CITY OF ALBUQUERQUE



September 29, 2006

Mr. Shahab Biazar, P.E.

ADVANCED ENGINEERING AND
CONSULTING, LLC

4416 Alameda Avenue NE
Moriarty, New Mexico 87113

Re: AIRPORT INDUSTRIAL PARK, LOT 11, BLOCK 1

2445 Baylor Drive SE

Approval of Permanent Certificate of Occupancy (C.O.)

Engineer's Stamp dated 03/09/2006 (M-16/D39)

Certification dated 09/27/2006

Dear Shahab:

Based upon the information provided in your submittal received 09/28/2006, 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

www.cabq.gov

C: CO Clerk

Sincerely, Oulene V. Pottillo

Arlene V. Portillo

Plan Checker, Planning Dept. - Hydrology

Development and Building Services

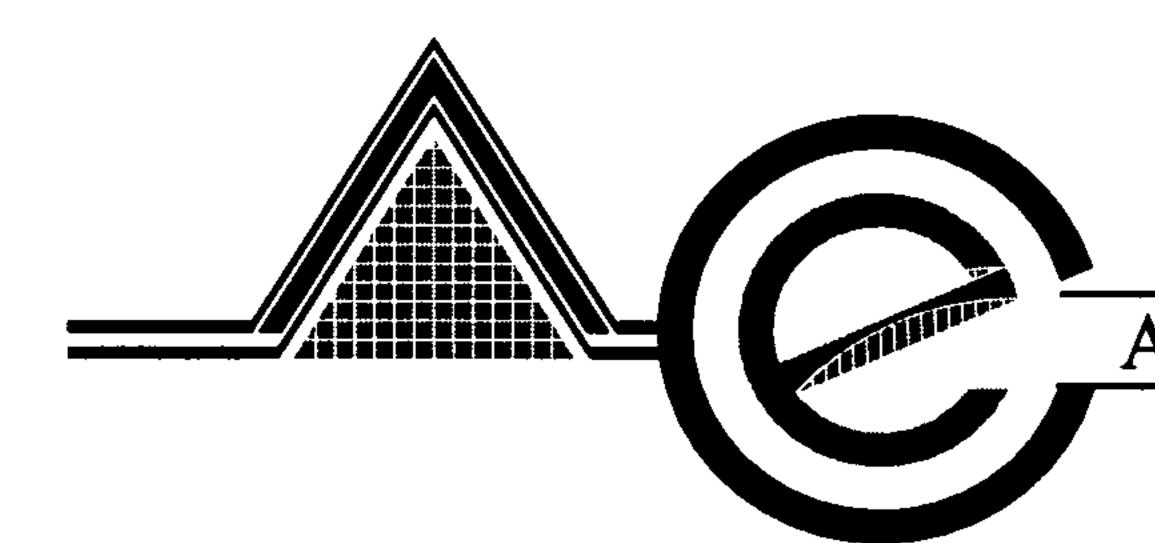
DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd) ,

PROJECT TITLE	: VLOT 11, BLOCK 1 (AIRPORT INDUSTRIAL PARK	ZONE ATLAS/DR	G. FILE #: M16 / D39
DRB #:	EPC #:	WORK ORDER #:	
LEGAL DESCRI	PTION: LOT 11, BLOCK 1, AIRPORT I	NDIISTRIAI, PARK	
CITY ADDRESS		TOOD I THERE	
ENGINEERING I	FIRM: Advanced Engineering and Consul	ing IIC CONTACT.	Chabab Dia
ADDRES	<u>~</u>	ting, LLC CONTACT: PHONE:	Shahab Biazar (505) 899-5570
CITY, STAT		ZIP CODE:	87113
OWNER:		CONTACT:	
ADDRES		PHONE:	· · · · · · · · · · · · · · · · · · ·
CITY, STAT	E :	ZIP CODE:	
ARCHITECT:		CONTACT:	
ADDRES CITY, STAT		PHONE:	
•		ZIP CODE:	- · · · · · · · · · · · · · · · · · · ·
SURVEYOR: ADDRES	······································	CONTACT:	
CITY, STAT		PHONE: ZIP CODE:	
CONTRACTOR:			
ADDRES	- · ·	CONTACT: PHONE:	
CITY, STAT	E:	ZIP CODE:	
CHECK TYPE O	F SUBMITTAL:	CHECK TYPE OF A	APPROVAL SOUGHT:
	INAGE REPORT		ANCIAL GUARANTEE RELEASE
	INAGE PLAN 1ST SUBMITTAL, REQUIRES TO		NARY PLAT APPROVAL
<u>, </u>	ICEPTUAL GRADING & DRAINAGE PLAN	- 	LAN FOR SUB'D. APPROVAL
	DING PLAN		
			PLAN FOR BLDG. PERMIT APPROVAL
	SION CONTROL PLAN	SECTOR	PLAN APPROVAL
· <u> </u>	INEER'S CERTIFICATION (HYDROLOGY)	FINAL PL	AT APPROVAL
CLO	MR / LOMR	FOUNDAT	TION PERMIT APPROVAL
TRA	FFIC CIRCULATION LAYOUT (TCL)	BUILDING	S PERMIT APPROVAL
ENG	INEER'S CERTIFICATION (TCL)	X CERTIFIC	ATE OF OCCUPANCY (PERM.)
ENG	INEER'S CERTIFICATION (DRB APPR. SITE PL	AN) CERTIFIC	ATE OF OCCUPANCY (TEMP.)
OTH	ER //	GRADING	PERMIT APPROVAL
		PAVING F	PERMIT APPROVAL
		WORK OF	RDER APPROVAL
	Lyv FP 2 o	OTHER (S	SPECIFY)
	290	200s 7/15	
WAS A PRE-DES	IGN CONFERENCE ATTENDED:		
YES	S. S		
X NO		W/QV/	
COP	Y PROVIDED		
DATE SUBMITTE	D:09/27/2006	BY: Shahal	b Biazar, 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 submittals may be required based on the following:

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



ADVANCED ENGINEERING and CONSULTING, LLC

Consulting
Design
Development
Management
Inspection
Surveying

September 27, 2006

Ms. Kristal D. Metro, P.E.
Senior Engineer, Planing Dept.
Development and Building Services
600 Second Street NW
Albuquerque, New Mexico 87102

RE: FINAL CERTIFICATE OF OCCUPANCY FOR 2445 BAYLOR DRIVE SE (M16-D39)

Dear Ms. Metro:

Enclosed please find one copy of the as-built Grading Plan for the above mentioned site. The grades are built according to the approved grading & drainage plan with engineering stamp date of 03/09/2006. We are requesting Final Certification Of Occupancy.

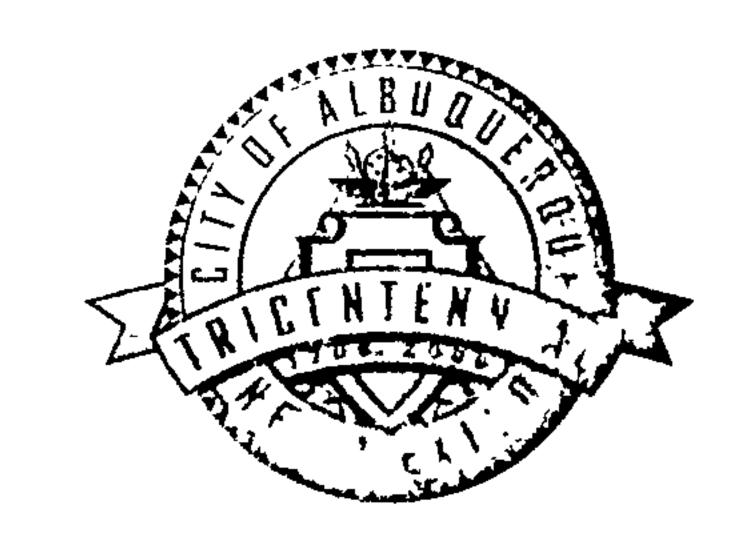
Please contact me if there are any questions or concerns regarding this submittal.

D) 国区国 W国 SEP 2 8 · 2006 HYDROLOGY SECTION

Sincerely yours

Shahab Biazar, P.E.

CITY OF ALBUQUERQUE



May 5, 2006

Shahab Biazar, P.E.
Advanced Engineering and Consulting, LLC
4416 Anaheim Ave., NE
Albuquerque, NM 87113

Re: Lot 11, Block 1, Airport Industrial Park, 2445 Baylor Dr. SE Grading and Drainage Plan - Engineer's Stamp dated 3-9-06 (M16 – D39)

Dear Mr. Biazar,

Based upon the information provided in your submittal dated 3-14-06, the above referenced plan is approved for Grading Permit & Paving Permit. Please provide Certified As-builts at the completion of this project for the file.

If you have any questions, you can contact me at 924-3990.

Sincerely,

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Phillip J. Lovato, E.I., C.F.M.

Engineering Associate, Hydrology,

Development and Building Services,

Planning Department

cc: file

DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

DRB #: EPC #: WORK ORDER #: LEGAL DESCRIPTION: LOT 11, BLOCK 1, AIRPORT INDUSTRIAL PARK CITY ADDRESS: 2445 BAYLOR DR SE ENGINEERING FIRM: Advanced Engineering and Consulting, LLC ADDRESS: 4416 Anaheim Ave., NE CITY, STATE: Albuquerque, New Mexico OWNER: ADDRESS: CITY, STATE: CONTACT: PHONE: ZIP CODE: ARCHITECT: CONTACT: PHONE: ZIP CODE: ARCHITECT: CONTACT: PHONE: ZIP CODE: SURVEYOR: ZIP CODE: CONTACT: PHONE: ZIP CODE: SURVEYOR: ZIP CODE: ZIP CO	PROJECT TITLE:	LOT 11, BLOCK 1, AIRPORT INDUSTRIAL PARK	ZONE ATLAS/DRG. FILE #: M16 / D 3 9
CITY ADDRESS: 2445 BAYLOR DR SE ENGINEERING FIRM: Advanced Engineering and Consulting, LLC ADDRESS: 4416 Anaheim Ave., NE CITY, STATE: Albuquerque, New Mexico OWNER: CITY, STATE: CONTACT: Shahab Biazar (505) 899-5570 ZIP CODE: 87113 CONTACT: PHONE: ZIP CODE: SURVEYOR: ZIP CODE: ZIP CODE: PHONE: ZIP CODE: PHONE: ZIP CODE: SURVEYOR: ZIP CODE: PHONE: PHONE: PHONE: ZIP CODE: PHONE: ZIP CODE: PHONE: PHON	DRB #:	EPC #:	WORK ORDER #:
ENGINEERING FIRM: Advanced Engineering and Consulting, LLC ADDRESS: 4416 Anaheim Ave., NE CITY, STATE: Albuquerque, New Mexico OWNER: ADDRESS: CITY, STATE: CONTACT: PHONE: CITY, STATE: CONTACT: PHONE: CITY, STATE: CONTACT: PHONE: CITY, STATE: CONTACT: ADDRESS: CITY, STATE: CONTACT: PHONE: CITY, STATE: CONTACT: ADDRESS: CITY, STATE: CONTACT: PHONE: CITY, STATE: CONTACT: PHONE: CONTACT: ADDRESS: CITY, STATE: CONTACT: PHONE:	LEGAL DESCRIPTION	ON: LOT 11, BLOCK 1, AIRPORT INDUS	STRIAL PARK
ADDRESS: 4416 Anaheim Ave., NE CITY, STATE: Albuquerque, New Mexico CONTACT: ADDRESS: PHONE: CITY, STATE: CONTACT: ADDRESS: PHONE: CITY, STATE: CONTACT: ADDRESS: CITY, STATE: CONTACT: ADDRESS: PHONE: CITY, STATE: CONTACT: ADDRESS: PHONE: CITY, STATE: ZIP CODE: SURVEYOR: CONTACT: ADDRESS: PHONE: PHONE:	CITY ADDRESS:	2445 BAYLOR DR SE	
CITY, STATE: Albuquerque, New Mexico OWNER: ADDRESS: CITY, STATE: ARCHITECT: ADDRESS: CITY, STATE: CONTACT: PHONE: ZIP CODE: CONTACT: PHONE: ZIP CODE: CONTACT: PHONE: ZIP CODE: CONTACT: PHONE: ZIP CODE: CONTACT: PHONE: PHONE: PHONE:	-		· · · · · · · · · · · · · · · · · · ·
OWNER: CONTACT: ADDRESS: PHONE: CITY, STATE: ZIP CODE: ARCHITECT: ADDRESS: ONTACT: PHONE: SURVEYOR: ADDRESS: CONTACT: PHONE:			
ADDRESS: CITY, STATE: ARCHITECT: ADDRESS: CITY, STATE: CONTACT: PHONE: ZIP CODE: ZIP CODE: SURVEYOR: ADDRESS: PHONE: PHONE: PHONE: PHONE:	OWNED.		
ARCHITECT: ADDRESS: CITY, STATE: SURVEYOR: ADDRESS: ADD	· 	· · · · · · · · · · · · · · · · · · ·	
ADDRESS: CITY, STATE: SURVEYOR: ADDRESS: PHONE: ZIP CODE: CONTACT: PHONE:	CITY, STATE:		ZIP CODE:
CITY, STATE: SURVEYOR: ADDRESS: CONTACT: PHONE:			CONTACT:
SURVEYOR: ADDRESS: PHONE:			
ADDRESS: PHONE:	·	· · · · · · · · · · · · · · · · · · ·	
	CITY, STATE:		ZIP CODE:
CONTRACTOR:	CONTRACTOR:		CONTACT:
ADDRESS: PHONE: ZIP CODE:			
CITY, STATE: ZIP CODE:	OIII, OIAIL.	· · · · · · · · · · · · · · · · · · ·	
CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF SU	JBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
X DRAINAGE REPORT SIA / FINANCIAL GUARANTEE RELEASE	X DRAINA	GE REPORT	SIA / FINANCIAL GUARANTEE RELEASE
DRAINAGE PLAN 1ST SUBMITTAL, REQUIRES TCL OR EQUAL PRELIMINARY PLAT APPROVAL	DRAINA	GE PLAN 1ST SUBMITTAL, REQUIRES TCL OR	EQUAL PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN S. DEV. PLAN FOR SUB'D. APPROVAL	CONCE	PTUAL GRADING & DRAINAGE PLAN	S. DEV. PLAN FOR SUB'D. APPROVAL
X GRADING PLAN S. DEV. PLAN FOR BLDG. PERMIT APPROVA	X GRADIN	IG PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
EROSION CONTROL PLAN SECTOR PLAN APPROVAL	EROSIC	N CONTROL PLAN	SECTOR PLAN APPROVAL
ENGINEER'S CERTIFICATION (HYDROLOGY) FINAL PLAT APPROVAL	ENGINE	ER'S CERTIFICATION (HYDROLOGY)	FINAL PLAT APPROVAL
CLOMR / LOMR FOUNDATION PERMIT APPROVAL	CLOMR	/ LOMR	FOUNDATION PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL) BUILDING PERMIT APPROVAL	TRAFFI	C CIRCULATION LAYOUT (TCL)	BUILDING PERMIT APPROVAL
ENGINEER'S CERTIFICATION (TCL) CERTIFICATE OF OCCUPANCY (PERM.)	ENGINE	ER'S CERTIFICATION (TCL)	CERTIFICATE OF OCCUPANCY (PERM.)
ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN) CERTIFICATE OF OCCUPANCY (TEMP.)	ENGINE	ER'S CERTIFICATION (DRB APPR. SITE PLAN)	CERTIFICATE OF OCCUPANCY (TEMP.)
OTHER A GRADING PERMIT APPROVAL	OTHER		X GRADING PERMIT APPROVAL
$\underline{\chi}$ PAVING PERMIT APPROVAL)		X PAVING PERMIT APPROVAL
Tee paid work order Approval	1	re paid	WORK ORDER APPROVAL
OTHER (SPECIFY)	•		OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	WAS A PRE-DESIGN	CONFERENCE ATTENDED:	
YES YES	YES		
\mathbf{x} NO	X NO		
COPY PROVIDED MAR 1 4, 2006	<u> </u>	ROVIDED	MAR 1 4 2006
DATE SUBMITTED: 03 / 09 / 2006 BY: Shanab Blazar, P.E.	DATE SUBMITTED:	03 / 09 / 2006	BY: HYDROLOGY SECTION Shanab Blazar, 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 submittals may be required based on the following:

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

DRAINAGE REPORT FOR

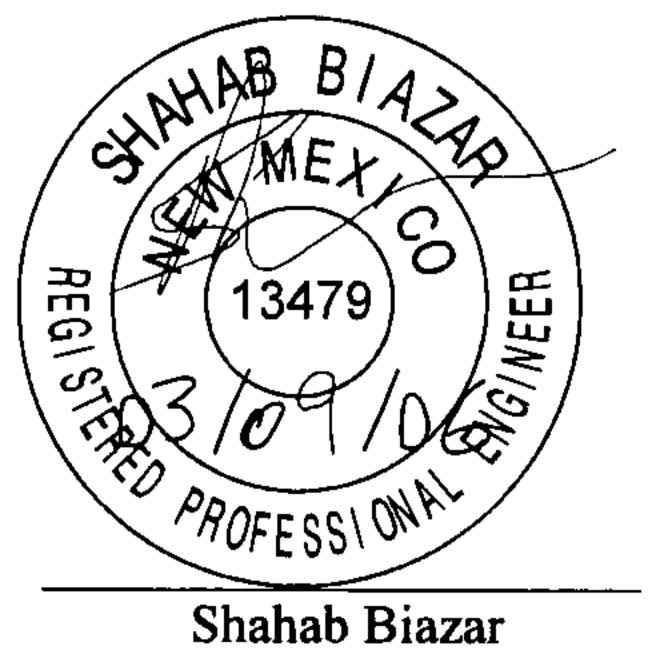
LOT 11, BLOCK 1 AIRPORT INDUSTRIAL PARK

Prepared by:

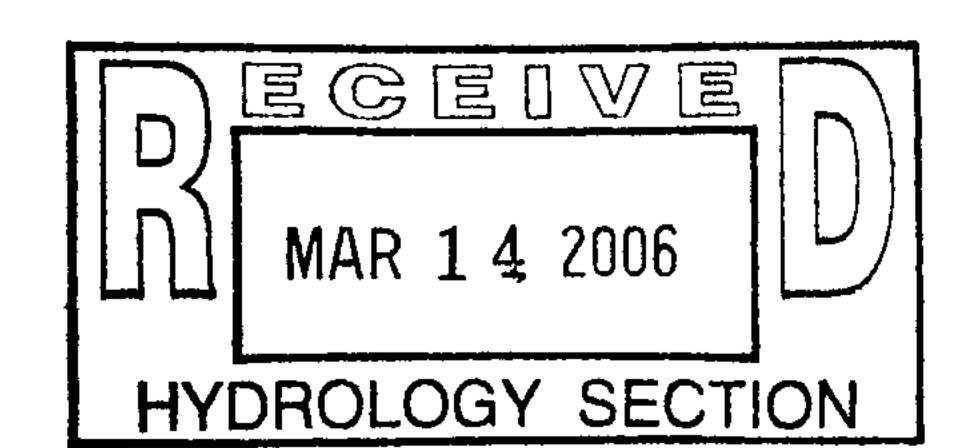


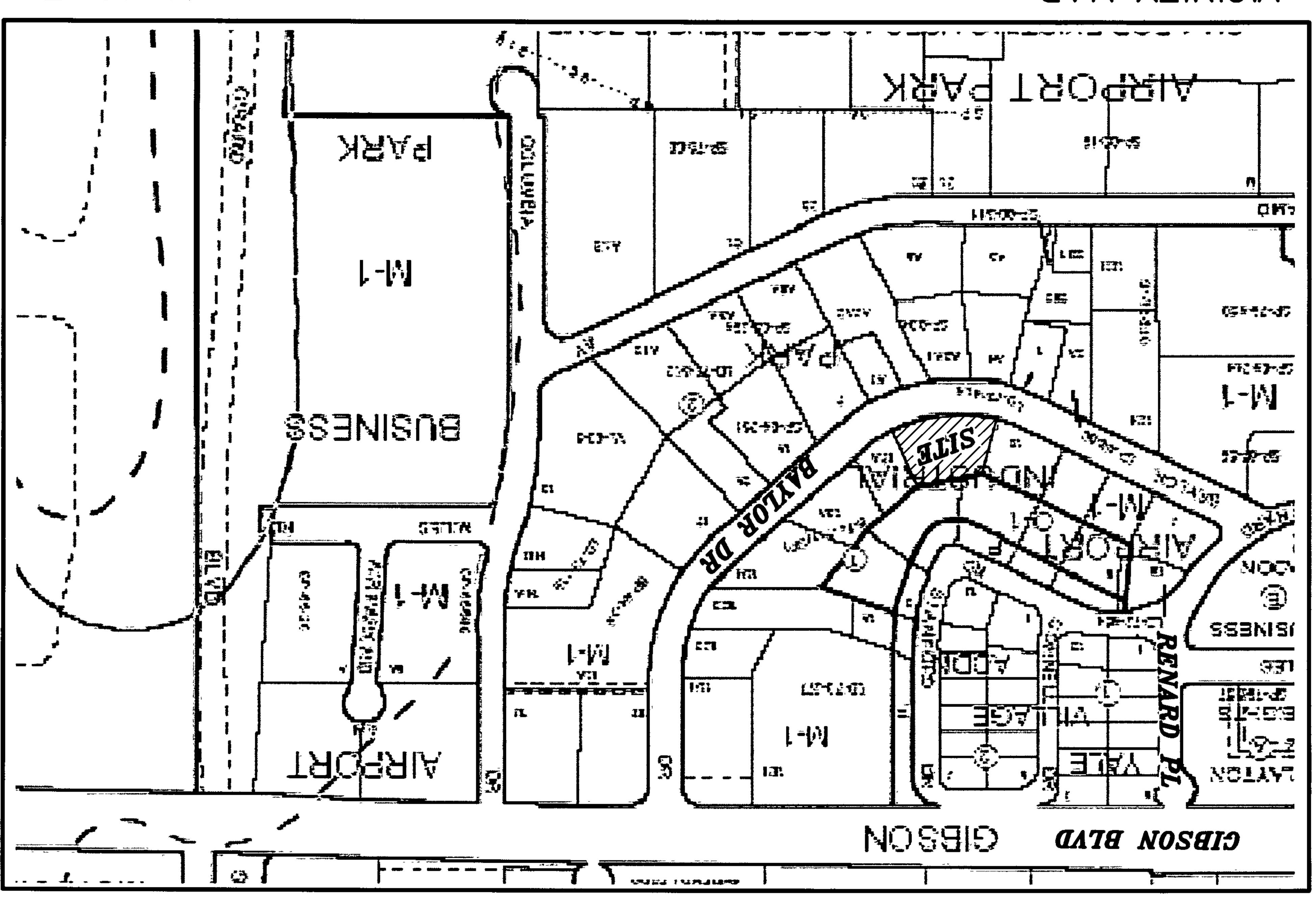
4416 Anaheim Ave., NE Albuquerque, New Mexico 87113

March, 2006



Shahab Biazar PE NO. 13479





Z-9l-W

VICINITY MAP:

Location

Lot 11, Block 1, Airport Industrial Park is located at 2445 Baylor Drive SE. See attached Zone Atlas page number M-16 for exact location.

Purpose

The purpose of this drainage report is to present a grading and drainage solution for the proposed sites. We are requesting rough grading approval and replat approval of the existing lot. The owner are proposing to build a parking lot on this Tract. The owners are also proposing to subdivide the existing lot into two lots.

Existing Drainage Conditions

7

This Lot drains to northwest corner of the site and then to Lot 4. From the runoff drains to Miles Road. Minor offsite runoff may enter from this site from the East. No other offsite runoff enters this site. The site does not fall within a 100-year floodplain.

Proposed Conditions and On-Site Drainage Management Plan

The offsite and on-site drainage pattern will remain the same as existing conditions.

The runoff will be discharged to Lot 4 at historical runoff rate of 1.16 cfs. A header wall with 2-4" diameter opening (through the header wall) will detain the runoff within the parking lot. Then the runoff will be discharged to a concrete channel (4' wide, 6" deep). From there the runoff will drain to Lot 4 and to Miles Road. In case of an emergency were the 2-4" diameter opening are clogged the runoff will overflow the header wall through an emergency overflow spillway (3.50' wide by 6" deep) onto the 4' concrete channel.

Calculations

City of Albuquerque, Development Process Manuel, Section 22.2, Hydrology Section, was used for runoff calculations. See this report for Summary Table for runoff results. See also this report for ponding calculations as well as the AHYMO input and output files for runoff calculations.

RUNOFF CALCULATIONS

(INPUT DATA FOR AHYMO CALCULATIONS)

The site is @ Zone 2

DEPTH (INCHES) @ 100-YEAR STORM

$$P_{60} = 2.01 \text{ inches}$$

$$P_{360} = 2.35 \text{ inches}$$

$$P_{1440} = 2.75 \text{ inches}$$

DEPTH (INCHES) @ 10-YEAR STORM

$$P_{60} = 2.01 \times 0.667$$

$$= 1.34$$
 inches

$$P_{360} = 1.57$$

$$P_{1440} = 1.83$$

See the summary output from AHYMO calculations.

Also see the following summary tables.

See this report for Summary Tables for the runoff and input file and summary output from AHYMO calculations.

RUNOFF CALCULATION RESULTS

BASIN	AREA (SF)	AREA (AC)	AREA (MI ²)
ON-SITE	32375.63	0.7432	0.001161

EXISTING

BASIN	Q-100	Q-10
	CFS	CFS
ON-SITE	1.16	0.28

PROPOSED

		·
BASIN	Q-100	Q-10
	CFS	CFS
ON-SITE	3.20	2.04

AHYMO INPUT FILE

* ZONE 2	***********
	6-HR STORM (UNDER EXISITNG CONDITIONS) *
·	**************************************
START	TIME=0.0
RAINFALL	TYPE=1 RAIN QUARTER=0.0 IN
	RAIN ONE=2.01 IN RAIN SIX=2.35 IN
	RAIN DAY=2.75 IN DT=0.03333 HR
COMPUTE NM HYD	ID=1 HYD NO=101.0 AREA=0.001161 SQ MI
	PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
	TP=0.1333 HR MASS RAINFALL=-1
*****	****************
* 10-YEAR,	6-HR STORM (UNDER EXISTING CONDITIONS) *
******	***************
START	TIME=0.0
RAINFALL	TYPE=1 RAIN QUARTER=0.0 IN
	RAIN ONE=1.34 IN RAIN SIX=1.57 IN
	RAIN DAY=1.83 IN DT=0.03333 HR
COMPUTE NM HYD	ID=1 HYD NO=101.0 AREA=0.001161 SQ MI
	PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
	TP=0.1333 HR MASS RAINFALL=-1

	6-HR STORM (UNDER PROPOSED CONDITIONS) * ***********************************
START	TIME=0.0
RAINFALL	TYPE=1 RAIN QUARTER=0.0 IN
	RAIN ONE=2.01 IN RAIN SIX=2.35 IN
	RAIN DAY=2.75 IN DT=0.03333 HR
COMPUTE NM HYD	ID=1 HYD NO=101.0 AREA=0.001161 SQ MI
	PER A=0.00 PER B=17.00 PER C=0.00 PER D=83.00
	TP=0.1333 HR MASS RAINFALL=-1
******	*************
* 10-YEAR,	6-HR STORM (UNDER PROPOSED CONDITIONS) *
******	***************
START	TIME=0.0
RAINFALL	TYPE=1 RAIN QUARTER=0.0 IN
	RAIN ONE=1.34 IN RAIN SIX=1.57 IN
	RAIN DAY=1.83 IN DT=0.03333 HR
COMPUTE NM HYD	ID=1 HYD NO=101.0 AREA=0.001161 SQ MI
	PER A=0.00 PER B=17.00 PER C=0.00 PER D=83.00
	TP=0.1333 HR MASS RAINFALL=-1

FINISH	

SUMMARY OUTPUT FILE

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02d RUN DATE (MON/DAY/YR) =03/07/2006
INPUT FILE = 601
USER NO.= AHYMO-I-9702c01000R31-AH

	YDROGRAPH IFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE =	
START RAINFALL TYPE= 1										TIME= RAIN6=	.00 2.350
COMPUTE NM HYD START RAINFALL TYPE= 1	101.00	_	1	.00116	1.16	.033	.53121	1.533	1.566	PER IMP= TIME= RAIN6=	.00 .00 1.570
COMPUTE NM HYD START	101.00	-	1	.00116	.28	.008	.12517	1.533	.375	PER IMP= TIME=	.00
RAINFALL TYPE= 1 COMPUTE NM HYD START	101.00	-	1	.00116	3.20	.117	1.88805	1.500	4.310	RAIN6= PER IMP= TIME=	2.350 83.00 .00
RAINFALL TYPE= 1 COMPUTE NM HYD FINISH	101.00	_	1.	.00116	2.04	.072	1.15756	1.500	2.744	RAIN6= PER IMP=	1.570

VOLUME CALCULATIONS

DETENTION POND/PARKING LOT PONDING

Ab - Bottom Of The Pond Surface Area

At - Top Of The Pond Surface Area

D - Water Depth

Dt - Total Pond Depth

C - Change In Surface Area / Water Depth

Volume =
$$Ab * D + 0.5 * C * D^2$$

$$C = (At - Ab) / Dt$$

Ab = 0.00

At = 2,365.60

Dt = 2.00

C = 1182.80

	<u> </u>	<u>-</u>	1-PIPE	2-PIPE
ACTUAL	DEPTH	VOLUME	Q	Q
ELEV.	(FT)	(AC-FT)	(CFS)	(CFS)
5239.00	0.00	0.00000	0.00	0.00
5239.30	0.30	0.00122	0.21	0.42
5239.40	0.40	0.00217	0.37	0.73
5239.60	0.60	0.00489	0.56	1.12
5239.80	0.80	0.00869	0.70	1.40
5240.00	1.00	0.01358	0.82	1.64
5240.20	1.20	0.01955	0.92	1.84
5240.40	1.40	0.02661	1.01	2.03
5240.60	1.60	0.03476	1.10	2.20
5240.80	1.80	0.04399	1.18	2.35
5241.00	2.00	0.05431	1.25	2.50

Orifice Equation

Q = CA SQRT(2gH)

C = 0.6

Diameter (in) 6Area (ft²)= 0.19634954085

g = 32.2

H (Ft) = Depth of water above center of orifice

Q(CFS)= Flow

USE 2-4" DIA PIPES FOR DRAINAGE THROUGHT THE HEADER WALL

AHYMO INPUT FILE (PONDING CONDITIONS/PARKING LOT PONDING)

* ZONE 2							

* 100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS) *							

START	TIME=0.0						
RAINFALL	TYPE=1 RAIN QUAR	TER=0.0 IN					
	RAIN ONE=2.01 IN	RAIN SIX=2.35 IN	1				
	RAIN DAY=2.75 IN	DT=0.03333 HR					
COMPUTE NM HYD	ID=1 HYD $NO=101$.	0 AREA=0.001161 S	SQ MI				
	PER A=0.00 PER B	=17.00 PER C=0.00	PER D=83.00				
	TP=0.1333 HR MAS	S RAINFALL=-1					
*******	*****	*****	*****				
*	PONDING CONDITION	N	*				
******	*****	******	*****				
ROUTE RESERVOIR	ID=10 HYD NO=501	.1 INFLOW ID=1	CODE=24				
	OUTFLOW(CFS)	STORAGE (AC-FT)	ELEVATION (FT)				
	0.00	0.0000	5239.00				
	0.15	0.00054	5239.20				
	0.41	0.00217	5239.40				
	0.55	0.00489	5239.60				
	0.67	0.00869	5239.80				
	0.77	0.01358	5240.00				
	0.85	0.01955	5240.20				
	0.93	0.02661	5240.40				
	1.01	0.03476	5240.60				
	1.07	0.04399	5240.80				
	1.14	0.05431	5241.00				
*							
*****	****	******	*****				
FINISH							

SUMMARY OUTPUT FILE (PONDING CONDITIONS/PARKING LOT PONDING)

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -RUN DATE (MON/DAY/YR) = 03/09/2006- VERSION: 1997.02d INPUT FILE = 601PD USER NO. = AHYMO-I-9702c01000R31-AH FROM TO PEAK RUNOFF TIME TO PAGE = HYDROGRAPH AREA DISCHARGE VOLUME RUNOFF PEAK PER COMMAND IDENTIFICATION NO. NO. (SQ MI) (CFS) (AC-FT) (INCHES) (HOURS) NOTATION ACRE START .00 TIME =RAINFALL TYPE= 1 2.350 RAIN6= COMPUTE NM HYD 101.00 3.20 .00116 .117 83.00 1.88805 4.310 PER IMP= 1.500 ROUTE RESERVOIR 501.10 .00116 10 1.88783 1.08 .117 1.450 AC-FT= 1.833 .045

FINISH

AHYMO OUTPUT FILE (PONDING CONDITIONS/PARKING LOT PONDING)

```
AHYMO PROGRAM (AHYMO 97) -
                                                   - Version:
                                                             1997.02d
        RUN DATE (MON/DAY/YR) = 03/09/2006
        START TIME (HR:MIN:SEC) = 11:41:04
                                            USER NO. = AHYMO-I-9702c01000R31-AH
        INPUT FILE = 601PD
* ZONE 2
***************
        100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)
START
                  TIME=0.0
RAINFALL
                  TYPE=1 RAIN QUARTER=0.0 IN
                  RAIN ONE=2.01 IN RAIN SIX=2.35 IN
                  RAIN DAY=2.75 IN DT=0.03333 HR
             COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
                     .033330 HOURS
                                       END TIME =
                                                     5.999400 HOURS
                 .0000
                        .0016
                               .0033
                                       .0049
                                              .0066
                                                      .0084
                                                             .0102
                 .0120
                        .0139
                               .0158
                                       .0178
                                              .0199
                                                      .0219
                                                             .0241
                 .0263
                        .0286
                               .0309
                                       .0333
                                              .0358
                                                      .0384
                                                             .0411
                 .0439
                        .0467
                               .0497
                                       .0529
                                                      .0596
                                              .0561
                                                             .0631
                 .0669
                        .0709
                               .0751
                                       .0807
                                                      .0930
                                              .0866
                                                             .1066
                .1371
                        .1840
                                .2514
                                       .3434
                                                      .6186
                                              .4644
                                                             .8106
               1.0449
                       1.2624
                              1.3533
                                      1.4300
                                             1.4982
                                                    1.5602
                                                            1.6174
               1.6704
                       1.7200
                              1.7664
                                      1.8102
                                             1.8514
                                                    1.8904
                                                            1.9273
               1.9622
                              2.0268
                      1.9953
                                      2.0566
                                             2.0850
                                                    2.0915
                                                            2.0976
               2.1033
                       2.1088
                              2.1140
                                      2.1191
                                             2.1239
                                                    2.1285
                                                            2.1329
               2.1373
                       2.1414
                              2.1454
                                     2.1494
                                             2.1531
                                                    2.1568
                                                            2.1604
               2.1639
                              2.1706
                       2.1673
                                      2.1739
                                             2.1771
                                                     2.1802
                                                            2.1832
               2.1862
                       2.1891
                              2.1919
                                     2.1947
                                             2.1975
                                                    2.2002
                                                            2.2028
               2.2054
                              2.2105
                       2.2080
                                      2.2130
                                             2.2154
                                                    2.2178
               2.2225
                      2.2248
                              2.2270
                                             2.2315
                                      2.2293
                                                    2.2336
               2.2379
                      2.2399
                              2.2420 2.2440 2.2460
                                                    2.2480
               2.2519
                      2.2538 2.2557
                                     2.2576
                                             2.2594
                                                    2.2612
                      2.2666 2.2684
               2.2648
                                     2.2701
                                             2.2718
                                                    2.2735
               2.2769
                      2.2785 2.2802
                                     2.2818
                                             2.2834
                                                    2.2850
               2.2881
                      2.2897 2.2912
                                     2.2928
                                             2.2943
                                                    2.2958
               2.2987
                      2.3002 2.3017
                                     2.3031
                                             2.3045
                                                    2.3060
               2.3088
                      2.3102 2.3115
                                     2.3129 2.3143
                                                    2.3156 2.3169
               2.3183 2.3196 2.3209
                                     2.3222 2.3235
                                                    2.3248 2.3261
               2.3273 2.3286 2.3298 2.3311 2.3323
                                                    2.3335 2.3348
               2.3360 2.3372 2.3384 2.3396 2.3408
                                                    2.3419 2.3431
               2.3443 2.3454 2.3466 2.3477 2.3488
                                                    2.3500
COMPUTE NM HYD ID=1 HYD NO=101.0 AREA=0.001161 SQ MI
                  PER A=0.00 PER B=17.00 PER C=0.00 PER D=83.00
                  TP=0.1333 HR MASS RAINFALL=-1
    K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
    UNIT PEAK = 3.8045 CFS UNIT VOLUME = .9965 B =
                                                                526.28
                                                                           P60 = 2.0100
    AREA = .000964 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
    RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330
    K = .132088HR TP = .133300HR K/TP RATIO = .990905 SHAPE CONSTANT, N = 3.563124
    UNIT PEAK = .48107 CFS UNIT VOLUME = .9719 B =
                                                                324.91
                                                                           P60 = 2.0100
          .000197 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
    AREA =
    RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
```

```
PONDING CONDITION
*
ROUTE RESERVOIR
                   ID=10 HYD NO=501.1 INFLOW ID=1
                                                   CODE=24
                   OUTFLOW (CFS)
                                     STORAGE (AC-FT)
                                                     ELEVATION (FT)
                       0.00
                                          0.00000
                                                       5239.00
                       0.15
                                                       5239.20
                                          0.00054
                       0.41
                                          0.00217
                                                       5239.40
                       0.55
                                          0.00489
                                                       5239.60
                       0.67
                                                       5239.80
                                          0.00869
                       0.77
                                          0.01358
                                                       5240.00
                       0.85
                                          0.01955
                                                       5240.20
                       0.93
                                          0.02661
                                                       5240.40
                       1.01
                                          0.03476
                                                       5240.60
                       1.07
                                          0.04399
                                                       5240.80
                       1.14
                                          0.05431
                                                       5241.00
    TIME
             INFLOW
                       ELEV
                                 VOLUME
                                           OUTFLOW
    (HRS)
              (CFS)
                       (FEET)
                                 (AC-FT)
                                           (CFS)
      .00
                 .00
                      5239.00
                                    .000
                                               .00
      .80
                      5239.00
                 .00
                                    .000
                                               .00
    1.60
               2.23
                      5240.66
                                    .037
                                              1.03
    2.40
                 .13
                      5240.26
                                    .022
                                               .87
    3.20
                      5239.03
                 .02
                                    .000
                                               .03
    4.00
                 .02
                      5239.02
                                    .000
                                               .02
    4.80
                 .02
                      5239.02
                                    .000
                                               .02
    5.60
                 .02
                      5239.02
                                    .000
                                               .02
    6.40
                .00
                      5239.00
                                    .000
                                               .00
PEAK DISCHARGE =
                        1.078 CFS - PEAK OCCURS AT HOUR
                                                           1.83
MAXIMUM WATER SURFACE ELEVATION =
                                      5240.821
MAXIMUM STORAGE =
                          .0451 AC-FT
                                           INCREMENTAL TIME=
                                                                 .033330HRS
*
***************
```

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 11:41:04

EMERGENCY OVERFLOW/SPILLWAY CALCULATIONS

SPILLWAY WIDTH

Weir Equation: Q=CLH^{3/2}

Q = 3.20 cfs (maximum allowable runoff)

C = 3.10

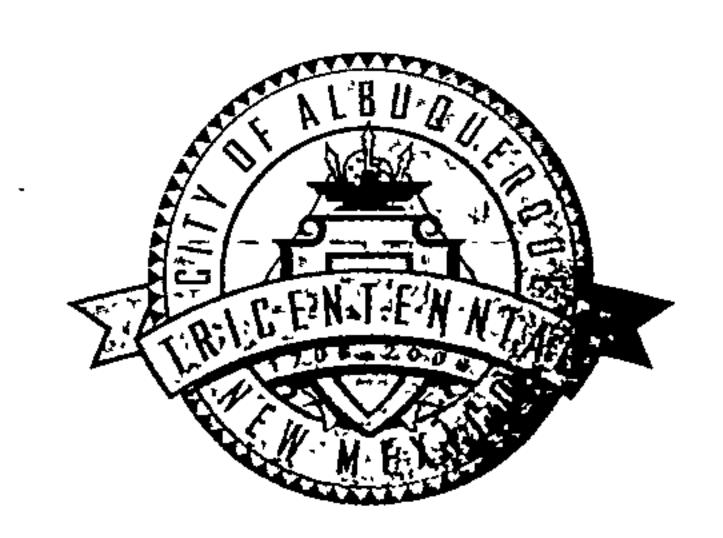
h = 0.50'

Opening = 3.50'

 $Q = 3.1(3.50)(0.50)^{3/2}$

Q = 3.84 cfs > 3.20 cfs

CITY OF ALBUQUERQUE



Planning Department Transportation Development Services Section

May 2, 2006

Shahab Biazar

Advanced Engineering & Consulting

4416 Anaheim Avenue NE

Albuquerque NM 87113

Re: Traffic Circulation Layout (TCL) Submittal for Building Permit Approval for Offices and Warehouse for Airport Industrial Park [M-16/D-39] (2445 Baylor Dr NE), Albuquerque, NM Engineer's/Architect's Stamp Dated 04-20-06

Dear Biazar,

The TCL submittal dated April 20, 2006 is approved for building permit. The plan is stamped and signed as approved. Two copies of the plan that is stamped as approved will be required: one for each of the building permit plans and the original to be kept by you to be used for certification of the site for final C.O. for Transportation. *Public infrastructure or work done within City Right-of-Way shown on these plans is for information only and is not part of approval. A separate DRC and/or other appropriate permits are required to construct these items.*

Albuquerque

P.O. Box 1293

New Mexico 87103

www.cabq.gov

If a temporary CO is needed then a copy of the original TCL that was stamped as approved by the City which includes a statement that identifies the outstanding items that need to be constructed or the items that have not been built in "substantial compliance". This statement requires a NM registered architect or engineer stamp to be dated. Submit this TCL with a completed <u>Drainage and Transportation Information Sheet</u> to Hydrology at the Development Services Center of Plaza Del Sol Building.

When the site is completed and a final C.O. is requested, use the original City stamped approved TCL for certification. A NM registered architect or engineer needs stamp and date the certification TCL along with indicating that the development was built in "substantial compliance" with the TCL. Submit this certification TCL with a completed Drainage and Transportation Information Sheet to Hydrology at the Development Services Center of Plaza Del Sol Building.

Once verification of certification is completed and approved, notification will be made to Building Safety to issue Final C.O. To confirm that a final C.O. has been issued, call Building Safety at 924-3306.

Sincerely.

Nilo Salgado-Pernandez, PE

Senior Engineer

Development and Building Services

CC:

Hydrology file

File

DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE:	LOT 11, BLOCK 1 , AIRPORT INDUSTRIAL PARK	ZONE ATLAS/DR	G. FILE #: M16/D39
DRB #:	EPC #:	WORK ORDER #:	
LEGAL DESCRIPTIO	N: LOT 11, BLOCK 1, AIRPORT INDUS	STRIAL PARK	
CITY ADDRESS:	2445 BAYLOR DR SE		
ENGINEERING FIRM	1: Advanced Engineering and Consulting, I	LC CONTACT:	Shahab Biazar
ADDRESS:	4416 Anaheim Ave., NE	PHONE:	(505) 899-5570
CITY, STATE:	Albuquerque, New Mexico	ZIP CODE:	87113
OWNER:		CONTACT:	
ADDRESS: CITY, STATE:	· · · · · · · · · · · · · · · · · · ·	PHONE: ZIP CODE:	
ARCHITECT:		CONTACT:	
ADDRESS:		PHONE:	· · · · · · · · · · · · · · · · · · ·
CITY, STATE:	·	ZIP CODE:	
SURVEYOR:		CONTACT:	
ADDRESS: CITY, STATE:		PHONE: ZIP CODE:	
·			
CONTRACTOR: ADDRESS:	-	CONTACT: PHONE:	
CITY, STATE:		ZIP CODE:	
CHECK TYPE OF SU	JBMITTAL:	CHECK TYPE OF	APPROVAL SOUGHT:
DRAINA	GE REPORT	SIA / FIN	ANCIAL GUARANTEE RELEASE
DRAINA	GE PLAN 1ST SUBMITTAL, REQUIRES TCL/OR	EQUAL PRELIMI	NARY PLAT APPROVAL
CONCE	PTUAL GRADING & DRAINAGE PLAN	S. DEV. I	PLAN FOR SUB'D. APPROVAL
GRADIN	IG PLAN	S. DEV. I	PLAN FOR BLDG. PERMIT APPROVAL
EROSIO	N CONTROL PLAN	SECTOR	PLAN APPROVAL
ENGINE	ER'S CERTIFICATION (HYDROLOGY)	FINAL PI	LAT APPROVAL
CLOMR	/ LOMR	FOUNDA	TION PERMIT APPROVAL
X TRAFFIC	CIRCULATION LAYOUT (TCL)	BUILDIN	G PERMIT APPROVAL
ENGINE	ER'S CERTIFICATION (TCL)	CERTIFIC	CATE OF OCCUPANCY (PERM.)
ENGINE	ER'S CERTIFICATION (DRB APPR. SITE PLAN)	CERTIFIC	CATE OF OCCUPANCY (TEMP.)
OTHER		GRADIN	G PERMIT APPROVAL
		X PAVING	PERMIT APPROVAL
		WORK O	RDER APPROVAL
	545,	OTHER (SPECIFY)
1			
WAS A PRE-DESIGN	CONFERENCE ATTENDED:		
YES			
X NO			APR 2 0 2006
COPY PI	ROVIDED	HV	DROLOGY SECTION
DATE SUBMITTED:	04 / 20 / 2006		b Biazar, 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 submittals may be required based on the following:

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

Perturn for Hydro Review Thorks Dup

1

.

### DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE:	LOT 11, BLOCK 1, AIRPORT INDU	STRIAL PARK	ZONE A	TLAS/DRG. FILE #:	M16/D39
DRB #:	EPC #:	WORK	ORDER #:		
LEGAL DESCRIPTION	DN: LOT 11, BLOCK 1,	AIRPORT INDUSTRIAL PA	ARK		
CITY ADDRESS:	2445 BAYLOR DR SE	· · · · · · · · · · · · · · · · · ·		· <u></u>	ST WARDS BOOK OF THE STATE OF T
ENGINEERING FIRM ADDRESS: CITY, STATE:	Advanced Engineering 4416 Anaheim Ave., NE Albuquerque, New Mexico	and Consulting, LLC	<u> </u>	NTACT: Shahab Bia PHONE: (505) 899-4 CODE: 87113	
OWNER: ADDRESS: CITY, STATE:			F	NTACT: JAMES PHONE: JAMES PHONE	
ARCHITECT: ADDRESS: CITY, STATE:			F	NTACT: PHONE: CODE:	
SURVEYOR:	<del></del>		<del></del>	NTACT:	
ADDRESS: CITY, STATE:	<del> </del>	·		PHONE:	· ····································
CONTRACTOR: ADDRESS: CITY, STATE:			COI	NTACT: PHONE: CODE:	
CHECK TYPE OF SU	JBMITTAL:		CHECK T	YPE OF APPROVAL S	OUGHT:
DRAINA	GE REPORT			SIA / FINANCIAL GUA	RANTEE RELEASE
DRAINA	GE PLAN 1ST SUBMITTAL, RE	QUIRES TCL OR EQUAL		PRELIMINARY PLAT	APPROVAL
CONCE	PTUAL GRADING & DRAINAGE	PLAN /		S. DEV. PLAN FOR SU	JB'D. APPROVAL
GRADIN	IG PLAN		<del></del>		LDG. PERMIT APPROVAL
<del></del>	N CONTROL PLAN			SECTOR PLAN APPR	
	ER'S CERTIFICATION (HYDRO	JOGY Z		FINAL PLAT APPROV	
CLOMR		11		FOUNDATION PERMI	
	CIRCULATION LAYOUT (TCL)		1.4		
	` / j			BUILDING PERMIT AF	
	ER'S CERTIFICATION (TCL)			CERTIFICATE OF OC	
	ER'S CERTIFICATION (DRB AP	PR. SHE PLAN)		CERTIFICATE OF OCC	
OTHER				GRADING PERMIT AP	
N- Verl	ral //		<u> </u>	PAVING PERMIT APP	ROVAL
W-Veul 4/17/	06			WORK ORDER APPR	OVAL
` (				OTHER (SPECIFY)	
WAS A PRE-DESIGN					
YES				NE	CE ENVEN
X NO			*		ADD O C AAA
	ROVIDED				APR 0 5 2005
				LANDID	EVELOPMENT SECTION
DATE SUBMITTED:	04	/ 05 / 2006	BY:	Shahab Blazar, P.E	
Requests for appro	ovals of Site Development Pl	ans and/or Subdivision (	Diate chall h	a accompanied by c	drainago submittal

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 submittals may be required based on the following:

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

DRIVEAIS/E W. DTHS TRUNCHTED DOMES 242 Le

CAIL out All CURUES 12ADII

Dimension PARKING STARLS.

EXPLANSW CONNection to onsite (to ADA PARKINGSTILS)?

Wy out (TYP) per 2420. STD DZW.

EXPLAIN What Iscation Does #9 to #5 type of pinned curb.

els ladscapping proposed une COA 12000

if so FROUIDE Clear site line & Doyou need street scape agreement

location of sign needs 2'back of curb, for vectile overhag