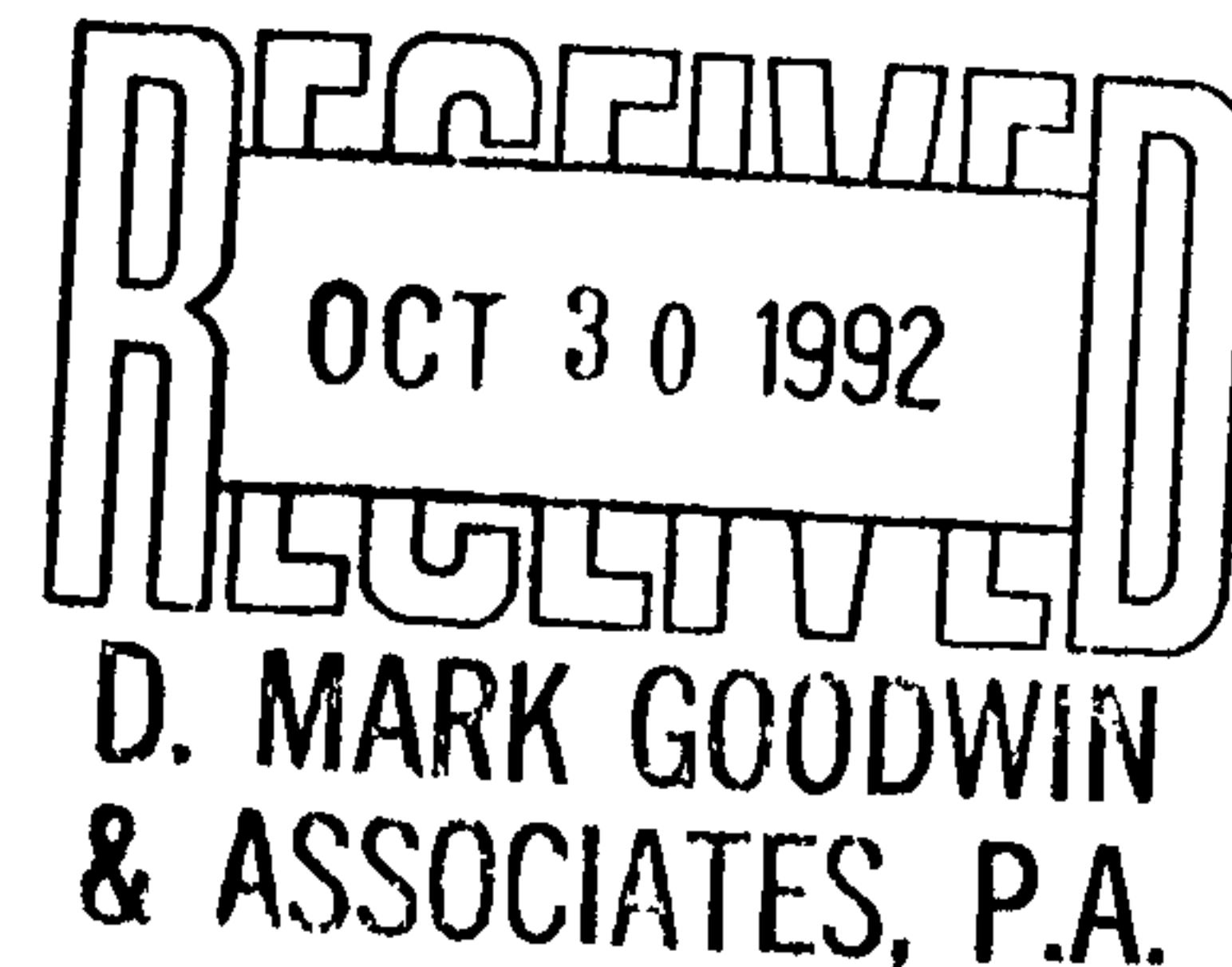
xc: Alan Martinez
File

10/30/92

xc: Jim Lewis, SENB
Tim Cynova, Gas Co.



PUBLIC WORKS DEPARTMENT



GAS COMPANY OF NEW MEXICO

February 1, 1993

Harry Eastham
The Atchison, Topeka and
Santa Fe Railway Company
7412 Jefferson St. NE
Albuquerque, New Mexico 87109

Dear Mr. Eastham;

The Gas Company of New Mexico, is in the preliminary stages of a master drainage plan for the property located at 4625 Edith NE.

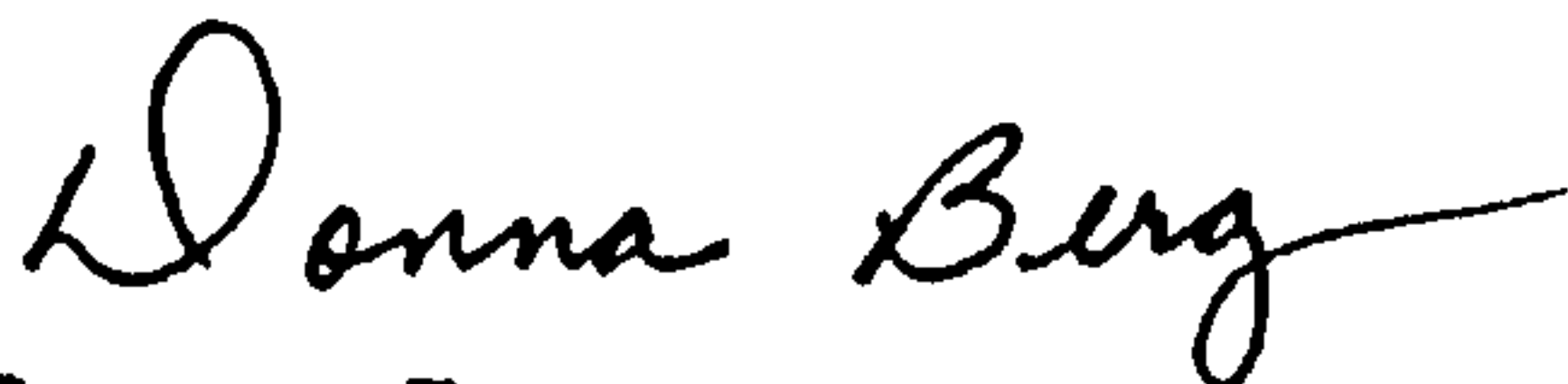
One of the proposals is to construct a ponding area in the southwest corner of the property with a 4" overflow pipe to run under AT&SF tracks and related property, to an existing storm drain.

Would AT&SF allow such a crossing? If so, what does AT&SF require in the way of paperwork and specification to build this type of crossing?

We would like your comments by March 1, 1993, if possible. If you would like to sent along construction specification at the same time, it would be appreciated. Please mail your comments and related material to my attention at MS-GS66 at the address shown below.

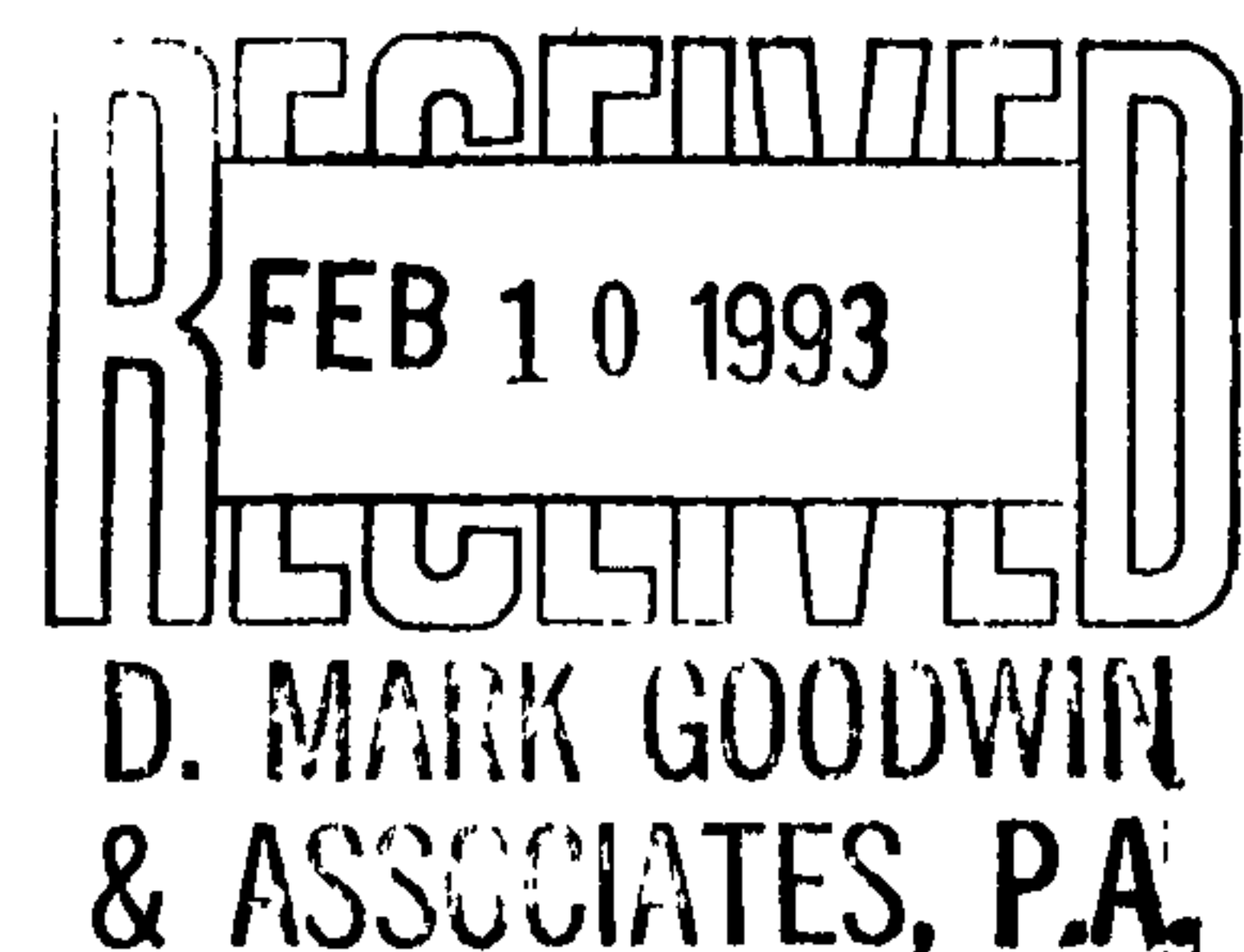
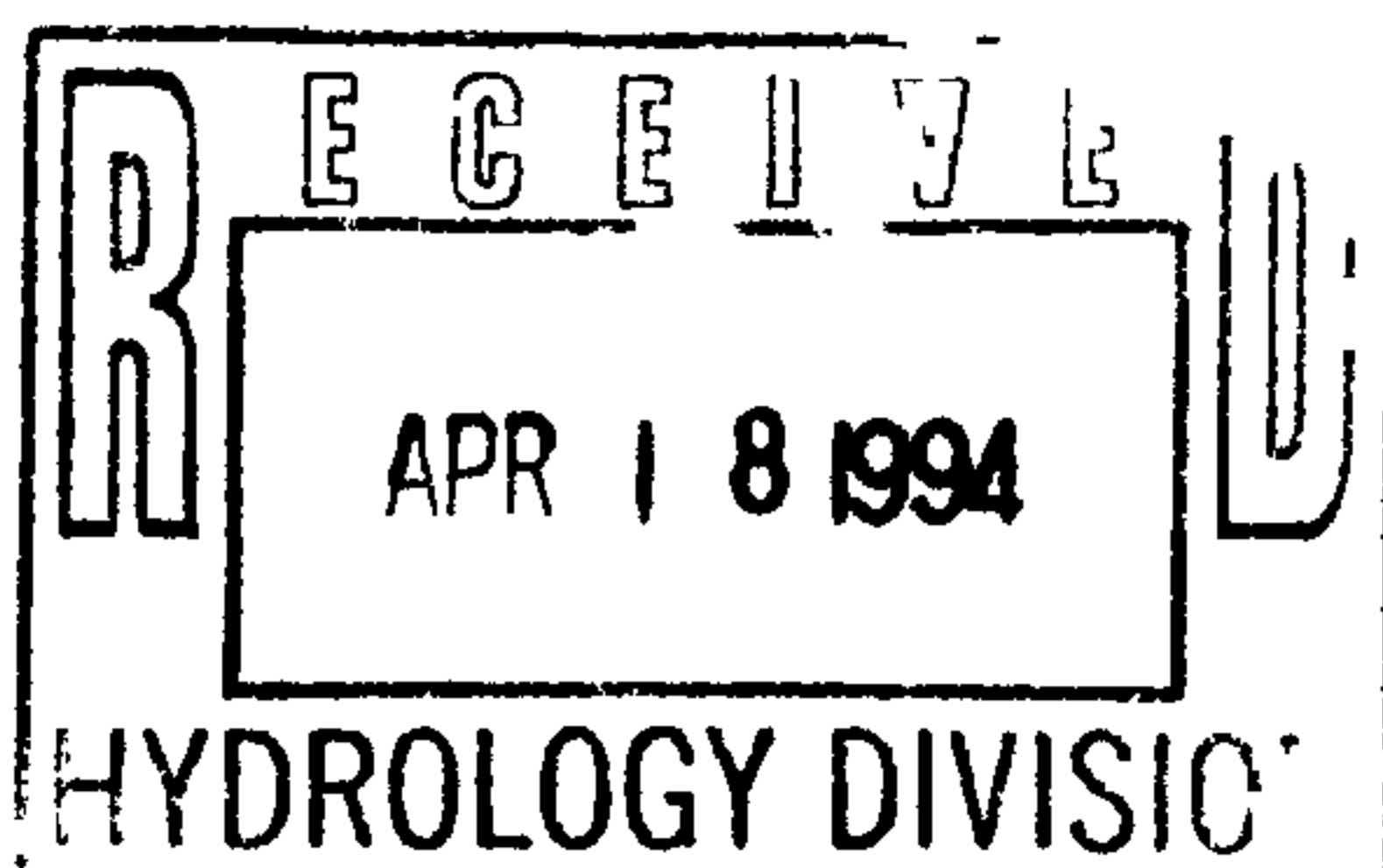
If you have any questions, please call me at 761-7778.

Sincerely,



Donna Berg
Drafting Supervisor

cc: Tim Cynova
Joe Rice



DRAINAGE INFORMATION SHEET

PROJECT TITLE: Gas Company Facility ZONE ATLAS/DRNG, FILE#: G-15 / 11 30
LEGAL DESCRIPTION: Tract 23, MAP 33 MEGCO
CITY ADDRESS: Edith and Griegos
ENGINEERING FIRM: D. Mark Goodwin & Assoc., PA CONTACT: Mark Goodwin
ADDRESS: P.O. Box 90606 PHONE: 828-2200
OWNER: Gas Company of New Mexico CONTACT: Tim Cynova
ADDRESS: 4625 Edith, NE PHONE: 761-7775
ARCHITECT: SLNB, Inc. CONTACT: Jim Lewis
ADDRESS: 1620 Central, SE PHONE: 247-1529
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING

☒ YES
☐ NO
☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. _____
EPC NO. _____
PROJ. NO. _____

TYPE OF SUBMITTAL:

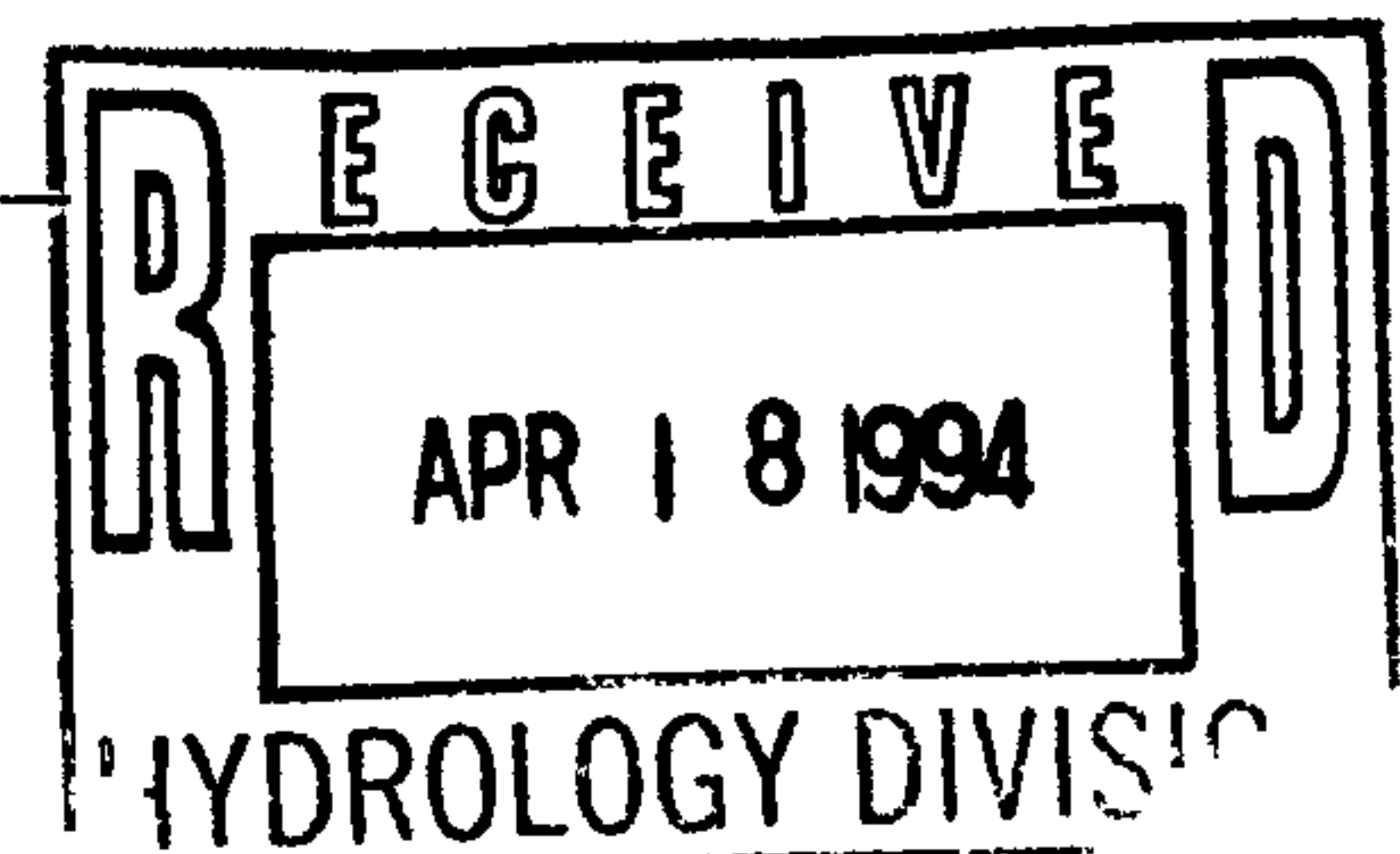
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☐ CERTIFICATION OF OCCUPANCY
APPROVAL
☐ ROUGH GRADING PERMIT
APPROVAL
☐ GRADING/PAVING PERMIT
APPROVAL
☐ OTHER _____ SPECIFY

DATE SUBMITTED: 4/13/94

BY: Mark Goodwin
Mark Goodwin, PE





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 23, 1992

Mark Goodwin
D. Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: MASTER DRAIN PLAN FOR GAS COMPANY FACILITY @ EDITH & GRIEGOS
(G15-D30) ENGINEER'S STAMP DATED 9/21/92.

Dear Mr. Goodwin:

Based on the information provided on your September 21, 1992 submittal, the above referenced site is approved for Rough Grading.

Please be advised that no field grading will be allowed contingent on verification from the Gas Co. of progress with negotiations with the A.T. & S.F. Railroad and the private property owners to the west for allowing a license agreement and easement across the properties.

The Concept for the Master Plan is also acceptable and all back up calculations. If for some reason negotiations are not favorable, new concept will need to be evaluated.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Assistant

BJM/d1/WPHYD/3730

xc: Alan Martinez
File

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Gas Company Facility ZONE ATLAS/DRNG, FILE#: G-15 D30

LEGAL DESCRIPTION: Tract 23, MAP 33 MEGCD

CITY ADDRESS: Edith and Griegos

ENGINEERING FIRM: D. Mark Goodwin & Assoc., PA CONTACT: Mark Goodwin

ADDRESS: P.O. Box 90606

PHONE: 828-2200

OWNER: Gas Company of New Mexico

CONTACT: Tim Cynova

ADDRESS: 4625 Edith, NE

PHONE: 761-7775

ARCHITECT: SLNB, Inc.

CONTACT: Jim Lewis

ADDRESS: 1620 Central, SE

PHONE: 247-1529

SURVEYOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

CONTRACTOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

PRE-DESIGN MEETING

X YES

___ NO

___ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

___ DRAINAGE PLAN

X CONCEPTUAL GRADING AND
DRAINAGE PLAN

___ GRADING PLAN

___ EROSION PLAN

___ ENGINEER'S CERTIFICATION

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___ SITE DEVELOPMENT PLAN
APPROVAL

___ FINAL PLAT APPROVAL

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___ FOUNDATION PERMIT APPROVAL

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APPROVAL

X ROUGH GRADING PERMIT
APPROVAL

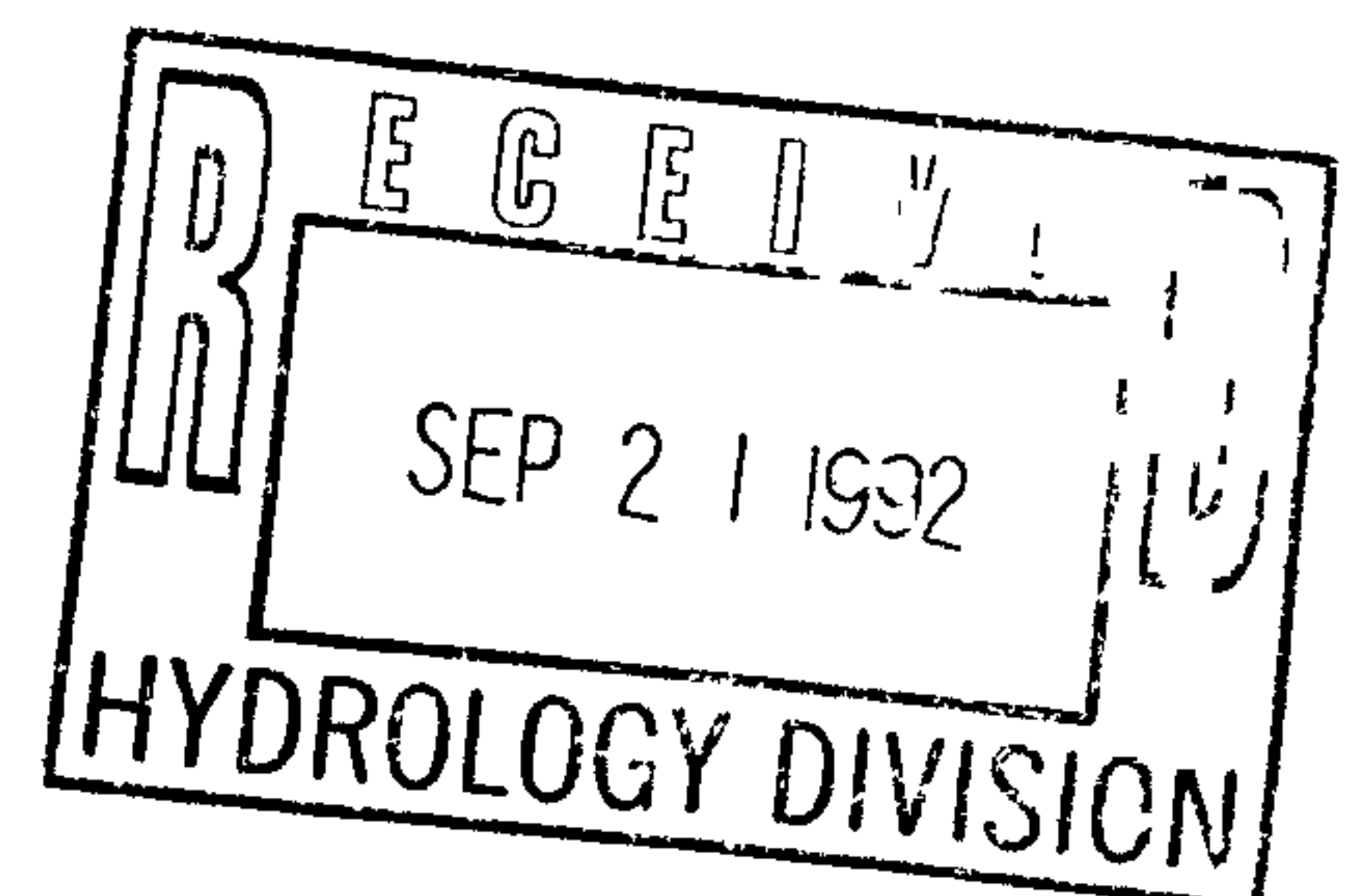
___ GRADING/PAVING PERMIT
APPROVAL

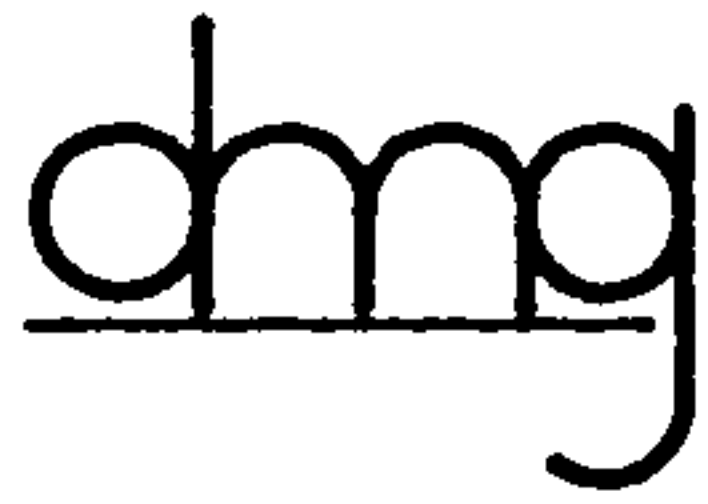
___ OTHER _____ SPECIFY

DATE SUBMITTED: September 18, 1992

BY: _____

Mark Goodwin
Mark Goodwin, PE





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

P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200

September 18, 1992

Mr. Gilbert Aldaz
CITY OF ALBUQUERQUE
Hydrology Department
P.O. Box 1293
Albuquerque, NM 87103

Re: Gas Company Facility, Edith and Griegos, G-15

Dear Mr. Aldaz:

Attached, please find the Master Drainage Plan for the referenced site. The overall plan with this site is to shift some of the smaller buildings around due to the right-of-way acquisitions, and to construct an NGV Station adjacent to Edith. Very little new impervious area is to be added by the shifting or new construction since these will occur primarily in existing impervious areas. The increase in the peak rate of runoff will be 1 cfs; from 50 cfs to 51 cfs. The net increase in volume will be 4800 cubic feet.

While the site does not lie within a 100 Year Flood Zone, it does contribute flows to a Flood Zone to the south. Minimal off-site flows exist and would be prevented from entering this site by the construction of SAD 216. The Gas Company is going to absorb a \$40,000.00 drainage assessment due to this situation.

A storm drain will be placed in Griegos Road north of this site as part of SAD 216, but it was not designed to accept any of this site's flows nor does the topography lend itself to this.

In short, this site does not have a lot of options. At your request, we are pursuing the possibility of crossing beneath the railroad to the west to tie into an existing City system. We have shown how this would work with this plan. However, two problems exist with this option:

1. We need a license from the A.T.&S.F. Railroad which can take over a year; and
2. There may be private owned properties between the railroad and the system.

We fully intend to pursue this, but in the interim we are requesting to be allowed to construct a retention pond under the Mayor's Emergency Rule. We would pond all existing flows as well as new flows. The design presented with this plan meets all of the criteria outlined by this rule, including using a 10-day design storm. In addition, the removal of 2.45 Ac.-Ft. of runoff from the Flood Zone to the south is a substantial benefit to property owners downstream.

Mr. Gilbert Aldaz
September 17, 1992
Page 2

We are requesting approval of this master plan at this time since plans to develop the NGV Station portion of this master plan will shortly follow. We are attaching all of the pertinent calculations to aid you in your review and we hope that you concur.

Please call us if any additional information is needed.

Sincerely,

D. MARK GOODWIN AND ASSOCIATES, P.A.

A handwritten signature in cursive script, appearing to read "Mark Goodwin".

Mark Goodwin, P.E.

DMG:smr

Attachments



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

JOB Gas Co. Facility
SUBJECT Drainage
JOB NO. _____ SHEET 1 OF _____
BY MG DATE 9/15/02
CHECKED _____ DATE _____

This project entails site modifications and improvements in an existing developed industrial site at Griggs & Edith. Site area = 19 Ac. of which an estimated portion is currently occupied i.e. bldgs., parking, etc.

The primary change will be the addition of a new NGV Station bldg. & containers. Other future changes will be new circulation roads, a walk & moving of 2 existing bldgs.

We will maintain the existing drainage facilities and make the necessary adjustments to the existing drainage facilities to accommodate the future changes.

The site area is situated on a slight slope and the drainage is towards the south. The drainage behind the proposed new facility off-site flows from Comanche and Edith will be intercepted by the Edith watercourse.

There is to be a new storm drain in the area of the new NGV station and containers. Griggs is 10 feet higher than the low end of the site.

Since there are no facilities downstream nor are any proposed, this site needs to be fortified. Since there will be an increase in volume, it needs appear that some retention ponding is in order.



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

JOB GAS CO.
SUBJECT Drainage
JOB NO. _____ SHEET 2 OF _____
BY N.T. DATE 9/15/92
CHECKED _____ DATE _____

To calculate the existing and future rates of runoff & determine the area of the site will be comprised of three areas. One area west of all future improvements that will be developed - it will not change & it currently drains into a nearby depression adjacent to the parking lot on the south.

Area O.A. A = 7.20 AC. = 0.0113 sq. mi.
Area O.A. B = 10.80 AC. = 0.0169 sq. mi.

$P_1 = 2.20$ in.

$P_2 = 2.66$ in.

$P_3 = 1.90$ in.

EXISTING CONDITIONS

LAND USAGE - O.A. A

Treatment A = 3%

Treatment B = 9%

Treatment C = 0

Treatment D = 88%

Land Use - O.A. B

Treatment A = 5%

Treatment B = 39%

Treatment C = 0

Treatment D = 56%



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

JOB 200
SUBJECT Plan 100
JOB NO. _____ SHEET 2 OF _____
BY MD DATE 9/15/02
CHECKED _____ DATE _____

Time of Concentration D.A. - A

Flow is best characterized as sheet flow with no obstructions

$$T_c = \frac{L}{V} \quad V = K\sqrt{S} = 1\sqrt{1.3} = 1.14$$

$$94.81 \frac{13}{1000} = .013$$

$$T_c = \frac{1000}{1.14} = 877.5 \text{ sec.} = 14.6 \text{ min.} \text{ USE } 15 \text{ min.}$$

$$T_p = 2/3 T_c = 10 \text{ min.} = 0.1667 \text{ Hrs.}$$

$$T_c = .0078 (L^{0.77} / S^{0.385}) = 8.48 \text{ min}$$

Time of Concentration D.A. - B

Flow is again classified as sheet flow

$$V = 1\sqrt{.87} = 0.93$$

$$T_c = \frac{1500}{.93} = 1613 \text{ sec.} = 26.9 \text{ min.} \text{ USE } 27 \text{ min.}$$

$$T_p = 18 \text{ min.} = 0.300 \text{ Hrs.}$$

Per the attached Hydro Run:

$$\text{D.A. - A} \quad Q(100) = 27 \text{ cfs}$$

$$\text{Vol.} = 1.09 \text{ Ac-Ft}$$

$$\text{D.A. - B} \quad Q(100) = 23 \text{ cfs}$$

$$\text{Vol.} = 1.25 \text{ Ac-Ft}$$

$$V = \frac{Q}{A}$$



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

JOB Gas Co.

SUBJECT Drainage

JOB NO. _____

SHEET 4 OF _____

BY _____

DATE 9/15/92

CHECKED _____

DATE _____

FUTURE CONDITIONS

LAND USE - D.A. A

This area basically will remain as is with some new roadway areas:

Treatment A = 2%

Treatment B = 8%

Treatment C = 0

Treatment D = 90%

$$.144(1.56) = .225$$

$$.576(2.28) = 1.31$$

$$6.48(4.74) = 30.43$$

$$31.97 \text{ cfs}$$

$$.144(.31)(5.05) = .225$$

$$.576(.45)(5.05) = 1.31$$

$$6.48(.48)(93)(5.05) = 30.43$$

$$7.20 \quad 31.97 \text{ cfs}$$

LAND USE - D.A. B

This area changes with the addition of the new station and a nurses bldg.

Treatment A = 6%

Treatment B = 29%

Treatment C = 0

Treatment D = 65%

$$2.02$$

Floor patterns will not change, so we will use the same T's as existing.

Per Attached XMO runs:

D.A. - A

$$Q(\text{in}) = 27 \text{ cfs}$$

$$\text{Vol.} = 1.10 \text{ AC-FT}$$

D.A. - B

$$Q(\text{in}) = 24 \text{ cfs}$$

$$\text{Vol.} = 1.35 \text{ AC-FT}$$



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

JOB 745 CO.
SUBJECT TRAINING
JOB NO. _____ SHEET 5 OF _____
BY MG DATE 9/15/92
CHECKED _____ DATE _____

The total increase $Q = 1 \text{ cfs}$

The total volume increase = $0.11 \text{ AC-Ft} = 4800 \text{ cu ft}$

ZONE 2

Based upon a meeting w/ Headquarters, we will attempt to gain an outlet beneath the railroad to an existing sewer at the Barre Co. This is going to take some time for permits, etc. So we will apply for a "temporary" retention pond. For the emergency file, we have to design for the 10 day volume:

$$V(10 \text{ day}) = V_{360} + \frac{A_D(P_{10} - P_0)}{12}$$

$$A_D = .9(7.20) + .65(10.8) = 13.50 \text{ AC}$$

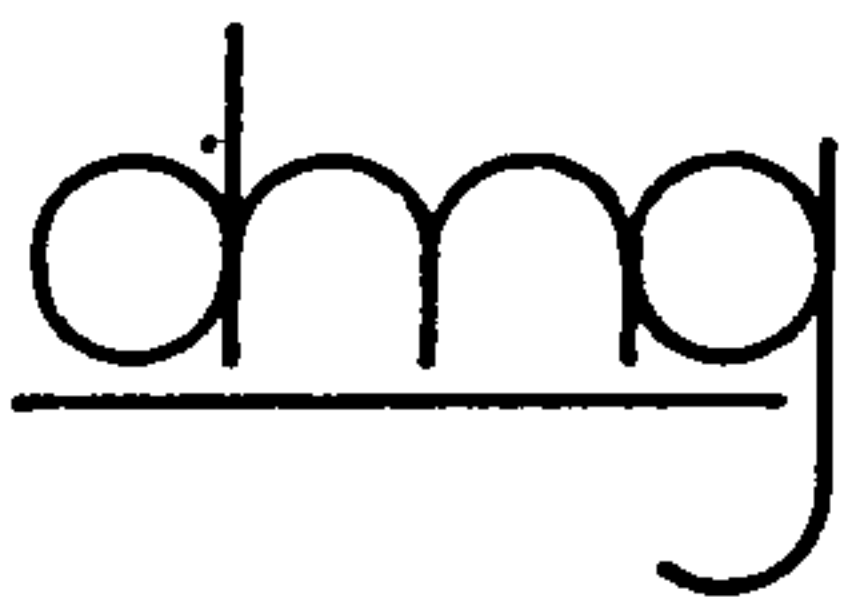
$$P_{10} = 3.95 \text{ in } \sqrt{2000}$$

$$P_0 = 2.20 \text{ in } \sqrt{360}$$

$$A + B = (6.48 + 7.02)$$

$$V(10) = 2.45 \text{ AC-Ft} + \frac{(13.50 \text{ AC})(3.95 - 2.20)}{12} = 4.4 \text{ AC-Ft}$$

When outlet is constructed, pond size can be reduced to 2.45 AC-Ft. To drain in 24 Hrs. $Q = 1.2 \text{ cfs}$, we will place a 18" outlet. A structure w/ check control will be utilized & emergency spillway for $Q = 51 \text{ cfs}$.



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

PROJECT Gas Co
SUBJECT DRAINAGE
BY MG DATE 9/17/92
CHECKED _____ DATE _____
SHEET 6 OF _____

We now need to size slots for standpipe:

$$Q_p = 1.2 \text{ cfs}$$

using a 1" drilled hole, as an orifice
with a max. head = 4.5'

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

$$C = 0.8$$

$$A = 0.006 \text{ ft}^2$$

$$Q = 0.8(0.006)\sqrt{2(32.2)(4.5)} = 0.09 \text{ cfs}$$

We need 14 holes

We need to size emergency spillway as a
weir for $Q = 51 \text{ cfs}$

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

$$H = 0.75'$$

$$C = 2.9$$

$$L = \frac{51}{2.9(0.75)^{3/2}} = 27'$$

START TIME=0.0
***** Hydrograph For Drainage Area A - Existing Conditions
***** Gas Co. Facility Masterplan
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.90 IN RAIN SIX=2.20 IN
RAIN DAY=2.60 IN DT=0.03333 HR
COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01130 SQ MI
PER A=3.00 PER B=9.00 PER C=0.0 PER D=88.0
TP=0.1667 HR MASS RAINFALL=-1
PRINT HYD ID=1 CODE=1
FINISH

AHYND PROGRAM (AHYND392) - AMAFCA VERSION OF HYND - MARCH, 1992
 RUN DATE (MON/DAY/YR) = 09/15/1992
 START TIME (HR:MIN:SEC) = 11:41:15 USER NO. = Z_GOODWN.S92
 INPUT FILE = GAS1.DAT

START TIME=0.0

***** Hydrograph For Drainage Area A - Existing Conditions

***** Gas Co. Facility Masterplan

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=1.90 IN RAIN SIX=2.20 IN

RAIN DAY=2.60 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2

- PEAK AT 1.40 HR.

DT = .033330 HOURS			END TIME = 5.999400 HOURS			
.0000	.0013	.0027	.0041	.0055	.0069	.0084
.0099	.0115	.0131	.0147	.0164	.0181	.0199
.0217	.0236	.0256	.0276	.0296	.0318	.0340
.0363	.0387	.0412	.0438	.0465	.0493	.0523
.0554	.0587	.0622	.0675	.0731	.0791	.0920
.1208	.1651	.2289	.3159	.4302	.5759	.7574
.9790	1.1846	1.2704	1.3429	1.4074	1.4661	1.5201
1.5702	1.6171	1.6610	1.7023	1.7413	1.7781	1.8130
1.8460	1.8774	1.9071	1.9353	1.9621	1.9681	1.9736
1.9789	1.9839	1.9887	1.9932	1.9976	2.0018	2.0059
2.0098	2.0136	2.0172	2.0208	2.0242	2.0275	2.0308
2.0339	2.0370	2.0400	2.0430	2.0458	2.0486	2.0514
2.0540	2.0567	2.0592	2.0617	2.0642	2.0666	2.0690
2.0714	2.0737	2.0759	2.0781	2.0803	2.0825	2.0846
2.0867	2.0887	2.0907	2.0927	2.0947	2.0966	2.0985
2.1004	2.1023	2.1041	2.1059	2.1077	2.1095	2.1112
2.1130	2.1147	2.1164	2.1180	2.1197	2.1213	2.1229
2.1245	2.1261	2.1277	2.1292	2.1307	2.1322	2.1337
2.1352	2.1367	2.1382	2.1396	2.1410	2.1425	2.1439
2.1452	2.1466	2.1480	2.1494	2.1507	2.1520	2.1533
2.1547	2.1560	2.1572	2.1585	2.1598	2.1611	2.1623
2.1635	2.1648	2.1660	2.1672	2.1684	2.1696	2.1708
2.1720	2.1731	2.1743	2.1754	2.1766	2.1777	2.1789
2.1800	2.1811	2.1822	2.1833	2.1844	2.1855	2.1866
2.1876	2.1887	2.1897	2.1908	2.1918	2.1929	2.1939
2.1949	2.1960	2.1970	2.1980	2.1990	2.2000	

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01130 SQ MI

PER A=3.00 PER B=9.00 PER C=0.0 PER D=88.0

TP=0.1667 HR MASS RAINFALL=-1

K = .090852HR TP = .166700HR K/TP RATIO = .545000 SHAPE
 CONSTANT, N = 7.106420
 UNIT PEAK = 31.393 CFS UNIT VOLUME = .9999 B = 526.28
 P60 = 1.9000
 P10 = .60000 SQ MI P100 = 1.1000000000000000 P1000 = 1.4000000000000000

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
= .033330

K = .173581HR TP = .166700HR K/TP RATIO = 1.041278 SHAPE
CONSTANT, N = 3.390295
UNIT PEAK = 2.5308 CFS UNIT VOLUME = .9946 B = 312.23
P60 = 1.9000
AREA = .001356 SQ MI IA = .53750 INCHES INF = 1.35500 I
NCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
= .033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.80435 INCHES = 1.0874 ACRE-FOOT
PEAK DISCHARGE RATE = 26.94 CFS AT 1.533 HOURS BASIN AREA =
.0113 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 11:41:16

START TIME=0.0
***** Hydrograph For Drainage Area B - Existing Conditions
***** Gas Co. Facility Masterplan
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.90 IN RAIN SIX=2.20 IN
RAIN DAY=2.60 IN DT=0.03333 HR
COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01690 SQ MI
PER A=5.00 PER B=39.0 PER C=0.0 PER D=56.0
TP=0.3000 HR MASS RAINFALL=-1
PRINT HYD ID=1 CODE=1
FINISH

AHYMO PROGRAM (AHYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
 RUN DATE (MON/DAY/YR) = 09/15/1992
 START TIME (HR:MIN:SEC) = 11:45:55 USER NO.= Z_GOODWN.S92
 INPUT FILE = GAS2.DAT

START TIME=0.0

***** Hydrograph For Drainage Area B - Existing Conditions

***** Gas Co. Facility Masterplan

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=1.90 IN RAIN SIX=2.20 IN

RAIN DAY=2.60 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2

- PEAK AT 1.40 HR.

DT = .033330 HOURS			END TIME = 5.999400 HOURS			
.0000	.0013	.0027	.0041	.0055	.0069	.0084
.0099	.0115	.0131	.0147	.0164	.0181	.0199
.0217	.0236	.0256	.0276	.0296	.0318	.0340
.0363	.0387	.0412	.0438	.0465	.0493	.0523
.0554	.0587	.0622	.0675	.0731	.0791	.0920
.1208	.1651	.2289	.3159	.4302	.5759	.7574
.9790	1.1846	1.2704	1.3429	1.4074	1.4661	1.5201
1.5702	1.6171	1.6610	1.7023	1.7413	1.7781	1.8130
1.8460	1.8774	1.9071	1.9353	1.9621	1.9681	1.9736
1.9789	1.9839	1.9887	1.9932	1.9976	2.0018	2.0059
2.0098	2.0136	2.0172	2.0208	2.0242	2.0275	2.0308
2.0339	2.0370	2.0400	2.0430	2.0458	2.0486	2.0514
2.0540	2.0567	2.0592	2.0617	2.0642	2.0666	2.0690
2.0714	2.0737	2.0759	2.0781	2.0803	2.0825	2.0846
2.0867	2.0887	2.0907	2.0927	2.0947	2.0966	2.0985
2.1004	2.1023	2.1041	2.1059	2.1077	2.1095	2.1112
2.1130	2.1147	2.1164	2.1180	2.1197	2.1213	2.1229
2.1245	2.1261	2.1277	2.1292	2.1307	2.1322	2.1337
2.1352	2.1367	2.1382	2.1396	2.1410	2.1425	2.1439
2.1452	2.1466	2.1480	2.1494	2.1507	2.1520	2.1533
2.1547	2.1560	2.1572	2.1585	2.1598	2.1611	2.1623
2.1635	2.1648	2.1660	2.1672	2.1684	2.1696	2.1708
2.1720	2.1731	2.1743	2.1754	2.1766	2.1777	2.1789
2.1800	2.1811	2.1822	2.1833	2.1844	2.1855	2.1866
2.1876	2.1887	2.1897	2.1908	2.1918	2.1929	2.1939
2.1949	2.1960	2.1970	2.1980	2.1990	2.2000	

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01690 SQ MI

PER A=5.00 PER B=39.0 PER C=0.0 PER D=56.0

TP=0.3000 HR MASS RAINFALL=-1

R = .163500HR TP = .300000HR R/TP RATIO = .545000 SHAPE
 CONSTANT, H = 7.106420
 UNIT PEAK = 16.602 CFS UNIT VOLUME = .09993 R = 526.28
 PEO = 1.0000
 DELTA = .000000

11:45:56
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
= .033330

K = .302512HR TP = .300000HR K/TP RATIO = 1.008372 SHAPE
CONSTANT, N = 3.500746
UNIT PEAK = 7.9412 CFS UNIT VOLUME = .9982 B = 320.38
P60 = 1.9000
AREA = .007436 SQ MI IA = .51705 INCHES INF = 1.29773 I
NCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
= .033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.38748 INCHES = 1.2506 ACRE-FEET
PEAK DISCHARGE RATE = 22.62 CFS AT 1.667 HOURS BASIN AREA =
.0169 SQ. MI.

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 11:45:56

START TIME=0.0
***** Hydrograph For Drainage Area A - Future Conditions
***** Gas Co. Facility Masterplan
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.90 IN RAIN SIX=2.20 IN
RAIN DAY=2.60 IN DT=0.03333 HR
COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01130 SQ MI
PER A=2.00 PER B=8.00 PER C=0.0 PER D=90.0
TI=0.1667 HR MASS RAINFALL=-1
PRINT HYD ID=1 CODE=1
FINISH

ANYMO PROGRAM (ANYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
 RUN DATE (MON/DAY/YR) = 09/15/1992
 START TIME (HR:MIN:SEC) = 11:50:31 USER NO. = Z_GOODWN.S92
 INPUT FILE = GAS3.DAT

START TIME=0.0

***** Hydrograph For Drainage Area A - Future Conditions

***** Gas Co. Facility Masterplan

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=1.90 IN RAIN SIX=2.20 IN

RAIN DAY=2.60 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2

-- PEAK AT 1.40 HR.

DT = .033330 HOURS			END TIME = 5.999400 HOURS			
.0000	.0013	.0027	.0041	.0055	.0069	.0084
.0099	.0115	.0131	.0147	.0164	.0181	.0199
.0217	.0236	.0256	.0276	.0296	.0318	.0340
.0363	.0387	.0412	.0438	.0465	.0493	.0523
.0554	.0587	.0622	.0675	.0731	.0791	.0920
.1208	.1651	.2289	.3159	.4302	.5759	.7574
.9790	1.1846	1.2704	1.3429	1.4074	1.4661	1.5201
1.5702	1.6171	1.6610	1.7023	1.7413	1.7781	1.8130
1.8460	1.8774	1.9071	1.9353	1.9621	1.9681	1.9736
1.9789	1.9839	1.9887	1.9932	1.9976	2.0018	2.0059
2.0098	2.0136	2.0172	2.0208	2.0242	2.0275	2.0308
2.0339	2.0370	2.0400	2.0430	2.0458	2.0486	2.0514
2.0540	2.0567	2.0592	2.0617	2.0642	2.0666	2.0690
2.0714	2.0737	2.0759	2.0781	2.0803	2.0825	2.0846
2.0867	2.0887	2.0907	2.0927	2.0947	2.0966	2.0985
2.1004	2.1023	2.1041	2.1059	2.1077	2.1095	2.1112
2.1130	2.1147	2.1164	2.1180	2.1197	2.1213	2.1229
2.1245	2.1261	2.1277	2.1292	2.1307	2.1322	2.1337
2.1352	2.1367	2.1382	2.1396	2.1410	2.1425	2.1439
2.1452	2.1466	2.1480	2.1494	2.1507	2.1520	2.1533
2.1547	2.1560	2.1572	2.1585	2.1598	2.1611	2.1623
2.1635	2.1648	2.1660	2.1672	2.1684	2.1696	2.1708
2.1720	2.1731	2.1743	2.1754	2.1766	2.1777	2.1789
2.1800	2.1811	2.1822	2.1833	2.1844	2.1855	2.1866
2.1876	2.1887	2.1897	2.1908	2.1918	2.1929	2.1939
2.1949	2.1960	2.1970	2.1980	2.1990	2.2000	

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01130 SQ MI

PER A=2.00 PER B=8.00 PER C=0.0 PER D=90.0

TP=0.1667 HR MASS RAINFALL=-1

K = .090852HR TP = .166700HR K/TP RATIO = .545000 SHAPE
 CONSTANT, N = 7.106420
 UNIT PEAK = 32.107 CFS UNIT VOLUME = .9999 B = 526.28
 P60 = 1.9000
 APTA = .010179 SQ MI IA = .15000 HOURS INF = .01000 1

Runoff Computed by Initial Abstraction/Infiltration Number Method - DT
= .033330

K = .171570HR TP = .166700HR K/TP Ratio = 1.029212 SHAPE
CONSTANT, N = 3.429764
UNIT PEAK = 2.1364 CFS UNIT VOLUME = .9934 B = 315.17
P60 = 1.9000
AREA = .001130 SQ MI IA = .53000 INCHES INF = 1.33400 I
NCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
= .033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.83259 INCHES = 1.1044 ACRE-FEET
PEAK DISCHARGE RATE = 27.33 CFS AT 1.533 HOURS BASIN AREA =
.0113 SQ. MI.

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 11:50:31

START TIME=0.0
***** Hydrograph For Drainage Area B - Future Conditions
***** Gas Co. Facility Masterplan
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.90 IN RAIN SIX=2.20 IN
RAIN DAY=2.60 IN DT=0.03333 HR
COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01690 SQ MI
PER A=6.00 PER B=29.0 PER C=0.0 PER D=65.0
TP=0.3000 HR MASS RAINFALL=-1
PRINT HYD ID=1 CODE=1
FINISH

AHYMO PROGRAM (AHYMO392) - AMAFCA VERSION OF HYMO - MARCH, 1992
 RUN DATE (MON/DAY/YR) = 09/15/1992
 START TIME (HR:MIN:SEC) = 11:53:31 USER NO.= Z_GOODWN.S92
 INPUT FILE = GAS4.DAT

START TIME=0.0

***** Hydrograph For Drainage Area B - Future Conditions

***** Gas Co. Facility Masterplan

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=1.90 IN RAIN SIX=2.20 IN

RAIN DAY=2.60 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2
 - PEAK AT 1.40 HR.

DT = .033330 HOURS			END TIME = 5.999400 HOURS			
.0000	.0013	.0027	.0041	.0055	.0069	.0084
.0099	.0115	.0131	.0147	.0164	.0181	.0199
.0217	.0236	.0256	.0276	.0296	.0318	.0340
.0363	.0387	.0412	.0438	.0465	.0493	.0523
.0554	.0587	.0622	.0675	.0731	.0791	.0920
.1208	.1651	.2289	.3159	.4302	.5759	.7574
.9790	1.1846	1.2704	1.3429	1.4074	1.4661	1.5201
1.5702	1.6171	1.6610	1.7023	1.7413	1.7781	1.8130
1.8460	1.8774	1.9071	1.9353	1.9621	1.9681	1.9736
1.9789	1.9839	1.9887	1.9932	1.9976	2.0018	2.0059
2.0098	2.0136	2.0172	2.0208	2.0242	2.0275	2.0308
2.0339	2.0370	2.0400	2.0430	2.0458	2.0486	2.0514
2.0540	2.0567	2.0592	2.0617	2.0642	2.0666	2.0690
2.0714	2.0737	2.0759	2.0781	2.0803	2.0825	2.0846
2.0867	2.0887	2.0907	2.0927	2.0947	2.0966	2.0985
2.1004	2.1023	2.1041	2.1059	2.1077	2.1095	2.1112
2.1130	2.1147	2.1164	2.1180	2.1197	2.1213	2.1229
2.1245	2.1261	2.1277	2.1292	2.1307	2.1322	2.1337
2.1352	2.1367	2.1382	2.1396	2.1410	2.1425	2.1439
2.1452	2.1466	2.1480	2.1494	2.1507	2.1520	2.1533
2.1547	2.1560	2.1572	2.1585	2.1598	2.1611	2.1623
2.1635	2.1648	2.1660	2.1672	2.1684	2.1696	2.1708
2.1720	2.1731	2.1743	2.1754	2.1766	2.1777	2.1789
2.1800	2.1811	2.1822	2.1833	2.1844	2.1855	2.1866
2.1876	2.1887	2.1897	2.1908	2.1918	2.1929	2.1939
2.1949	2.1960	2.1970	2.1980	2.1990	2.2000	

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.01690 SQ MI

PER A=6.00 PER B=29.0 PER C=0.0 PER D=65.0

TP=0.3000 HR MASS RAINFALL=-1

K = .163500HR TP = .300000HR K/TP RATIO = .545000 SHAPE
 CONSTANT, H = 7.106420
 UNIT PEAK = 19.270 CFS UNIT VOLUME = .9994 B = 526.28
 P50 = 1.9000
 P10 = 1.0000 P20 = 1.0000 P30 = 1.0000 P40 = 1.0000 P50 = 1.0000 P60 = 1.0000 P70 = 1.0000 P80 = 1.0000 P90 = 1.0000

* RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
= .033330

K = .306695HR H' = .300000HR K/IP RATIO = 1.022318 SHAPE
CONSTANT, N = 3.452847
UNIT PEAK = 6.2477 CFS UNIT VOLUME = .9977 R = 316.87
P60 = 1.9000
AREA = .005915 SQ MI IA = .52571 INCHES INF = 1.32200 1
NCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT
= .033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.50060 INCHES = 1.3525 ACRE-FEET
PEAK DISCHARGE RATE = 24.39 CFS AT 1.667 HOURS BASIN AREA =
.0169 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 11:53:32



City of Albuquerque

October 19, 1999

John C. Wilson, P.E.
Wilson Surveying Co.
809 Copper Ave. NW
Albuquerque, New Mexico

RE: Grading and Drainage Plan for PNM Gas Co. of New Mexico (G15/D30) Submitted for Building Permit Approval, Engineer's Stamp Dated 9/2/99.

Dear Mr. Wilson:

Mark Burak, P.E., who is under contract with the City of Albuquerque, reviewed the above referenced plan. His comments are attached. These comments must be addressed prior to Building Permit release.

Please follow the D.P.M. checklist regarding drainage requirements and drainage submittals. Basically, the plan must include all existing and developed hydrologic and hydraulic calculations for all on-site and off-site basins. The plan must identify how the site drains in the interim and in the ultimate condition.

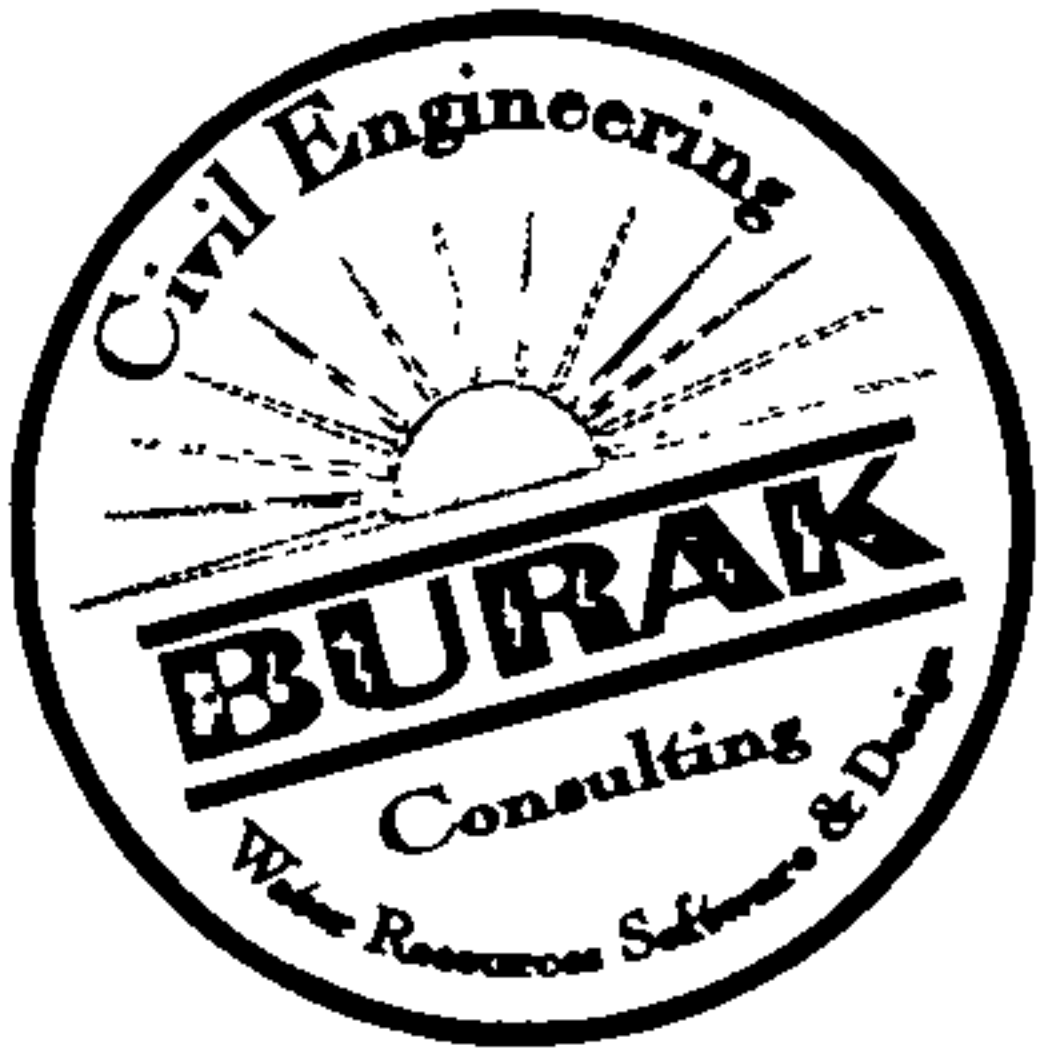
If you have any questions, please call me at 924-3982.

Sincerely,

Susan M. Calongne, P.E.
City/County Floodplain Administrator

Attachment

C: Tim Cynova, PNM
File_



Mark H. Burak, P.E.

1512 Sagebrush Trail SE Albuquerque, NM 87123

(505) 296-0461

235-2256 cell

296-0467 fax

October 18, 1999

Fred J. Aguirre, P.E., City Engineer
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87102

- **Case No:** G15-D030
- **Submittal dated:** September 7, 1999 by Wilson Surveying
- **Project Title:** PNM
- **Location:** 4625 Edith NE
- **Approval Type:** Building Permit
- **Note:** *This submittal concerns the construction of commercial building and parking area on a 19.3-acre parcel. It is intended to discharge directly to the southwest corner of the property to discharge onto other PNM property.*

Dear Mr. Aguirre:

Based on the submittal stamped September 2, 1999, the proposed grading and drainage plan appears to be insufficient and cannot be approved for building permit at this time. The following clarifications will need to be addressed in subsequent submittals:

- No grading was shown on the plan. Spot elevations must be included for parking facilities.
- No drainage calculations were included on the plan, see DPM 22.2.
- No offsite drainage basin was included on the plan. Offsite flows and street capacities and/or drainage facility capacities must be indicated. It is well documented that Griegos Road experiences extensive flooding along the northern property boundary of this project. PNM has an ongoing maintenance program and should be noted on the plan.
- No Flood Map was included on the plan.
- Additional comments may be likely upon subsequent review.

If you have any questions regarding this letter or need any clarification concerning the above project, please feel free to call me at 296-0461.

Sincerely,

Mark H. Burak, P.E.
Hydrology Consultant

DRAINAGE INFORMATION SHEET

APPLICANT'S NAME: JEFF HAWKINS ZONE ATLAS/DRNG. FILE #: G15/D030
 DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: LOT 23 B Block 0 OUTLOOK RANCH

CITY ADDRESS: 4625 Edith Blvd NE

ENGINEERING FIRM: WILSON SURVEYING CO CONTACT: John Wilson

ADDRESS: 809 Copper Ave NW PHONE: 934 8483

OWNER: PNM CONTACT: Tim Cynova

ADDRESS: 4625 Edith Blvd NE PHONE: 241 7775

ARCHITECT: FMSM CONTACT: Jerrey Francis

ADDRESS: 809 Copper Ave NW PHONE: 766 6610

SURVEYOR: Wilson Surveying Co CONTACT: John Wilson

ADDRESS: 809 Copper Ave NW PHONE: 934 8483

CONTRACTOR: CQSM, Inc. CONTACT: Jeff Hawkins

ADDRESS: Po Box 8266 Albany 97198 PHONE: 244 1861 328 7716 (m)

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

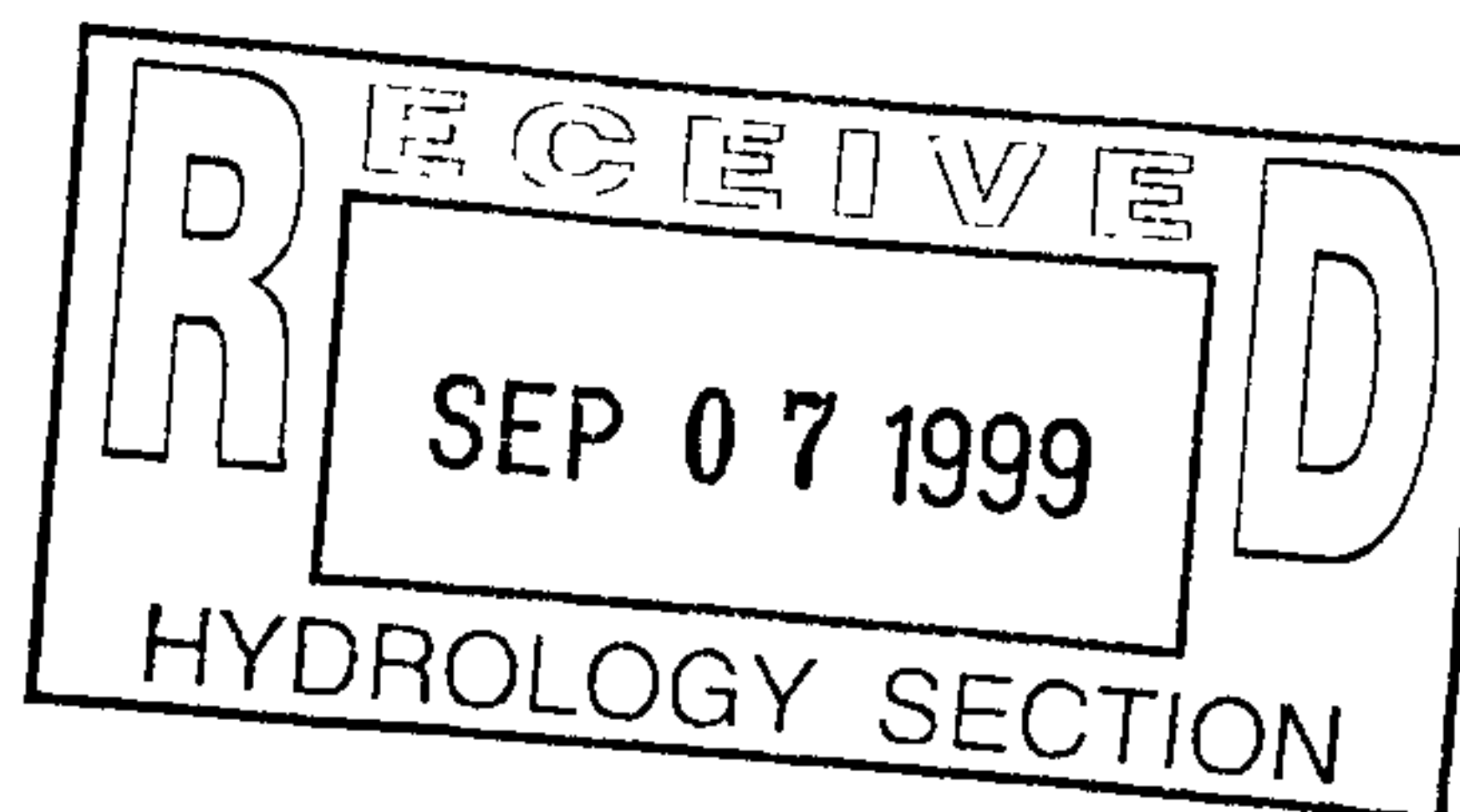
CHECK TYPE OF APPROVAL SOUGHT:

- ☐ 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: 9-7-99

BY: Jeff Hawkins

Revised 02/98





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 30, 1999

John C. Wilson, P.E.
Wilson Surveying Co.
809 Copper Ave., NW
Albuquerque, NM 87102

**RE: PNM - GAS COMPANY OF NEW MEXICO (G15-D30). GRADING AND DRAINAGE
PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP (Rev) DATED
NOVEMBER 23, 1999. Originally Stamped September 2, 1999.**

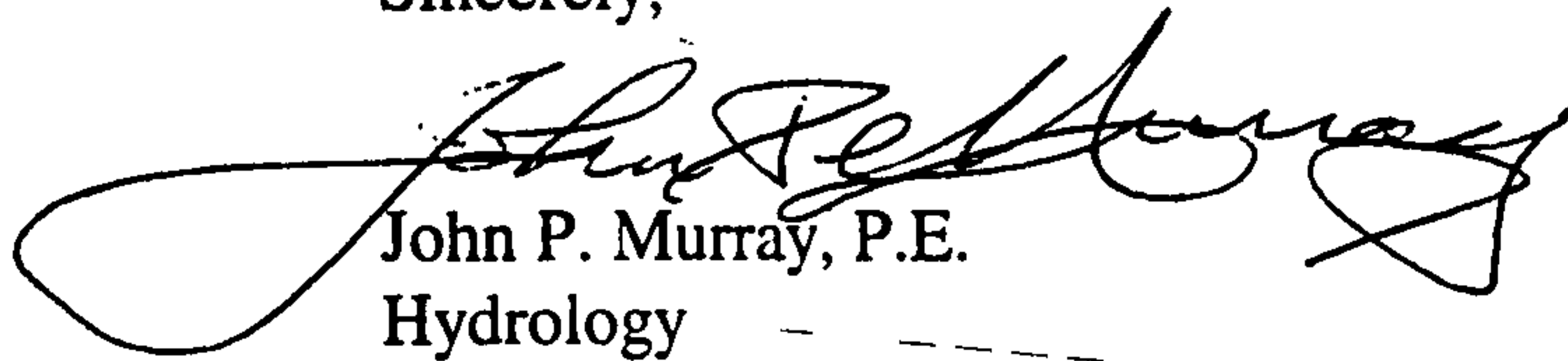
Dear Mr. Wilson:

Based on the information provided on your November 23, 1999 submittal, City Hydrology has the following remaining comments:

The resubmittal fails to answer the comments in the City's letter of October 19, 1999, which included a copy of our Consultant's review. You may wish to schedule a meeting with the City/County Floodplain Administrator and myself to discuss these issues.

If we can be of further assistance, please feel free to contact Ms. Calongne at 924-3982 or me at 924-3984.

Sincerely,


John P. Murray, P.E.
Hydrology

c: WR
✓ File
Floodpl. Admin.

12/13
2PM-

Mr Wilson was
in. Discussed
his mtg w Fred &
Paul Buashaw (PNM
Elec).

John, would you review this
plan at your earliest convenience.

Mr.
11/30/99

DRAINAGE INFORMATION SHEET

APPLICANT'S NAME: PNM GAS SERVICES
by: JOHN C. WILSON ZONE ATLAS/DRNG. FILE #: G-15/1030

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: _____

CITY ADDRESS: 4625 EDITH BLVD. NE

ENGINEERING FIRM: WILSON SURV. CO. CONTACT: JOHN C. WILSON

ADDRESS: 809 COPPER AVE. NW PHONE: 243-6434

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

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

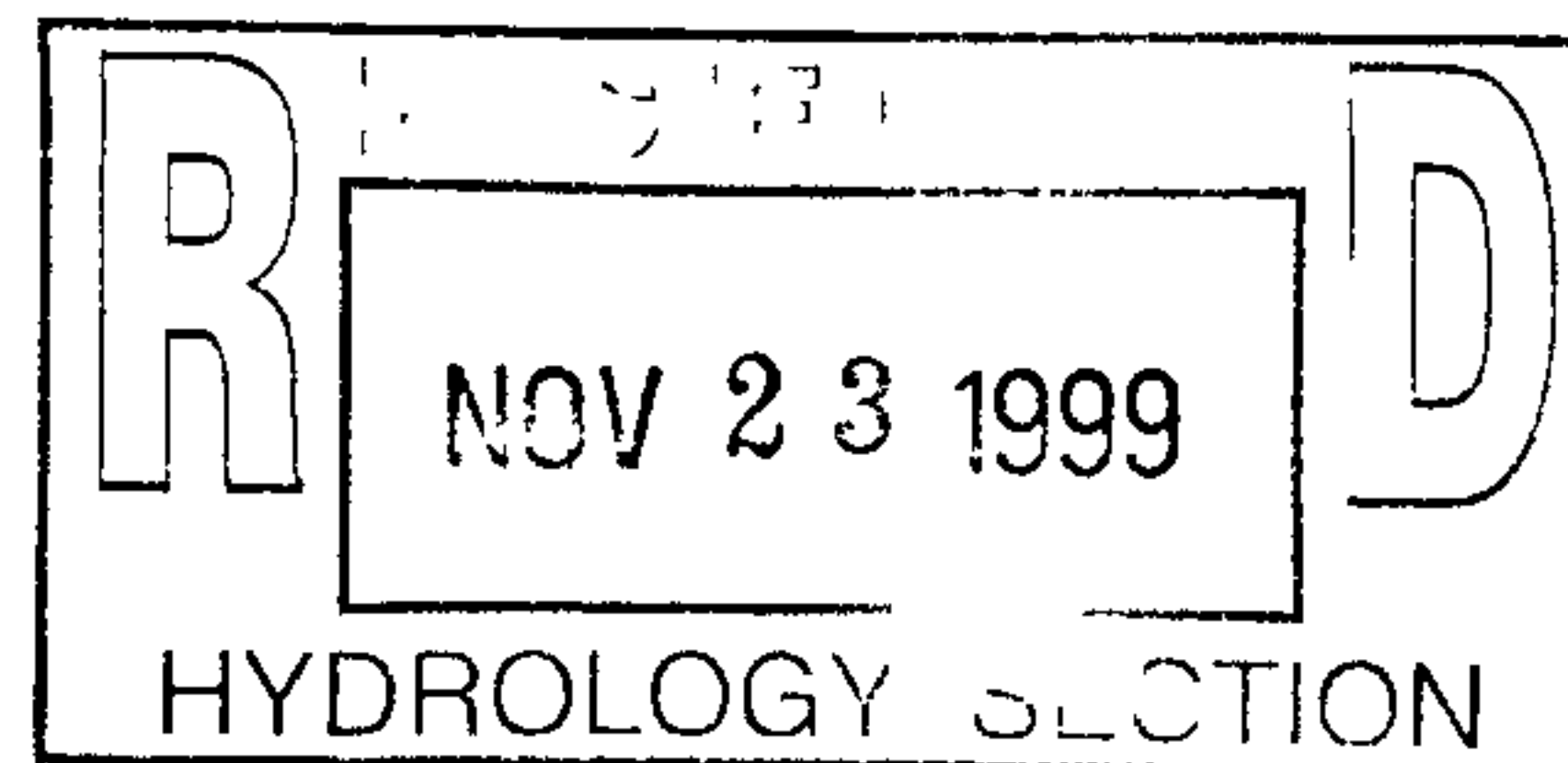
CHECK TYPE OF APPROVAL SOUGHT:

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- ☐ 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: 11/23/99

BY: John C. Wilson

Revised 02/98





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz
Mayor

UTILITY DEVELOPMENT DIVISION
HYDROLOGY SECTION
(505) 768-2650

January 19, 1988

Jeff Mortensen, P.E.
Tom Mann & Associates, Inc.
811 Dallas, NE
Albuquerque, New Mexico 87110

RE: GRADING/PAVING PLAN FOR GAS COMPANY OF NEW MEXICO
(G-15/D30) ENGINEER'S STAMP DATED JANUARY 8, 1988

Dear Mr. Mortensen:

Based on the information provided on your submittal of January 7, 1988,
the above referenced plan is approved for Grading/Paving permit.

Upon completion of the project, a field inspection will need to be
scheduled with Rick Duran at 764-1699 (the file number will need to be
provided).

If I can be of further assistance, please feel free to call me at
768-2650.

Cordially,

Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

PROJECT TITLE: GAS. Co. OF N.M. ZONE ATLAS/DRNG. FILE #: G-15/D30

LEGAL DESCRIPTION: UNPLATTED

CITY ADDRESS: 4625 EDITH BLVD NE

ENGINEERING FIRM: TOM MANN & ASSOC. CONTACT: J.G. MORTENSEN

ADDRESS: 811 DALLAS NE. PHONE: 265-5611

OWNER: GAS. Co. OF NM. CONTACT: SANDY BOWERS

PO Box 1692

ADDRESS: ALB.; NM. 87108 PHONE: 889-2559

ARCHITECT: N/A CONTACT: _____

ADDRESS: _____ PHONE: _____

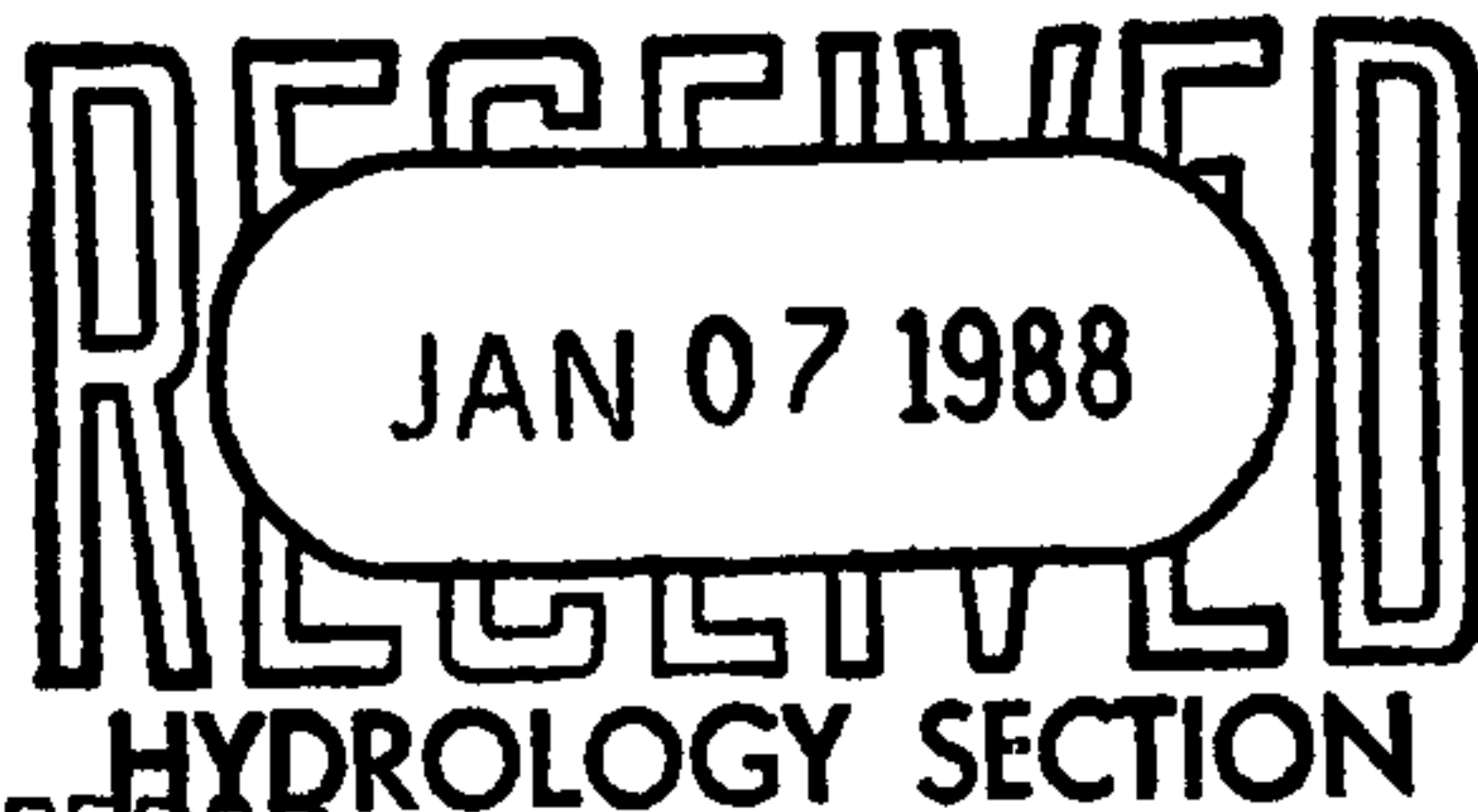
SURVEYOR: TOM MANN & ASSOC. CONTACT: J.G. MORTENSEN

ADDRESS: 811 DALLAS NE PHONE: 265-5611

CONTRACTOR: NOT SELECTED CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☒ YES☐ NO☒ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

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: 01-07-88BY: J.G. MORTENSEN

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: G15 DATE: 12/31/87
PLANNING DIVISION NOS: EPC: _____ DRB: _____
SUBJECT: GRS C. OF U A
STREET ADDRESS (IF KNOWN): _____
SUBDIVISION NAME: _____

APPROVAL REQUESTED:

_____ PRELIMINARY PLAT	_____ FINAL PLAT
_____ SITE DEVELOPMENT PLAN	_____ BUILDING PERMIT
<u>X</u> OTHER	_____ ROUGH GRADING
<u>PAJUE PUA</u>	

	WHO	REPRESENTING
ATTENDANCE:	<u>Jeff M...</u>	_____
	<u>Fred J...</u>	_____
	_____	_____

FINDINGS:

- DRAINAGE PLAN REQUIRED FOR SUBMITTAL
- FOUND "REVISION" (REVISION) IS NOT IN EX - G
- FOUND PLAN IS NOT CORRECT THE DR. (PLU)
- FOUND EX - G IS NOT CORRECT
- REVISIONS TO BE MADE

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: [Signature]
TITLE: _____
DATE: 12/31/87

SIGNED: [Signature]
TITLE: _____
DATE: 12-31-87

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz
Mayor

UTILITY DEVELOPMENT DIVISION
HYDROLOGY SECTION
(505) 768-2650

October 15, 1987

Victor Chavez
Chavez-Grievess/Consulting Engineers, Inc.
4600 Montgomery NE
Building C #101
Albuquerque, New Mexico 87109

RE: DRAINAGE PLAN FOR ADDITION TO GAS COMPANY OF NEW MEXICO
(G-15/D30) ENGINEER'S STAMP DATED SEPTEMBER 10, 1987

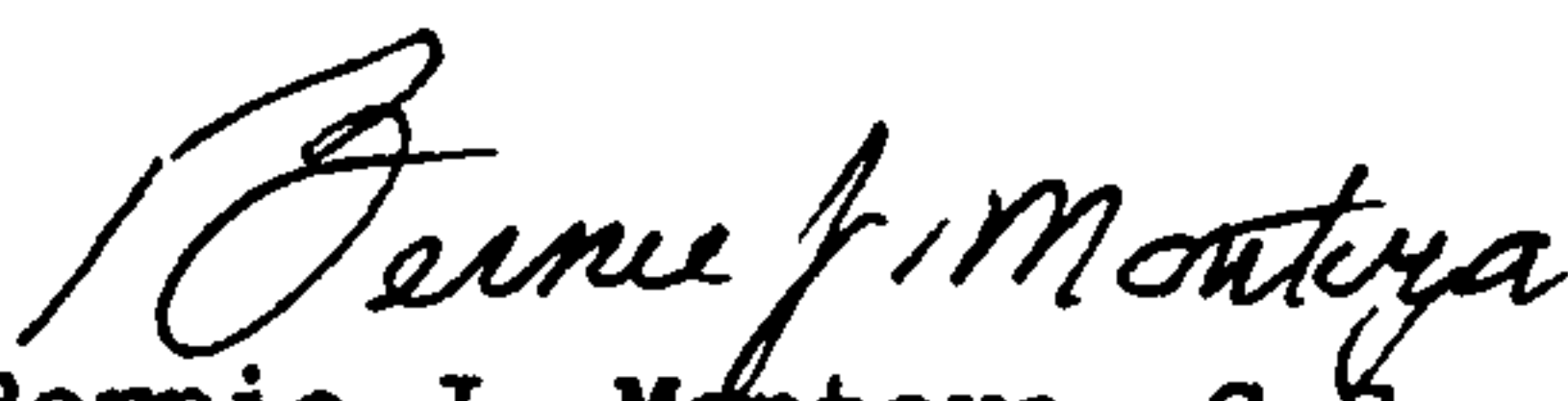
Dear Mr. Chavez:

Based on the information provided on your October 13, 1987 submittal, the above referenced drainage plan is approved for Building Permit.

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

If I can be of further assistance, please feel free to contact me at 768-2650.

Sincerely,


Bernie J. Montoya, C.E.
Engineering Assistant
Hydrology Section

BJM/lk

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Gas Co. Add'n ZONE ATLAS/DRNG.FILE #: G-15/D30
LEGAL DESCRIPTION: SW corner of Griegos & Edith

CITY ADDRESS: 4625 Edith Blvd NE
ENGINEERING FIRM: Chavez-Grievés CONTACT: Jackie McDowell

ADDRESS: 4600 C Montgomery PHONE: (505) 881-7376

OWNER: Gas Co. of NM CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: Paragon Resources, Inc. CONTACT: Ken Tawrey

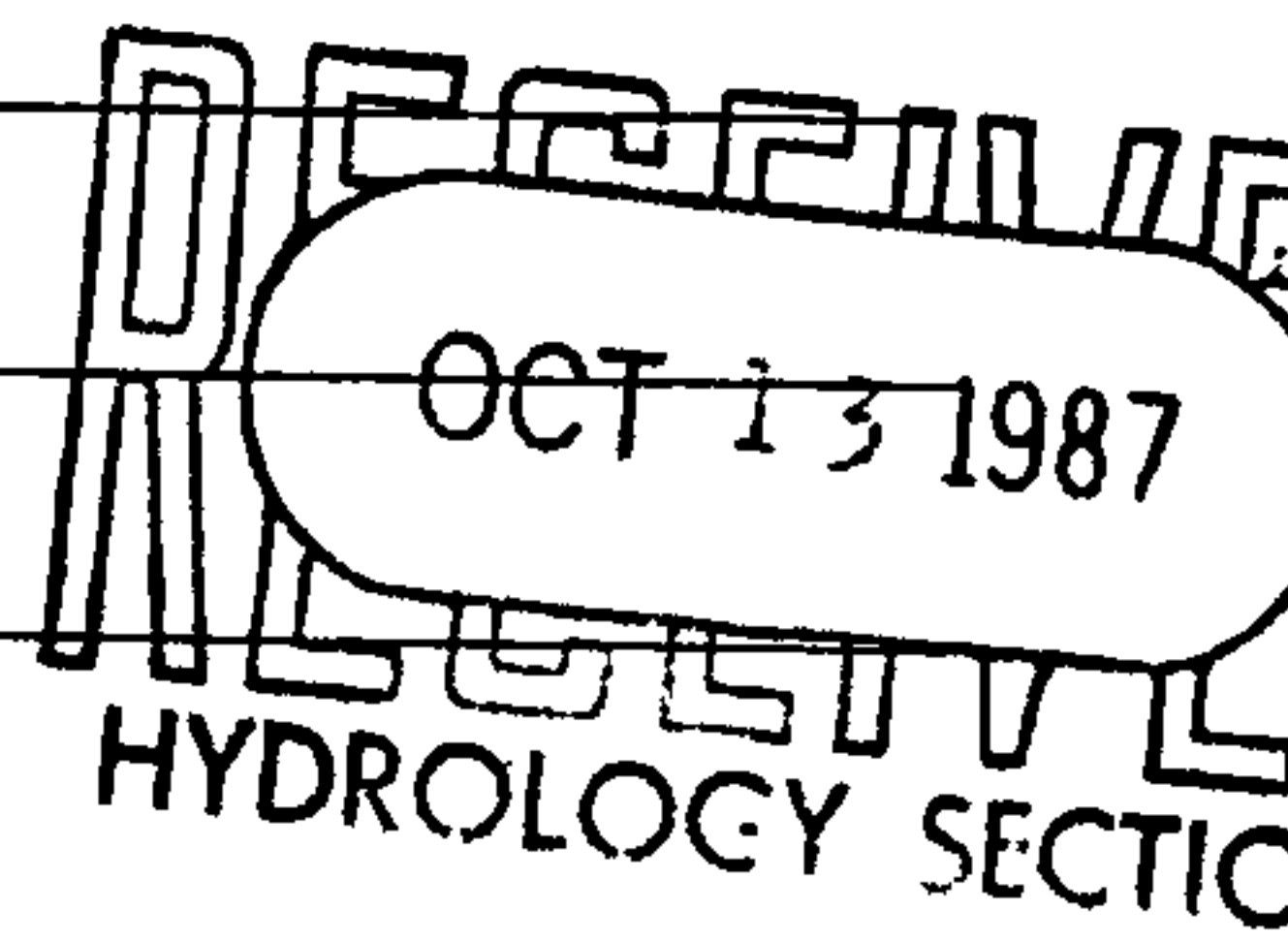
ADDRESS: 4500 Bogan PHONE: (505) 881-5328

SURVEYOR: N/A CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: N/A CONTACT: _____

ADDRESS: _____ PHONE: _____



PRE-DESIGN MEETING:

☒ YES
☐ NO

☒ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

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: 10/13/87
BY: Jackie S. McDowell



CHAVEZ—GRIEVES / CONSULTING ENGINEERS, INC.

4600 MONTGOMERY N.E., BUILDING C, #101
ALBUQUERQUE, NEW MEXICO 87109
(505) 881-7376

LETTER OF TRANSMITTAL

TO: City Hydrology Dept.
4th Floor City Hall
Attn: Barbara

DATE: 10/13/87
JOB NO. _____
RE: Gas Co Add'n

GENTLEMEN:

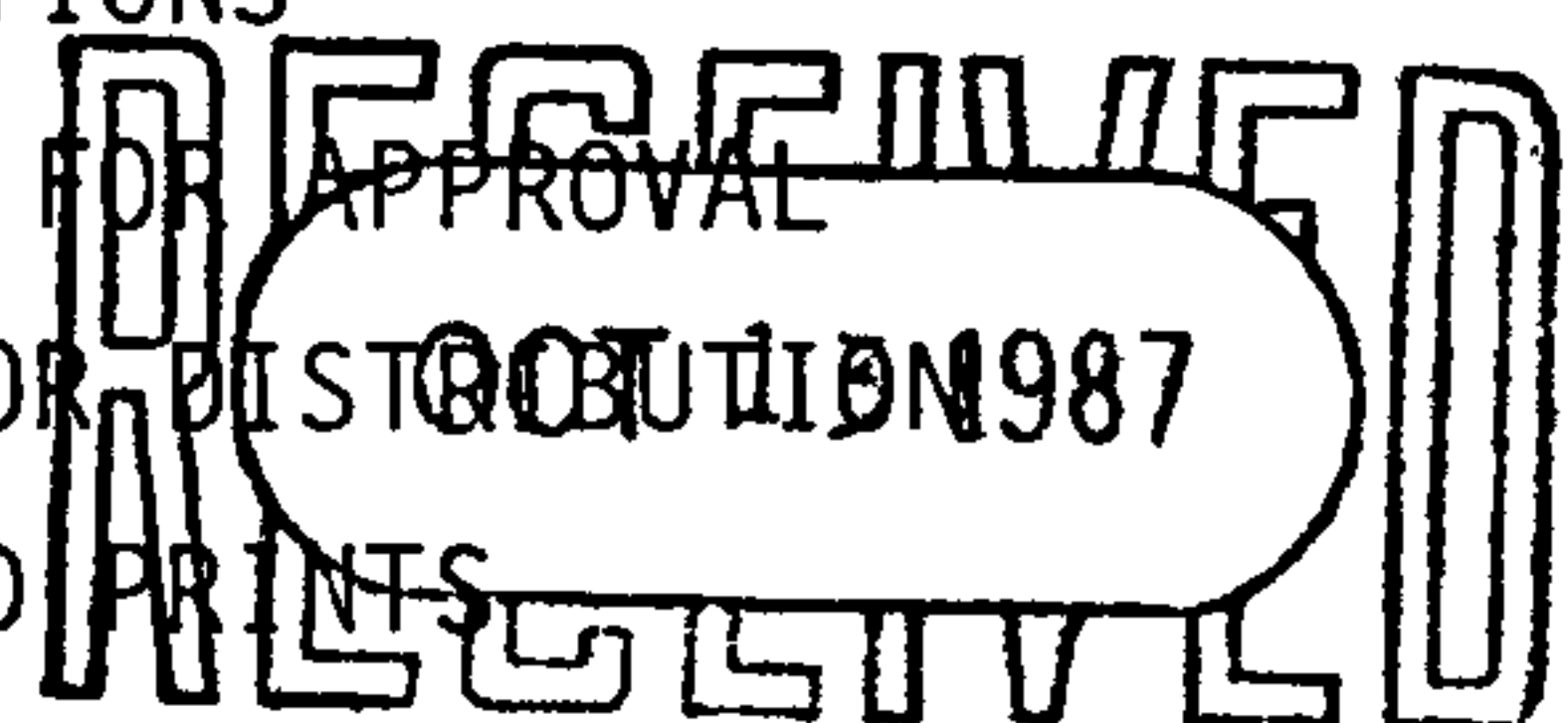
We are sending you ☒ ATTACHED _____ UNDER SEPARATE COVER the following items:

☐ SHOP DRAWINGS ☐ CHANGE ORDER ☐ SPECIFICATIONS
☐ COPY OF LETTER ☐ PLANS _____
☒ PRINTS ☐ SAMPLES _____

COPIES	DATE	NO.	DESCRIPTION
1			Grading & Drainage Plan
1			Info. Sheet
1			Conference Recap

THESE ARE TRANSMITTED as checked below:

☒ FOR APPROVAL	☐ RETURNED FOR CORRECTIONS
☐ FOR YOUR USE	☐ RESUBMIT _____ COPIES FOR APPROVAL
☐ AS REQUESTED	☐ SUBMIT _____ COPIES FOR DISTRIBUTION
☐ FOR REVIEW AND COMMENT	☐ RETURN _____ CORRECTED PRINTS
☐ APPROVED AS SUBMITTED	☐ PRINTS RETURNED AFTER _____
☐ APPROVED AS NOTED	☐ FOR BIDS DUE _____ 19____



REMARKS:

COPY TO: file SIGNED: John S. McDaniel

If enclosures are not as noted, kindly notify us at once.

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: G-15 DATE: 7-30-87
PLANNING DIVISION NOS: EPC: _____ DRB: _____
SUBJECT: Addition to existing Building GAS Company of N.M.
STREET ADDRESS (IF KNOWN): S.W. corner of Griegos & Edith
SUBDIVISION NAME: _____

APPROVAL REQUESTED:

☐ PRELIMINARY PLAT ☐ SITE DEVELOPMENT PLAN ☐ OTHER _____	☒ FINAL PLAT ☒ BUILDING PERMIT ☐ ROUGH GRADING
---	---

WHO	REPRESENTING
ATTENDANCE: <u>Joshee McDowell</u>	<u>James Griegos</u>
<u>Roger Green</u>	<u>City Hydrology</u>
_____	_____

FINDINGS:

1. Addition of a 2500 ft² new existing paved area.
entire site is over 20 acres.
2. New addition will have no impact on drainage
or runoff rates other than to reduce them.
3. As a minimum submitted, provide a site plan showing
existing and proposed conditions. Provide vicinity map,
flood map etc with a drainage plan narrative. No
hydrology calculations are required.
4. Previous building permit was approved at same site
under file No. G-15/D30 with a drainage plan meeting
the same criteria

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: Roger Green
TITLE: Civil Engineer
DATE: 7/30/87

SIGNED: James Griegos
TITLE: City Hydrology
DATE: 7/30/87

****NOTE** PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL**