CITY OF ALBUQUERQUE

October 6, 2008

Martin J. Garcia, P.E.
ABQ Engineering, Inc.
6739 Academy Road NE Suite 130
Albuquerque, NM 87109

Re: 8601 President Pl NE, Grading and Drainage Plan
Engineer's Stamp dated 9-30-08 (C17/D011U)

Dear Mr. Garcia,

Based upon the information provided in your submittal received 10-6-08, the above referenced plan is approved for Grading Permit.

Upon completion of the project, please provide an Engineer Certification for our files.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

CITY OF ALBUQUERQUE

November 5, 2004

Jackie McDowell, PE
McDowell Engineering
7820 Beverly Hills NE
Albuquerque, NM 87122

Re: Tract B1A1, Clifford Industrial Park Grading and Drainage Plan
Engineer's Stamp dated 10-13-04 (C17/D11U)

Dear Ms. McDowell,

Based upon the information provided in your submittal dated 10-19-04, the above referenced plan is approved for Building Permit and SO#19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. An Agreement and Covenant will be a requirement of this approval.

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).

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

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: Pam Lujan, Excavation and Barricading
Matt Cline, Storm Drain Maintenance
file
Chuck Caruso, DMD

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

CITY OF ALBUQUERQUE

May 20, 2005

Ms. Jackie S. McDowell, P.E.
MCDOWELL ENGINEERING, INC.
7820 Beverly Hills Ave. NE
Albuquerque, NM 87122

Re: SUNDANCE TRACT B1A1 DEVELOPMENT
8601 President Place NE
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 10/13/2004 (C-17/D11U)
Certification dated 04/28/2005

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Dear Jackie,

Based upon the information provided in your submittal received 04/29/2005, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

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

Sincerely,

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

C: Phyllis Villanueva
File

8601 Presidents Place
Drainage pond area computations:
28129 Pond 1
9/23/08

diameter = 1.5840
k= 0.6000
A= 1.9706
Inv el. = 86.0000

Height above pond bottom	Pond Elev.	Area (sf)	Average Storage Volume	Cumul. Storage	head	Q
0.0000	86.0000	631.5000	0.0000	0.0000	0.0000	0.0000
0.5000	86.8000	681.5000	0.0075	0.0075	0.8000	8.4867
1.0000	87.0000	7,294.2800	0.0458	0.0533	1.0000	9.4885
1.5000	87.5000	9,614.4400	0.0970	0.1504	1.5000	11.6209
2.0000	88.0000	4,662.5800	0.0819	0.2323	2.0000	13.4187

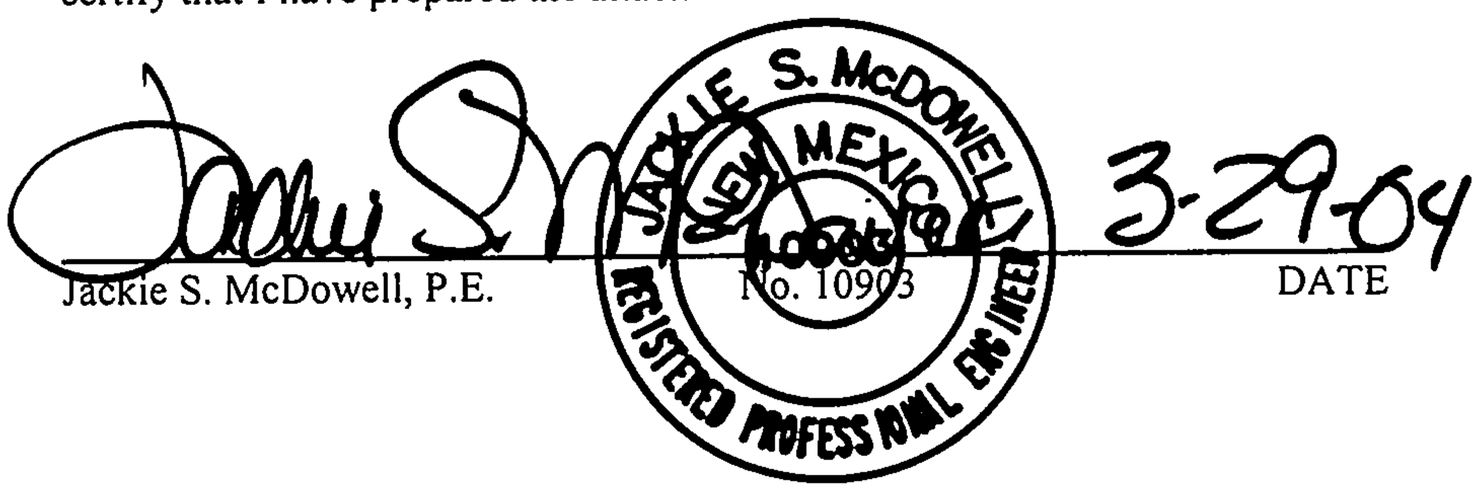
ATTACHMENT NO. 1

SUPPLEMENTAL CALCULATIONS TO

SUNDACE TRACT B1A1
CLIFFORD INDUSTRIAL PARK

GRADING & DRAINAGE PLAN

I, Jackie S. McDowell, Registered Professional Engineer, No. 10903, hereby certify that I have prepared the attached calculations.



Jackie S. McDowell, P.E. No. 10903 3-29-04 DATE

DRAINAGE PLAN

SCOPE.

Pursuant to the latest City of Albuquerque Ordinance, the Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. One building is proposed for the subject property, with associated access, parking and landscaping.

EXISTING CONDITIONS.

Presently the 2.26 acre site is undeveloped. The site is bounded on the west by a portion of the Balloon Fiesta Park (Tract E), north, south and east by private tracts of land, and on the northeast corner by a cul-de-sac (President Pl.). The site slopes from the east to the west at approximately 2%. As shown by the FEMA Map Panel No. 136, dated November 19, 2003, the site is not located in a 100-year floodplain. No offsite runoff enters the property.

PROPOSED CONDITIONS

As shown by the plan, the building is located within the easterly portion of the Lot. On site flows will drain around the structure and flow to the west. All roof drainage will discharge from the roofs to the north and south, then west to the natural drainage path and into the existing drainage channel.

Supplemental calculations have been provided to the City of Albuquerque Hydrology Department

CALCULATIONS:

The calculations shown hereon define the 100 year/6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority, latest edition.

Existing Treatment Types

Treatment A = 1.99 acres
Treatment B = 0.00 acres
Treatment C = 0.00 acres
Treatment D = 0.27 acres

Proposed Treatment Types

Treatment A = 0.38 acres
Treatment B = 0.22 acres
Treatment C = 0.12 acres
Treatment D = 1.54 acres

Using the values above produces the following storm water flows and volumes:

Existing 100-year Flow = 4.37 cfs
Proposed 100-year Flow = 8.71 cfs

Existing 100-year Volume = 5906 cu. ft.
Proposed 100-year Volume = 13697 cu. ft.

PROPERTY ADDRESS

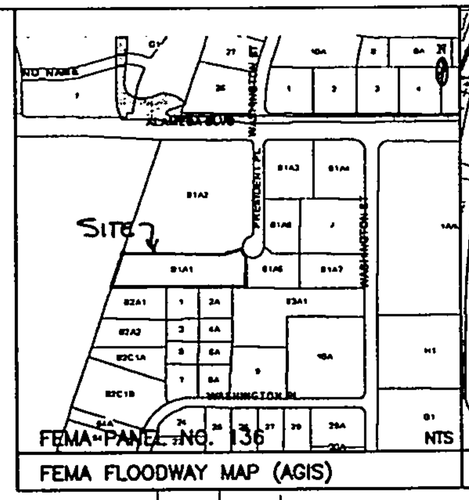
8601 President Place NE

TOPOGRAPHY

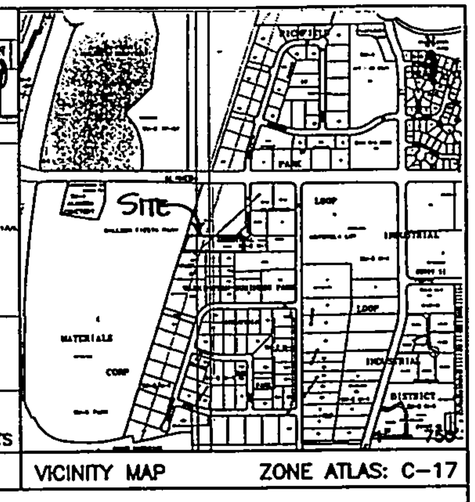
Topographic information provided by Surveys Southwest, Ltd. dated March, 2004

GENERAL GRADING NOTES

1. THE CONTRACTOR SHALL OBTAIN A TOP SOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE, ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION
2. THE CONTRACTOR IS TO REFER TO THE EARTHWORK SPECIFICATIONS NOTED IN THE GEOTECHNICAL INVESTIGATION REPORT PREPARED FOR THIS LOT AND CAN BE OBTAINED BY THE OWNER.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS, PERMITS AND APPROVALS.
4. PVC DRAINAGE PIPES MAY REQUIRE FIELD ADJUSTMENT DUE TO SUBSURFACE ROCK. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE TO INLET/STREET.
5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY CONDITIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
6. TWO WORKING DAYS PRIOR TO EXCAVATION THE CONTRACTOR SHALL CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
7. CONTRACTOR SHALL PROVIDE DOUBLE CLEAN-OUTS AT ALL BENDS IN DRAINAGE PIPE.
8. THE TOPSOIL COULD BE SAVED ASIDE FOR RE-USE IN FILLING DISTURBED AREAS AROUND THE STRUCTURE.
9. ALL DISTURBED AREAS ON THE LOT SHALL BE RESEEDED WITH NATIVE SEEDING MATERIAL.
10. THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY).
11. AREAS DISTURBED DUE TO GRADING SHALL BE RESEEDED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STD. SPECIFICATION 1012 - NATIVE GRASS SEEDING, D.A.E.



FEMA FLOODWAY MAP (AGIS)



VICINITY MAP

SPOT ELEVATION LEGEND

- 5090 = ELEVATION AT GROUND
- 5091.00 = ELEVATION AT TOP OF FINISHED SURFACE
- 5091.00 TOC = ELEVATION AT BACK OF CURB
- 5091.00 FL = ELEVATION AT FLOWLINE OF CURB
- 5091.00 RIM = ELEVATION AT RIM OF MANHOLE

SYMBOLS LEGEND

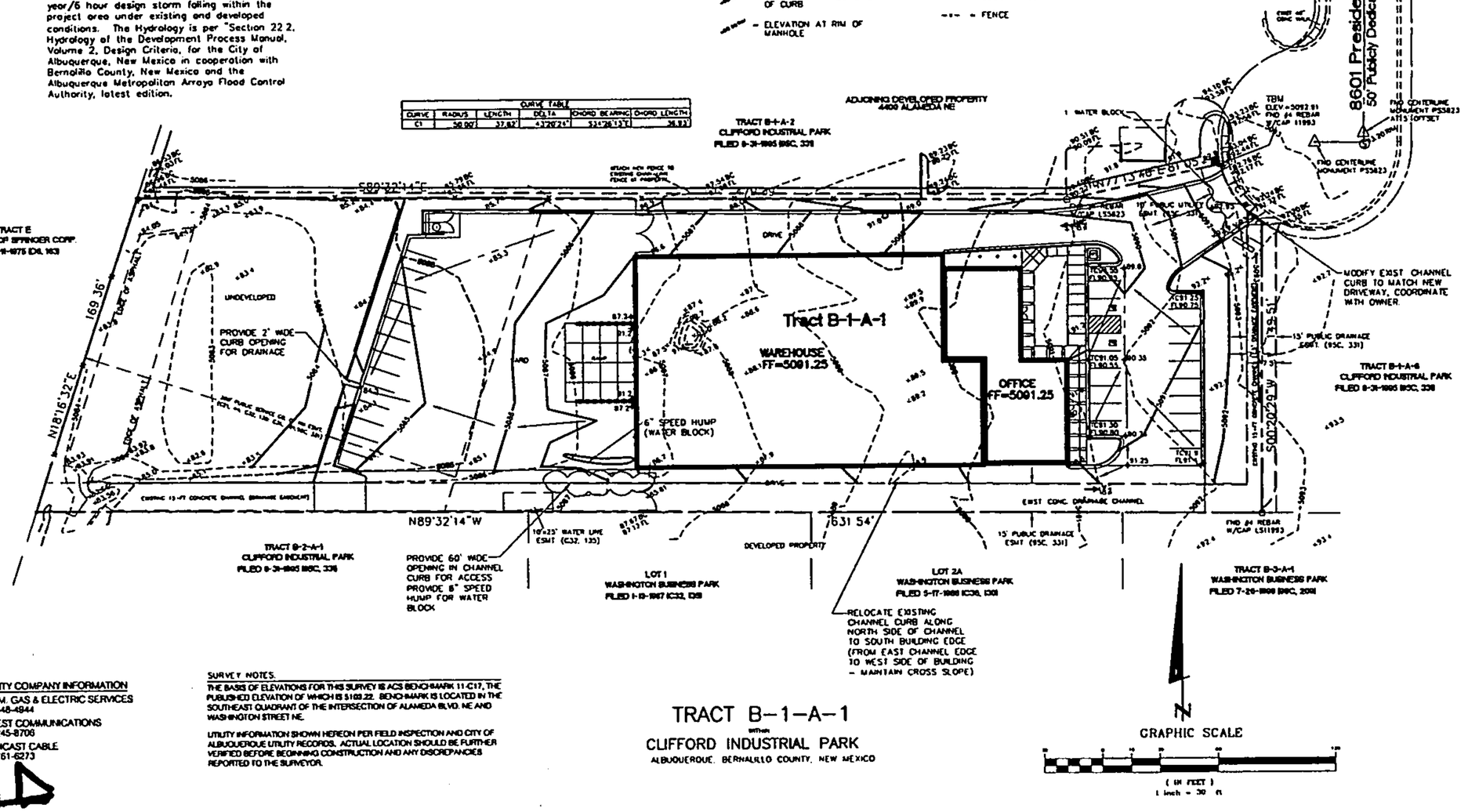
- S = SEWER MANHOLE
- W = WATER METER
- C = SEWER CLEANOUT
- T = TELEPHONE RISER
- —— = BLOCK WALL
- -o-o- = FENCE

MONUMENT LEGEND

- △ = FOUND CENTERLINE MONUMENT AS NOTED
- ■ = FOUND MONUMENT AS NOTED
- • = COMPUTED CORNER (NOT SET)

LEGEND

	EXISTING	PROPOSED
CONTOUR	5090	5090
PROPERTY LINE		
ROAD		
SETBACK		
RETAINING WALL		
SPOT ELEVATION	5090.3	+XX.XX



UTILITY COMPANY INFORMATION

P.N.M. GAS & ELECTRIC SERVICES
848-4944
QWEST COMMUNICATIONS
245-8708
COMCAST CABLE
761-6273

SURVEY NOTES.

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS ACS BENCHMARK 11-C17, THE PUBLISHED ELEVATION OF WHICH IS 5109.22. BENCH-MARK IS LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF ALAMEDA BLVD. NE AND WASHINGTON STREET NE.

UTILITY INFORMATION SHOWN HEREON PER FIELD INSPECTION AND CITY OF ALBUQUERQUE UTILITY RECORDS. ACTUAL LOCATION SHOULD BE FURTHER VERIFIED BEFORE BEGINNING CONSTRUCTION AND ANY DISCREPANCIES REPORTED TO THE SURVEYOR.

GRADING
3 - 29 - 04
1 = 30
SUN0104L

TRACT B-1-A-1
within
CLIFFORD INDUSTRIAL PARK
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

JACKIE S. McDOWELL — NEW MEXICO — 10277 — REGISTERED PROFESSIONAL ENGINEER
3-29-04

CITY OF ALBUQUERQUE, BERNALILLO COUNTY — NEW MEXICO

TRACT B-1-A-1
CLIFFORD INDUSTRIAL PARK

SUNDANCE DEVELOPMENT

McDowell Engineering, Inc.
Tel: 505-828-2430 Fax: 505-821-4857

Designed	Drawn	Checked	Sheet	of
JSM	STAFF	JSM	1	1
File: SUN0104L	Date: MARCH, 2004			

28-Mar-04

Calculations: Total Basin

Calculations are based on "Section 22.2 Hydrology of the
Development Process Manual, Volume 2, Design Criteria for the
City of Albuquerque, New Mexico, January 1993 - basins < 40 acres".

Precipitation Zone = 2

Depth at 100-year, 6-hour storm: (Table A-2) P = 2.35 inches

Land Treatments:

From Table 5 - Percent Treatment D
Single Family Residential =
7*SQR((N*N) +(5*N))
where N = units/acre
N = ---------- = ------, ok < 6 N = 0.00
Therefore Percent Treatment D = 0.00%
(includes local streets)

Areas: (acres)	Existing	Proposed
Treatment A	1.99	0.38
Treatment B	0.00	0.22
Treatment C	0.00	0.12
Treatment D	0.27	1.54
Total (acres) =	2.26	2.26

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.14	0.31	0.05	0.19	0.02	0.10
Volume (cubic feet) =	5,906	13,697	2,252	8,120	774	4,498

Total Q(p), cfs:	100 year Existing Q(p)*A	100 year Proposed Q(p)*A	10 year Existing Q(p)*A	10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
Treatment A	3.10	0.59	0.76	0.14	0.00	0.00
Treatment B	0.00	0.50	0.00	0.21	0.00	0.02
Treatment C	0.00	0.38	0.00	0.21	0.00	0.07
Treatment D	1.27	7.24	0.85	4.84	0.50	2.86
Total Q (cfs) =	4.37	8.71	1.60	5.39	0.50	2.95

DRAINAGE REPORT

for

Tract B-1-A-1 Clifford Industrial Park

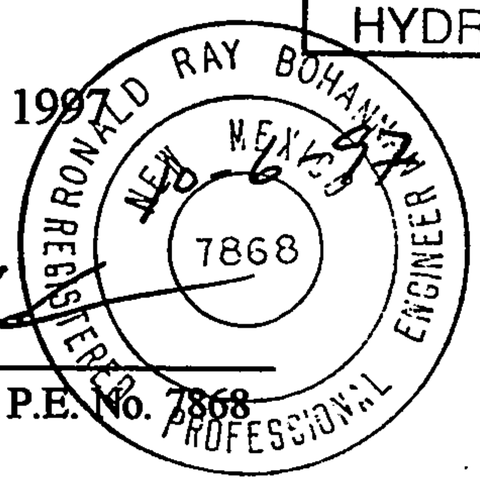
Prepared by

Tierra West Development Management Services
4421 McLeod Road NE, Suite D
Albuquerque, New Mexico 87109

Prepared for

Ron Lucero
VIS-COM, Inc.
129 Placitas, NE
Albuquerque, New Mexico 87107

September 1997



Ronald R. Bohannan P.E. No. 7868

Location

The site is the location of a proposed shop and parking lot. It is located south of Alameda and west of President Place. The site is shown on the attached Zone Atlas Map C-17 and contains approximately 2.25 acres. The site is identified as Tract B-1-A-1 of the Clifford Industrial Park. The purpose of the report is to provide the drainage analysis and management plan for the site.

Existing Drainage Conditions

The site is part of an approved master plan by Easterling and Associates, Inc. (C17-D1U). According to the master plan, the allowable release rate from the site is 5.20 cfs. The site drains to an existing concrete channel located on the south and east sides of the site. The existing runoff sheet flows from east to west, and 3.32 cfs of undeveloped runoff enters the channel at the west side of the site.

There are no off-site flows impacting the site. Flows from the east and south are intercepted by an existing concrete drainage channel. The natural topography of the area slopes from east to west and keeps flows from the north and west from entering the site.

FEMA map and Soil Conditions

The site is located on FEMA map 35001C0136 D as shown on the attached excerpt. The map shows that the site does not lie within any 100 year flood plains.

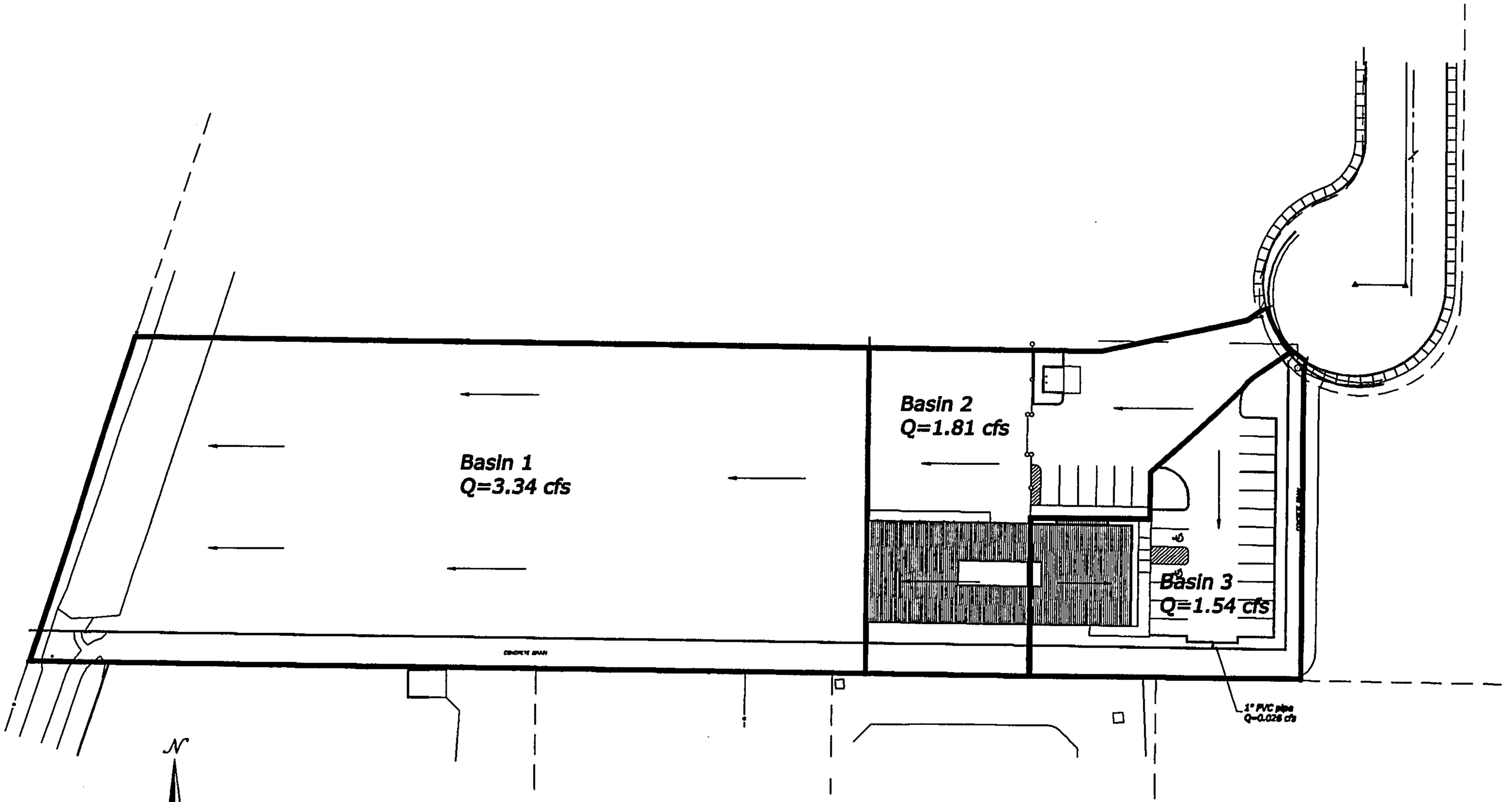
The site contains two soils from the Soil Conservation Service Soil Survey of Bernalillo County. The soils are a Embudo gravelly fine sandy loam and an Embudo-Tijeras complex. Both soils have medium runoff and the hazard of water erosion is moderate.

On-site Drainage Management Plan

There are three proposed basins on the site. The approved master plan for the site allows for a discharge of 2.3 cfs per acre. This site is 2.25 acres and will be allowed to discharge a total developed flow of 5.20 cfs. Basin 1 will free discharge 3.34 cfs into the existing concrete channel. Basin 2 will include part of the new office building and will free discharge 1.81 cfs into Basin 1. There will be minimal improvements on Basin 1 and it will continue the existing drainage pattern. Basin 3 has a developed runoff flow of 1.54 cfs. The developed runoff from this basin will pond in a parking lot detention pond located on the south side of the site. The developed discharge will be released at a controlled rate of 0.026 cfs into the existing concrete channel. A 4" PVC pipe with a 1" orifice plate will limit the discharge from Basin 3. There will be a total discharge from the site of 5.18 cfs which is less than the allowable of 5.20 cfs.

Summary

The site is part of an approved master plan designed by Easterling and Associates, Inc. (C17-D1U). The site is divided into three basins. Basin 1 has a runoff flow of 3.34 cfs and Basin 2 has a developed runoff flow of 1.81 cfs. Basin 3 will release the developed runoff flow at a controlled rate of 0.026 cfs. The total runoff from the site will be 5.18 cfs which is less than the allowable of 5.20 cfs.



PROPOSED BASIN LAYOUT

RUNOFF CALCULATIONS

The site is @ Zone 2

LAND TREATMENT

Proposed

Basin 1
B = 88 %
D = 12 %

Basin 2
B = 10 %
D = 90 %

Existing
B = 100%

DEPTH (INCHES) @ 100-YEAR STORM

P_{60} = 2.01 inches

P_{360} = 2.35 inches

P_{1440} = 2.75 inches

DEPTH (INCHES) @ 10-YEAR STORM

P_{60} = 2.01 x 0.667
= 1.34 inches

P_{360} = 1.57

P_{1440} = 1.83

DRAINAGE BASINS

Existing

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
1	98459.54	2.2603	0.003532

Proposed

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
1	62939.56	1.4449	0.002258
2	20773.09	0.4769	0.000745
3	14746.89	0.3385	0.000529

RUNOFF CALCULATION RESULTS

Existing

BASIN	Q-100 CFS	Q-10 CFS	V-100 AC-FT	V-10 AC-FT
1	3.32	1.25	0.147	0.053

Proposed

BASIN	Q-100 CFS	Q-10 CFS	V-100 AC-FT	V-10 AC-FT
1	3.34	1.37	0.094	0.034
2	1.81	1.08	0.063	0.036
3	1.54	0.99	0.056	0.035

VOLUME CALCULATIONS

DETENTION POND

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	(@ Elevation 5093.25)
At =	4,714.98	(@ Elevation 5094.25)
Dt =	1.00	
C =	4714.98	

ACTUAL ELEV.	DEPTH (FT)	VOLUME (AC-FT)	Q (CFS)
93.25	0	0	0.0000
93.45	0.2	0.0022	0.0104
93.65	0.4	0.0087	0.0166
93.85	0.6	0.0195	0.0203
94.05	0.8	0.0346	0.0235
94.25	1	0.0541	0.0263

<u>Weir Equation</u>
Q = CLH^(3/2)

C =	0.6
Diameter (in	1
Radius (in)	0.5
Area (in)	0.005454
H=	Height above center of orifice
Q (cfs)=	Flow

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) =09/08/1997

INPUT FILE = A:\A.DAT USER NO.= R_BOHANN.I01

COMMAND	HYDROGRAPH IDENTIFICATION	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	NOTATION	
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	2.350
COMPUTE NM HYD	100.10	-	1	.00226	3.34	.094	.77901	1.532	2.310	PER IMP=	.00
COMPUTE NM HYD	100.20	-	1	.00075	1.81	.063	1.58078	1.510	3.796	PER IMP=	60.00
COMPUTE NM HYD	100.30	-	1	.00053	1.54	.056	1.98166	1.510	4.542	PER IMP=	90.00
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	1.570
COMPUTE NM HYD	110.10	-	1	.00226	1.37	.034	.27917	1.532	.947	PER IMP=	.00
COMPUTE NM HYD	110.20	-	1	.00075	1.08	.036	.91415	1.510	2.267	PER IMP=	60.00
COMPUTE NM HYD	110.30	-	1	.00053	.99	.035	1.23163	1.510	2.936	PER IMP=	90.00
FINISH											

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) =08/15/1997

INPUT FILE = A:E.DAT USER NO.= R_BOHANN.I01

COMMAND	HYDROGRAPH IDENTIFICATION	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	NOTATION	
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	2.350
COMPUTE NM HYD	100.10	-	1	.00354	3.32	.147	.77901	1.645	1.466	PER IMP=	.00
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	1.570
COMPUTE NM HYD	110.10	-	1	.00354	1.25	.053	.27917	1.645	.551	PER IMP=	.00
FINISH											

CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

May 6, 2005

Kent Trauernicht, Registered Architect
PO BOX 3366
Albuquerque, NM 87190

Re: Certification Submittal for Final Building Certificate of Occupancy for Sundance Tract B1A1 Dev, [C-17 / D11U]
8601 President Place NE
Architect's Stamp Dated 05/02/05

Dear Mr. Trauernicht:

The TCL / Letter of Certification submitted on May 2, 2005 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

akt, LLC
architects

P. O. B O X 3 3 6 6
ALBUQUERQUE, NM 87190
TELE: (505) 281 - 9560
FAX: (505) 286 - 1055

May 2, 2005

City of Albuquerque
Public Works Department
Transportation Development Services
600 2nd Street NW
Albuquerque, NM 87102

RE: Traffic Circulation Layout – Certification
COA BP# 0504676
Office Warehouse
8601 President Place NE
Albuquerque, NM 87113

I have visited the completed project and to the best of my knowledge and information it appears to be in substantial compliance with the intent of the design concepts and the construction documents, as approved by the City for traffic circulation and parking. Minor site changes may have occurred during the construction of this project but have no adverse impact to the site and its ability to comply with the approved plan. Those relying upon this record are advised to obtain independent verification of its accuracy before using it for any other purpose.

This document neither expresses nor implies a warranty.

STATE OF NEW MEXICO
KENT TRAUERNICHT
No. 1285
5/2/05
REGISTERED ARCHITECT

RECEIVED
MAY 02 2005
HYDROLOGY SECTION

CITY OF ALBUQUERQUE

ALBUQUERQUE
THREE HUNDRED YEARS
1706 • 2006
Making History

September 17, 2004

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

Re: President Place Commercial Office / Warehouse, 8601 Presidential Place,
Traffic Circulation Layout
Architect's Stamp dated 9-14-04 (C17-D11U)

Dear Mr. Trauernicht,

The TCL submittal received 9-16-04 is approved for Building Permit. The plan is stamped and signed as approved. A copy of this plan will be needed for each of the building permit plans. Please keep the original to be used for certification of the site for final C.O. for Transportation.

If a temporary CO is needed, a copy of the original TCL that was stamped as approved by the City will be needed. This plan must include a statement that identifies the outstanding items that need to be constructed or the items that have not been built in "substantial compliance," as well as the signed and dated stamp of a NM registered architect or engineer. Submit this TCL with a completed Drainage and Transportation Information Sheet 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 must stamp, sign, 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,

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

cc: file

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov