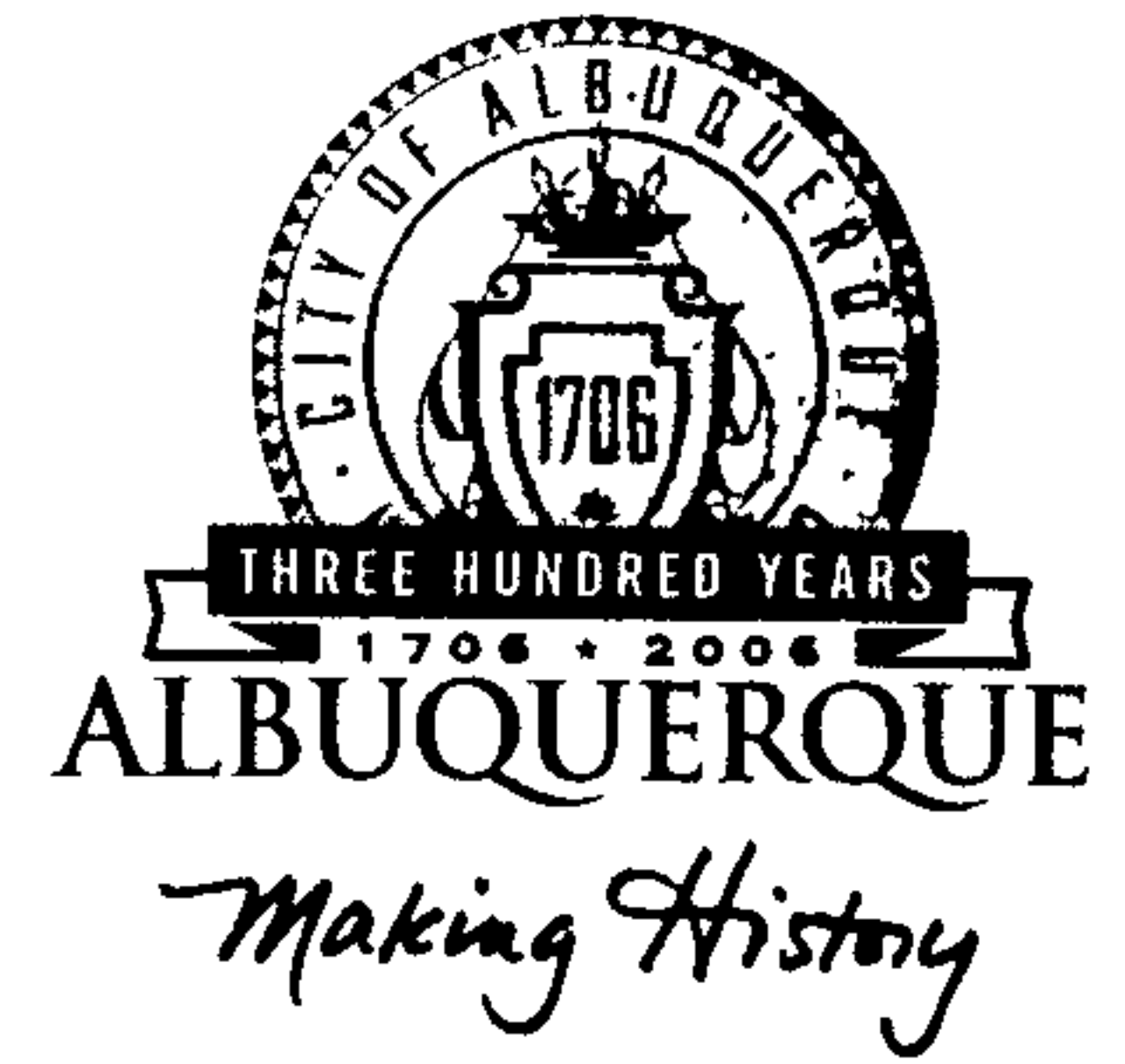


CITY OF ALBUQUERQUE



December 5, 2005

Mr. Joe P. Kelley, PE
JC ENGINEERING, LLC
10006 N. 177TH E. Avenue
Owasso, Ok 74055-7752

Re: DIRECT FUNERAL SERVICES PARKING FACILITY
401 Cordova Avenue NW
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 04/15/2004 (H-14/D97)
Certification dated 12/04/2005

Dear Joe:

P.O. Box 1293

Based upon the information provided in your submittal received 12/05/2005, 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: CO Clerk
File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/29/2003rd)

PROJECT TITLE Direct Funeral Services Parking Facility ZONE MAP/DRG. FILE #: H14/D97
DRB#: _____ EPC#: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lot 1-A, Block 1, Glenhaven Addition
CITY ADDRESS: 401 Cordova NW

ENGINEERING FIRM: JC Engineering, LLC CONTACT: Joe P. Kelley, P.E.
ADDRESS: 10006 N. 177th E. Ave. PHONE: 918-798-5979
CITY, STATE: Owasso, OK ZIP CODE: 74055-7752

OWNER: Direct Funeral Services CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

ARCHITECT: Tom Gentry CONTACT: Tom Gentry
ADDRESS: 901 Rio Grande NW, Suite D220-A PHONE: 505-764-8550
CITY, STATE: Albuquerque, NM ZIP CODE: 87104

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

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

<u>TYPE OF SUBMITTAL:</u>	<u>CHECK TYPE OF APPROVAL SOUGHT:</u>
<input type="checkbox"/> DRAINAGE REPORT	<input type="checkbox"/> SIA/FINANCIAL GUARANTEE RELEASE
<input type="checkbox"/> DRAINAGE PLAN 1 st SUBMITTAL, <i>REQUIRES TCL or equal</i>	<input type="checkbox"/> PRELIMINARY PLAT APPROVAL
<input type="checkbox"/> DRAINAGE PLAN RESUBMITTAL	<input type="checkbox"/> S. DEV. PLAN FOR SUB'D. APPROVAL
<input type="checkbox"/> CONCEPTUAL GRADING & DRAINAGE PLAN	<input type="checkbox"/> S. DEV. PLAN FOR BLDG. PRMT. APPROVAL
<input type="checkbox"/> GRADING PLAN	<input type="checkbox"/> SECTOR PLAN APPROVAL
<input type="checkbox"/> EROSION CONTROL PLAN	<input type="checkbox"/> FINAL PLAT APPROVAL
<input checked="" type="checkbox"/> ENGINEER'S CERTIFICATION (HYDROLOGY)	<input type="checkbox"/> FOUNDATION PERMIT APPROVAL
<input type="checkbox"/> CLOMR/LOMR	<input type="checkbox"/> BUILDING PERMIT APPROVAL
<input type="checkbox"/> TRAFFIC CIRCULATION LAYOUT (TCL)	<input checked="" type="checkbox"/> CERTIFICATE OF OCCUPANCY (PERM.)
<input type="checkbox"/> ENGINEERS CERTIFICATION (TCL)	<input type="checkbox"/> CERTIFICATE OF OCCUPANCY (TEMP.)
<input type="checkbox"/> ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)	<input type="checkbox"/> GRADING PERMIT APPROVAL
<input type="checkbox"/> OTHER	<input type="checkbox"/> PAVING PERMIT APPROVAL
	<input type="checkbox"/> WORK ORDER APPROVAL
	<input type="checkbox"/> OTHER _____ (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES
☒ NO
☐ COPY PROVIDED

DATE SUBMITTED: Dec. 5, 2005 BY: Joe P. Kelley, P.E.

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.



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 28, 2004

Joe Kelley, PE
JC Engineering
1924 Roanoke Dr. NE
Rio Rancho, NM 87124

**Re: Direct Funeral Services Parking Facility Drainage Report
Engineer's Stamp dated 4-15-04 (H14/D97)**

Dear Mr. Kelley,

Based upon the information provided in your submittal dated 4-16-04, the above referenced report is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

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: file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/29/2003rd)

PROJECT TITLE Direct Funeral Services Parking Facility ZONE MAP/DRG. FILE #: H14 / 1097
DRB#: _____ EPC#: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lot 1-A, Block 1, Glenhaven Addition
CITY ADDRESS: 401 Cordova NW

ENGINEERING FIRM: JC Engineering, LLC CONTACT: Joe P. Kelley, P.E.
ADDRESS: 1924 Roanoke Dr. NE PHONE: 263-9032
CITY, STATE: Rio Rancho, NM ZIP CODE: 87144-5532

OWNER: Direct Funeral Services CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

ARCHITECT: Tom Gentry CONTACT: Tom Gentry
ADDRESS: 1125 Montclair Dr. NE PHONE: 262-5455
CITY, STATE: Albuquerque, NM ZIP CODE: 87110

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

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

TYPE OF SUBMITTAL:

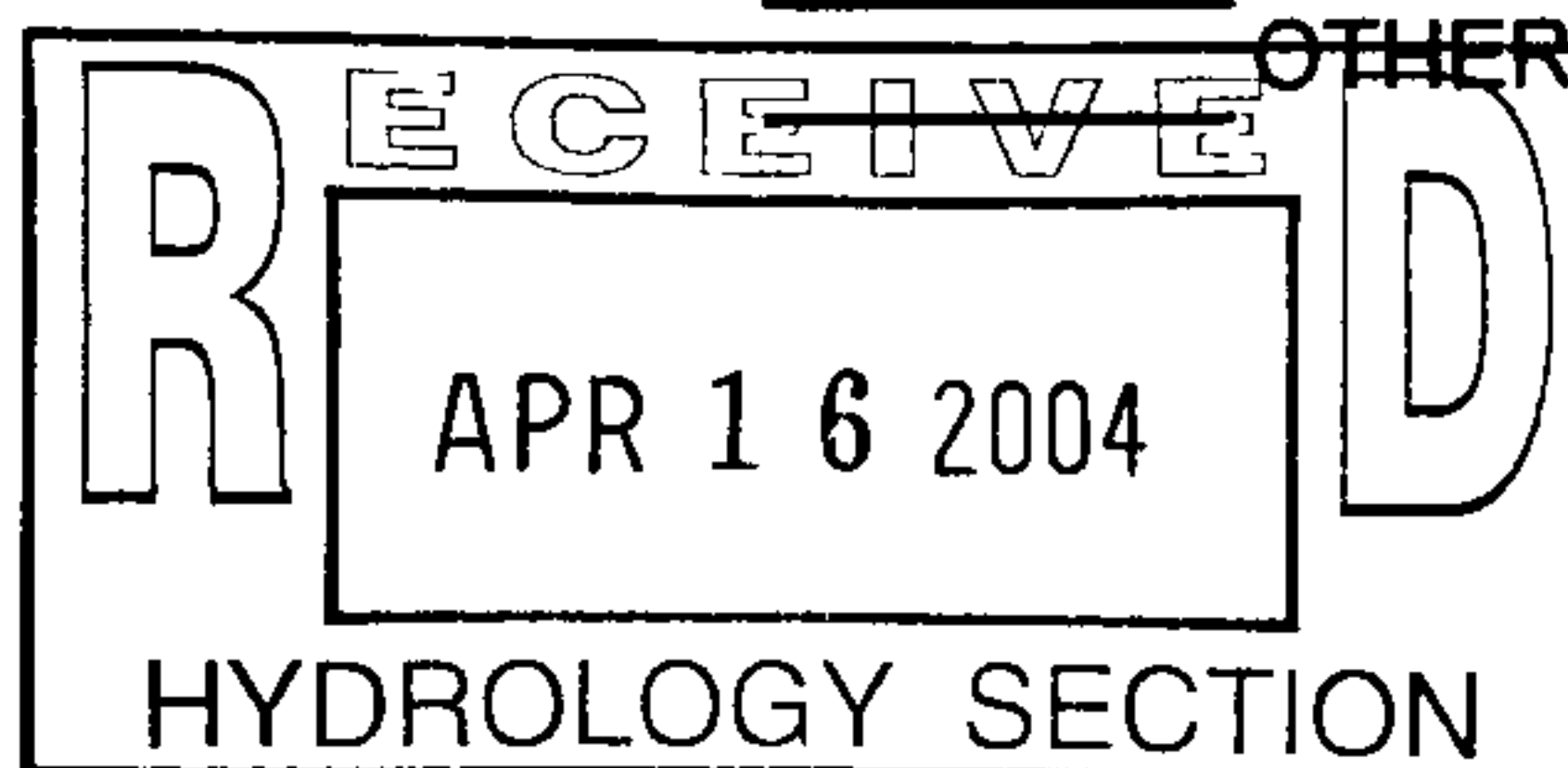
☒ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL, *REQUIRES TCL or equal*
☐ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☒ GRADING PLAN
☒ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEERS CERTIFICATION (TCL)
☐ ENGINEERS 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. PRMT. APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM.)
☐ CERTIFICATE OF OCCUPANCY (TEMP.)
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ OTHER _____ (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES
☐ NO
☐ COPY PROVIDED



DATE SUBMITTED: April 16, 2004

BY: Joe P. Kelley, P.E.

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.

JC=Engineering, LLC

1924 Roanoke Dr. NE Rio Rancho, NM 87144-5532
Tel(505)263-9032 Fax (505)867-9304 www.jcengineering.com

Drainage Report

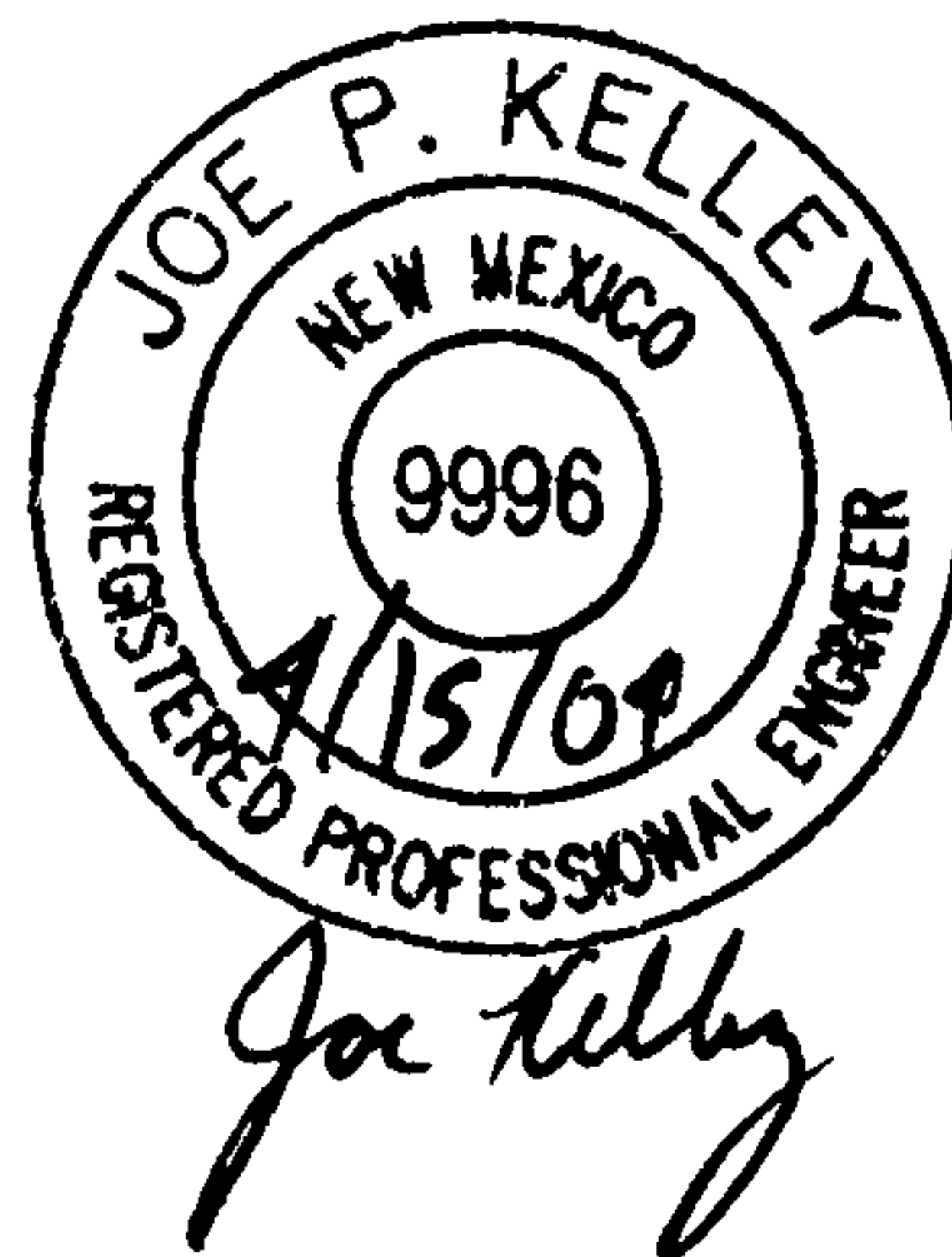
For

Direct Funeral Services Parking Facility

401 Cordova NW

In

Albuquerque, New Mexico



April 2004

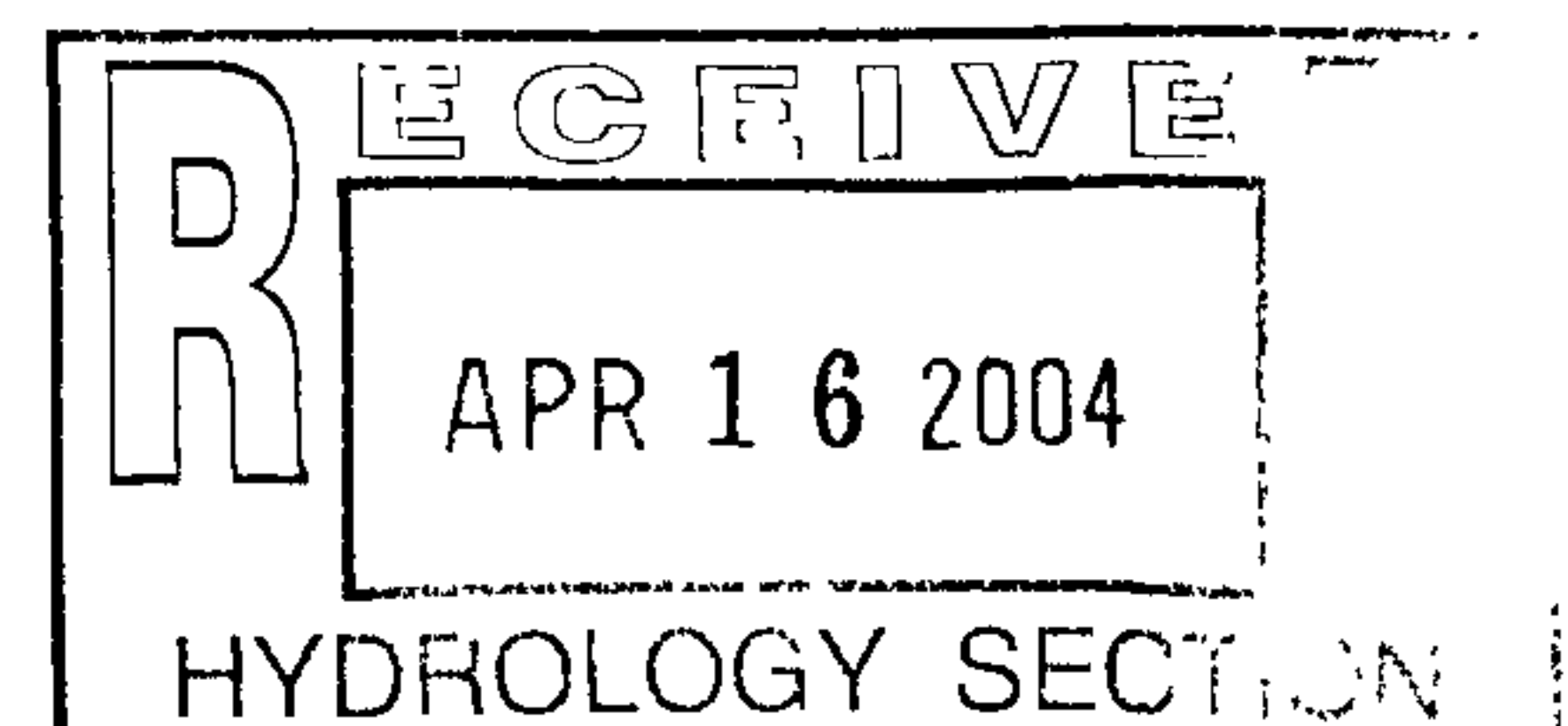


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Appendices

AHYMO Hydrologic Output A-1

Attachments (in Back Pocket)

Grading Plan Sheet C1

Purpose

This drainage report provides the hydrologic rationale for the development of the Direct Funeral Services Parking Facility at 401 Cordova NW.

Project Location

The project is located across the street from the main buildings of the Direct Funeral Services site, in a C-2 zone. It is one building west of Fourth Street, a major City of Albuquerque street, and two blocks north of Menaul. The area is completely developed, and the buildings fronting on Fourth Street are all commercial, while the lots located off of the Fourth Street thoroughfare are all residentially developed.

Floodplain

Per FEMA FIRM Map 35001C0328, dated Sept., 1996, this site is not within a designated FEMA floodplain.

Existing Conditions

When the site was purchased for this project, it consisted of an old residential house. The house has now been torn down, and the foundations remain (as indicated on the grading plan). There is one tree and some other minor vegetation on the site. A two-story brick building abuts the site on the north (i.e., zero lot line). The building to the west is a house, while there is a commercial building to the east. As indicated on the grading plan, there are wood fences and iron fences on the lot lines shared with those properties.

The historic drainage pattern has been free discharge to the street. There are storm inlets located at a local low point on both sides of the street, 240' to the west.

Developed Conditions

The site is going to be developed as a commercial parking garage for funeral vehicles, with a paved driveway and some new landscaping. The perimeter fences will be removed and replaced, the sidewalk will be improved, and the driveway will be widened.

The new drainage pattern will be identical to the existing—sheet flow to the street. As indicated in the summary table below, there will be a slight increase in runoff of 0.0038 ac-ft (=166 cu.ft.). Because the public storm drainage facilities are so close, and because the increase in runoff is so minor, the continuation of the existing drainage pattern is proposed.

Hydrologic Summary

Description	Flow (cfs)	Volume (ac-ft)	Page Reference
Pre-project Runoff	0.37	0.0114	A-1
Post-project Developed Runoff	0.45	0.0152	A-2

APPENDIX

Direct Funeral Parking Facility Drainage Report

100-Year AHYMO Output File

□(s16.67h8.5v0T□&l8D

AHYMO PROGRAM (AHYMO_97) - - Version: 1997.02d
 RUN DATE (MON/DAY/YR) = 04/15/2004
 START TIME (HR:MIN:SEC) = 14:31:24 USER NO.= AHYMO-I-9702c01000S33-AH
 INPUT FILE = C:\DOCUME~1\ALLUSE~1\DOCUME~1\JCEng\Projects\DIRECT~1\HYDROL~2\DIRECT~1.DTA

*S JC ENGINEERING

□□□

*S*****

*S DIRECT FUNERAL PARKING FACILITY--401 CORDOVA NW

*S AHYMO HYDROLOGIC ANALYSIS

*S 100-YEAR, 6-HOUR STORM

*S

START TIME=0.0 CODE 0 LINES -6

LOCATION ALBUQUERQUE

City of Albuquerque soil infiltration values (LAND FACTORS) used for computations.

Land Treatment	Initial Abstr.(in)	Unif. Infilt.(in/hour)
A	0.65	1.67
B	0.50	1.25
C	0.35	0.83
D	0.10	0.04

RAINFALL TYPE=-1 RAIN QUARTER=0.0 RAIN ONE=1.92
 RAIN SIX=2.20 RAIN DAY=2.65 DT=0.03333

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
 DT = .033330 HOURS END TIME = 5.999400 HOURS

□□□

*S*****

*S COMPUTE RUNOFF UNDER PRE-PROJECT CONDITIONS. THIS IS A RESIDNETIAL NEIGH-

*S BORHOOD NEXT TO A COMMERCIAL DISTRICT, AND THERE USED TO BE A HOUSE ON THIS

*S LOT. IT HAS BEEN TORN DOWN BUT THE FOUNDATIONS STILL REMAIN, SO THE

*S OLD IMPERVIOUS AREA CAN BE EASILY COMPUTED.

COMPUTE NM HYD ID=1 HYD=BASIN_EXIST DA=0.0001697 SQ MI
 PER A=0 PER B=27 PER C=37 PER D=36 TP=0.1333
 MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = .24119 CFS UNIT VOLUME = .9546 B = 526.28 P60 = 1.9200
 AREA = .000061 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .116797HR TP = .133300HR K/TP RATIO = .876194 SHAPE CONSTANT, N = 4.052364
 UNIT PEAK = .29221 CFS UNIT VOLUME = .9532 B = 358.65 P60 = 1.9200
 AREA = .000109 SQ MI IA = .41328 INCHES INF = 1.00719 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=1 CODE=1

HYDROGRAPH FROM AREA BASIN_EXIST

RUNOFF VOLUME = 1.26429 INCHES = .0114 ACRE-FEET
 PEAK DISCHARGE RATE = .37 CFS AT 1.500 HOURS BASIN AREA = .0002 SQ. MI.

*S NOW COMPUTE THE RUNOFF UNDER PROPOSED CONDITIONS

COMPUTE NM HYD ID=1 HYD=BASIN_DEV DA=0.0001697 SQ MI
 PER A=0 PER B=13 PER C=13 PER D=74 TP=0.1333
 MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = .49579 CFS UNIT VOLUME = .9751 B = 526.28 P60 = 1.9200
 AREA = .000126 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .118716HR TP = .133300HR K/TP RATIO = .890595 SHAPE CONSTANT, N = 3.982164

UNIT PEAK = .11717 CFS UNIT VOLUME = .8869 B = 353.98 P60 = 1.9200
AREA = .000044 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=1 CODE=1

HYDROGRAPH FROM AREA BASIN_DEV

RUNOFF VOLUME = 1.67466 INCHES = .0152 ACRE-FEET
PEAK DISCHARGE RATE = .45 CFS AT 1.500 HOURS BASIN AREA = .0002 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 14:31:24
(s0p10h4099T&l6D