# CITY OF ALBUQUERQUE



April 3, 2008

Jeffrey L. Mulbery, P.E. Bohannan Huston, Inc. 7500 Jefferson St NE- Courtyard 1 Albuquerque, NM 87109

Re: CNM Montoya Campus Bookstore Grading and Drainage Plan Engineer's Stamp dated 3-7-08 (F21/D026G)

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 3-7-08, 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.

PO Box 1293

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. You are required to send a copy of your SWPPP on a CD to the following address:

Albuquerque

Department of Municipal Development, Storm Drainage Division, P.O. Box 1293, One Civic Plaza, Rm. 301, Albuquerque, NM 87103

NM 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

www.cabq.gov

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

Sincerely,

Curtis A. Cherne, P.E.

Cutu a Chem

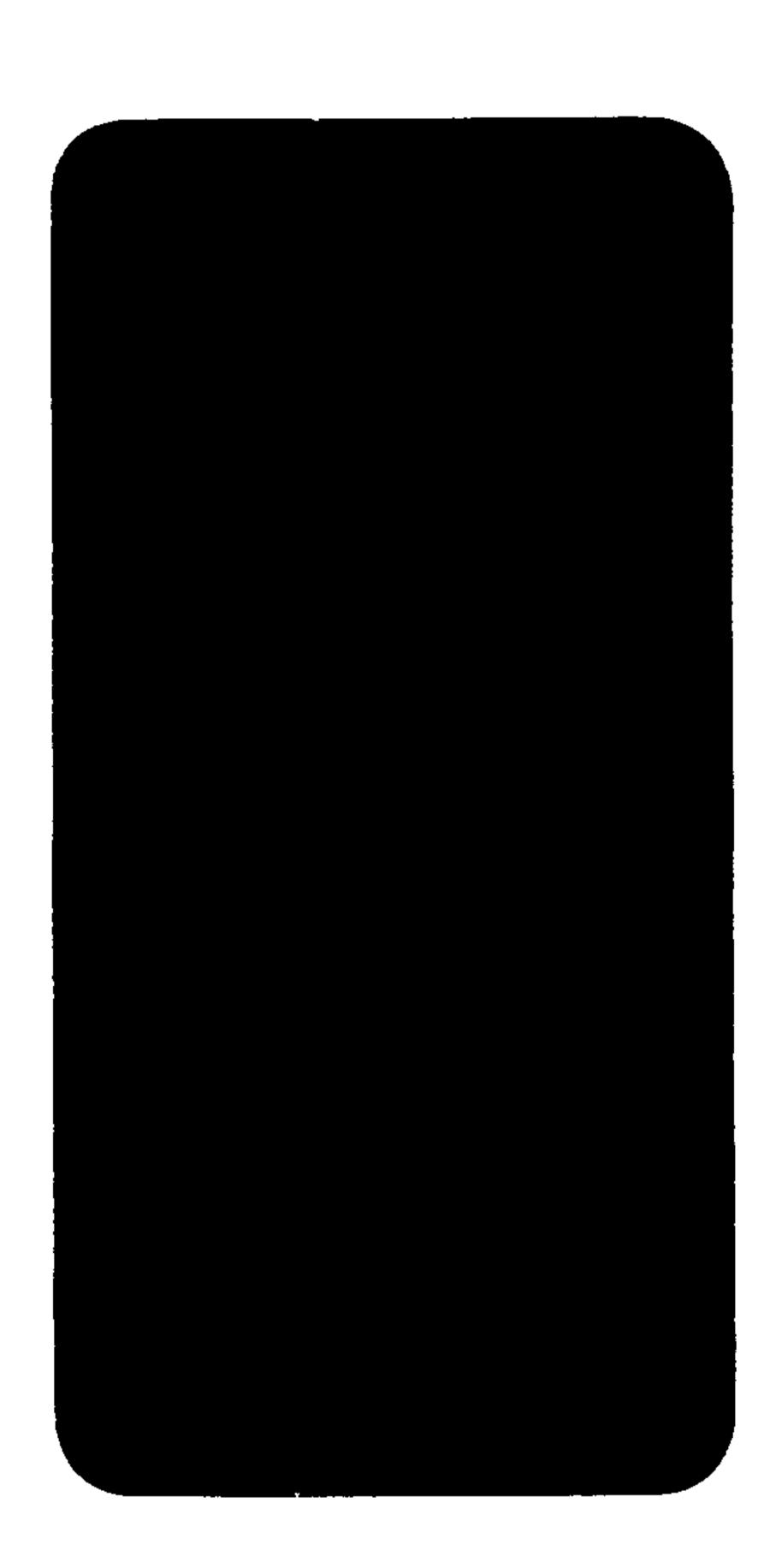
Senior Engineer, Planning Dept.

Development and Building Services

C: fi

Kathy Verhage, DMD

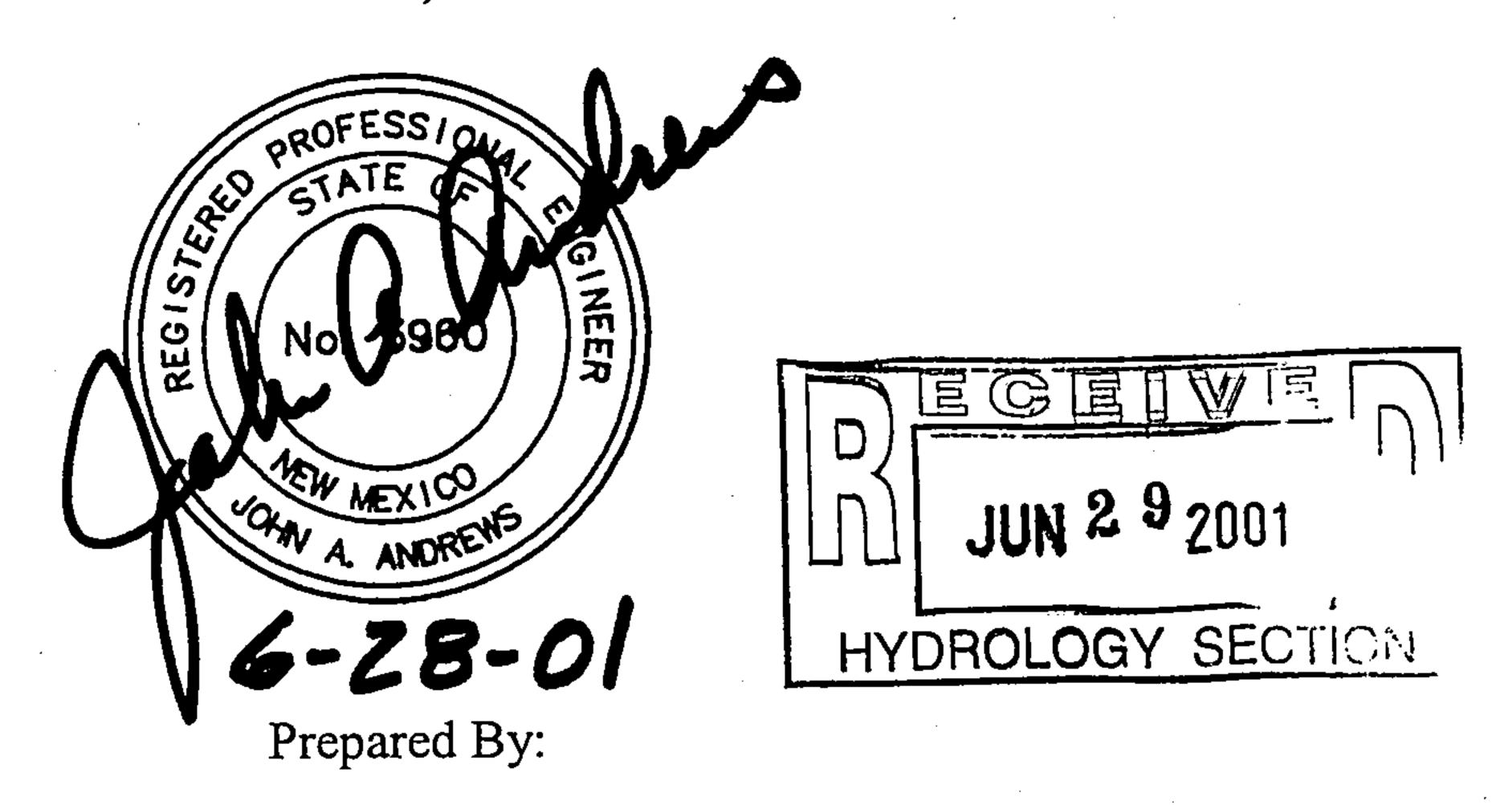




# Albuquerque Technical Vocational Institute

Drainage Report for
Joseph M. Montoya Campus
Instructional Facility

June 29, 2001





8500 Menaul NE, Suite A-440 Albuquerque, NM 87112

# **Table of Contents**

Section	Description							
	List of Figures	iii						
	List of Tables	iv						
1.0	Introduction	1						
2.0	Existing Watershed Conditions	4						
3.0	Developed Watershed Conditions	7						
Appendix A	Hydraulic Computations	A-1						
4.0	References	11						

# List of Figures

Figure	Description	Page
Figure 1	Location Map	3
Figure 2	Location Map and Existing Conditions Drainage Plan	Enclosed
Figure 3	Grading Plan	Enclosed
Figure 4A	Drainage Plan	Enclosed
Figure 4B	Civil Site Details	Enclosed
Figure 5	Flood Insurance Rate Map, Map No. 35001C0144	10
Figure 6	Albuquerque Public School Tract No. 34 Lots A, B & C, Amended Plat	Enclosed
Figure 7	COA Fire Station Site, Lot C	Enclosed
Figure 8	Division of Lot C of the Amended Plat of Albuquerque Public School	•
	Tract No. 34	Enclosed

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# List of Tables

<u>Table</u>	Description	Page
Table 1	Runoff Calculation Data for City of Albuquerque Precipitation Zone 4	5
Table 2	Existing Conditions Runoff Calculations	6
Table 3	Developed Conditions Runoff Calculations	8-9

### 1.0 Introduction

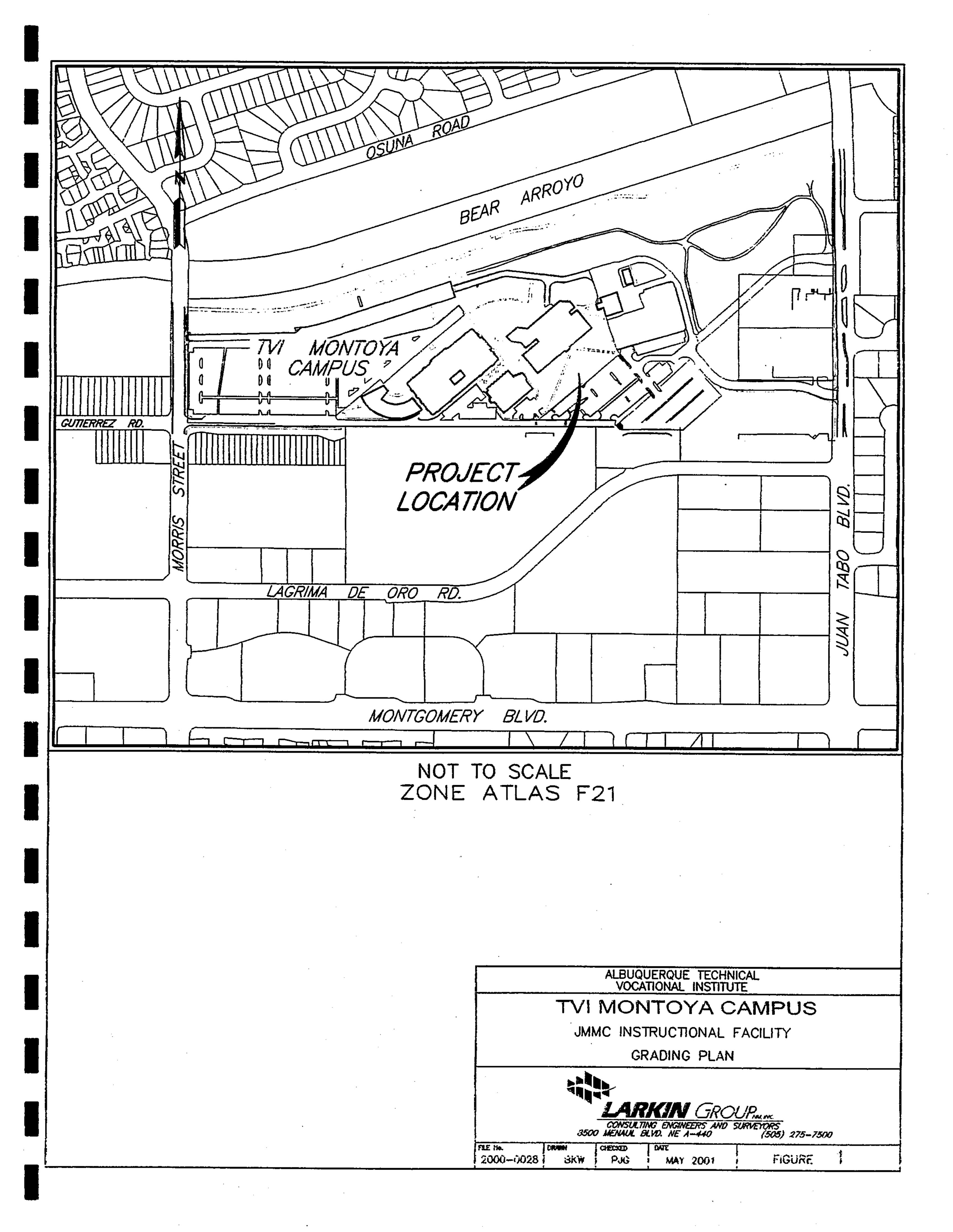
The Albuquerque Technical Vocational Institute (TVI) intends to construct a new instructional facility on the Joseph M. Montoya Campus (TVI Montoya Campus). The TVI Montoya Campus is located in the northeast quadrant of the City of Albuquerque. The campus is bounded on the north by the Bear Arroyo, on the south by a residential subdivision and lies between Juan Tabo Boulevard and Morris Street. (See **Figure 1**, **Location Map**) The purpose of this report is to address grading and drainage issues surrounding the new building in order to obtain grading and building permit approvals.

A Master Drainage Plan for the Albuquerque Technical Vocational Institute's Joseph M. Montoya Campus was prepared and submitted to the City of Albuquerque, Hydrology Division, by Jeff Mortensen and Associates in January 1995. The plan is designated as F21 026D. The entire campus discharges its runoff directly to the Bear Arroyo via surface flow. The proposed instructional facility is situated south of the Bear Arroyo and not within a FEMA designated Flood Hazard Area, as indicated in **Figure 5**.

A Pre-Design meeting was held March 20, 2001 with Mr. John Murray of the City of Albuquerque, Hydrology Division. At that time, it was assumed that there would be a minimal increase in peak flow (less than 2 cubic feet per second) of the runoff due to the proposed new building. Mr. Murray indicated that the small increase in peak flow would not be a problem. Mr. Murray asked for the flow path to the Bear Arroyo to be indicated on the submitted drainage plan (See **Figure 2**).

Guidelines for this hydrologic analysis are based on methods as defined in Section 22.2, Hydrology, of the Development Process Manual (DPM), Design Criteria for the City of Albuquerque, New Mexico, January 1997.

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# 2.0 Existing Watershed Conditions

As mentioned in the previous section, the drainage of the TVI Montoya Campus - Phase I was addressed in a previous Master Drainage Plan (MDP) submitted January 1995 to the City of Albuquerque. The basin of particular concern in the MDP report is that of Basin "D". This area lies between Buildings "K" and "H" as the western limit and an access road at the east end of the campus. This report addresses a portion of Basin "D" from the MDP These areas are shown in **Figure 2** and are designated as Drainage Areas *A-1* through *A-4*.

The topographic conditions are also shown in **Figure 2**. Generally, Drainage Areas *A-1* through *A-4* drain via surface swale to an 18-inch diameter corrugated metal pipe (CMP) at the southwest corner of Building "J." The proposed location of the new instructional facility is in the area designated as *A-2*. A portion of the runoff is generated off-site in Drainage Areas *A-1*, *A-3* and *A-4*. Currently, runoff from these areas is transmitted southwesterly via surface swales to the 18-inch diameter CMP. This 18-CMP conveys the runoff to a junction box that outlets to dual 12-inch diameter PVC pipes. The 12-inch PVC pipes outlet to a surface swale that runs northward between Building "J" and Building "H." From this terminus, a 24-inch diameter CMP conveys the runoff under a sidewalk. From north of the sidewalk, runoff continues northward to two, 24-inch diameter CMP's that convey the runoff under a fire access road to the Bear Arroyo.

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Values of land treatment and excess rainfall for runoff are calculated using the data for Precipitation Zone 4 and are included in **Table 1**.

Table 1

Runoff Calculation Data for City of Albuquerque Precipitation Zone 4

QP100A=	2.20	cfs/acre	QP10A=	0.87	cfs/acre
QP100B=	2.92	cfs/acre	QP10B=	1.45	cfs/acre
QP100C=	3.73	cfs/acre	 QP10C=	2.26	cfs/acre
QP100D=	5.25	cfs/acre	QP10D=	3.57	cfs/acre
				··· -	
E100A=	0.80	In	P60	2.23	inches
E100B=	1.08	· In	P360	2.90	inches
E100C=	1.46	in	P1440	3.65	inches
E100D=	2.64	In	P4Day	4.70	inches
			P10Day	5.95	inches

Drainage Area characteristics for existing conditions are indicated in **Table 2**. The hydrologic analysis of Drainage Areas A-1 through A-4 indicates that the peak runoff from a one-percent chance storm event under existing conditions is approximately 13.1 cubic feet per second.

# TABLE 2 EXISTING CONDITIONS RUNOFF CALCULATIONS

RUNOFF CALCULATION FOR SMALL WATERSHEDS/BASINS TIME TO PEAK, TP < OR = 0.133 HOUR = 8 MINUTES

WATERSHED CONDITIONS:

EXISTING

BERNALILLO COUNTY PRECIP. ZONE:

4

### TVI'S JOSEPH M. MONTOYA CAMPUS

			LAND TR	EATMENT			PEAK	FLOW	6-Hour	VOLUM	E OF RUNC	FF 100-YR	EVENT
BASIN	TOTAL	Α	В	С	D ´	100%	of Ru		EW	V360	V1440	V-4DAY	V-10DAY
IDENTIFICATION	AREA (Acres)	% Acres	% Acres	% Acres	% Acres	Снеск	100-YR CFS	10-YR CFS	Inches	AC-FT CU FT	AC-FT CU FT	AC-FT CU FT	AC-FT CU FT
		0	0	100	. 0	ок				0.1241	0.1241	0.1241	0.1241
A-1	1.01	0	0	1.01	0		3.77	2.28	1.47	5406	5406	5406	5406
		0	0	100	0	ок				0.2088	0.2088	0.2088	0.2088
A-2	1.31	0	. 0	1.31	0		4.89	2.96	1.91	9095	9095	9095	9095
		0	0	0	100	ок				0.0766	0.1135	0.1651	0.2265
A-3	0.59	0	0	0	0.59		- 3.10	2.11	1.56	3336	4942	7191	9868
		0	0	0	100	ок			•	0.0149	0.0311	0.0539	0.0810
A-4	0.26	0	0	0	0.26		1.37	0.93	0.69	648	1356	2347	3526

# 3.0 Developed Watershed Conditions

The Grading Plan for the new building site is shown in **Figure 3**, enclosed. Drainage Area characteristics under developed conditions remain the same as existing conditions for areas A-1, A-3 and A-4. Drainage Area A-2 is further subdivided into eleven separate basins to account for drainage on and around the proposed new building site. These basins are identified in the Drainage Plan shown in **Figure 4**, enclosed. The characteristics of these basins are indicated in **Table 3**.

A description of the drainage plan is as follows: Runoff from Drainage Areas A-1 and A-4 is to be collected at an inlet in Drainage Area A-1. An 18-inch and 24-inch diameter subsurface storm drain is to convey the runoff in a southwesterly direction, between Building "J" and the new building to the existing, subsurface, dual 12" PVC storm drains that run between Building "J" and Building "K". These 12" diameter PVC culverts have the hydraulic capacity to discharge the 100-year peak runoff with approximately 0.5-feet of headwater over the soffit elevation of the pipe at the upstream end. The roof drains from Building "J" and the new building are to be connected directly to this new storm drain. A series of surface drain inlets are to collect runoff between the two buildings. Hydraulic computations for the storm drain are included in **Appendix A**. The hydraulic computations indicate that the storm drain is sufficiently sized to accommodate the 100-year precipitation event peak flow.

The peak runoff generated by the developed land treatment conditions for the 100-year storm event is 14.3 cubic feet per second. This is an increase in peak flow of 1.2 cubic feet per second over the existing conditions peak flow.

# TABLE 3 DEVELOPED CONDITIONS RUNOFF CALCULATIONS

RUNOFF CALCULATION FOR SMALL WATERSHEDS/BASINS TIME TO PEAK, TP < OR = 0.133 HOUR = 8 MINUTES

WATERSHED CONDITIONS:

DEVELOPED

BERNALILLO COUNTY PRECIP. ZONE:

4

### TVI'S JOSEPH M. MONTOYA CAMPUS

				LAND TR	EATMENT			PEAK	LOW	6-Hour	Volum	E OF RUNC	FF 100-Y	R EVENT
BASIN	TOTAL		Α	<u>B</u>	С	D	100%	of Ru	NOFF	Ew	V360	V1440	,	V-10DAY
IDENTIFICATION	AREA (Acres)		% ^cres	% Acros	% ^cros	% ^oros	CHECK	100-YR	10-YR	Inches	AC-FT	AC-FT	AC-FT	AC-FT
·	(Acies)		Acres	Acres	Acres	Acres		CFS	CFS		CUFT	CUFT	CUFT	CUFT
			ò	0	100	0	ок				0.1241	0.1241	0.1241	0.1241
A-1	1.01		0	0	1.01	0		3.77	2.28	1.47	5406	5406	5406	5406
		Ì	0	0	0	100	ок			-	0.0008	0.0045	0.0098	0.0160
A-2.01	0.06		0	0	0	0.06		0.32	0.21	0.16	34	198	427	699
			0	0	0	100	ок				0.0037	0.0117	0.0230	0.0364
A-2.02	0.129		0	0	0	0.129		0.68	0.46	0.34	159	511	1002	1588
			0	0	0	100	ок			,	0.0077	0.0194	0.0357	0.0552
A-2.03	0.187		0	0	0	0.187		0.98	0.67	0.49	335	844	1557	2405
			0	0	0	100	ок				0.0016	0.0069	0.0143	0.0232
A-2.04	0.085		0	0	0	0.085		0.45	0.30	0.22	69	301	625	1010
			0	80	10	10	ок			•	0.0027	0.0037	0.0051	0.0067
A-2.05	0.159		0	0.1272	0.0159	0.0159		0.51	0.28	0.20	117	160	221	293
			0	10	0	90	ок				0.0026	0.0088	0.0175	0.0279
A-2.06	0.111		0	0.0111	0	0.0999		0.56	0.37	0.28	111	383	764	1217
•			0	20	0	80	ок				0.0010	0.0046	0.0096	0.0156
A-2.07	0.072	j	0	0.0144	. 0	0.0576		0.34	0.23	0.17	44	201	420	682

# TABLE 3 DEVELOPED CONDITIONS RUNOFF CALCULATIONS

RUNOFF CALCULATION FOR SMALL WATERSHEDS/BASINS TIME TO PEAK, TP < OR = 0.133 HOUR = 8 MINUTES

WATERSHED CONDITIONS:

DEVELOPED

BERNALILLO COUNTY PRECIP. ZONE:

4

### TVI'S JOSEPH M. MONTOYA CAMPUS

				LAND TR	EATMENT			PEAK	LOW	6-Hour	Volum	E OF RUNC	FF 100-Y	R EVENT
Basin	TOTAL		Α	<u>B</u>	<u>C</u>	D	100%	of Ru	NOFF	Ew	V360	V1440	<del></del>	V-10DAY
IDENTIFICATION			. %	%	%	%	Снеск	100-YR	10-YR	Inches	AC-FT	AC-FT	AC-FT	AC-FT
	(Acres)		Acres	Acres	Acres	Acres		CFS	CFS		CUFT	CU FT	CU FT	CU FT
			0	30	0	70	ок		•		0.0011	0.0044	0.0092	0.0148
A-2.08	0.077		0	0.0231	0	0.0539		0.35	0.23	0.17	47	193	399	644
				^	^	400					0.000			
A-2.09	0.039	1	0 .	0	0	100	ок	0.00	0.44	0.40	0.0003	0.0028	0.0062	0.0102
A-2.05	0.035	•		0	0	0.039		0.20	0.14	0.10	15	121	269	446
			0	20	0	80	ок				0.0054	0.0138	0.0255	0.0394
A-2.10	0.167		0	0.0334	0	0.1336		0.80	0.53	0.39	236	599	1109	1715
						-								
			0	10	85	5	ок		!		0.0010	0.0013	0.0017	0.0021
A-2.11	0.09		0	0.009	0.0765	0.0045		0.34	0.20	0.13	44	56	73	93
			0	70	15	15	ок				0.0002	0.0006	0.0012	0.0010
A-2.12	0.044		Ö	0.0308	0.0066	0.0066		0.15	0.08	0.06	10	28	53	0.0019 83
			0	0	10	90	ок				0.0024	0.0083	0.0167	0.0266
A-2.13	0.106		0	0	0.0106	0.0954	<b>i</b> i	0.54	0.36	0.27	103	363	726	1159
			_	^	0	100					0.0700	0.4405	0.00	
A-3	0.59		0	0	0	100 0.59	ок	2 10	244	4.50	0.0766	0.1135	0.1651	0.2265
	0.00		U	U	U	0.59		3.10	2.11	1.56	3336	4942	7191	9868
			0	0	. 0	100	ок				0.0149	0.0311	0.0539	0.0810
A-4	0.26		0	0	0	0.26		1.37	0.93	0.69	648	1356	2347	3526
										-				<del>-</del>
			·	···										

# Appendix A Hydraulic Computations



9233 Ward Parkway, Suite 300 Kansas City, Missouri 64114 Phone: 816-361-0440 Fax: 816-361-0045

Job Title JMMC INSTRUCTIONIAL
FACILITY

Made By PAG

Chkd. By

Chkd. By

Date 4/13/2001 Page 1

Client FBT / TV/

JOB NO. ALZK - 0028

e-mail: kcmail@larkin-grp.com

# GRATE MILET CAPACITY CALCULATIONIS

30" DIA. STID H-20 GRATE @ STA 4+76 LINE "A"

FREE OPEN SPACE = 232 SQ IN = 1661 SQ FT
AS PER MANUFACTURER

PONDING CONDITION WITH 1.1 FT HEAD

ORIFICE FLOW!

Q= 0.6 A \ Zgh

Q= 8.13 C=S CAPACITY

A= 1.61 SQFT 9=32.2 FT/52 h=1.1 FT

Q100 = 5.14 CFS

PRINAGE AREAS A-1

FA-4: COMBINITIS

0,00 < 0 ans



9233 Ward Parkway, Suite 300 Kansas City, Missouri 64114 Phone: 816-361-0440 Fax: 816-361-0045 e-mail: kcmail@larkin-grp.com

Date 4/13/201 Page 2/6
Client FIST / TV/
JOB NO. FLZK-COZS  JMMC INSTRUCTIONAL  JOB Title FACILITY
Job Title FACILITY
Made By 7/6
Chkd. By

# GRATE INLECT CAPACITY CALCULATIONS

18" DIA. GRATIE, STO H-20 @ STA 4+32 LINIE "A"

FREE OPEN SPACE = 98.7 30 IN = 0.685 SQ FT
AS PRR MANUFACTURER

MAXIMUM HEAD = 0.70 FT

WEIR FLOW!

 $Q_{\text{cap}} = 3.3 TP (h)^{15}$   $= 3.3 (4.71) (0.70)^{1.55}$ 

T = PRRIMETER = ZTY = 4.71 = T h = 0.70

Dans = 9.1 CFS

ORIFICE FLOW!

O= 0.6A \ Zgh = 0.6(0.685) \ Z(32.2)(0.7)

A= 0.685 SQFT 9= 32.2 FT/s2 h= 0.7 FT

OCAP, = 2.75 CFS

Q100 = 0.34 CFS FROM DRAINAGE AREA Z.1

Q100 & QCAPO



9233 Ward Parkway, Suite 300 Kansas City, Missouri 64114 Phone: 816-361-0440 Fax: 816-361-0045

Date 4/13/2001 Page 3/6
Client FBT / TV/
JOB NO. ALZY-0028 JMMC INSTRUCTIONAL
Job Title FACIL! TY
Made By 72/G
Chkd. By

e-mail: kcmail@larkin-grp.com

# GRATE INLET CAPACITY CALCULATIONS

18" DIA. PROBSTRIAN GRATE, STA 3+40 LINE "A"

FREE OPEN SPACE = 87.6 SQ IN = 0.608 SQ FT

AS PER MANUFACTURER

MAXIMUM HEAD = 0.25 FT

WEIR FLOW:

 $Q_{CAP} = 3.3 P(h)^{1.5}$   $= 33(4.71)(0.25)^{1.5}$ 

P= Nd= 4.71 FT h= 0.25 FT

Que = 1.94 CFS

ORIFICIE FLOW:

Qcap = 0.64 JZgh

acar = 1.5 cfs

 $A = 0.608 FT^2$  h = 0.25 FT

DRAINAGE BASIN Z.10 Q100 = 0.80 CFS < Qcap = 1.5 CFS V



9233 Ward Parkway, Suite 300 Kansas City, Missouri 64114 Phone: 816-361-0440 Fax: 816-361-0045 e-mail: kcmail@larkin-grp.com

Date 4/13/20/ Page 4/6					
Client FBT / TV/					
JOB NO. ALZK - OD Z8 JMMC INSTRUCTIONAL					
JOB Title FACILITY					
Made By 716					
Chkd. By					

# GRATE INLET CAPACITY CALCULATIONS

24" DIA. PEDESTRIAN GRATE, STA 2+61 LINE "A"

FREE OPEN SPACE = 125.2 SQIN = 0.869 SQFT

AS PRR MANUFACTURED.

MAXIMUM HEAD = 0.50 PT

WEIR FLOW;

Que = 3.3 P(h)

QCAPW = 7.32 CFS

TP = 27-r = 6.28 FT h = 0.5 FT

ORIFICE FLOW:

Ocapo = 0.6 A Jzgh.

= 2.96 CF 5

A = 0.869 50 FT h = 0.50 FT

DRAINIAGR BASIN 2.08

0.00 = 0.35 CFS < Ocrps = 2.96 CFS VOK



9233 Ward Parkway, Suite 300 Kansas City, Missouri 64114

Phone: 816-361-0440 Fax: 816-361-0045

e-mail: kcmail@larkin-grp.com

Date 4/13/2001 Page 5/6
Client_FBT_TV/
JOB NO. ALZIZ-0028  JMMC INSTRUCTIONIAL  JOB Title FACILITY
Job Title FACILITY
Made By ZG
Chkd. By

# GRATE INLET CAPACITY CALCULATIONS

12"x 12" PEDESTRIANI GRATE, STA 1+94 LINE "A"

FREE OPEN SPACE = 51.0 SQINI = 0.354 SQFT AS PER MANUFACTURER MAXIMUM HEADINGATTER = 0.5 FT

WELR FLOW:

Q= 3.3 P(h)1.5

Que = 3.66 CFS

P=27-= 3.14 FT h=0.50 FT

ORIFICE FLOW

Ochro = 0.6 A Tzah

Ocap = 1,20 c= 5

A= 0.354 sa FT n = 0.5 FT

Q100 = 0.34 CFS

DRAINAGE AREA 2.07

Q100 < QCAPO

# 12" PVC Headwater Calculation Worksheet for Pressure Pipe

Project Description						
Worksheet	Pressure Pipe - 12" PVC					
Flow Element	Pressure Pipe					
Method	Hazen-Williams Formula					
Solve For	Elevation at 1					

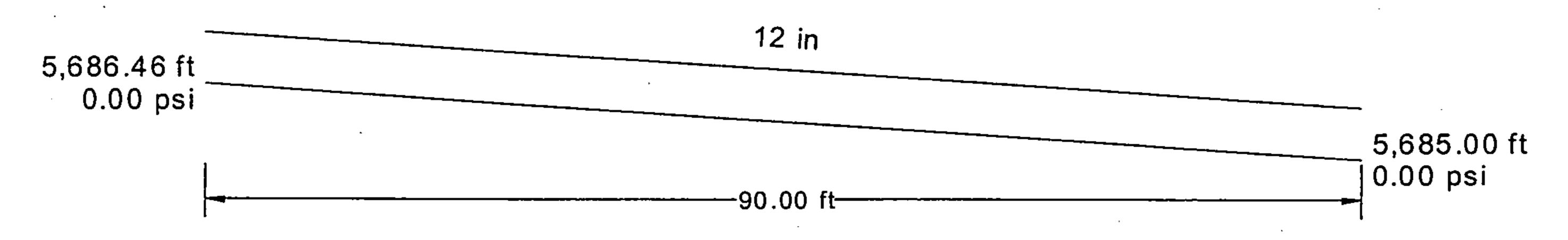
Input Data		
Pressure at 1	0.00	psi
Pressure at 2	0.00	psi
Elevation at 2	5,685.00	ft
Length	90.00	ft
C Coefficient	150.0	
Diameter	12	in
Discharge	7.00	cfs

Results		
Elevation at 1	5,686.46	ft
Headloss	1.46	ft
Energy Grade at 1	5,687.69	ft
Energy Grade at 2	5,686.23	ft
Hydraulic Grade at 1	5,686.46	ft
Hydraulic Grade at 2	5,685.00	ft
Flow Area	0.8	ft²
Wetted Perimeter	3.14	ft
Velocity	8.91	ft/s
Velocity Head	1.23	ft
Friction Slope	0.0162	ft/ft

# **Cross Section Cross Section for Pressure Pipe**

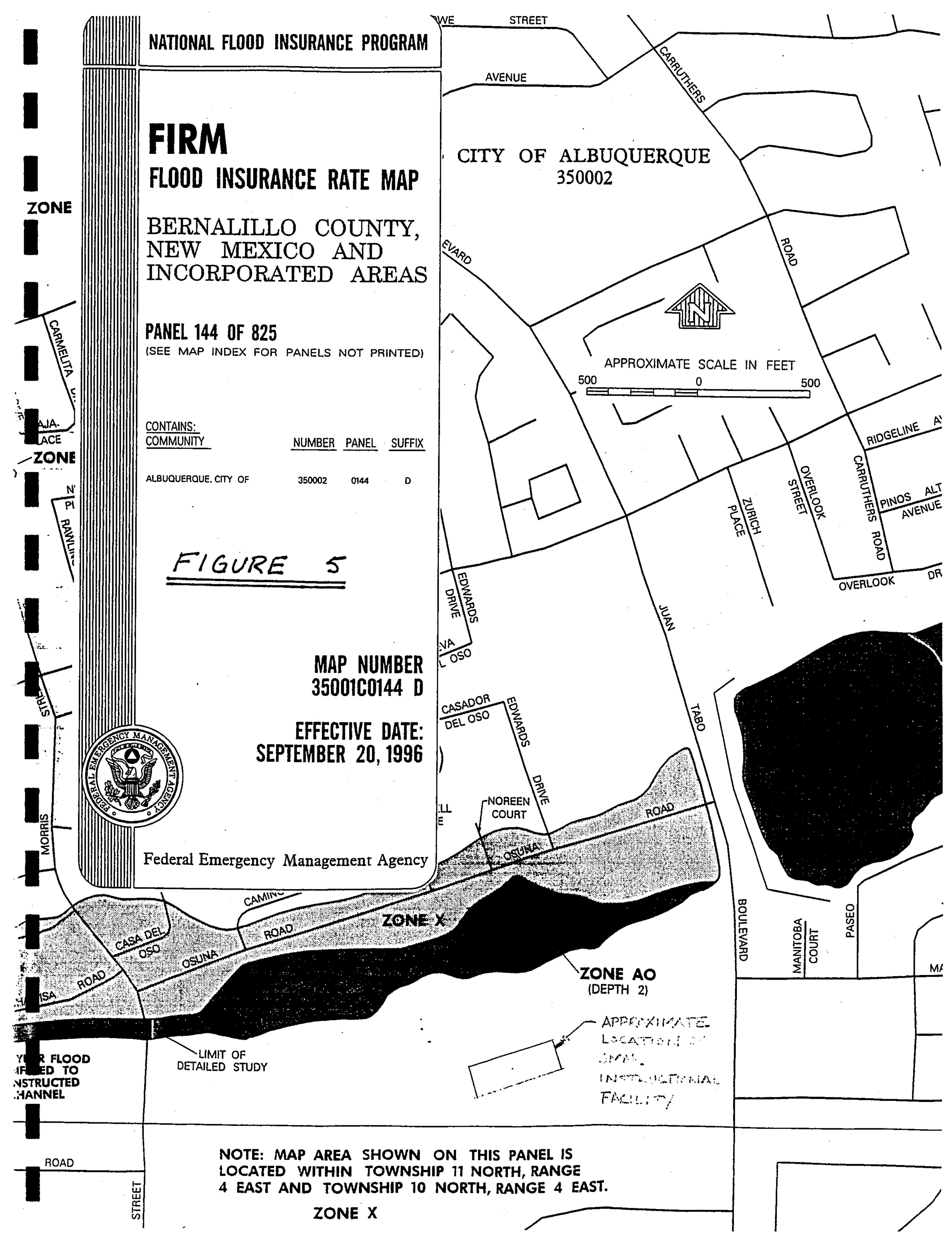
Project Description	
Worksheet	Pressure Pipe - 12" PVC
Flow Element	Pressure Pipe
Method	Hazen-Williams Formula
Solve For	Elevation at 1
Section Data	

Section Data		
Pressure at 1	0.00	psi
Pressure at 2	0.00	psi
Elevation at 1	5,686.46	ft
Elevation at 2	5,685.00	ft
Length	90.00	ft
C Coefficient	150.0	:
Diameter	12	in
Discharge	7.00	cfs



H:1 NTS

Page 1 of 1



# References

- 1. Section 22.2, Hydrology of the Development Process Manual, Design Criteria, January 1997.
- 2. TVI Montoya Campus, Master Drainage Plan, City of Albuquerque, New Mexico, F21 026D, January 1995, prepared by Jeff Mortensen and Associates.
- 3. AHYMO Computer Program Users Manual, Albuquerque Metropolitan Flood Control Authority, January 1997.

LATER DAY	SAINTS STATION OF STAT		CATION	TR. G PLACE
S 0° 0 6' 2 0" E	50°08'20"E	JUAH FAE	O BLVD. H.E.	
BA 14 GR.	NEW	HOLIDAA	PARI	
				Seele: 1'= 200'
SUMMARY PLAT FIRE STATION SIT ALBUQUERQUE, NE				
FREE CONSENT, DEDIC	ATION			
THE CITY OF MIDDIGUES QUE	State of the Marie SS County of Service This maintains the first	By Harry Harry Mayor,	E. Kinney  City of Albuquerque	
		Attest		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
STATE OF NEW MEXIC	LO)		sicipal Clerk	
On this 13 day of	F. i	foregoing instrum	ent was actionisd	ged before me.
My commission expires	· · · · · · · · · · · · · · · · · · ·	·, - · ·		
· SURVEY		Notory Pu	blic	•
i, under 'ne laws of l was prepared by me requirements for mon	New Mexico, certify that I a or under my supervision, so umentation and surveys of the best at my knowledg	ine Albuquerque S	of record, meets	the minimum
		La Monte New Mexico	J. Urban  D. L.S. No 4257	
APPROVAL AND CONDI	TIONAL ACCEPTANCE, as sp			Albuquerose

Subdivision Ordinance.

Planning Director,

City of Albuquerque, New Mexico

INFORMATION

Quistanding pro-reta charges for water and sewer Installation

SP-75-36



# CITY OF ALBUQUERQUE



October 14, 2009

Jeffrey L. Mulbery, P.E. Bohannan Huston, Inc. 7500 Jefferson St NE- Courtyard 1 Albuquerque, NM 87109

Re: CNM Montoya Campus Bookstore - Pond Drain Pipe Plan Engineer's Stamp date 10-12-09 (F21/D026G)

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 10-12-09, the above referenced plan is approved for SO-19 Permit.

PO Box 1293

The valley gutter/connection to the channel in the Drainage Easement must be inspected and accepted. Please contact Duane Schmitz, 235-8016, to schedule an inspection.

Albuquerque

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

NM 87103

Curtis A. Cherne, P.E.

Sincerely,

www.cabq.gov

Senior Engineer, Planning Dept.

Development and Building Services

C: file

Duane Schmitz, Street/Storm Drain Maintenance

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

PROJECT TITLE: CNM Montoya Campus Bookstore	ZONE MAP/DRG. FILE F-21-Z/D026G
DRB #:EPC#:	WORK ORDER#:
LEGAL DESCRIPTION: Albuquerque Public Schools Tract no 34	
CITY ADDRESS: 4700 Morris NE, Albuquerque, NM 87111	- · · · · · · · · · · · · · · · · · · ·
ENGINEERING FIRM: Bohannan Huston, Inc.	CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson NE – Courtyard I	PHONE: (505) 823-1000
CITY, STATE: Albuquerque, NM	ZIP CODE: 87109
OWNER: CNM	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
ARCHITECT: NCA Architects	CONTACT: Mildred Ortiz
ADDRESS: 1306 Rio Grande BLVD NW	PHONE: 255-6400
CITY, STATE: Albuquerque, NM 87104	ZIP CODE: 87104
	•
SURVEYOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
· · · · · · · · · · · · · · · · · · ·	
	ECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	SIA / FINANCIAL GUARANTEE RELEASE
DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN .	S. DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN	S. DEV. PLAN FOR DRB APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN APPROVAL
ENGINEER'S CERTIFICATION (HYDROLOGY)	FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL
CLOMR/LOMR TRAFFIC CIRCUITATION LAYOUT (TCL)	BUILDING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL)	CERTIFICATE OF OCCUPANCY (PERM.)
ENGINEERS CERTIFICATION (TCL) ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)	CERTIFICATE OF OCCUPANCY (TEMP.)
X OTHER	GRADING PERMIT APPROVAL
	PAXING PERMIT APPROVAL
	ORK ORDER APPROVALE TO THE
	XI, SD BEF WY APPROVA
	H. MENILLE V. L.
WAS A PRE-DESIGN CONFERENCE ATTENDED:	OCT 9 2009
YES	
- NO $         -$	
COPY PROVIDED	HYDROLOGY
HYDROLOG	TIPICATION
SECTION	SECILO!
DATE CUDANTTED: 40.05.00 In 19.09 DV: 1-4	F MANIBONE
DATE SUBMITTED: 40-05-09 しいひりつ	f Mulbery

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:

- 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 (5) acres.
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

www.bhinc.com

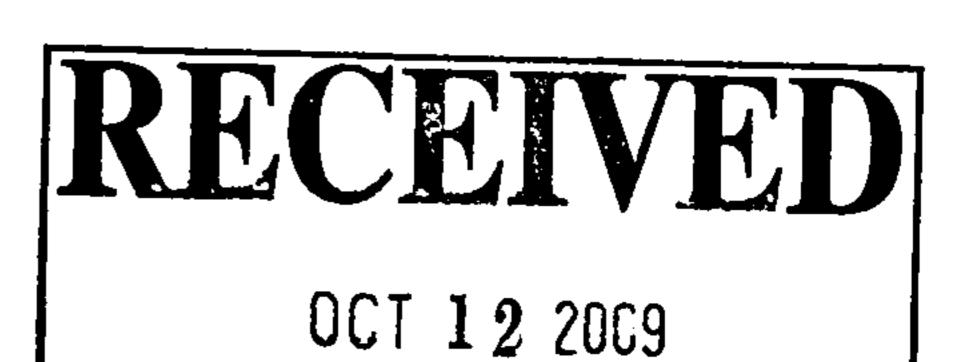
voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332

October 12, 2009

Curtis Cherne, P.E.
City of Albuquerque Hydrology
600 Second Street NW, 2nd Floor West
Albuquerque, NM 87102

Re: CNM Bookstore; Retention Pond Drain Pipe (C-18/42A)

Dear Curtis:



HYDROLOGY SECTION

Enclosed is the revised grading and drainage revision for the above reference project. I believe we have addressed your concerns outlined in your October 1<sup>st</sup>, 2009, email. Outlined below, we have described how your review comments have been addressed:

- The invert of the new pipe is .05' above the pipe to the pond. Therefore, flows will drain through the wall on the way to the pond as well as from the pond. And in low flow conditions, flows will split between the two.
  - Because of the small size of the pipe, large majority of the flow will head toward the pond and not the channel.
- I will need to know the capacity of the valley gutter to the channel.
  - At the current slope, 3.28%, the capacity of the valley gutter is 0.70 CFS.
- I will need to know the flow out of the pipe. Head from pond and/or head from upstream SD.
  - The water surface elevation of the pond, 83.1, is the governing factor for the amount of head on the pipe. The flow out of the pipe with the pond at max is 0.18 CFS.
- How much flow will enter the valley gutter from the area between the wall and the channel from uphill of the valley gutter?
  - o The basin is about 240 SF with 30% 'D' and 70% 'C' land treatments. This yields approximately 0.02 CFS to the valley gutter.
- We need to make sure there is no erosion in the ROW.
  - Because the valley gutter has the capacity for the flow from the pipe, no erosion should occur.

For the following comments, please refer to the attached SKC-5.1 for the graphical responses.

- Show what the grade will look like on both sides of the valley gutter in the detail.
  - See the Concrete Valley Gutter cross-section.
- 2" SD should stick out from wall a little.
  - Located at the wall edge along the gutter centerline extended 4" from wall face.

ENGINEERING A

SPATIAL DATA -

Curtis Cherne, P.E.
City of Albuquerque Hydrology
October 12, 2009
Page 2

- Is the valley gutter to be level, or will flow run to the west as it approaches the channel?
  - The valley gutter will match the grades of the channel, flowing approximately 3% towards the channel.
- You will need to submit a stamped plan (does not need to be full-size, submit 2 copies) with a DTIS requesting an SO 19 permit.
  - Refer to enclosures for the required paperwork. This has been added to the SKC.

If you have any questions regarding this, please feel free to contact me.

Sincerely,

MD 2 M M

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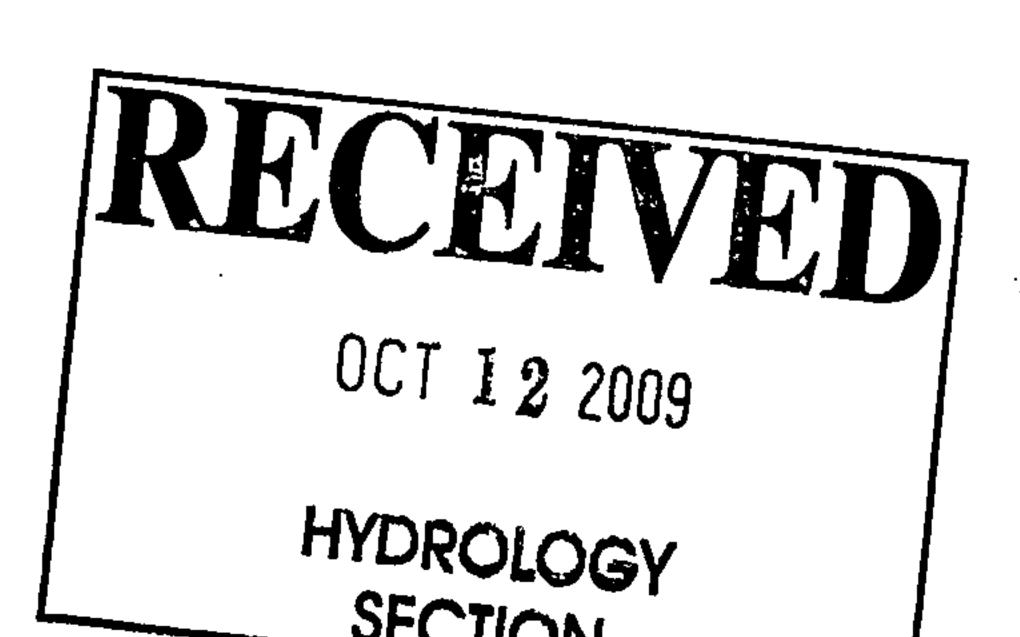
Jeff Mulbery, P.E. Project Manager

Community Development and Planning

JLM/cc Enclosures

# Pipe Flow:

Orifice Eqn: Q = C\*A\*SQRT(2\*g\*h)

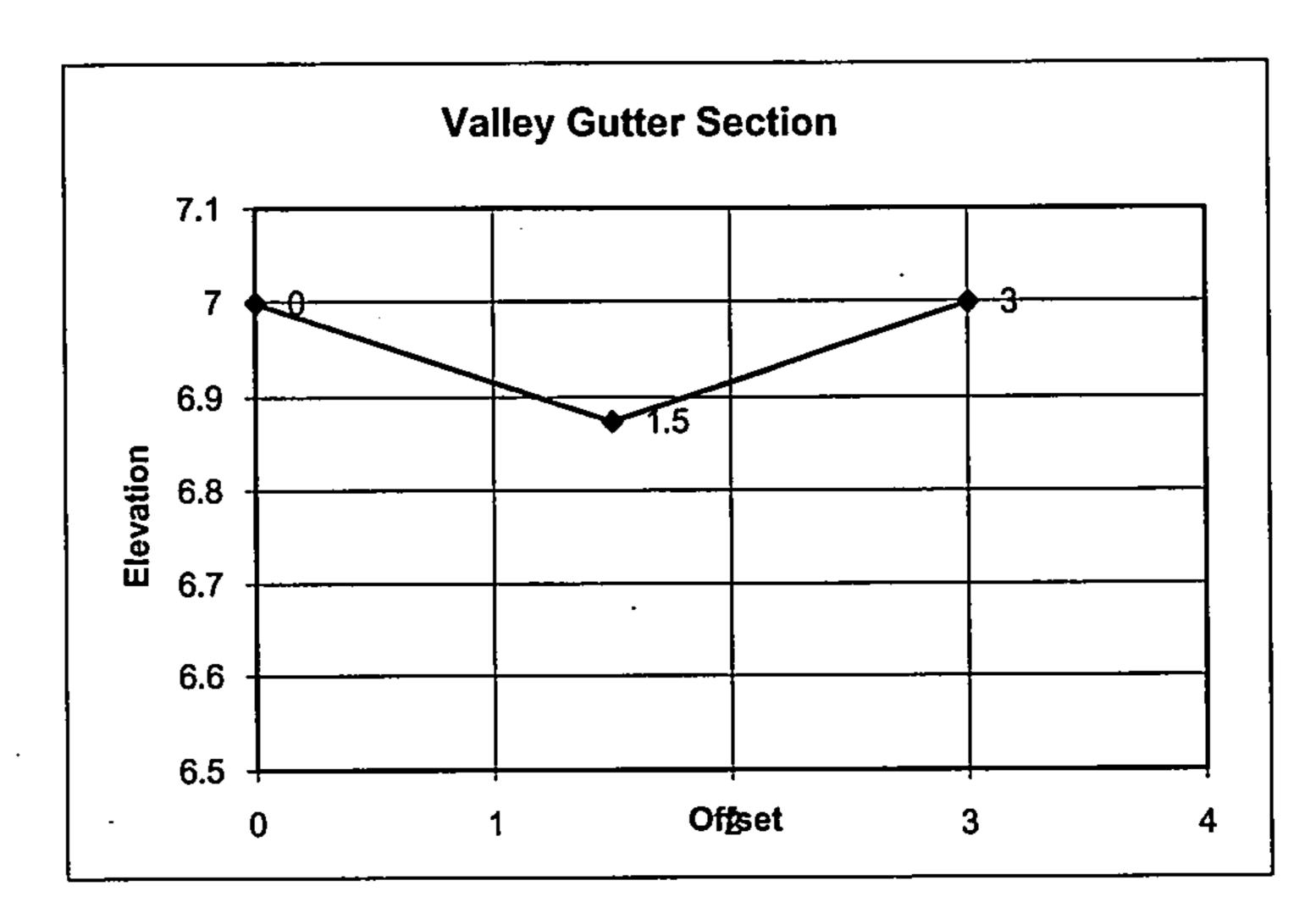


# Concrete Valley Gutter (Typ):

Manning's Eqn:  $Q = 1.49/n \times AR^2/3 \times S^1/2$ 

# Channel Coordinates - Offset and Elevation

Point # 1 2 3	Offset 0 1.5 3	Elevation 7 6.875 7
	A WP R Slope n	0.1875 sq. ft 3.0104 ft. 0.0623 ft. 0.0328 0.013
	Q = V =	0.70



RECEIVED

OCT 12 2009

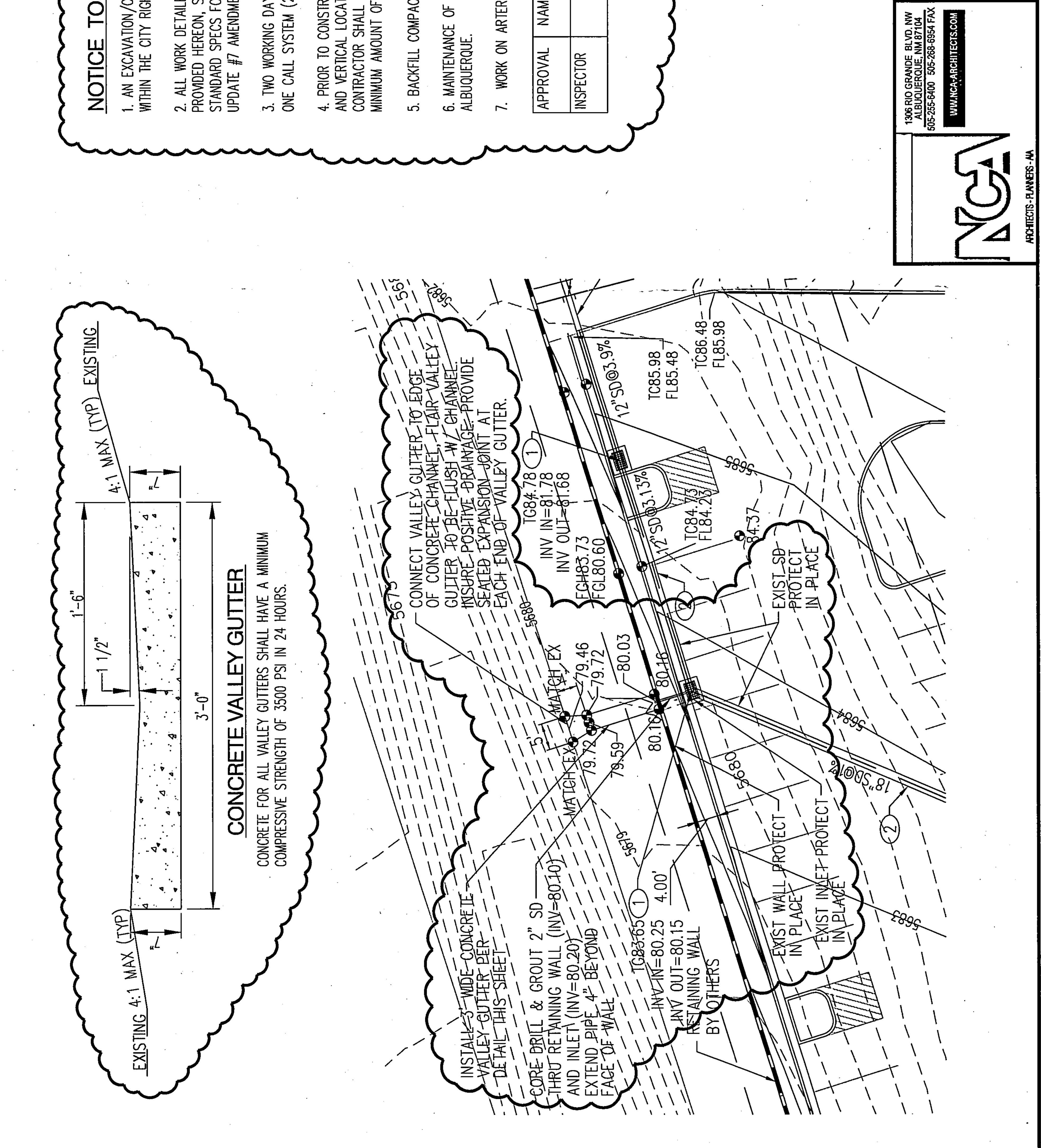
HYDROLOGY SECTION

	•			•	TABLE 1					
		Pro	•		opment Cor the DPM Section		sin Data Tab 4	le		
Basin	Area	Area		Land Treatment Percentages			Q(100)	Q(100)	V(100)	V(100)
ID	(SQ. FT)	(AC.)	A B C D (cfs/ac.) (CFS) (inches) (CF)					(CF)		
OSF1	240	0.01	0.0%	0.0%	70.0%	30.0%	4.19	0.02	1.81	36

# RECEIVED

OCT 12 2009

HYDROLOGY SECTION



·- - ·

# NOTICE TO CONTRACTORS (SO 19)

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROMDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.

4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.

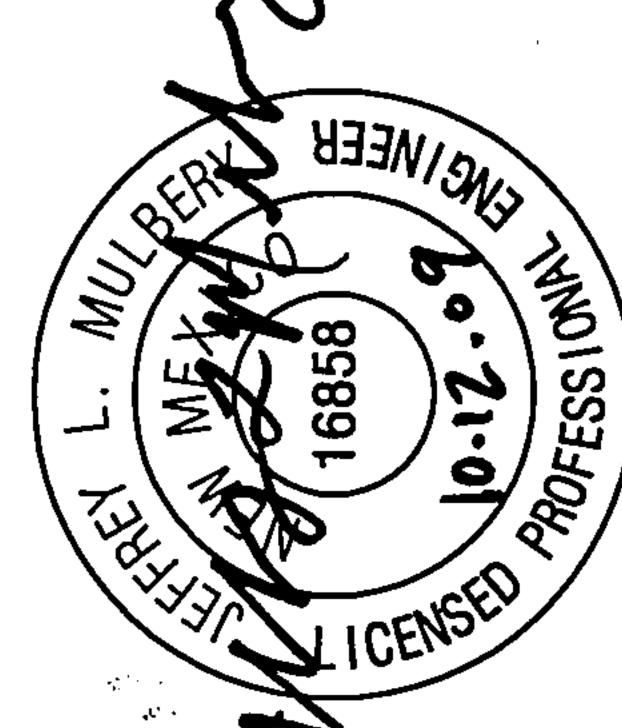
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE CITAL BLIDIEROLIF

. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

	APPROVAL	NAME	DATE
	INSPECTOR		
>			



HYDROLOGY SECTION



2963

ONTOYA CAMPUS BOOKSTORE

DATE 10/5/09
DRAWN BY BHW
CHECKED BY JLM
SCALE: 1"=20'
REFERENCE SHEET C-101

**NEW MEXICO** 

ALBUQUERQUE

BHW CONCRETE
JLM RUNDOWN
T=20' REVISION
EET C-101 SKC-5.1

RETENTION POND

A06.40

OB NUMBER

# CITY OF ALBUQUERQUE



September 25, 2009

Michael Balaskovitz, P.E. **Bohannan Huston, Inc.**7500 Jefferson NE - Courtyard I

Albuquerque, NM 87109

Re: CNM Montoya Campus Bookstore, 4700 Morris NE

Approval of Permanent Certificate of Occupancy,

Engineer's Stamp Dated: 3-7-08 (C-18/42A)

Engineer's Certification Date: 9-25-09

Dear Mr. Balaskovits,

PO Box 1293

Based upon the information provided in your submittal received 9/25/09, 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 924-3695.

Sincerely,

NM 87103

Curtis Cherne, P.E.

www.cabq.gov Senior Engineer

Development and Building Services

**C**:

CO Clerk

file

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET.

(REV. 1/11/2002)

PROJECT TITLE: CNM Montoya Campus Bookstore DRB #: EPC#:	ZONE MAP/DRG. FILE <u>F-21-Z/D026G</u> WORK ORDER#:
DRB #:EPC#:	VVORK ORDLIN#
LEGAL DESCRIPTION: Albuquerque Public Schools Tract no 34	
CITY ADDRESS: 4700 Morris NE, Albuquerque, NM 87111	
ENGINEERING FIRM: Bohannan Huston, Inc.	CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson NE – Courtyard I	PHONE: (505) 823-1000
CITY, STATE: <u>Albuquerque, NM</u>	ZIP CODE: <u>87109</u>
OWNER: CNM	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
ARCHITECT: NCA Architects	CONTACT: Mildred Ortiz
ADDRESS: 1306 Rio Grande BLVD NW	PHONE: 255-6400
CITY, STATE: <u>Albuquerque, NM 87104</u>	ZIP CODE: <u>87104</u>
SURVEYOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CHECK TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN  CONCEPTUAL GRADING & DRAINAGE PLAN  GRADING PLAN  EROSION CONTROL PLAN  X 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 DRB APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL X CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (RE-APPROVAL)
WAS A PRE-DESIGN CONFERENCE ATTENDED:  YES NO COPY PROVIDED  DATE SUBMITTED: 9-25-09 BY: Mike I	HADBOTOGA  SEB 3 9 5000  BECETAED  Balaskovitselivoskalas

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



June 5, 2008

Robert Calvani, R.A. NCA Architects 1306 Rio Grande Blvd. NW Albuquerque, NM 87104

Re:

F21-D026G CNM Bookstore and Parking Lot Addition, 4700 Morris Street NE,

Traffic Circulation Layout

Architect's Stamp dated 5-4-08 (F21-D026G)

Dear Mr. Calvani,

The TCL submittal received 6-05-08 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. 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.

PO Box 1293

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 <u>Drainage and Transportation Information Sheet</u> to Hydrology at the Development Services Center of Plaza Del Sol Building.

Albuquerque

NM 87103

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 <u>Drainage and Transportation Information Sheet</u> to Hydrology at the Development Services Center of Plaza Del Sol Building.

www.cabq.gov

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,

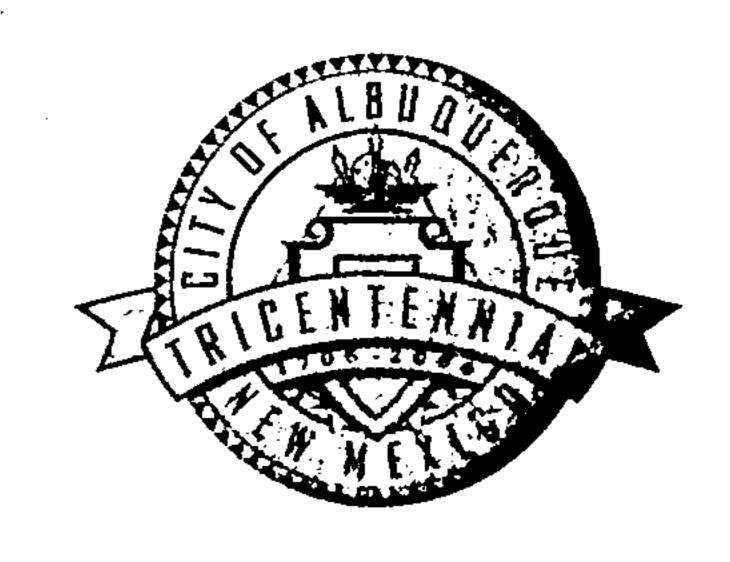
Kristal D. Metro, P.E.

Senior Engineer, Planning Dept.
Development and Building Services

C:

File

## CITY OF ALBUQUERQUE



January 15, 2008

Jeffery L. Mulbery, P.E. Bohannan Huston, Inc 7500 Jefferson St. NE Albuquerque, NM 87109

Re:

CNM Bookstore, 4700 Morris NE, Grading and Drainage Plan

Engineer's Stamp dated 1-11-08 (F-21/D026G)

Mr. Mulbery:

Based upon the information provided in your submittal received 1-11-08, 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

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. In addition to submitting an NOI to the EPA and preparing a SWPPP, please, send a copy of the SWPPP on a CD in .pdf format to the following address:

New Mexico 87103

Department of Municipal Development

Storm Drainage Division

P.O. Box 1293, One Civic Plaza, Rm. 301

Attn: Kathy Verhage Albuquerque, NM 87103

www.cabq.gov

If you have any questions regarding this permit please feel free to call the DMD Storm Drainage Design section at 768-3654 or 768-3645.

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

Sincerely,

Timothy Sims

Plan Checker - Hydrology, Planning Dept.

Development and Building Services

Cc:

Bradley L. Bingham

File

Albuquerque - Making History 1706-2006

January 10, 2008

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

www.bhinc.com

voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332

Mr. Timothy Sims
Plan Checker, Planning Dept
Development and Building Services
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

Re:

Response to Comments dated 11-29-07 on CNM Montoya Campus Bookstore, 4700 Morris NE, Grading and Drainage Plan for Building Permit, Engineer's Stamp dated 11-13-07 (F-21/D026G)

Dear Mr. Sims:

The following comments have been addressed:

### Base Bid:



Provide a more adequate detail on the 30" storm drain and curb opening that connect to the channel.

- A more specific detail based on NMDOT Std Detail 511-3-1/1 is included on sheet C-101.
- It appears that a fire hydrant is located inside of the building; will this be removed? Will this line be capped or removed?
  - The fire hydrant will be relocated and the line will be removed. Notes have been added for clarity. The utility plan, sheet C-200, is included for your file.
- What is the intent of the 2' bench? Please provide more detail.
  - This note is to imply that this area is to be graded as if the sidewalk was widened 2' to the east uniformly. This note has been removed.
- Include more specific detail on the rundown from the interior pond.
  - Minor changes were made in this area and elevation information was added to the details of this rundown.
  - This pond is designed to retain the 2 year, 24 hour storm for LEED purposes, assuming the parking lot as treatment "C".
- Please, define the property line.
  - The property line is shown and now matches the legend as indicated on the plan.
- What are the extents of the rip rap channel? Please clarify.
  - The Rip-Rap detail on sheet C-101 pertains to the storm drain outlet erosion control in the pond. Please see the landscape plans for the extents of the rip rap channel. A copy of this plan is provided for your file.

JAN 1

LAND DEVELOPMENT SECTION I

ENGINEERING A

SPATIAL DATA 🔺

Mr. Timothy Sims City of Albuquerque January 11, 2008 Page 2

#### **Alternate Bid:**

- On the match line of Phase I and Phase II, there are two inlets to be constructed with the base bid. These inverts do not match the invert elevations with the alternate bid. Why?
  - The inverts of these inlets have been revised, and they now match.
- The inlet adjacent to west parking island would be more effective if it was relocated to a more accessible flow pattern.
  - The purpose of this inlet is to make the angular joint construction for the storm drain as well as provide clean out access. It is not intended to capture a large amount of flow.

If you have any questions, you can contact me at 823-1000.

Sincerely,

Jeffery L. Mulbery, P.E.

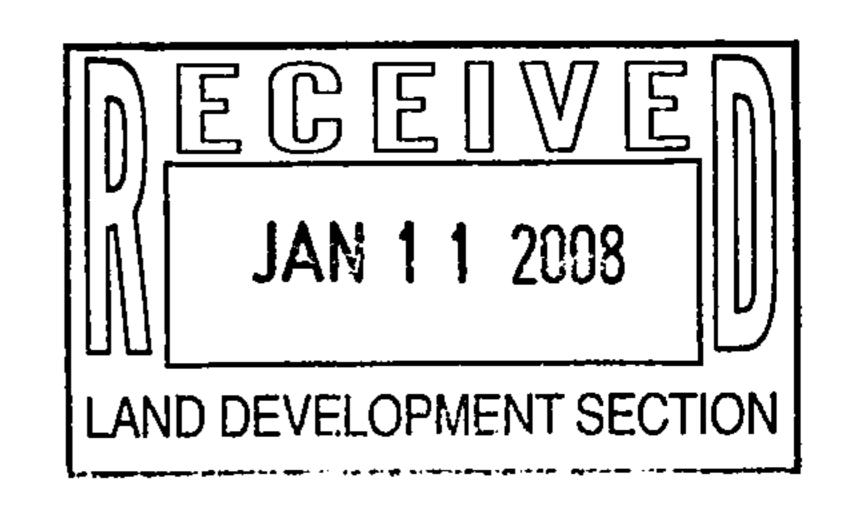
Project Manager

Community Development & Planning

ma 2 Mon

JLM/cc

Enclosures



## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

	F-21/D0765
PROJECT TITLE: CNM Montoya Campus Bookstore	ZONE MAP/DRG. FILE # F-21-Z
DRB #:EPC#:	WORK ORDER#:
LEGAL DESCRIPTION: Albuquerque Public Schools Tract no 34	
CITY ADDRESS: 4700 Morris NE, Albuquerque, NM 87111	
ENGINEERING FIRM: Bohannan Huston, Inc.	CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson NE – Courtyard I	PHONE: (505) 823-1000
CITY, STATE: <u>Albuquerque, NM</u>	ZIP CODE: 87109
OWNER: CNM ADDRESS:	CONTACT: <u>}                                </u>
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ADDRESS:	PHONE:
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CONTRACTOR	CONTACT
CONTRACTOR: ADDRESS:	CONTACT: PHONE:
CITY, STATE:	ZIP CODE:
CHECK TYPE OF SUBMITTAL:  DRAINAGE REPORT  X DRAINAGE PLAN  CONCEPTUAL GRADING & DRAINAGE PLAN  X GRADING PLAN  EROSION CONTROL PLAN  ENGINEER'S CERTIFICATION (HYDROLOGY)  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT (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 DRB APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL X BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (ROUGH GRADING PERMIT)
WAS A PRE-DESIGN CONFERENCE ATTENDED:  YES NO COPY PROVIDED  DATE SUBMITTED: 1/11/08 BY: Jeff Mu	JAN 11;

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:

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P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 20, 2001

John A. Andrews, P.E. Larkin Group NM, Inc. 8500 Menaul Blvd. NE, Suite A-440 Albuquerque, NM 87112

Attn: Paul J. Gonzales

RE: INSTRUCTIONAL FACILITY, ALBUQUERQUE TVI, Joseph M. Montoya Campus (F21-D26G). DRAINAGE REPORT, GRADING AND DRAINAGE PLAN FOR GRADING PERMIT AND BUILDING PERMIT APPROVALS. ENGINEER'S STAMP DATED JUNE 28, 2001

Dear Mr. Andrews:

Based on the information provided on your June 29, 2001 submittal, the above referenced project is approved for both Grading and Building Permits. Note that Building Permit covers Grading and Foundation Permits.

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,

Hydrology

c: Terri Martin

## DRAINAGE INFORMATION SHEET

PROJECT TITLE: JMMC Instructional Facility Z(	ONE ATLAS/DRNG.	FILE #: F21 D26G
DRB #: EPC #: WO	ORK ORDER#	
LEGAL DESCRIPTION: Albuquerque Technical Vocational Institute - Je	oseph M. Montoya	Campus
CITY ADDRESS: 4700 Morris Street NE	<u> </u>	- -
ENGINEERING FIRM: The Larkin Group, NM, Inc.	CONTACT:	Paul J. Gonzales
ADDRESS: 8500 Menaul Blvd. NE, Suite A-440, Albuquerque, NM 87112	PHONE:	275-7500
OWNER: Albuquerque Technical Vocational Institue	CONTACT:	
ADDRESS: 525 Buena Vista SE	PHONE:	
ARCHITECT: Fanning Bard Tatum Archtitects	CONTACT:	Susan Johnson
ADDRESS: 6100 Indian School Rd. Suite 210 NE, Albuquerque, NM 87110	PHONE:	883-5200
SURVEYOR: The Larkin Group, NM, Inc.	CONTACT:	Gayle Jewell
ADDRESS: 8500 Menaul Blvd. NE, Suite A-440, Albuquerque, NM 87112	PHONE:	275-7500
CONTRACTOR:	CONTACT:	
ADDRESS:	PHONE:	
TYPE OF SUBMITTAL:	K TYPE OF APPR	OVAL SOUGHT:
X_DRAINAGE REPORT	SKETCH PLAT	APPROVAL
X_DRAINAGE PLAN	PRELIMINARY F	PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S. DEV. PLAN F	OR BLDG. PERMIT APPROVAL
X GRADING PLAN	S. DEV. PLAN F	OR SUBDIVISION APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN	APPROVAL
ENGINEER'S CERTIFICATION	FINAL PLAT API	PROVAL
OTHER	FOUNDATION F	PERMIT APPROVAL
X	BUILDING PERM	MIT APPROVAL
PRE-DESIGN MEETING:	CERTIFICATE O	F OCCUPANCY APPROVAL
XYES	GRADING PERM	IIT APPROVAL
NO	PAVING PERMI	TAPPROVAL
X_COPY PROVIDED	S.A.D. DRAINAG	SE REPORT
	DRAINAGE REC	UIREMENTS
DATE SUBMITTED: 06/29/2001 JUN 2 9 2001	OTHER	(SPECIFY)
BY: Paul J. Gonzales, The Larkin Group NWOIn GY SECTION		

FRE - DESIGNI MITG

MASTER DP EXISTS

F21 02ED J. MORTENISEN 1/1995

É ASSOCIATES

IMPROVEMENTS IN BASIN D OF MOP

A = 5.7 ACRES 63.570 B En = 1.64 in 36.570 D How = 33 930 CF = 0.7770 KG FT Qpice = 21.4 CFS

NO HYDRAULIC ANALYSIS ON LANDSCAPED

DISCUSSRID INCREASE IN FLOWS

AT 1.6 CFS DIANID TREATMENT

INC. HURRAY INDICATED THAT THE MINIMAL

DEGETYER MINIMAL

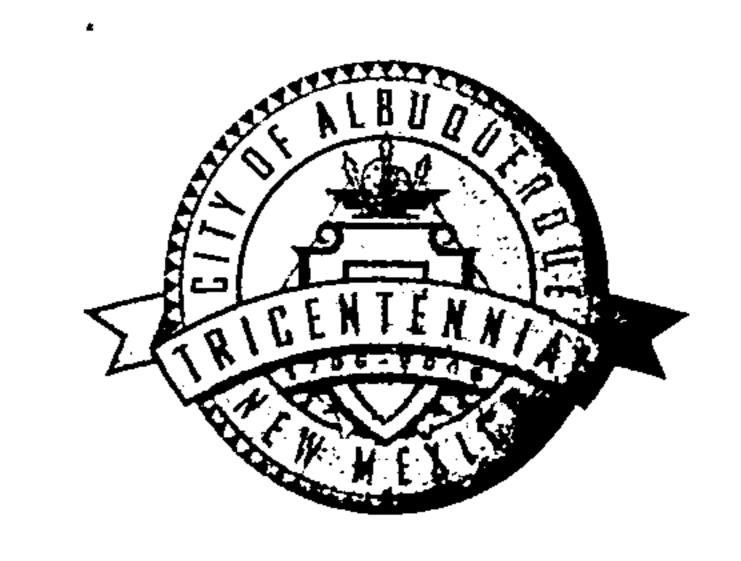
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# CITY OF ALBUQUERQUE



November 13, 2007

Robert Calvani, R.A.
NCA Architects
1306 Rio Grande Blvd. NW
Albuquerque, NM 87104

Re: CNM – Montoya Campus, Book Store Addition, Traffic Circulation Layout, Architect's Stamp date 11-09-07 (F-21-D026G)

Dear Mr. Calvani,

Based upon the information provided in your submittal received 11-13-07, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

## PHASE 1 (BASE BID)

- 1. List radii for all curves shown.
- 2. Please list the width and length for all parking spaces.
- 3. Define width of the sidewalk.
- 4. Show the existing ADA parking.
- 5. Clarify the extents of the Phase 1 (Base Bid). Will access, for Phase 1, be taken off of the Existing Vehicular Access if Phase 2 (Alt. 1) is not built?
- 6. Please refer to all applicable city standards.
- 7. Provide the drive aisle width.

New Mexico 87103

P.O. Box 1293

Albuquerque

## PHASE 2 (ALTERNATE BID 1)

- 1. For passenger vehicles, the minimum end island radius is 15 feet.
- 2. Please list the width and length for all parking spaces.
- 3. Per the *Development Process Manual*, "Aisle lengths should not exceed 400' and 300' is desirable without providing internal circulation between aisles..."

  Please provide internal circulation or shorten the drive aisles.
- 4. The plan reflects the existing vehicular access road to be paved; is this construction a part of phase 1 or 2? Please clarify and revise your phase limits.

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

Sincerely,

Kristal D. Metro, P.E.

Traffic Engineer, Planning Dept.

Development and Building Services

C: File

Albuquerque - Making History 1706-2006

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www.cabq.gov

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (Rev. 12/05)

PROJECT TITLE: CWM BOOKstore Parking Add	ZONE MAP/DRG. FILE #
DRB#: EPC#:A(+†+)	WORK ORDER#:
LEGAL DESCRIPTION:	·
CITY ADDRESS:	
ENGINEERING FIRM:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
OWNER: CNM	CONTACT: LW9 Campos
ADDRESS: 901 Brena Vista SE	PHONE: 505. 224.4580
CITY, STATE: Albuquerque NM	ZIP CODE: <u>87106</u>
ARCHITECT. NCA Architetts	CONTACT: TOM WILBER
ADDRESS: 1306 Rio Grande Blod	PHONE: 505 255.6400
CITY, STATE: Muquerue NM	ZIP CODE: <u>8710</u>
SURVEYOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
TYPE OF SUBMITTAL:	TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	SIA/FINANCIAL GUARANTEE RELEASE
DRAINAGE PLAN 1 <sup>st</sup> SUBMITTAL	PRELIMINARY PLAT APPROVAL
DRAINAGE PLAN RESUBMITTAL	S. DEV. PLAN FOR SUB'D APPROVAL
CONCEPTUAL G & D PLAN	S. DEV. FOR BLDG. PERMIT APPROVAL
GRADING PLAN	SECTOR PLAN APPROVAL
EROSION CONTROL PLAN	FINAL PLAT APPROVAL
ENGINEER'S CERT (HYDROLOGY)	FOUNDATION PERMIT APPROVAL
CLOMR/LOMR	BUILDING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT	CERTIFICATE OF OCCUPANCY (PERM)
ENGINEER/ARCHITECT CERT (TCL)	CERTIFICATE OF OCCUPANCY (TEMP)
ENGINEER/ARCHITECT CERT (DRB S.P.)	GRADING PERMIT APPROVAL
ENGINEER/ARCHITECT CERT (AA)	PAVING PERMIT APPROVAL
OTHER (SPECIFY)	WORK ORDER APPROVAL
	WORK ORDER APPROVAL OTHER (SPECIFY)   D   C   C   V   C
WAS A PRE-DESIGN CONFERENCE ATTENDED:	NOV-89 2007   U)
YES	13
NO COPY PROVIDED	HYDROLOGY SECTION
	A
SUBMITTED BY: MULLION (25)	DATE: 700.7

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define 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 subdivision containing more than ten (10) lots or constituting five (5) acres or more.

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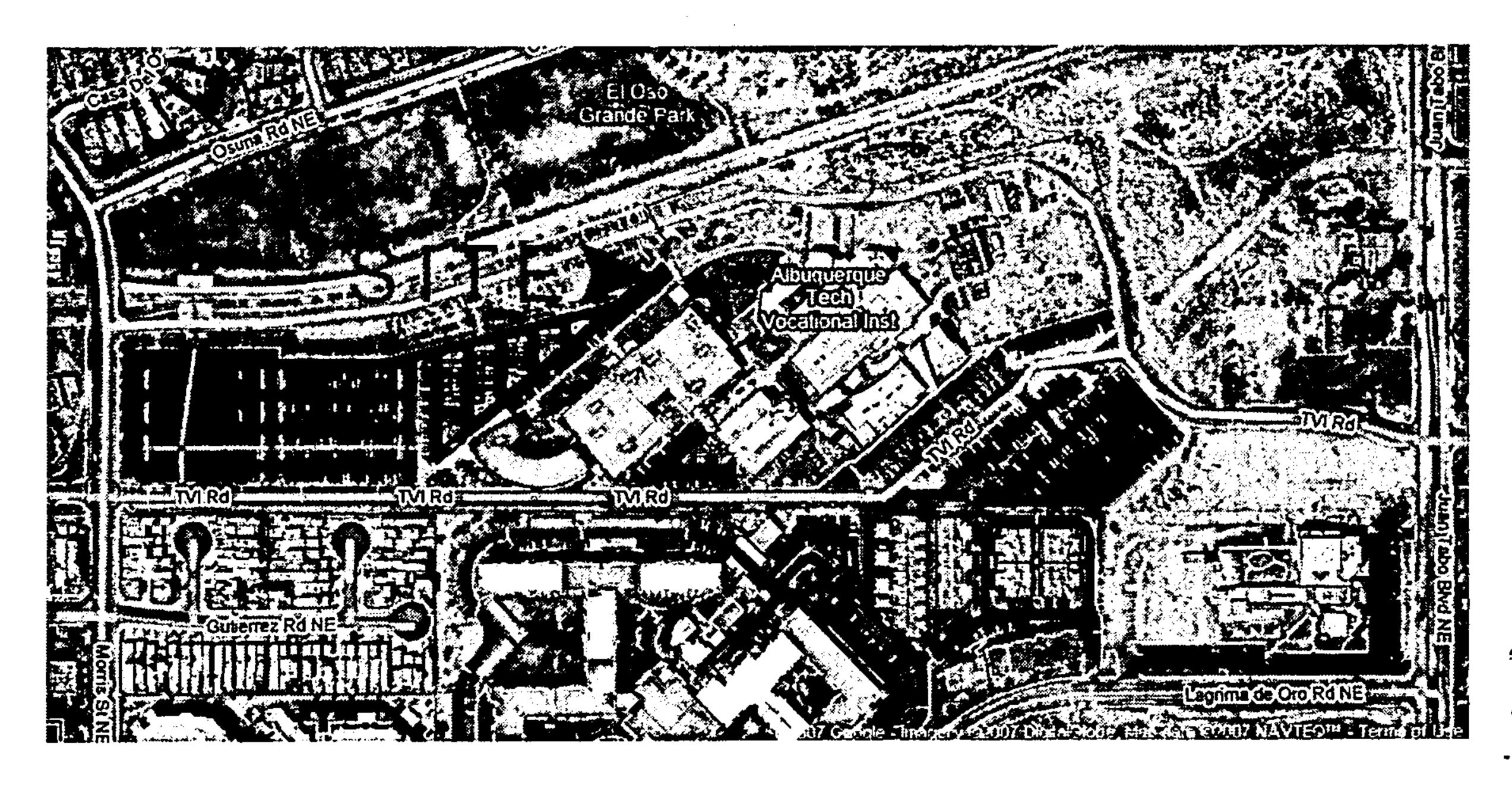
SHOW ADA PARKING

- CLARIFY PHASE I LIMITS

1000 To 3000 7

Contract Contract

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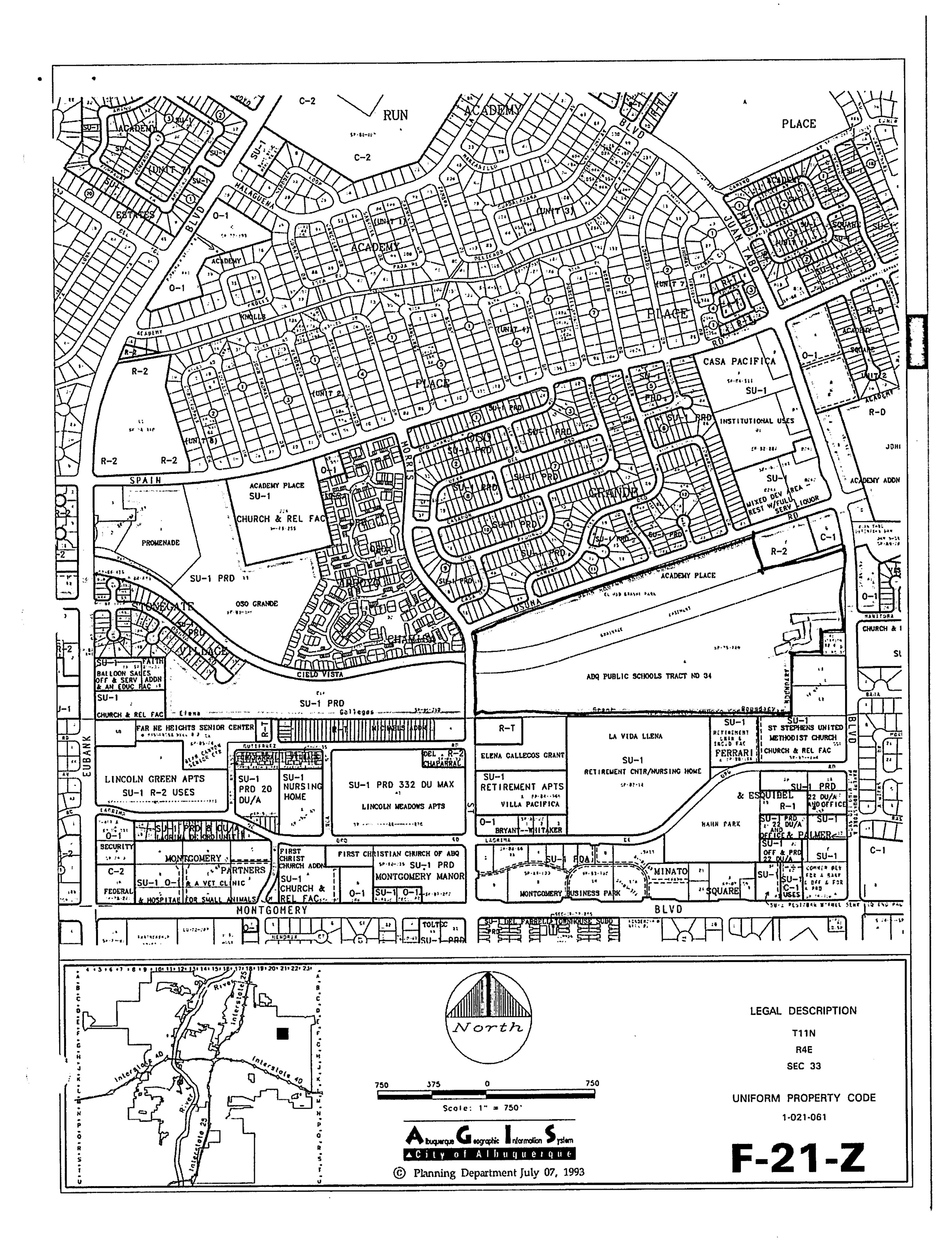


CNM Joseph Montoya Campus

## Summary of Work:

The CNM Montoya campus is a higher education facility located north of Montgomery Blvd. and Juan Tabo Blvd. NE in Albuquerque, New Mexico. The campus consists of 5 main educational buildings and other support areas. The campus site has two main vehicular access points, from Juan Tabo Blvd. and Morris St.

The scope of work for this project consists of an alternate that would provide additional parking for students and staff members. This will include site grading and drainage, construction of retaining walls along the north side of the property and landscaping. A separate TCL permit is requested for the construction of this scope of work.





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

## Planning Department Transportation Development Services Section

June 19, 2003

John Andrews, PE Larkin Group NM 8500 Menual NE Albuquerque, NM 87112

Re:

Certification Submittal for Final Building Certificate of Occupancy for

TVI JMMC Instructural Facility, [F217/D26G], 4700 Morris NE

Engineers Certification Dated 06-19-03

Dear Mr. Andrews:

The TCL / Letter of Certification submitted on June 19, 2003 is approved by this office for final Certificate of Occupancy (C.O.) for Transportation. Notification has been made to the Building and Safety Section.

Sincerely,

Richard Dourte, P.E.

Traffic Engineer

Development and Building Services

Planning Department

C:

Hvdrology file

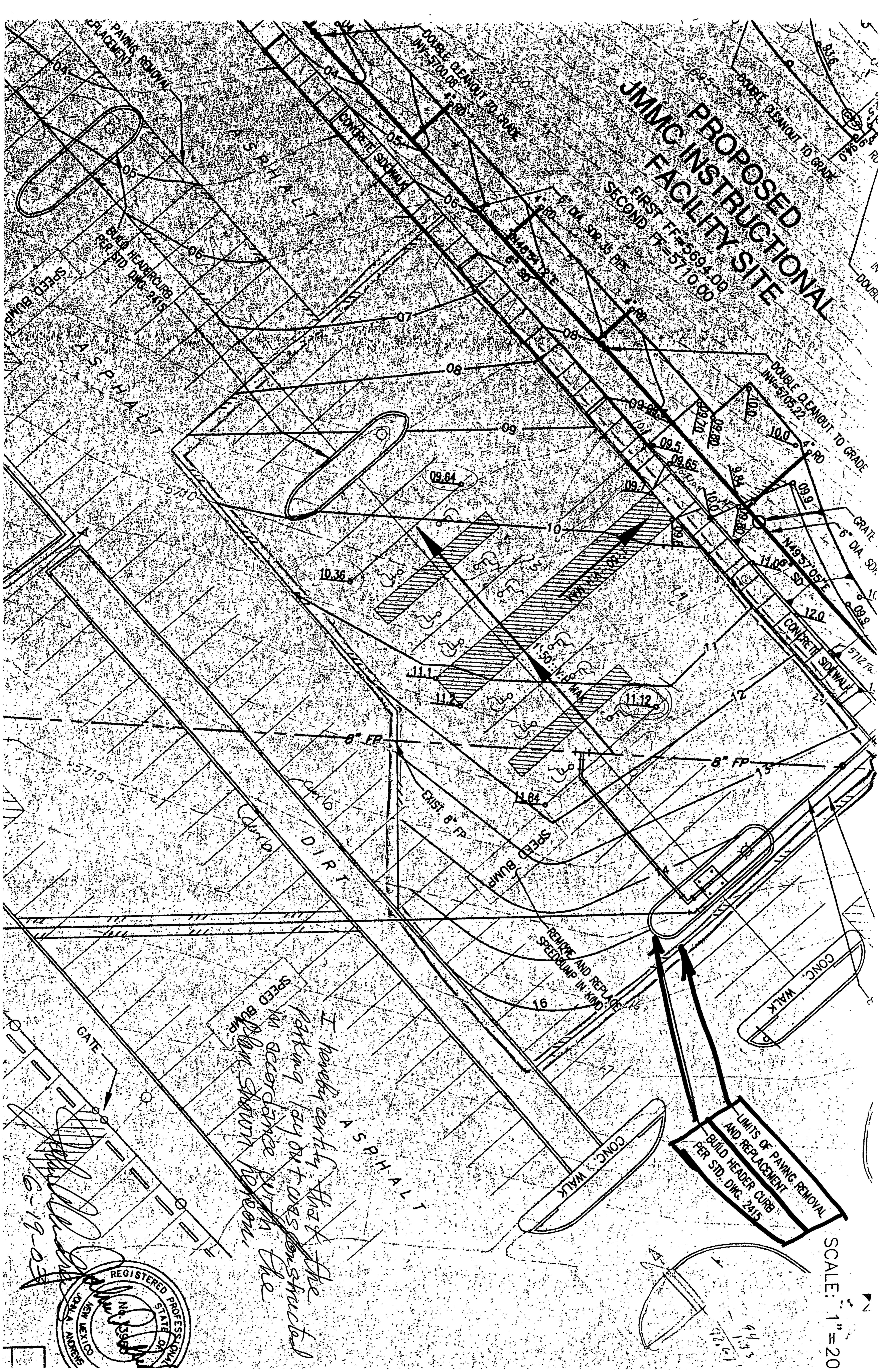
## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

	; e
PROJECT TITLE: TV JMMC Tustmehand Faci DRB #:EPC#:	ZONE MAP/DRG. FILE #: $F-Z1/O2($ WORK ORDER#:
LEGAL DESCRIPTION:  CITY ADDRESS: 4700 YAGOTS NE	
ENGINEERING FIRM: Larkin Tro-in NM  ADDRESS: 8500 Wender WE  CITY, STATE: Alberg: NM.	CONTACT:
OWNER: Albury Pull TV/ ADDRESS: \$05 Ballut 1/15ta, 56 CITY, STATE: Albury, NM	CONTACT:
ARCHITECT: Fanma Bord To fam.  ADDRESS: 6/00 Uptarin NE  CITY, STATE: Albuquerque WM 8	
SURVEYOR:  ADDRESS  CITY, STATE:	CONTACT: PHONE: "ZIP CODE:
CONTRACTOR: Lufhor Construction  ADDRESS: CITY, STATE:	CONTACT: Chuck Hoglands PHONE: ZIP CODE:
CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
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)  CLOMP/LOMR  TRAFFIC CIRCULATION LAYOUT (TCL)  ENGINEERS CERTIFICATION (TCL)  ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)  OTHER	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
WAS A PRE-DESIGN CONFERENCE ATTENDED UN 1 9 2003  YES NO COPY PROVIDED HYDROLOGY SECTION	
DATE SUBMITTED: 6-19-03 BY: 101	my della de
Requests for approvals of Site Development Plans and/or Subdivision  The particular nature Recation and scope of the proposed develor	

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.





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 30, 2003

John Andrews, P.E.
The Larkin Group
8500 Menaul Blvd NE Suite A-440
Albuquerque, New Mexico 87112

RE: ALBUQUERQUE T.V.I. JOSEPH MONTOYA CAMPUS (F-21/D26G)

(4700 Morris St NE)

ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY

ENGINEERS STAMP DATED 6/28/2001

**ENGINEERS CERTIFICATION DATED 5/29/2003** 

Dear Mr. Andrews:

Based upon the information provided in your Engineers Certification submittal dated 5/30/2003, the above referenced site is approved for a Permanent Certificate of Occupancy.

<u>Please Note:</u> In future submittals regarding Engineers Certification, please use the attached DPM approved format, in lieu of using your standard certification language. This language should be placed directly on the grading and drainage plan. Certifications without this standard language will not be accepted.

If I can be of further assistance, please contact me at 924-3981.

Sincerely,

Tausi- A. Martin

Teresa A. Martin

Hydrology Plan Checker

Development & Bldg. Ser. Division

BLB

C: Certificate of Occupancy Clerk, COA approval file drainage file drainage file

TRANSMISSION OK

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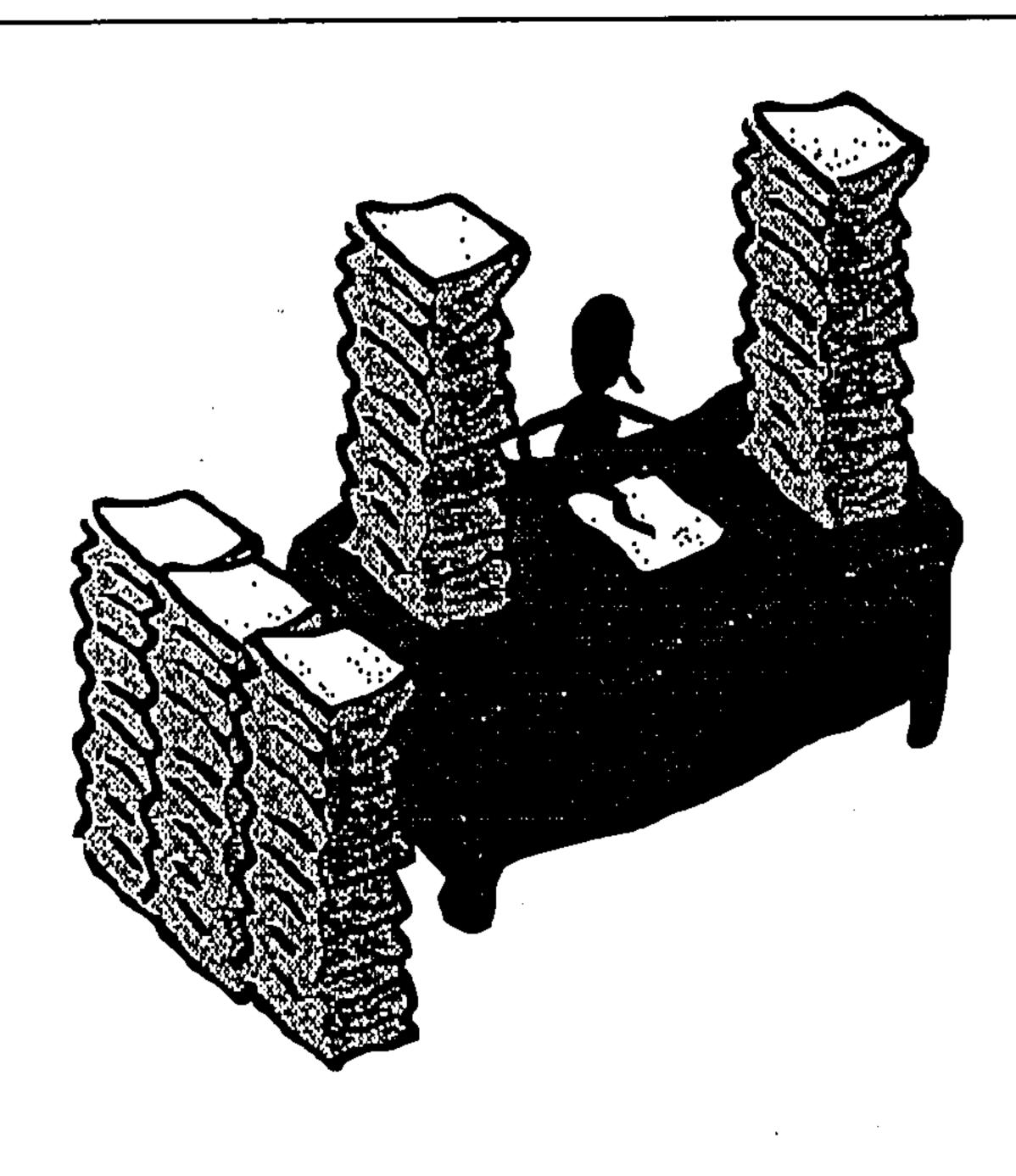
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# City of Albuquerque Planning Department Development & Bldg. Ser. Div. Hydrology Section

TO: JOHN ANDREWS
At: CANKIN GROUP
city: Arbo.
State: N.M.
Fax No. (505) 275 - 0748
Number of pages:
Date: 5-30-03 Time: 10:40

From: TERESA MARTIN

600 2nd St NW

Albuquerque, New Mexico 87102

Phone No. (505) 924-3981 Fax No. (505) 924-3864

			2148
DRAINAGE INFORM	MATION S	<u>SHEET</u>	25
PROJECT TITLE: JMMC Instructional Facility	ZONE	ATLAS/DRNG	.FILE #: F 21-D26G
DRB #: EPC #:	WORK	ORDER#	•
LEGAL DESCRIPTION: Albuquerque Technical Vocational Institu	ute - Josep	h M. Montoya	Campus
CITY ADDRESS: 4700 Morris Street NE			_ , , , , , , , , , , , , , , , , , , ,
ENGINEERING FIRM: The Larkin Group, NM, Inc.	C	ONTACT:	John A. Andrews
ADDRESS: 8500 Menaul Blvd. NE, Suite A-440, Albuquerque, NM 871	112 P	PHONE:	275-7500
OWNER: Albuquerque Technical Vocational Institute	C	CONTACT: _	Luis Campos
ADDRESS: 525 Buena Vista SE, Albuquerque, NM 87106	F	PHONE:	224-4565
ARCHITECT: Fanning Bard Tatum Archtitects		CONTACT:	Susan Johnson
ADDRESS: 6100 Indian School Rd. Suite 210 NE, Albuquerque, NM 871	110 P	PHONE:	883-5200
SURVEYOR: The Larkin Group, NM, Inc., Construction Staking by Con	ntractor C	CONTACT:	Gayle Jewell or John Andrews
ADDRESS: 8500 Menaul Blvd. NE, Suite A-440, Albuquerque, NM 87	7112 F	PHONE:	275-7500
CONTRACTOR: Luther Construction Co.		CONTACT:	Chuck Hogeland
ADDRESS: P.O. Box 25523, Albuquerque, NM 87126	F	PHONE:	883-7718
TYPE OF SUBMITTAL:	CHECK T	YPE OF APPR	ROVAL SOUGHT:
DRAINAGE REPORT	s	SKETCH PLAT	APPROVAL
DRAINAGE PLAN	F	PRELIMINARY	PLAT APPROVAL .
CONCEPTUAL GRADING & DRAINAGE PLAN		S. DEV. PLAN F	FOR BLDG. PERMIT APPROVAL
GRADING PLAN		S. DEV. PLAN F	FOR SUBDIVISION APPROVAL
EROSION CONTROL PLAN		SECTOR PLAN	APPROVAL
X_ENGINEER'S CERTIFICATION	F	INAL PLAT AP	PROVAL
OTHER	F	OUNDATION	PERMIT APPROVAL
	B	UILDING PERI	MIT APPROVAL
PRE-DESIGN MEETING:	XCE	ERTIFICATE O	F OCCUPANCY APPROVAL
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COPY PROVIDED	_S.A.D. DR	RAINAGE REPO	ORT
		DRAINAGE RE	QUIREMENTS
DATE CHIDMITTED: ACIONIONA		OTHER	(SPECIFY)
DATE SUBMITTED: 05/29/2003  BY: John (C) Androws The Larkin Group NM Inc.			

BY:





8500 Menaul Boulevard NE, Suite A-440 Albuquerque, New Mexico 87112 Phone: 505-275-7500 Fax: 505-275-0748 e-mail: info@larkinnm.com

Terri Martin, City of Albuquerque-Public Works Dept.

From: John A. Andrews, Larkin Group NM, Inc.

CC:

Date:

May 29, 2003

Re:

JMME Instructional Facility, Engineer's Certification.

Please call should you need anything further.

Please fax approval letter to us when it has been prepared.

Thank you,

John A. Andrews



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 20, 2001

John A. Andrews, P.E. Larkin Group NM, Inc. 8500 Menaul Blvd. NE, Suite A-440 Albuquerque, NM 87112

Attn: Paul J. Gonzales

RE: INSTRUCTIONAL FACILITY, ALBUQUERQUE TVI, Joseph M. Montoya Campus (F21-D26G). DRAINAGE REPORT, GRADING AND DRAINAGE PLAN FOR GRADING PERMIT AND BUILDING PERMIT APPROVALS. ENGINEER'S STAMP DATED JUNE 28, 2001

#### Dear Mr. Andrews:

Based on the information provided on your June 29, 2001 submittal, the above referenced project is approved for both Grading and Building Permits. Note that Building Permit covers Grading and Foundation Permits.

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. Murra Hydrology	y, P.E.	The Larkin G  DATE  JUL 2 4 2001	roup, Inc.
c: Terri Martin File			JOB NC. Z K-002 ZANC-0000 COMMENTS	3
			ACCOMMODATION EMP	