

CITY OF ALBUQUERQUE



October 12, 2006

Mr. Scott McGee, P.E.
ISAACSON & ARFMAN, PA
128 Monroe St, NE
Albuquerque, NM 87108

Re: WASHINGTON OFFICE/WAREHOUSE (PHASE 2, BLDG B)
8500 Washington St. NE
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 12/07/2004 (C-17/D117)
Certification dated 10/11/2006

Dear Scott:

P.O. Box 1293

Based upon the information provided in your submittal received 10/11/2006, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3982.

New Mexico 87103

Sincerely,

Arlene V. Portillo
Plan Checker, Planning Dept. - Hydrology
Development and Building Services

www.cabq.gov

C: CO Clerk
File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV. 1/28/2003rd)

PROJECT TITLE: Washington Office / Warehouse – Phase II Bldg B ZONE MAP / DRG. FILE #: C-17 / D117
DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lot H1, Los Angeles investors Tract 4, Albuquerque, NM
CITY ADDRESS: 8500 Washington St. NE

ENGINEERING FIRM: Isaacson & Arfman, P.A. CONTACT: Bryan Bobrick
ADDRESS: 128 Monroe St. NE PHONE: 268-8828
CITY, STATE: Albuquerque, NM ZIP CODE: 87108

OWNER: Mechenbier Construction CONTACT: John Mechenbier
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: Albuquerque, New Mexico ZIP CODE: _____

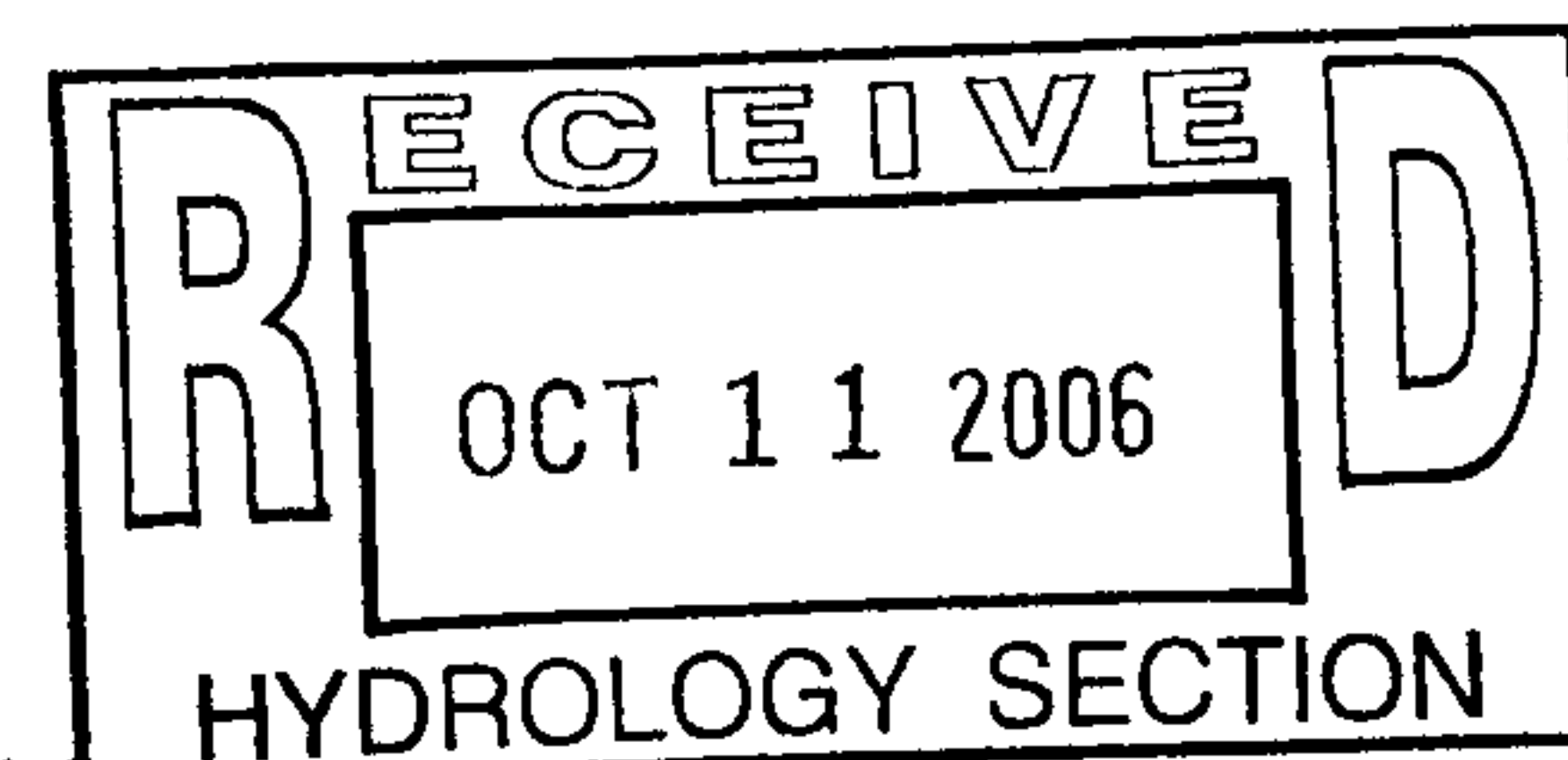
SURVEYOR: Aldrich Land Surveying CONTACT: Tim Aldrich
ADDRESS: _____ PHONE: 884-1990
CITY, STATE: Albuquerque, New Mexico ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:
____ DRAINAGE REPORT
____ DRAINAGE PLAN 1ST *REQUIRES TCL or equal*
____ DRAINAGE PLAN RESUBMITTAL
____ CONCEPTUAL GRADING & DRAINAGE PLAN
____ GRADING PLAN
____ EROSION CONTROL PLAN
____ **XXX** ENGINEER'S CERTIFICATION (HYDROLOGY)
____ CLOMR / LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ ENGINEER'S CERTIFICATION (TCL)
____ ENGINEER'S CERTIFICATION (DRB APPR, SITE PLAN)
____ OTHER (Supplemental Calculations)

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

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

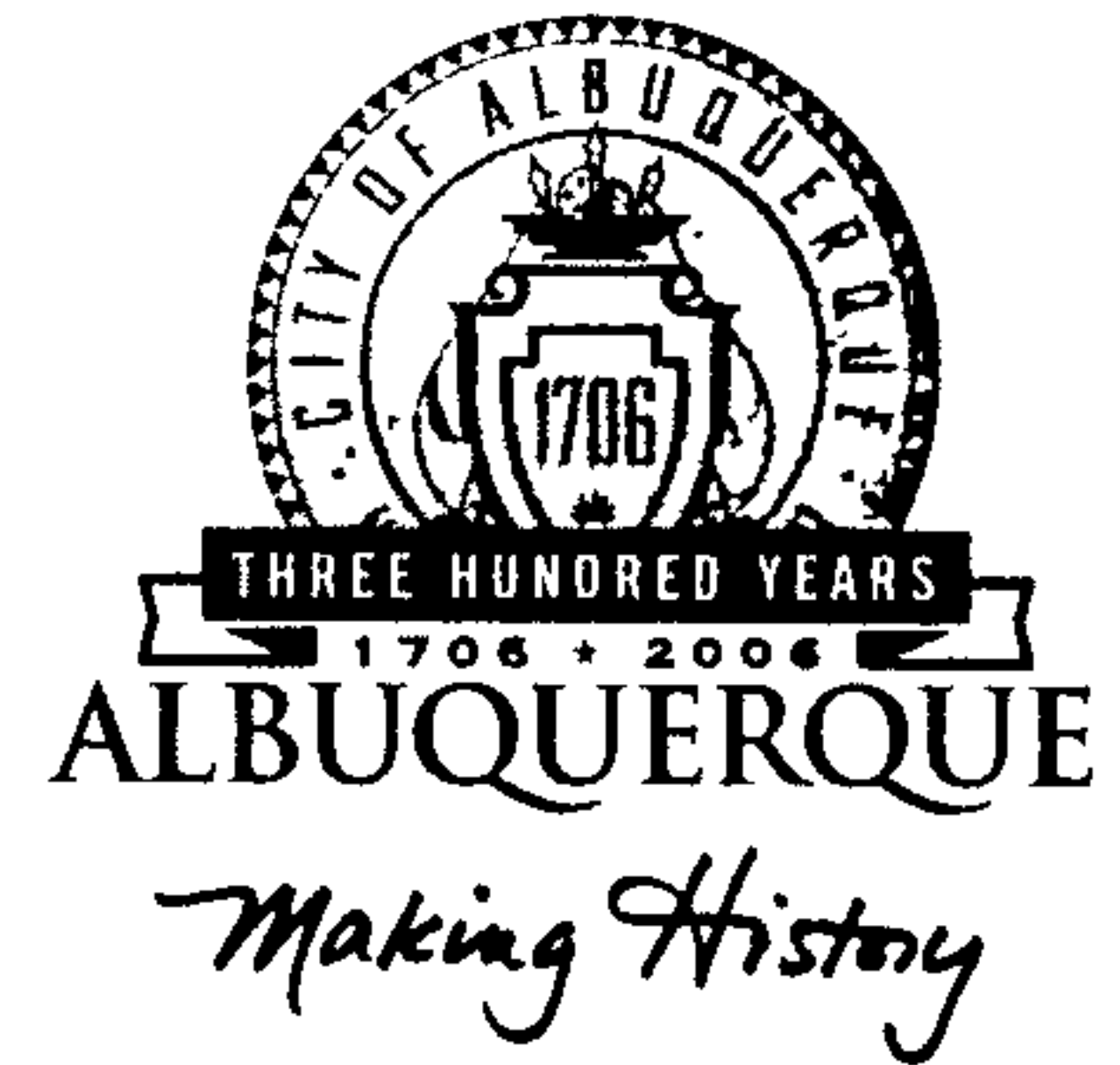


DATE SUBMITTED: Wednesday, October 11, 2006 BY: Bryan Bobrick
Isaacson & Arfman, P.A.

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

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

CITY OF ALBUQUERQUE



August 12, 2005

Mr. Scott McGee, P.E.
ISAACSON & ARFMAN, PA
128 Monroe St, NE
Albuquerque, NM 87108

Re: WASHINGTON OFFICE/WAREHOUSE (Phase 1, Bldg A)
8500 Washington St. NE
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 12/07/2004 (C-17/D117)
Certification dated 08/12/2005

Dear Scott:

P.O. Box 1293

Based upon the information provided in your submittal received 08/12/2005, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3982.

New Mexico 87103

Sincerely,

Arlene V. Portillo

Plan Checker, Planning Dept. - Hydrology
Development and Building Services

www.cabq.gov

C: Phyllis Villanueva
File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Washington Office / Warehouse

ZONE MAP / DRG. FILE #: C-17 / D117

DRB #: _____ EPC #: _____

WORK ORDER #: _____

LEGAL DESCRIPTION: Lot H1, Los Angeles investors Tract 4, Albuquerque, NM

CITY ADDRESS: 8500 Washington St. NE

ENGINEERING FIRM: Isaacson & Arfman, P.A.

ADDRESS: 128 Monroe St. NE

CITY, STATE: Albuquerque, NM

CONTACT: Bryan Bobrick

PHONE: 268-8828

ZIP CODE: 87108

OWNER: Mechenbier Construction

ADDRESS: _____

CITY, STATE: _____

CONTACT: John Mechenbier

PHONE: _____

ZIP CODE: _____

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: Albuquerque, New Mexico

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: Aldrich Land Surveying

ADDRESS: _____

CITY, STATE: Albuquerque, New Mexico

CONTACT: Tim Aldrich

PHONE: 884-1990

ZIP CODE: _____

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☐ DRAINAGE PLAN 1ST *REQUIRES TCL or equal*

☐ DRAINAGE PLAN RESUBMITTAL

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☒ ENGINEER'S CERTIFICATION (HYDROLOGY)

☐ CLOMR / LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)

☐ ENGINEER'S CERTIFICATION (TCL)

☐ ENGINEER'S CERTIFICATION (DRB APPR, SITE PLAN)

☐ OTHER (Supplemental Calculations)

CHECK TYPE OF APPROVAL SOUGHT:

☐ SIA / FINANCIAL GUARANTEE RELEASE

☐ PRELIMINARY PLAT APPROVAL

☐ S. DEV. PLAN FOR SUB'D APPROVAL

☐ S. DEV. PLAN FOR BLDG. PERMIT APPR.

☐ SECTOR PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ BUILDING PERMIT APPROVAL

☒ CERTIFICATE OF OCCUPANCY (PERM)

☐ CERTIFICATE OF OCCUPANCY (TEMP)

☐ GRADING PERMIT APPROVAL

☐ PAVING PERMIT APPROVAL

☐ WORK ORDER APPROVAL

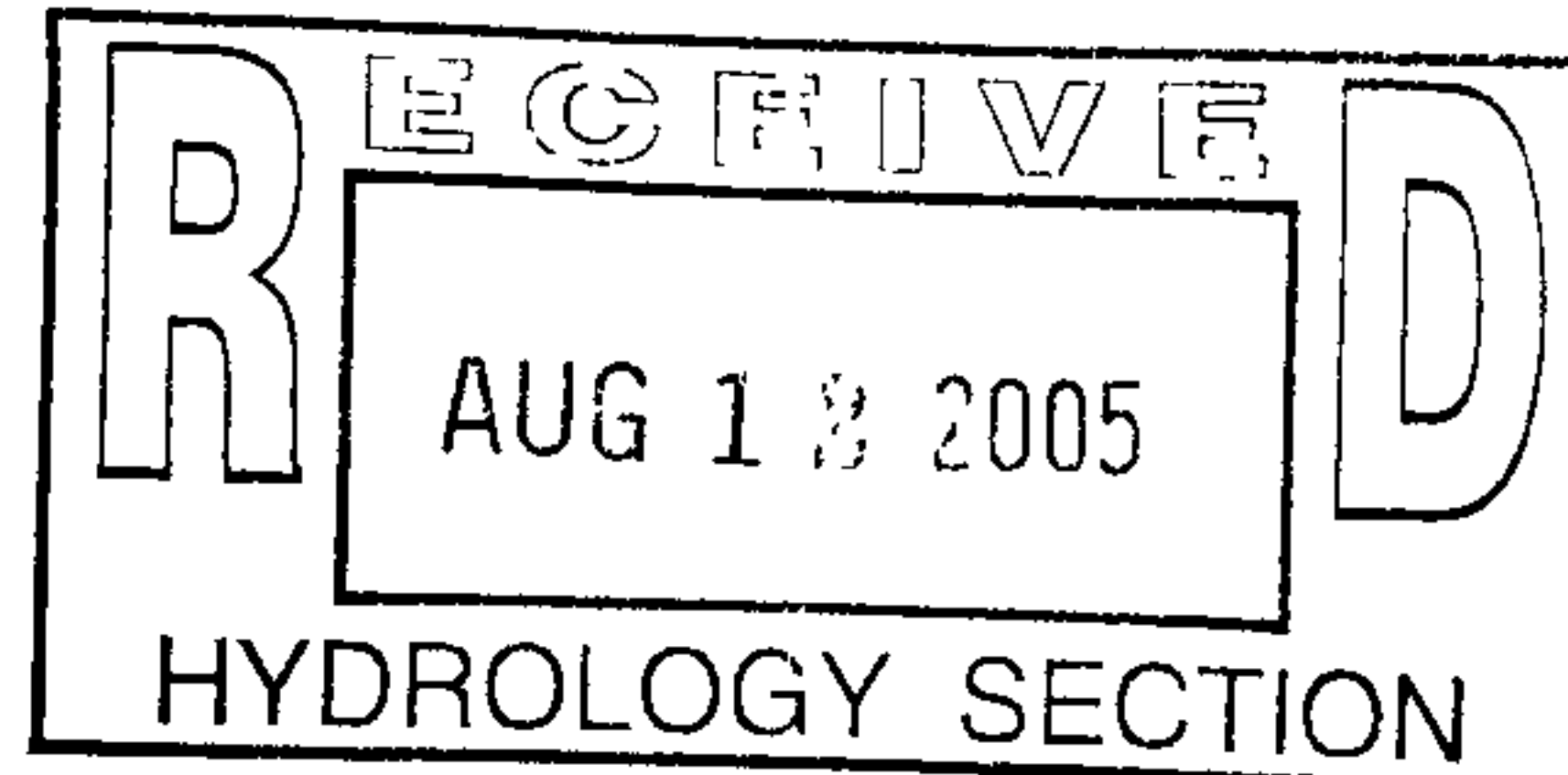
☐ OTHER

WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES

☐ NO

☐ COPY PROVIDED



DATE SUBMITTED: Friday, August 12, 2005

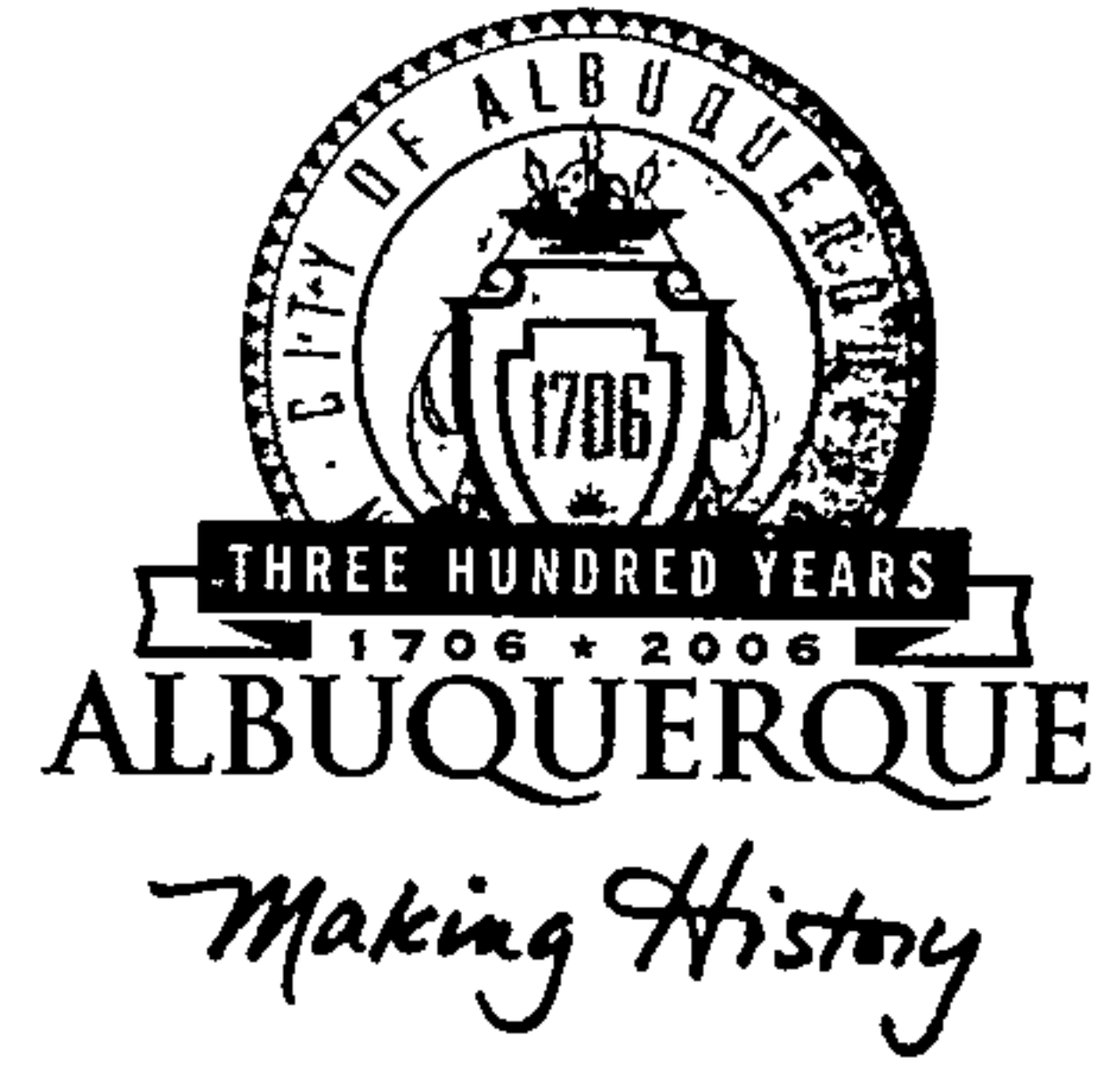
BY: Bryan Bobrick

Isaacson & Arfman, P.A.

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

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

CITY OF ALBUQUERQUE



January 12, 2005

Scott McGee, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. NE
Albuquerque, NM 87108

**Re: Washington Office / Warehouse, 8500 Washington Street NE, Grading
and Drainage Plan**

Engineer's Stamp dated 12-07-04 (C17-D117)

Dear Mr. McGee,

Based upon the information provided in your submittal received 12-07-04, the
above referenced plan is approved for Building Permit. Please attach a copy of this
approved plan to the construction sets prior to sign-off by Hydrology.

P.O. Box 1293

A separate permit (SO#19) is required for construction within City Right of Way.
A copy of this approval letter must be on hand when applying for the excavation
permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM
checklist will be required.

Albuquerque

This project requires a National Pollutant Discharge Elimination System (NPDES)
permit. If you have any questions regarding this permit please feel free to call the
DMD Storm Drainage Design section at 768-3654 (Charles Caruso).

New Mexico 87103

www.cabq.gov

If you have any questions, you can contact me at 924-3981.

Sincerely,

Kristal D. Metro
Engineering Associate, Planning Dept.
Development and Building Services

C: Matt Cline, Arroyo Maintenance
Pam Lujan, Excavation Permits
Charles Caruso, DMD Storm Drainage Design
File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Washington Office / Warehouse

ZONE MAP / DRG. FILE #: C-17 / D117

DRB #: _____ EPC #: _____

WORK ORDER #: _____

LEGAL DESCRIPTION: Lot H1, Los Angeles investors Tract 4, Albuquerque, NM

CITY ADDRESS: 8500 Washington St. NE

ENGINEERING FIRM: Isaacson & Arfman, P.A.

ADDRESS: 128 Monroe St. NE

CITY, STATE: Albuquerque, NM

CONTACT: Bryan Bobrick

PHONE: 268-8828

ZIP CODE: 87108

OWNER: Mechenbier Construction

ADDRESS: _____

CITY, STATE: _____

CONTACT: John Mechenbier

PHONE: _____

ZIP CODE: _____

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: Albuquerque, New Mexico

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: Aldrich Land Surveying

ADDRESS: _____

CITY, STATE: Albuquerque, New Mexico

CONTACT: Tim Aldrich

PHONE: 884-1990

ZIP CODE: _____

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

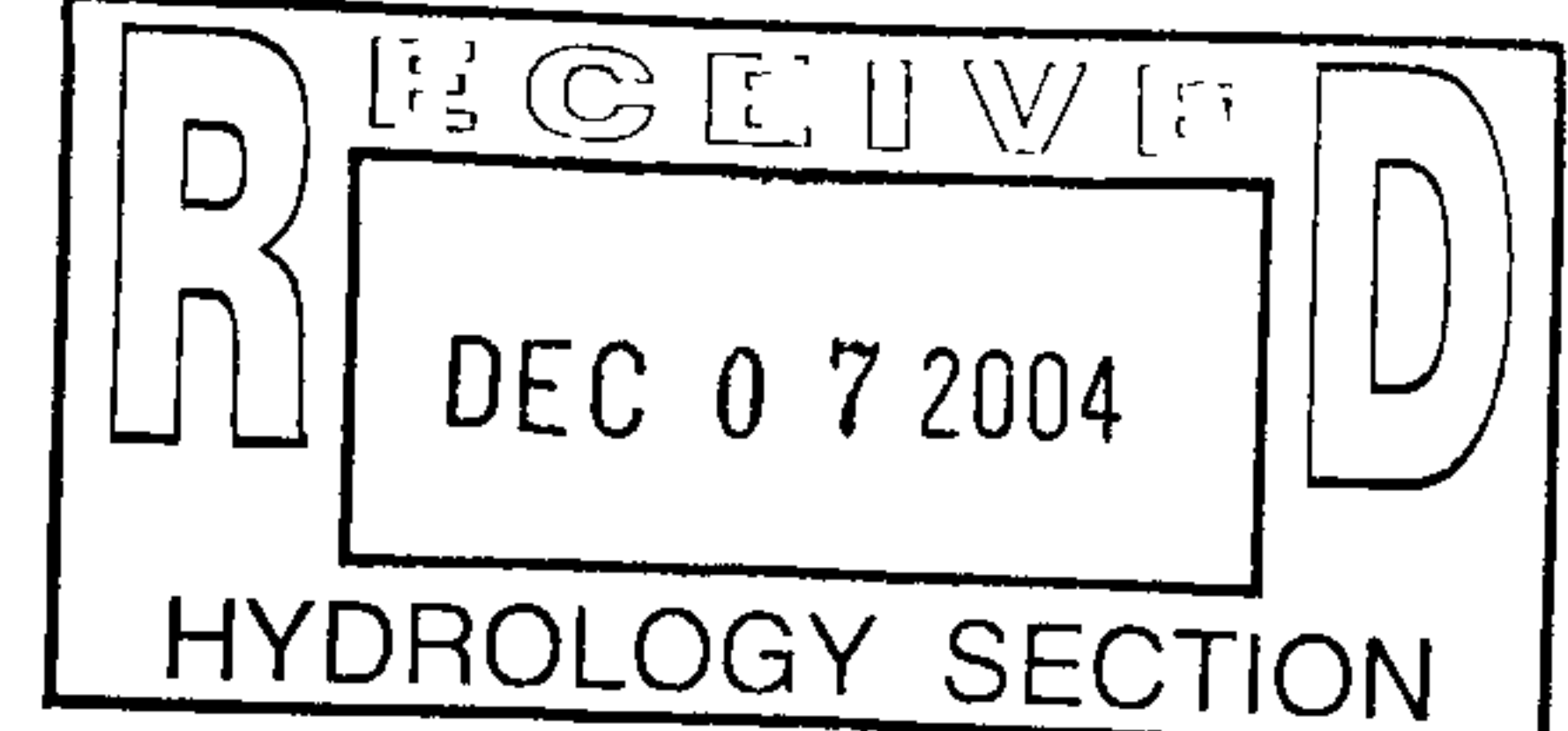
- ☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1ST *REQUIRES TCL or equal*
☒ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
☐ CLOMR / LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEER'S CERTIFICATION (TCL)
☐ ENGINEER'S CERTIFICATION (DRB APPR, SITE PLAN)
☒ OTHER (Supplemental Calculations)

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. PLAN FOR BLDG. PERMIT APPR.
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM)
☐ CERTIFICATE OF OCCUPANCY (TEMP)
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ OTHER

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☐ NO
☐ COPY PROVIDED



DATE SUBMITTED: Tuesday, December 07, 2004

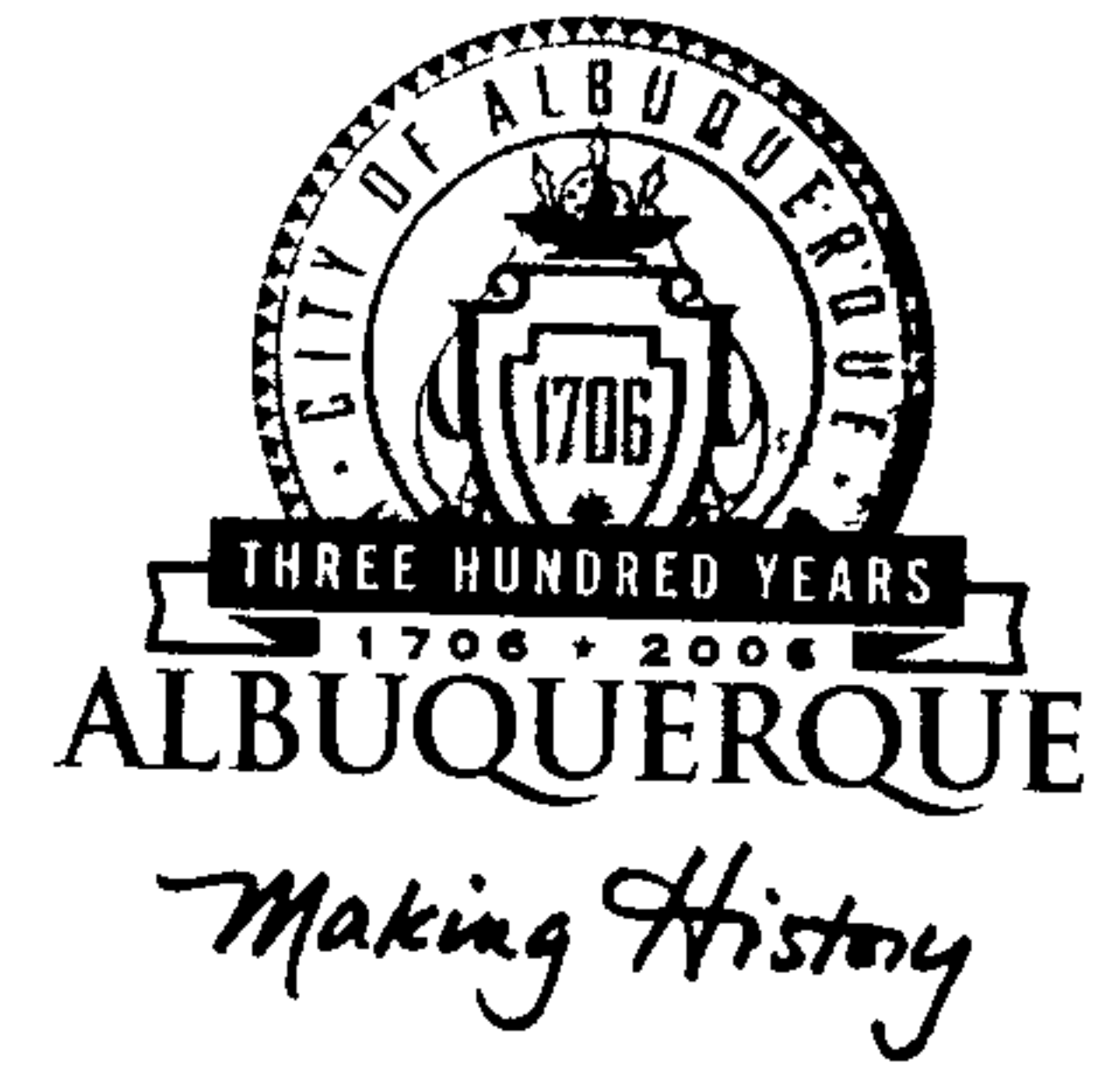
BY: Bryan Bobrick

Isaacson & Arfman, P.A.

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

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

CITY OF ALBUQUERQUE



November 22, 2004

Kent Trauernicht, R.A.
AKT Architects
55 Camino del Senador
Tijeras, NM 87059

**Re: Washington Office / Warehouse, 8500 Washington St NE, Traffic
Circulation Layout**
Architect's Stamp dated 11-11-04 (C17-D117)

Dear Mr. Trauernicht,

Based upon the information provided in your submittal received 11-15-04, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

P.O. Box 1293

Albuquerque

New Mexico 87103

- ✓ 1. The handicapped accessible parking spaces require one van accessible aisle of 8 feet in width, as well as one regular aisle of 5 feet in width.
- ✓ 2. Please provide more detailed information regarding Washington Street, such as the number of lanes in each direction and the location of any designated on-street parking.
- ✓ 3. Refer to all applicable City Standards.

If you have any questions, you can contact me at 924-3991.

www.cabq.gov

Sincerely,

Wilfred A. Gallegos, P.E.
Traffic Engineer, Planning Dept.
Development and Building Services

C: File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Washington Office/Warehouse ZONE MAP/DRG. FILE #: C-17/D117
 DRB #: _____ EPC#: _____ WORK ORDER#: C-17-2

LEGAL DESCRIPTION: Lot H-1 Lands of Los Angeles Investors
 CITY ADDRESS: 3500 Washington Street NE

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

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

OWNER: Mechanbier Construction, Inc.
 ADDRESS: 8804 Washington NE Suite A
 CITY, STATE: Alb. NM 87113

CONTACT: John E. Mechanbier
 PHONE: 828-1676
 ZIP CODE: _____

ARCHITECT: ART Architects
 ADDRESS: P.O. Box 2366
 CITY, STATE: Alb. NM 87190

CONTACT: Kurt Trauernight
 PHONE: 281-9560
 ZIP CODE: _____

SURVEYOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

CONTRACTOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

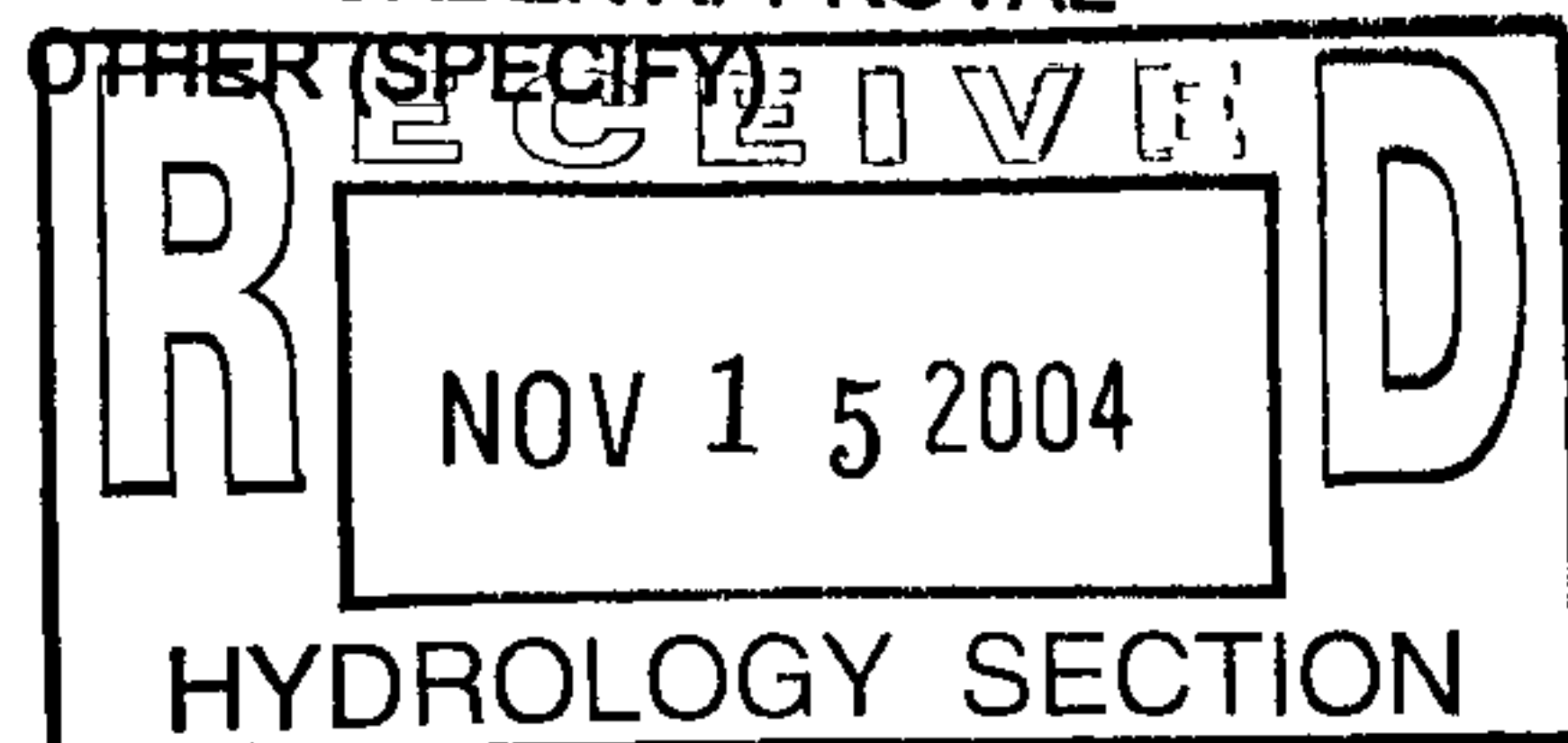
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, *REQUIRES TCL or equal*
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☒ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

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

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☒ YES 8/6/04
☐ NO
☐ COPY PROVIDED



DATE SUBMITTED: 11/15/04 BY: John L. Brewer, Const. Mgr.

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

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

8' van access aisle

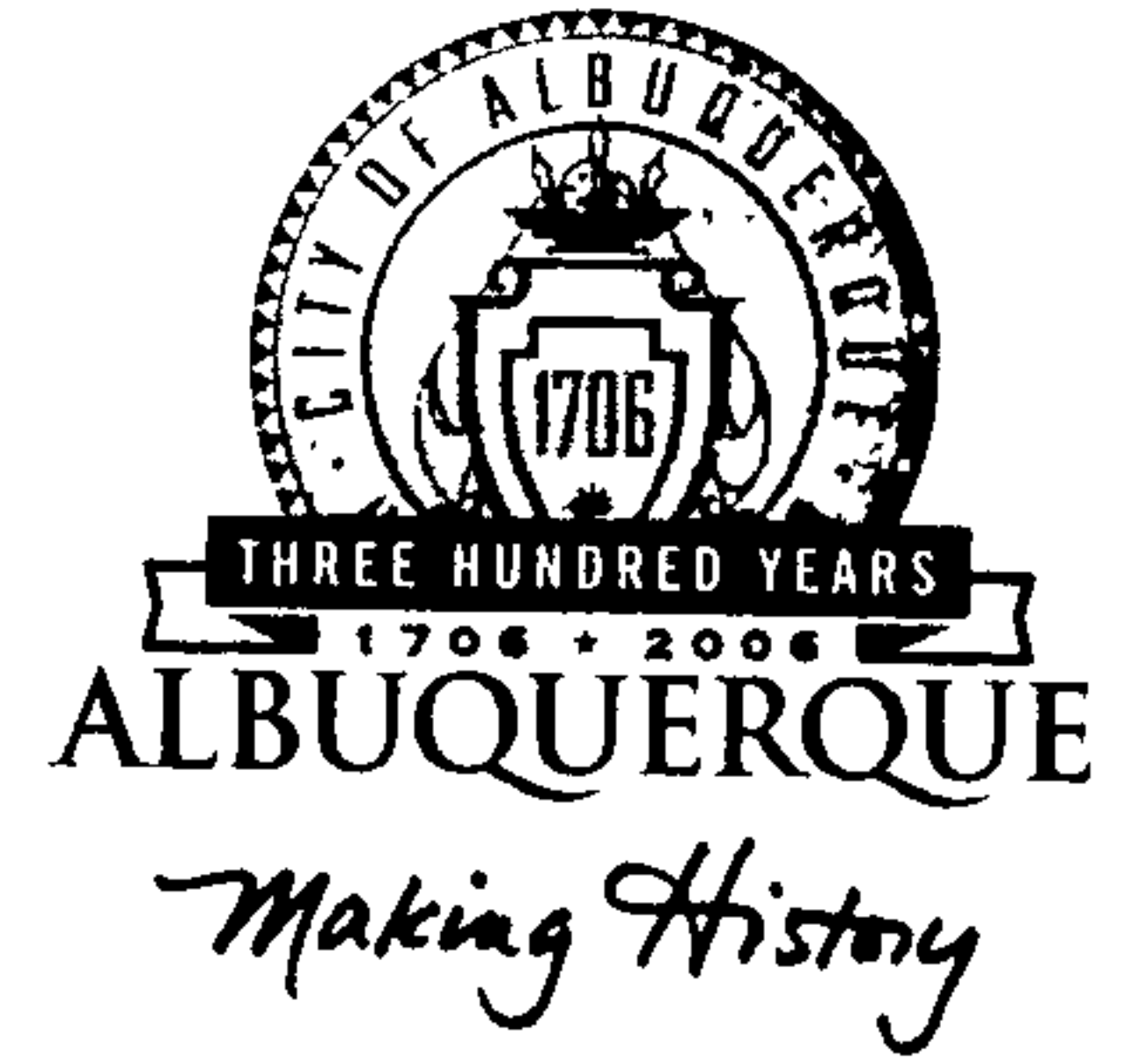
5' reg aisle

Washington St -

- 2 lanes each dir?

B

CITY OF ALBUQUERQUE



November 19, 2004

Fred Arfman, PE
Isaacson & Arfman
128 Monroe NE
Albuquerque, NM 87108

**Re: Mechenbier Construction Washington Office/Warehouse
Grading and Drainage Plan
Engineer's Stamp dated 10-8-04, (C17/D117)**

Dear Mr. Arfman,

P.O. Box 1293

Based upon the information provided in your submittal dated 10-8-04, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Albuquerque

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions please feel free to call the Municipal Development Department, Hydrology section at 768-3654 (Charles Caruso).

New Mexico 87103

Also, prior to Certificate of Occupancy release, Engineer Certification of the grading plan per the DPM checklist will be required.

www.cabq.gov

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

Sincerely,

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

C: Chuck Caruso, DMD
file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Washington Office / Warehouse

ZONE MAP / DRG. FILE #: C-17/D117

DRB #: _____ EPC #: _____

WORK ORDER #: _____

LEGAL DESCRIPTION: Lot H1, Los Angeles investors Tract 4, Albuquerque, NM

CITY ADDRESS: 8500 Washington St. NE

ENGINEERING FIRM: Isaacson & Arfman, P.A.

ADDRESS: 128 Monroe St. NE

CITY, STATE: Albuquerque, NM

CONTACT: Bryan Bobrick

PHONE: 268-8828

ZIP CODE: 87108

OWNER: Mechenbier Construction

ADDRESS: _____

CITY, STATE: _____

CONTACT: John Mechenbier

PHONE: _____

ZIP CODE: _____

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: Albuquerque, New Mexico

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: Aldrich Land Surveying

ADDRESS: _____

CITY, STATE: Albuquerque, New Mexico

CONTACT: Tim Aldrich

PHONE: 884-1990

ZIP CODE: _____

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN 1ST *REQUIRES TCL or equal*
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR / LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERTIFICATION (TCL)
- ☐ ENGINEER'S CERTIFICATION (DRB APPR, SITE PLAN)
- ☒ OTHER (Supplemental Calculations)

CHECK TYPE OF APPROVAL SOUGHT:

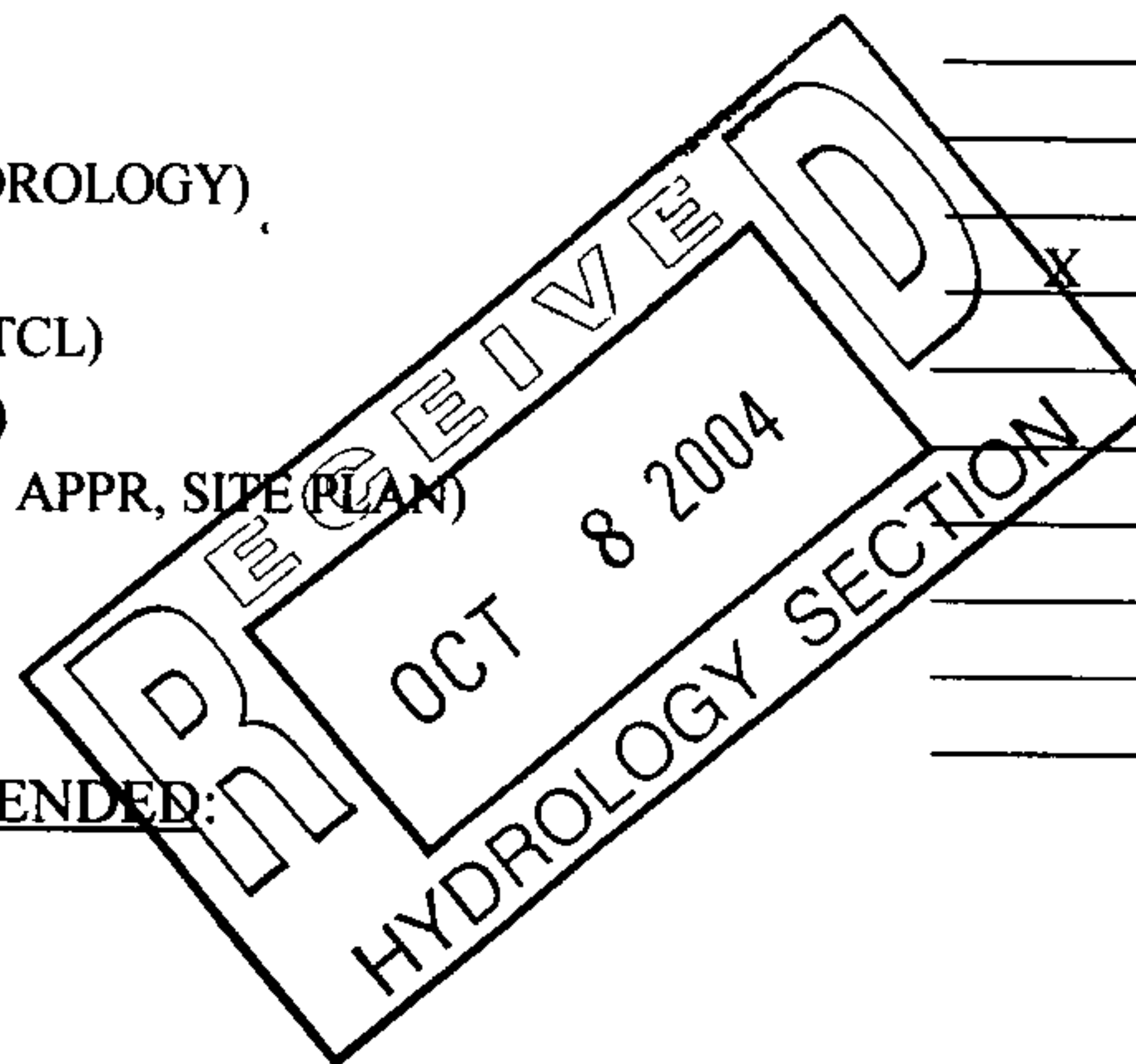
- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPR.
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ OTHER

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____

☐ YES

☐ NO

☐ COPY PROVIDED



DATE SUBMITTED: Friday, October 08, 2004

BY: Bryan Bobrick

Isaacson & Arfman, P.A.

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

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

DECEMBER 7, 2004

SUPPLEMENTAL INFORMATION
FOR
WASHINGTON OFFICE / WAREHOUSE
FOR
Mechenbier Construction

BY



WASHINGTON OFFICE / WAREHOUSE
For Mechenbier Construction
December 7, 2004

DRAINAGE ANALYSIS – SUMMARY Based on 100-year, 6-hour storm event
--

- ❖ Discharge from the Washington Office / Warehouse site will be limited to the 10-year developed flow per the design of the Alameda Blvd., Jefferson Street, and Washington Storm Drain systems (SAD 201). See the attached Drainage Basin Exhibit and Calculations for specific sub-basin information.
- ❖ Per the 10-year, 6-hour calculations, the allowable discharge from the property is 12.0 cfs.
- ❖ Sub-basins #1, #2 and #3 (total = 13.85 cfs) will be directed to the proposed 'Interior Detention Pond'.
- ❖ The Interior Pond has a detainable volume of 8,980 cf (max. depth = 18" at elevation 5110.50). Per the attached calculations, the proposed inlet and 15" dia. storm drain will discharge this ponding area to the 'Washington Pond' at a rate of 6.54 cfs.
- ❖ Sub-basins #4, #5, #7 and #8 (totaling 2.07 cfs) will free discharge to Washington Street N.E. via the access drives.
- ❖ Sub-basin #6 will surface drain to the 'Washington Pond'. This will combine with the 6.54 cfs from the 'Interior Pond' storm drain.
- ❖ With a total allowable discharge of 12.0 cfs from the site, subtracting the free discharge volume of 2.07 cfs, the remaining allowable discharge is 9.9 cfs.
- ❖ The Main Pond has a detainable volume of 2024 cf (max. depth = 13.2"). One 12" PVC will discharge 8.0 cfs into the back of the existing storm drain inlet in Washington St.
- ❖ Total discharge from site = 2.07 cfs free discharge + 8.0 cfs controlled = 10.07 < 12.0 allowable.

Job Name:	Washington Office / Warehouse
Client:	Mechenbier
Date Prepared:	Sept. 21, 2004
Date Modified:	09/21/04
Precipitation Zone:	2

CALCULATIONS: Washington Office / Warehouse : 09/21/04

Calculations are based on the Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE

AREA OF SITE: 178065 SF = 4.088 Ac.

HISTORIC FLOWS:

On-Site Historic Land Condition

Area a	=	SF
Area b	=	SF
Area c	=	SF
Area d	=	SF
Total Area	=	0 SF

DEVELOPED FLOWS:

On-Site Developed Land Condition

Area a	=	1781	SF
Area b	=	8903	SF
Area c	=	7123	SF
Area d	=	160259	SF
Total Area	=	178065	SF

EXCESS PRECIPITATION:

Precip. Zone 2

Ea	=	0.13
Eb	=	0.28
Ec	=	0.52
Ed	=	1.34

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{EaAa + EbAb + EcAc + EdAd}{Aa + Ab + Ac + Ad}$$

Historic E	=	#DIV/0! in.	Developed E	=	1.24 in.
------------	---	-------------	-------------	---	----------

On-Site Volume of Runoff: $V_{360} = E * A / 12$

Historic V_{360}	=	#DIV/0! CF	Developed V_{360}	=	18431 CF
--------------------	---	------------	---------------------	---	----------

On-Site Peak Discharge Rate: $Q_p = Q_{pa}Aa + Q_{pb}Ab + Q_{pc}Ac + Q_{pd}Ad / 43,560$

For Precipitation Zone 2

Q_{pa}	=	0.38
Q_{pb}	=	0.95

Q_{pc}	=	1.71
Q_{pd}	=	3.14

Historic Q_p	=	0.0 CFS	Developed Q_p	=	12.0 CFS
----------------	---	---------	-----------------	---	----------

ALLOWABLE
DISCHARGE

CALCULATIONS: Washington Office / Warehouse : 09/21/04

Calculations are based on the Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE

AREA OF SITE:	178065	SF	=	4.088	Ac.
----------------------	--------	----	---	-------	-----

HISTORIC FLOWS:

On-Site Historic Land Condition

Area a	=	0	SF
Area b	=	178065	SF
Area c	=	0	SF
Area d	=	0	SF
Total Area	=	178065	SF

DEVELOPED FLOWS:

On-Site Developed Land Condition

Area a	=	1781	SF
Area b	=	8903	SF
Area c	=	7123	SF
Area d	=	160259	SF
Total Area	=	178066	SF

EXCESS PRECIPITATION:

Precip. Zone 2

Ea	=	0.53
Eb	=	0.78
Ec	=	1.13
Ed	=	2.12

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{EaAa + EbAb + EcAc + EdAd}{Aa + Ab + Ac + Ad}$$

Historic E	=	0.78 in.	Developed E	=	2.00 in.
------------	---	----------	-------------	---	----------

On-Site Volume of Runoff: $V360 = E \cdot A / 12$

Historic V360	=	11574	CF	Developed V360	=	29641	CF
---------------	---	-------	----	----------------	---	-------	----

On-Site Peak Discharge Rate: $Qp = QpaAa + QpbAb + QpcAc + QpdAd / 43,560$

For Precipitation Zone 2

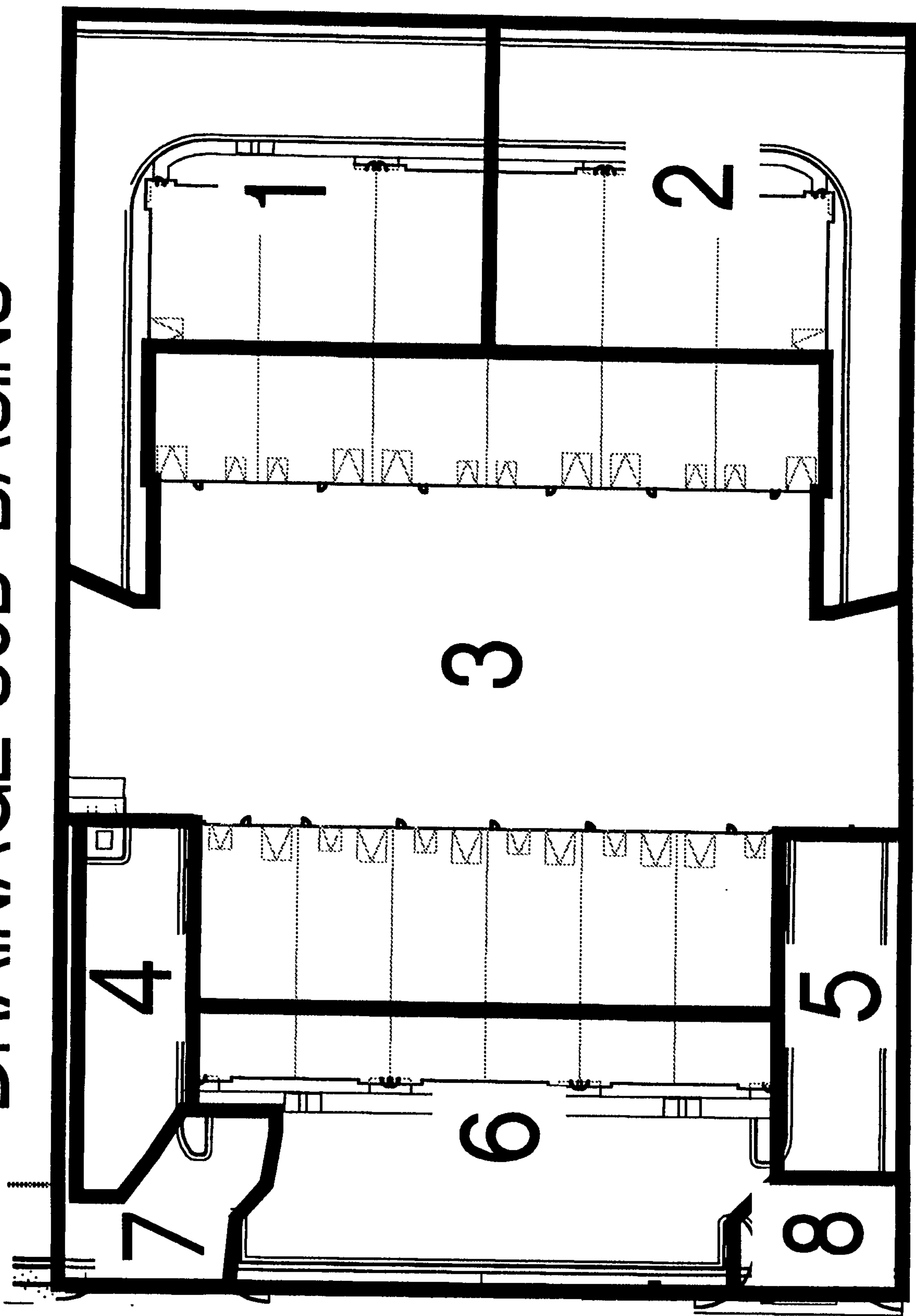
Qpa	=	1.56	Qpc	=	3.14
Qpb	=	2.28	Qpd	=	4.70

Historic Qp	=	9.3	CFS	Developed Qp	=	18.3	CFS
-------------	---	-----	-----	--------------	---	------	-----

POND VOLUME CALCULATIONS

Interior Pond				Washington Pond			
Contour	Area	Volume		Contour	Area	Volume	
5110.5	17145	5851	CF	5107.6	1840	1104	CF
5110.0	6260			5107.0	1840		
5109.0	6			5106.5	1840		
Pond Volume		8984	CF	Pond Volume		2024	CF

DRAINAGE SUB-BASINS



BASIN NO.	1	NORTHEAST BASIN TO INTERIOR POND		
Area of basin flows =	26600	SF	=	0.6 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 2.00 in.

TREATMENT

Sub-basin Volume of Runoff (see formula above)

V360 = 4441 CF

A = 0%

B = 5%

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 2.75 cfs

C = 5%

D = 90%

BASIN NO.	2	SOUTHEAST BASIN TO INTERIOR POND		
Area of basin flows =	26600	SF	=	0.6 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 2.00 in.

TREATMENT

Sub-basin Volume of Runoff (see formula above)

V360 = 4441 CF

A = 0%

B = 5%

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 2.75 cfs

C = 5%

D = 90%

BASIN NO.	3	CENTER BASIN TO INTERIOR POND		
Area of basin flows =	77400	SF	=	1.8 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 2.12 in.

TREATMENT

Sub-basin Volume of Runoff (see formula above)

V360 = 13674 CF

A = 0%

B = 0%

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 8.35 cfs

C = 0%

D = 100%

BASIN NO.	4	NORTH BASIN TO FREE DISCHARGE TO WASHINGTON ST.		
Area of basin flows =	6500	SF	=	0.1 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 2.00 in.

TREATMENT

Sub-basin Volume of Runoff (see formula above)

V360 = 1085 CF

A = 0%

B = 5%

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 0.67 cfs

C = 5%

D = 90%

BASIN NO.	5	SOUTH BASIN TO FREE DISCHARGE TO WASHINGTON ST.		
Area of basin flows =	7200	SF	=	0.2 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 1.75 in.

TREATMENT

Sub-basin Volume of Runoff (see formula above)

V360 = 1052 CF

A = 0%

B = 20%

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 0.67 cfs

C = 10%

D = 70%

BASIN NO.	6	WEST BASIN TO WASHINGTON ST. POND			
Area of basin flows =	25065	SF	=	0.6	Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 1.80 in.

Sub-basin Volume of Runoff (see formula above)

V360 = 3769 CF

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 2.37 cfs

TREATMENT

A = 7%

B = 5%

C = 10%

D = 76%

BASIN NO.	7	NORTHWEST BASIN TO FREE DISCHARGE TO WASHINGTON ST.			
Area of basin flows =	5500	SF	=	0.1	Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 1.49 in.

Sub-basin Volume of Runoff (see formula above)

V360 = 681 CF

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 0.45 cfs

TREATMENT

A = 0%

B = 40%

C = 10%

D = 50%

BASIN NO.	8	SOUTHWEST BASIN TO FREE DISCHARGE TO WASHINGTON ST.			
Area of basin flows =	3200	SF	=	0.1	Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 1.62 in.

Sub-basin Volume of Runoff (see formula above)

V360 = 432 CF

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 0.28 cfs

TREATMENT

A = 0%

B = 30%

C = 10%

D = 60%

Interior Pond Hydrograph

CALCULATIONS: Washington Office / Warehouse : 09/21/04
HYDROGRAPH FOR SMALL WATERSHED
DPM SECTION 22-2 * PAGE A-13/14

Base time, t_B , for a small watershed hydrograph is,

$$t_B = (2.107 * E * AT / QP) - (0.25 * AD / AT)$$

Where

E	=	2.07 inches
AT	=	3.00 acres
AD	=	2.87 acres
QP	=	13.85 cfs

t_B	=	0.71 hours
-------	---	------------

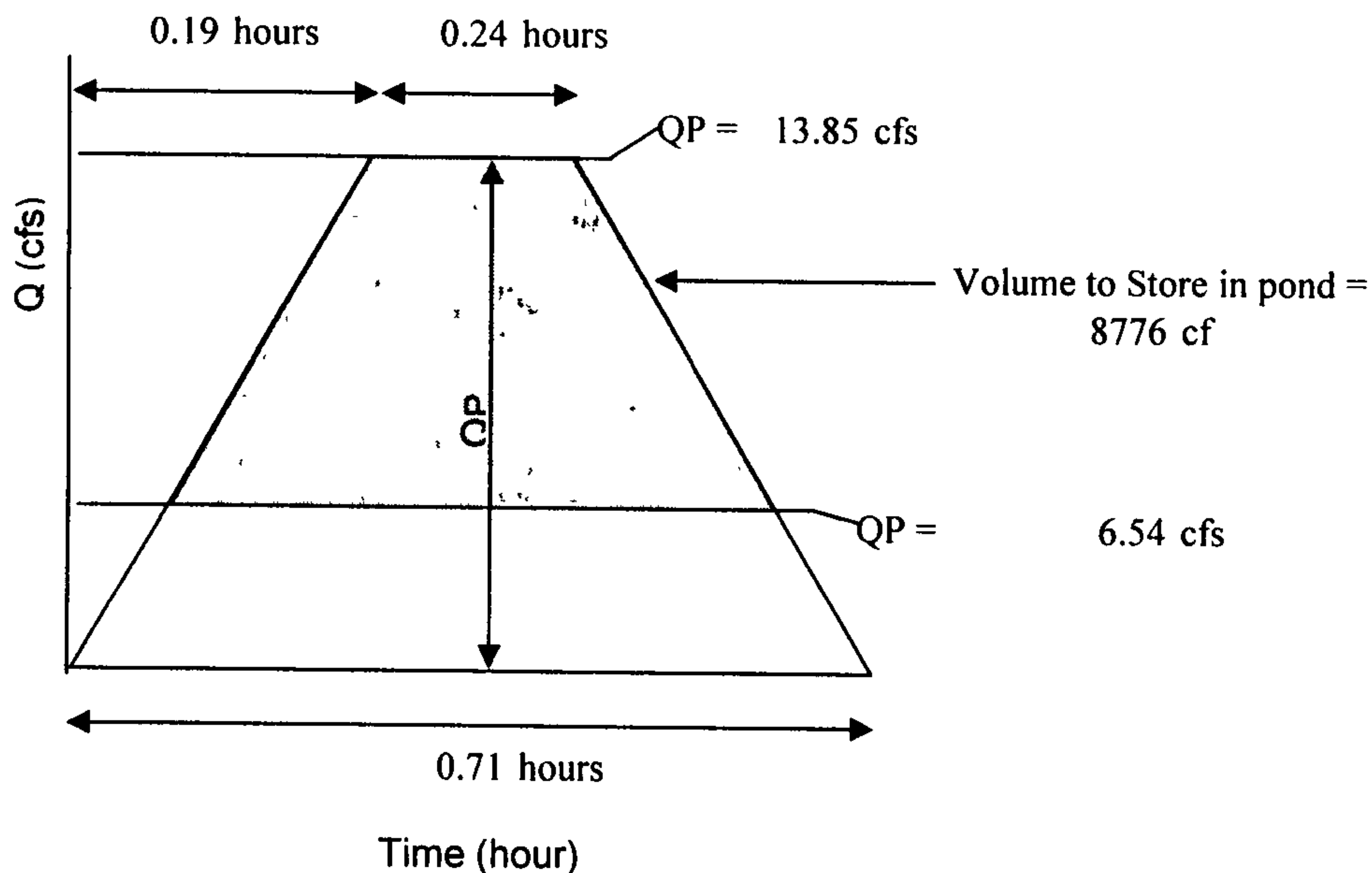
E is the excess precipitation in inches (from DPM TABLE A-8), QP is the peak flow, AD is the area (acres) of treatment D, and AT is the total area in acres. Using the time of concentration, t_C (hours), the time to peak in hours is:

$$t_P = (0.7 * t_C) + ((1.6 - (AD / AT)) / 12)$$

Where t_C = 0.20 hours

t_P = 0.19 hours

Continue the peak for $0.25 * AD / AT$ hours. When AD is zero, the hydrograph will be triangular. When AD is not zero, the hydrograph will be trapezoidal. see the graph below:



INFLOW / OUTFLOW HYDROGRAPH

15" PVC drain to Wash Pond Nyloplast
Worksheet for Pressure Pipe

Project Description	
Project File	c:\program files\haestad\fmw\1392.fm2
Worksheet	Pond Discharge to Washington Pond
Flow Element	Pressure Pipe
Method	Manning's Formula
Solve For	Discharge

Input Data		
Pressure at 1	0.00	psi
Pressure at 2	0.00	psi
Elevation at 1	7.00	ft
Elevation at 2	3.90	ft
Length	355.00	ft
Mannings Coefficient	0.012	
Diameter	15.00	in

Results		
Discharge	6.5392	cfs
Headloss	3.10	ft
Energy Grade at 1	7.43	ft
Energy Grade at 2	4.33	ft
Hydraulic Grade at 1	7.00	ft
Hydraulic Grade at 2	3.90	ft
Flow Area	1.23	ft ²
Wetted Perimeter	3.93	ft
Velocity	5.33	ft/s
Velocity Head	0.44	ft
Friction Slope	0.008732	ft/ft

Main Pond Hydrograph

CALCULATIONS: Washington Office / Warehouse : 09/21/04
HYDROGRAPH FOR SMALL WATERSHED
DPM SECTION 22-2 * PAGE A-13/14

Base time, t_B , for a small watershed hydrograph is,

$$t_B = (2.107 * E * AT / QP) - (0.25 * AD / AT)$$

Where

E	=	2.00 inches
AT	=	3.57 acres
AD	=	3.31 acres
QP	=	9.3 cfs

t_B	=	1.38 hours
-------	---	------------

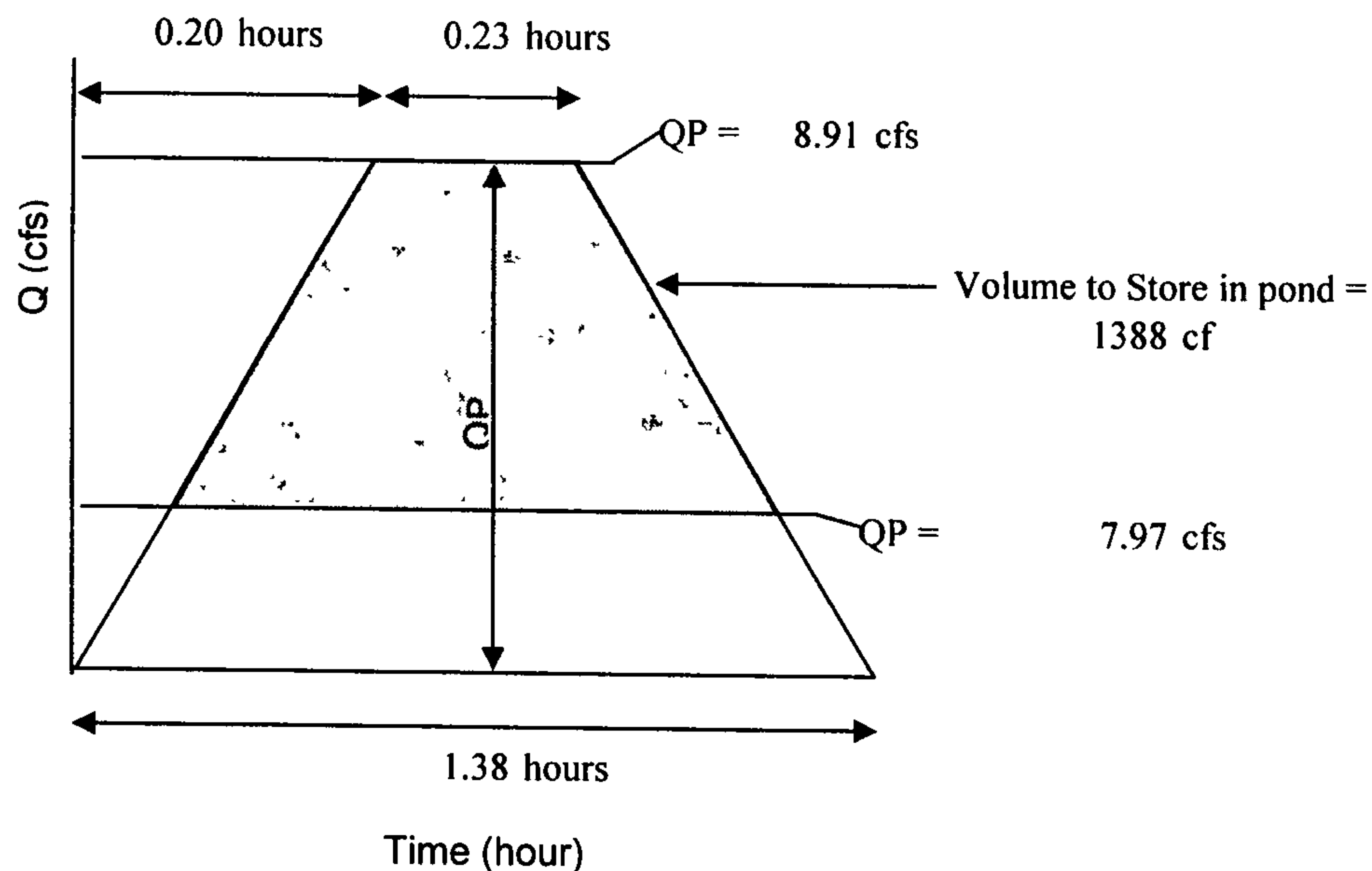
E is the excess precipitation in inches (from DPM TABLE A-8), QP is the peak flow, AD is the area (acres) of treatment D, and AT is the total area in acres. Using the time of concentration, t_C (hours), the time to peak in hours is:

$$t_P = (0.7 * t_C) + ((1.6 - (AD / AT)) / 12)$$

Where t_C = 0.20 hours

$$t_P = 0.20 \text{ hours}$$

Continue the peak for $0.25 * AD / AT$ hours. When AD is zero, the hydrograph will be triangular. When AD is not zero, the hydrograph will be trapezoidal. see the graph below:



INFLOW / OUTFLOW HYDROGRAPH

12" PVC drain to public inlet in Wash.St
Worksheet for Pressure Pipe

Project Description	
Project File	c:\program files\haestad\fmw\1392.fm2
Worksheet	Pond Discharge to existing SD in Wash.
Flow Element	Pressure Pipe
Method	Manning's Formula
Solve For	Discharge

Input Data		
Pressure at 1	0.00	psi
Pressure at 2	0.00	psi
Elevation at 1	3.90	ft
Elevation at 2	3.47	ft
Length	10.00	ft
Mannings Coefficient	0.012	
Diameter	12.00	in

Results		
Discharge	8.0032	cfs
Headloss	0.43	ft
Energy Grade at 1	5.48	ft
Energy Grade at 2	5.05	ft
Hydraulic Grade at 1	3.90	ft
Hydraulic Grade at 2	3.47	ft
Flow Area	0.79	ft ²
Wetted Perimeter	3.14	ft
Velocity	10.19	ft/s
Velocity Head	1.61	ft
Friction Slope	0.043000	ft/ft



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 29, 2000

Frank Lovelady, P.E.
300 Alamosa NW
Albuquerque, NM 87107

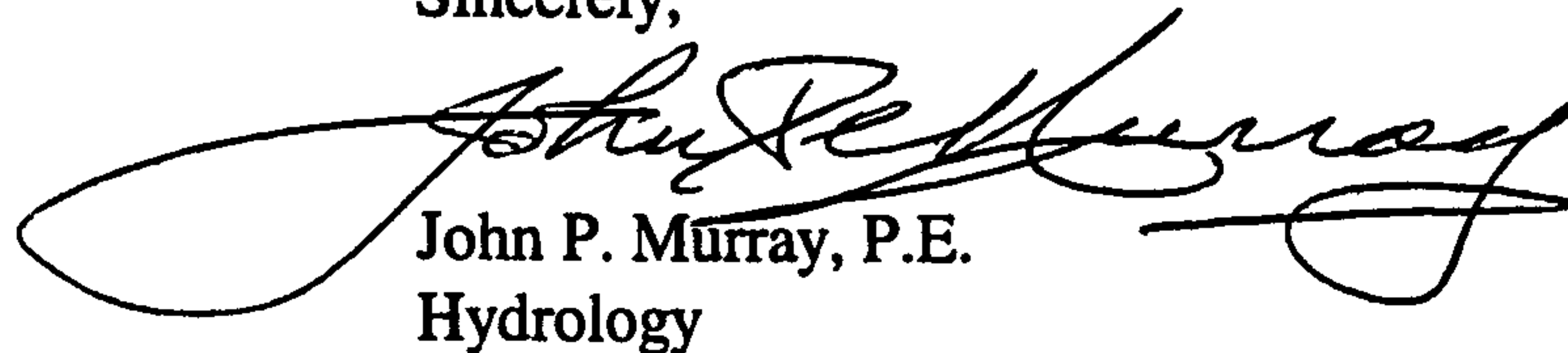
***RE: OFFICE/WAREHOUSE FACILITY, HERMANSON COSTRUCTION (C17-D107).
ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY APPROVAL.
ENGINEER'S STAMP DATED SEPTEMBER 20, 2000.***

Dear Mr.Lovelady:

Based on the information provided on your September 20, 2000 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 924-3984.

Sincerely,



John P. Murray, P.E.
Hydrology

c: Whitney Reiersen
✓ File

CERTIFICATION - OFFICE/WAREHOUSE

APPLICANT'S NAME FOR HERMANSON CONST. ZONE ATLAS/DRNG. FILE # C-17 / D 107

DRB # _____ EPC # _____ WORK ORDER # _____

LEGAL DESCRIPTION TRACT 3-A-3 LANDS OF LOS ANGELES INVESTORS

CITY ADDRESS _____

ENGINEERING FIRM: FRANK D. LOVELADY P.E. CONTACT: FRANK LOVELADYADDRESS: 300 ACAMOSA NW PHONE: 345-2267OWNER: HERMANSON CONSTRUCTION CONTACT: GERALD HERMANSONADDRESS: 4923 PASEO DEL NORTE NE PHONE: 299-4225ARCHITECT: KEN HOVEY CONTACT: KEN HOVEYADDRESS: 3808 SIMMS AVE. SE PHONE: 254-0083SURVEYOR: HARRIS SURVEYING CO. CONTACT: TONY HARRISADDRESS: 2412 MONROE NE PHONE: 889-8056CONTRACTOR: CAMBER CONSTRUCTION CONTACT: BOB DOOSEADDRESS: 7424 2ND NW PHONE: 345-1133

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

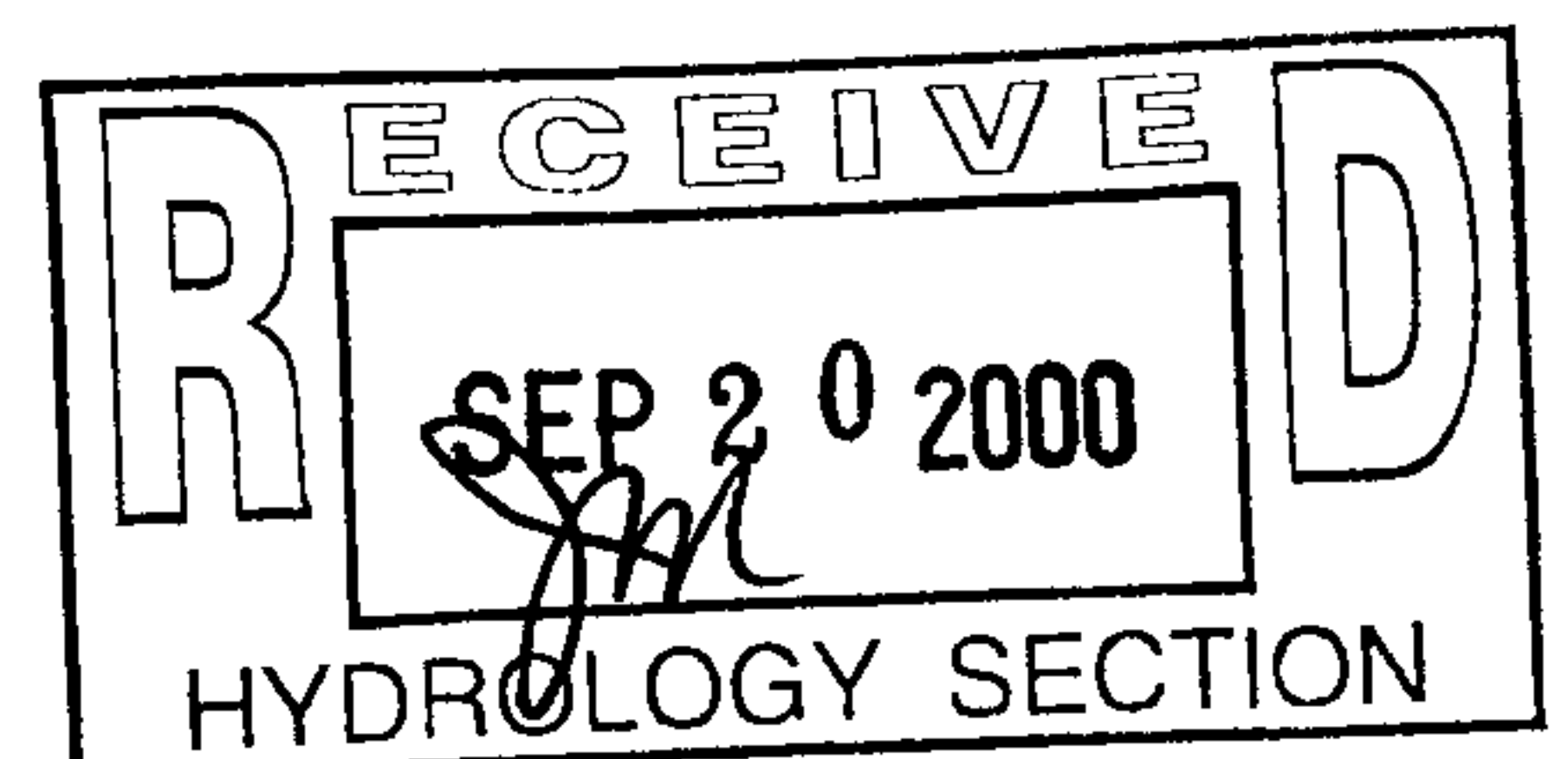
- ☐ YES
☐ NO
☐ COPY PROVIDED

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: SEPT 20, 2000BY: Frank D. Lovelady

Revised 02/98





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 29, 1998

Frank Lovelady, P.E
300 Alamosa NW
Albuquerque, NM 87107

RE: OFFICE/WAREHOUSE FACILITY (C17-D107). DRAINAGE PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP DATED NOVEMBER 20, 1998.

Dear Mr. Lovelady:

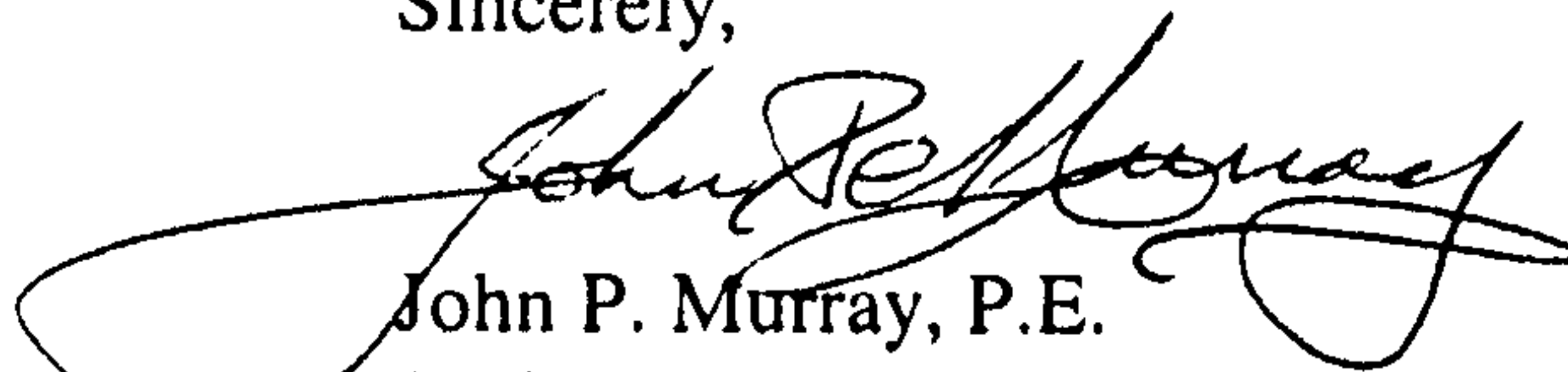
Based on the information provided on your November 20, 1998 submittal, the above referenced project is approved for the Building Permit.

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

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be required.

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

Sincerely,


John P. Murray, P.E.
Hydrology

c: Andrew Garcia
✓ File

PROJECT TITLE: OFFICE/WAREHOUSE FOR HERMANSON CONST. ZONE ATLAS/DRNG. FILE #: C-17/D-107
RB #: _____ EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: Tract 3-A-3 LANDS OF LOS ANGELES INVESTORS
PROPERTY ADDRESS: _____
ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank D. Lovelady
ADDRESS: 300 ALAMOSA NW 87107 PHONE: 345-2267
OWNER: HERMANSON CONST. CONTACT: _____
ADDRESS: 108 GEN. ARNOLD NE PHONE: 299-4225
ARCHITECT: KEN HOVEY CONTACT: KEN HOVEY
ADDRESS: 3808 SIMMS AVE SE PHONE: 254-0083
SURVEYOR: HARRIS SURVEYING CONTACT: TONY HARRIS
ADDRESS: 2412 MOH ROE NE PHONE: 889-8056
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

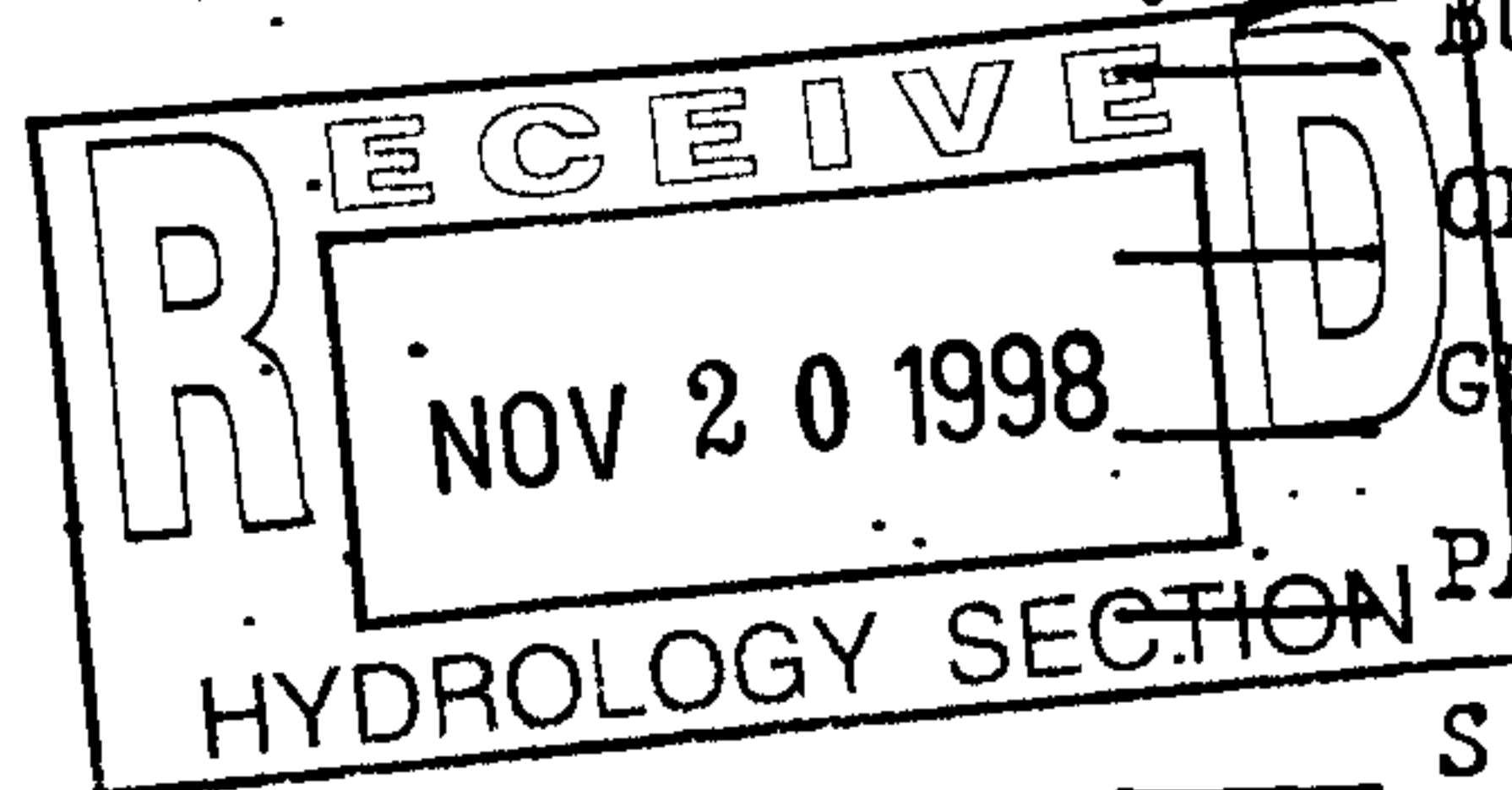
- ☐ DRAINAGE REPORT
☒ DRAINAGE PLAN
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION
☐ OTHER

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
☐ OTHER _____ (SPECIFY)



DATE SUBMITTED: November 20, 1998
BY: Frank D. Lovelady