

Mr. Curlis Cherne, PE

Hydrology Division
City of Albuquerque
P.O. Box 1293

Albuquerque, NM 87103

Re: Hope Christian Elementary School Addition (Tract 23, NAA – D18/D009A)

Dear Mr. Cherne:

Your letter of approval for a grading and drainage plan on the referenced property, dated July 9, 2010, has been received and acknowledged by my office. Hope Christian School, Inc. is owner of both Lot 23 and the adjoining 7-acre Tract B, Hope Christian Schools, directly to the west of the subject site. As part of its improvement plan on Lot 23, incidental modifications are being proposed to current site development plan for the adjoining Tract B, HCS (AA submitted 08/27). Minor changes have recently been made to this plan to comply with DRB comments.

Under current conditions the vacant Lot 23 drains directly west and onto the school's existing Tract B. The objective of the subject grading and drainage plan is to divert developed runoff south and toward Palomas Ave., which has previously been shown to have sufficient capacity (Hope Christian School Master Drainage Plan, approved March 30, 2006). Lot 23 and a 0.37-acre portion of Tract B (about 5% of that 7-acre site) has been divided up into 6 distinct drainage basins on the latest grading and drainage plan, stamped with today's date. All these surfaces are presently Type C land treatment and with site development they will convert to primarily Type D, with lesser amounts of Type C. From AHYMO I found that all the basins will generate 5.39 cfs in the future condition, compared to 4.14 cfs in the existing state. Basins A-D will be graded to drain directly into Palomas Ave., while Basins E and F, serving as a transition between the two sites, will still continue to drain west and into the existing school campus. Basins and E and F generate 0.64 cfs under developed conditions. Given that the school's existing campus currently receives all of Tract B's existing of-site flows, implementation of this plan will result in a net 3.5-cfs reduction in total peak flow reaching Tract B of the school.

A letter from Jim Tate of Hope Christian School, concurring with this condition (dated July 6, 2010) should have already been received by your office. A private drainage easement is also being developed for the purpose of allowing this condition to continue. This is all a temporary condition since the pre-engineered modular buildings being proposed for this site will eventually be replaced by site-built structures once the school can afford to construct its campus improvements, as shown and approved on the school's master plan (approved by EPC in 2004).

Please contact me if I can be of further assistance.

Sincerely,

Mark Goodwin & Associates, PA

John M. MacKenzie, PE Vice President

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ĭ. CES HOUR z Z H CES FLOW HOUR . 0 = 2.1300FLOW = 2.1300.033330 . 2 .033330 K = 4.378976 ADD HYD PRINT HYD *COMBINE HYDROGRAPHS-EXISTING CONDITIONS FOR BASINS A, B & C TO D & E ***** EXISTING DISCHARGE FOR ADJOINING-SITE BASIN F - 0.07 ACRES COMPUTE NM HYD ID=11 HYD NO=111.0 AREA=0.0001 SQ MI *THIS BASIN ALSO DRAINED DIRECTLY WEST ONTO ADJOINING PROPERTY PRINT HYD PRINT HYD RUNOFF VOLUME = 1.24986 INCHES PEAK DISCHARGE RATE = .23 C RUNOFF VOLUME = 1.24986 INCHES PEAK DISCHARGE RATE = 1.09 CFS UNIT PEAK = TIME UNIT PEAK = RUNOFF AREA = TIME RUNOFF COMPUTED AREA = HRS HRS .000 .000 2.666 HRS HRS TIME TIME .108800HR COMPUTED BY FLOW FLOW CES CES .000100 SQ MI 1.4242 .000500 SQ MI .0 . .28484 FLOW FLOW ID=12 HYD NO=112.0 ID=9 ID=10 ID=12 CODE=24 CFS ID=11 HYD NO=111.0 AREA=0.0001 SQ MI PER A=0.0 PER B=0.0 PER C=100.00 PER D=0.00 TP=0.1333 HR MASS RAINFALL=-1 CES . ID=11 CODE=24 ID=10 CODE=24 BY TP = INITIAL INITIAL CFS CFS TIME .133300HR TIME HRS HRS . 667 . 667 .23 CFS IA = IA = UNIT VOLUME = UNIT VOLUME = ABSTRACTION/INFILTRATION NUMBER PARTIAL HYDROGRAPH ABSTRACTION/INFILTRATION NUMBER PARTIAL HYDROGRAPH FLOW FLOW CES CFS AT AT 11 .35000 INCHES .35000 INCHES . . K/TP RATIO = .0067 ACRE-FEET 1.500 HOURS BASIN AREA = .0333 ACRE-FEET 1.500 HOURS BASIN .9557 .9917 110.00 1.333 1.333 111.00 TIME TIME HRS HRS .816201 INF = BASIN AREA = INF = 11 \square [] FLOW FLOW CFS CFS METHOD . METHOD .83000 INCHES PER .83000 INCHES PER 379.69 379.69 SHAPE CONSTANT, .0005 SQ. .0001 SQ. DŢ DT 2.000 2.000 TIME TIME HRS HRS P60

PARTIAL HYDROGRAPH

112.00

CITY OF ALBUQUERQUE



September 14, 2010

John M. MacKenzie, P.E. Mark Goodwin & Associates, PA P.O. Box 90606 Albuquerque, NM 87199

Re: Hope Christian Elementary School Addition, Lot 23, Grading and Drainage Plan

Engineer's Stamp dated 8-30-10 (D18/D009A)

Dear Mr. MacKenzie,

Based upon the information provided in your submittal received 8-30-10, the above referenced plan is approved for Site Plan for Building Permit action by the DRB with the understanding that Lot 23 can only discharge 3.0 cfs per the DMP.

The above referenced plan cannot be approved for Building Permit until the following comments are addressed:

 SO-19 Notes are required on the plan for construction of the sidewalk culverts in the City ROW.

Albuquerque

PO Box 1293

NM 87103

- Per the Drainage Report for Hope Christian School dated January 2006, Lot 23 is to produce 3 cfs. This plan proposes 3.82 cfs. If the landscape areas/parking islands were depressed as to not produce any runoff, the plan would be approvable. A "Typical" detail could be provided.
- Depressing the landscape areas would also satisfy the condition mentioned for Site Plan.

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

www.cabq.gov

Sincerely,

Curtis A. Cherne, P.E.

Senior Engineer, Planning

Senior Engineer, Planning Dept.

Development and Building Services

C: file Brad Bingham

Albuquerque - Making History 1706-2006





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 30, 1996

128 Monroe Street NE Scott McGee, PE Albuquerque, NM 87108 Isaacson & Arfman

RE: @ HOPE CHRISTIAN SCHOOL (D-18/D9)
RECEIVED JANUARY 30, 1996 FOR CERTIFICATE OF OCCUPANCY
ENGINEER'S STAMP DATED 1-29-96 ENGINEER'S CERTIFICATION FOR GYMNASIUM ADDITION

Dear Mr. McGee:

Hydrology accepts the Engineer's Certification. Contact Vicki Chavez to obtain the Certificate of Occupancy for 6800 Palomas Ave NE. Based on the information included in the submittal referenced above, City

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.

Civil Engineer, Hydrology

ဂ Andrew Garcia



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103 ity of Albuquerque

July 15, 1994

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

RE: GRADING & DRAINAGE PLAN (REV3) FOR HOPE CHRISTIAN SCHOOL (D18-D9) RECEIVED JULY 6, 1994 FOR FOUNDATION PERMIT APPROVAL ENGINEER'S STAMP DATED 7-5-94

Dear Mr. McGee:

Based on the information included in the submittal referenced above, City Hydrology approves Revision 3 for Foundation Permit.

Include a copy of the approved Plan dated 7-5-94 in the set of construction documents that will be submitted to the "one stop" for the Foundation Permit.

Engineer's Certification of grading & drainage per DPM checklist must be approved before any Certificate of Occupancy will be released.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.

Civil Engineer/Hydrology

0: Andrew Garcia

WPHYD/7663/jpc

== THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER ======



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 23, 1994

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

RE: GRADING & DRAINAGE PLAN (REV2) FOR HOPE CHRISTIAN SCHOOL (D18-D9) RECEIVED JUNE 13, 1994 FOR FOUNDATION PERMIT APPROVAL ENGINEER'S STAMP DATED 6-10-94

Dear Mr. McGee:

Based on the information included in the submittal referenced above, City Hydrology approves Revision 2 for Foundation Permit. This is only for the buldings which have a F.F. elevation indicated.

Include a copy of the approved Plan dated 6-10-94 in the set of construction documents that will be submitted to the "one stop" for the Foundation Permit.

Engineer's Certification of grading & drainage per DPM checklist must be approved before any Certificate of Occupancy will be released.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.

Civil Engineer/Hydrology

.. Andrew Garcia

WPHYD/7663/jpc

== THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER =====



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 30, 1994

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

RE: REV CON GRADING & DRAINAGE PLAN FOR HOPE CHRISTIAN SCHOOL (D18-D9) RECEIVED MARCH 29, 1994 FOR FOUNDATION PERMIT APPROVAL ENGINEER'S STAMP DATED 3-29-94

Dear Mr. McGee:

Based on the information included in the submittal referenced above, City Hydrology approves this project for Foundation Permit.

Include a copy of the approved Plan dated 3-29-94 in the set of construction documents that will be submitted to the "one stop" for the Foundation Permit.

Engineer's Certification of grading & drainage per DPM checklist must be approved before any Certificate of Occupancy will be released.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, r.w. Civil Engineer/Hydrology

0: Andrew Garcia

WPHYD/7663/jpc



Martin J. Chávez, Mayor

August 20, 1997

Scott McGee Isaacson & Arfman 128 Monroe NE Albuquerque, NM 87108

RE: HOPE SCHOOL - WEST CAMPUS (D18-D9A). ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY. ENGINEER'S CERTIFICATION DATED AUGUST 13, 1997.

Dear Mr. McGee:

Based on the information provided on your submittal dated August 13, 1997, the above referenced project is approved for Certificate of Occupancy.

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

Engineering Assoc./Hyd.

Andrew Garcia

?

Good for You, Albuquerque!





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 2, 1996

Scott McGee
Isaacson & Arfman
128 Monroe NE Albuquerque, NM 87108

RE:HOPE SCHOOL - WEST CAMPUS (D18-D9A) GRADING PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP DATED 3-18-96.

Dear Mr. McGee:

Based on the information provided on your submittal dated March 19, 1996, the above referenced project is approved for Building Permit.

Prior to Certificate of Occupancy approval, an Engineer's Certification is required.

If I can be of further assistance, please feel free to contact me at 768-3622.

Engineering Assoc./Hyd. Lisa Ann Manwill

S Andrew Garcia

THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER ----



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 20, 1995

Scott McGee
Isaacson & Arfman
128 Monroe NE
Albuquerque, NM 87108

RE: HOPE SCHOOL - WEST CAMPUS (D18-D9A) CONCEPTUAL GRADING AND DRAINAGE AND PLAN FOR SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP DATED 11-14-95.

Dear Mr. McGee:

Based on the information provided on your submittal dated November 15, 1995, the above referenced project is approved for Site Development Plan for Building Permit.

With your next submittal, please show sediment control in the area of the (2) 4 inch pipes from the south detention pond to Palomas Ave.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Sincerely,

Lisa Ann Manwill

Engineering Assoc./Hyd.

c: Andrew Garcia

THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/ SEASONABLE ACCOMMODATION EMPLOYER -----



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 10, 1995

Scott McGee, PE Albuquerque, NM 87108 Isaacson & Arfman 128 Monroe NE

RE: GRADING & DRAINAGE PLAN FOR HOPE SCHOOL - WEST (D=18/D9A) RECEIVED JUNE 6, 1995 FOR SITE DEV PLAN & FOUNDATION PERMIT **ENGINEER'S STAMP DATED 6-5-95**

Dear Mr. McGee:

Based on the information included in the submittal referenced above, City Hydrology accepts the general concept for Site Development Plan for B.P. The following comments must be addressed before Foundation Permit will be released for Buildings A-F & I:

Plan. Provide a copy of the infrastructure list. determine whether or not a storm drain is required. What is the DRB number for this Site drain in San Pedro from the Wilson & Co's report. Check the future capacity of Palomas to Verify downstream capacity. Provide specific information about the proposed storm

Plan on the Grading & Drainage Plan. A separate line pattern must be used for the future contours. Include the Erosion Control surface elevation of each pond. A single Drainage Covenant could cover all eight ponds. Label each of the eight retention ponds and calculate the volume & maximum water

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.

Civil Engineer/Hydrology

9 Andrew Garcia Fred Aguirre, DRB ??-???

Dan Hedges, Hope Christian School, 6800 Palomas Ave NE 87109

D. Mark Goodwin and Associates, P.A. Consulting Engineers

P.O. Box 90606 ☐ Albuquerque, NM 87199 (505) 828-2200 ☐ (505) 797-9539 fax e-mail: john@goodwinengineers.com

LETTER OF TRANSMITTAL

NOTES:				AHYN	We a		T0:
<u>:S</u> :	Request for Bid	As you requested	For your Approval	AHYMO Runs	We are sending:		Brad Bingham
			×			RE:	Date:
	_ Pre-Design Meeting	_ For a Statement	For your Approval X For your information			Hope Christian Elementary	Date: <u>July 6, 2010</u>

Project Engineer
SIGNED: Mac



AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - INPUT FILE = LOT23.DAT

ahymo.sum - VERSION: 1997.02d

RUN DATE (MON/DAY/YR) =07/02/2010 USER NO.= AHYMO-I-9702dGoodwinM-AH

INPUT FILE = 1	.0123.DA1						·	3LK NO 7	ullino I	J1 024400411	1111111 7411
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	PAGE =	
START RAINFALL TYPE COMPUTE NM HYE COMPUTE NM HYE COMPUTE NM HYE ADD HYD ADD HYD COMPUTE NM HYE COMPUTE NM HYE COMPUTE NM HYE FINISH	101.00 102.00 103.00 104.00 105.00 106.00 107.00	- - - - 1& 2 3& 5	1 2 3 4 5 6 7 8	.00030 .00020 .00080 .00030 .00050 .00130 .00130	.82 .55 2.45 .93 1.38 3.83 2.82	.028 .019 .090 .034 .047 .137 .087	1.75700 1.75700 2.11201 2.11201 1.75625 1.97497 1.24986 1.24986	1.500 1.500 1.500 1.500 1.500 1.500 1.500	4.783 4.850 4.306 4.600 3.390	PER IMP= PER IMP= PER IMP=	.00 2.500 50.00 50.00 85.00 85.00

AHYMO PROGRAM (AHYMO 97) - RUN DATE (MON/DAY/YR) = 07/02/2010- Version: 1997.02d

HOUR	. 130	= 4.37		HOUR	130	= 7.10	0 * * *			HR.	R * * * S	
AREA		K = 78976	RUNOFF	AREA		K =	********* ****** DRAINAGE COMPUTE NM HYD				***** ***** ***** **** ****	
11	PEAK =	.108800HR	EF COMPUTED	II	PEAK =	.072649	* *		DT	CON		RUN DATE (N START TIME INPUT FILE
.000150	. 42726	H	BY	.000150	.59221	9HR TP	*********PROPO: ***********************************	. 0293 . 0489 . 111494 1.1115 1.7743 2.2333 2.2333 2.25697 2.33224 2.33432 2.3432 2.3432 2.4328 2.4443 2.4444 2.44	.0 00 34	COMPUTED 6	TYPE= RAIN RAIN	L ' 45a
SQ MI	CFS	Ð =	INITIAL A	IM ÖS	CFS	*	PROPOSED*COND ********* 0.19 ACRES HYD NO=101.0 4=0.0 PER B=0 .1333 HR MASS	.0319 .0521 .1991 1.3420 1.8268 2.1186 2.2392 2.2392 2.33021 2.33641 2.3864 2.3864 2.3864 2.3864 2.3864 2.3864 2.3864 2.3864 2.3864 2.3866 2.3	33330	6-HOUR RAINFALL	H CC II 1 RAIN ONE=2. DAY=2.	(MON/DAY/YR) = E (HR:MIN:SEC) E = LOT23.DAT
IA =	UNIT	133300HR	ABSTRACTION/INFILTRATION	IA =	UNIT	133300HR		.0345 .0555 .0837 .2706 1.4382 1.8761 2.1519 2.27448 2.2785 2.33057 2.3386 2.3386 2.3386 2.3487 2.44113 2.4475 2.4582 2.4684 2.4781	03			07/02/2010 = 11:37:15
.35000	VOLUME =	K/TP	[ON/INFI]	.10000	VOLUME =	K/TP	**************************************	.0372 .0896 .3681 1.5195 1.9224 2.1836 2.2827 2.3317 2.3317 2.3396 2.4378 2.4490 2.4490 2.4698 2.4794 2.4887	10 (1	DISTRIBUT	=0.0 CHRISTIAN ELEMENTARY ULATE FLOWS USING 100- T FILE: LOT23.DAT 6-2: JARTER=0.0 IN IN RAIN SIX=2.5 IN IN DT=0.03333 HR	
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INF =	7 B	.81620	NUMBER M	INF =	В	.545000	* * * * * * * * * * * * * * * * * * *	.0428 .1027 .6597 1.6597 1.6575 2.2206 2.2206 2.2503 2.2503 2.2503 2.2503 2.2503 2.2403 2.3375 2.3375 2.3375 2.34169 2.44294 2.4429 2.	5.999400 .0094 .0245	ED ON NOAA	SCHOOL LOT 2: -YEAR, 6-HOUR 5-10 JMM	
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ES PER	P60 =	CONSTANT, N	.033330	ES PER	P60 =	CONSTANT, N				AK AT 1.40		-АН

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=1 CODE=24

PARTIAL
HYDROGRAPH
101.00

	. 0		CFS	FLOW
RUNOFF VOLUME = PEAK DISCHARGE !	.667 5.999	.000 5.333	HRS HRS	TIME TIME
RATE	.0	.0	CFS	FLOW
1.75700 INCHES = .82 CFS	2.000	1.333	HRS	TIME
AT	. 2	. 2	CFS	FLOW
.0281 ACRE-FEET 1.500 HOURS BASIN AREA =	3.333	2.666	HRS	TIME
-FEET ASIN AREA =	. 0	. 0	CFS	FLOW
.0003 SQ. MI.	4.666	4.000	HRS	TIME

***** DRAINAGE BASIN B - 0.10 AC.

***** ALSO DIRECTLY SOUTH OF BASIN 101

COMPUTE NM HYD ID=2 HYD NO=102.0 AREA=0.0002 SQ MI

PER A=0.0 PER B=0.0 PER C=50.0 PER D=50.00

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR = 7.106420 HOUR 2.1300 UNIT PEAK = RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .000100 SQ MI .39481 CFS IA = UNIT VOLUME = .10000 INCHES K/TP RATIO = .9711 .545000 INF = B ∥ .04000 INCHES PER 526.28 SHAPE CONSTANT, N .033330 P60 =

HOUR 2.1300 K = .108800HR 4.378976 AREA = UNIT PEAK = .000100 SQ MI . 28484 TP = .133300HRCFS IA = UNIT VOLUME = K/TP RATIO = .35000 INCHES .9557 .816201 INF = В 11 .83000 INCHES PER 379.69 SHAPE CONSTANT, N P60 =

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =

PRINT HYD ID=2 CODE=24

PARTIAL HYDROGRAPH 102.00

. 0	. 0	CFS	FLOW
			TIME TIME
.0	.0	CFS	FLOW
2.000	1.333	HRS	TIME
· 1	·	CFS	FLOW
3.333	2.666	HRS	TIME
. 0	. 0	CES	FLOW
4.666	4.000	HRS	TIME

RUNOFF VOLUME = 1.75700 INCHES = PEAK DISCHARGE RATE = .55 CFS AT

1.500 HOURS

BASIN AREA =

.0002 SQ. MI.

.0187 ACRE-FEET

***** DRAINGE BASIN C - 0.53 AC.

COMPUTE NM HYD ID=3 HYD NO=103.0 AREA=0.0008 SQ MI

PER A=0.0 PER B=0.0 PER C=15.0 PER D=85.0

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR = 7.106420CES HOUR HOUR CFS FLOW HOUR K = .108800HR = 4.378976HOUR 2.1300 K = 7.106420.0 FLOW 2.1300 K = 4.3789762.1300 .0 ***** OFF-SITE DRAINGE BASIN D - 0.22 AC.

COMPUTE NM HYD ID=4 HYD NO=104.0 AREA=0.0003 SQ MI

PER A=0.0 PER B=0.0 PER C=15.0 PER D=85.0

TP=0.1333 HR MASS RAINFALL=-1 PRINT HYD PRINT HYD RUNOFF VOLUME = 2.11201 INCHES = PEAK DISCHARGE RATE = 2.45 CFS AT UNIT PEAK = RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = AREA = UNIT PEAK = RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = UNIT PEAK = UNIT PEAK = RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .000 5.333 .667 5.999 HRS .072649HR .108800HR TIME HRS HRS TIME FLOW FLOW CFS CFS . 0 .000680 SQ MI .000045 SQ MI .000255 SQ MI .0 .000120 SQ MI 1.0068 2.6847 .34181 .12818 FLOW CFS CFS .0 ID=4 CODE=24 ID=3 CODE=24 TP = TP = .133300HRTP = TP = CFS CFS CFS CFS .133300HR K/TP RATIO = .133300HR .133300HR TIME 2.000 1.333 TIME HRS HRS IA = IA = UNIT VOLUME = IA = IA = UNIT VOLUME = UNIT VOLUME = UNIT VOLUME = PARTIAL HYDROGRAPH 103.00 PARTIAL HYDROGRAPH FLOW FLOW CFS CFS K/TP RATIO = .10000 INCHES .10000 INCHES .35000 INCHES .35000 INCHES K/TP RATIO = K/TP RATIO = .0901 ACRE-FEET 1.500 HOURS BASIN AREA = .9640 .9949 .8993 .9881 TIME 3.333 2.666 TIME 104.00 HRS HRS INF = INF = .83000 INCHES PER .545000 .545000 .816201 INF = INF = .816201 B = B = \square B FLOW FLOW CFS H CFS .04000 INCHES PER . 0 .04000 INCHES PER . .83000 INCHES PER 526.28 379.69 379.69 526.28 SHAPE CONSTANT, N SHAPE CONSTANT, N SHAPE CONSTANT, N SHAPE CONSTANT, N B .0008 SQ. MI .033330 TIME 4.666 4.000 TIME .033330 .033330 HRS HRS P60 =

2,1300 CES FLOW CES .0 .0 .0 . FLOW . .0 K = 4.378976 ADD HYD PRINT HYD ADD HYD *****COMBINE HYDROGRAPHS FOR BASINS A AND B WITH C
*****THIS IS THE TOTAL DISCHARGE FROM LOT 23 ONTO PALOMAS AVE PRINT HYD *****COMBINE HYDROGRAPHS FOR BASINS A AND B ****************************** ******************* RUNOFF VOLUME = 1.97497 INCHES PEAK DISCHARGE RATE = 3.83 CF RUNOFF VOLUME = 1.75625 INCHES PEAK DISCHARGE RATE = 1.38 CFS RUNOFF VOLUME = RUNOFF VOLUME = 2.11201 INCHES PEAK DISCHARGE RATE = .93 CF UNIT PEAK = .000 5.333 .667 5.999 .000 5.333 .667 5.999 .000 5.333 .667 5.999 HRS TIME HRS TIME .108800HR FLOW FLOW CFS CES CES .0.0 .0 .0 .0 .0 3.7029 FLOW FLOW CES . ID=6 CODE=24 . ID=6 HYD NO=106.0 ID=3 ID=5 ID=5 HYD NO=105.0 ID=1 ID=2
ID=5 CODE=24 . 0 TP = CFS TIME 2.000 1.333 2,000 1.333 TIME 2.000 1.333 .133300HR HRS HRS 3.83 CFS AT .93 CFS AT UNIT VOLUME = PARTIAL HYDROGRAPH PARTIAL HYDROGRAPH FLOW FLOW CFS AT 1.0 . 9 ·ω ·ω 2 · (1) K/TP RATIO = .1369 ACRE-FEET 1.500 HOURS BASIN AREA = .0468 ACRE-FEET 1.500 HOURS BASIN AREA = 1.500 HOURS .0338 ACRE-FEET 3.333 2.666 2.666 TIME 3.333 TIME 2.666 HRS HRS 106.00 105.00 .816201 BASIN AREA = B FLOW FLOW П CFS CFS .0 .0 .0 .0 .0 379.69 SHAPE CONSTANT, N .0013 SQ. MI. .0005 SQ. MI. .0003 SQ. 4.666 4.000 TIME TIME 4.666 4.666 4.000 4.000 HRS HRS

FIN		⊢	O HJ W	FLOW		PRI		HOUR		= 4.378976	C * OM *		* (OF N	FI.O.		PRINT		HOUR
FINISH	RUNOFF VOLUME = 1.24986 PEAK DISCHARGE RATE =	. (CFS	TIME FLOW		PRINT HYD ID=8 COD	RUNOFF COMPUTED BY INITIAL	AREA = .000300 SQ	UNIT PEAK = .85452	K = .108800HR TP = 976	***** EXISTING DISCHARGE FOR COMPUTE NM HYD ID=8 HYD PER A=0.0	RUNOFF VOLUME = 1.24 PEAK DISCHARGE RATE =		CFS	TIME FLOW		HYD ID=7	RUNOFF COMPUTED BY INITIAL	AREA = .001300 SQ
	INCH	. 667	HRS	TIME	PA	CODE=24		MI IA =	CFS UNI	.133300HR	7. ()	24986 INCHES 2.82 CFS	. 667	HRS	TIME	PA:	CODE=24		MI IA =
	CFS AT 1.	. 0	CES	FLOW	PARTIAL HYDR		CTION/INFI	.35000	UNIT VOLUME =	HR K/TP	ON-SITE BASIN D - 0.22 & 0.21	= FS AT 1.	.0	CFS	FLOW	PARTIAL HYDR		CTION/INFI	
	.0200 ACRE-FEET	1.333	HRS	TIME	HYDROGRAPH 108.00		ABSTRACTION/INFILTRATION NUMBER METHOD	INCHES INF =	. 9859	RATIO = .816201	- 0.22 ACRES .0003 SQ MI >=100.00 PER D=0.00	.0867 ACR 500 HOURS	₽-1 • 33 33 33	HRS	TIME	HYDROGRAPH 107.00		ABSTRACTION/INFILTRATION NUMBER METHOD	.35000 INCHES INF =
	FEET SIN AREA =	, ,	CFS	FLOW			METHOD - DT	.83000	B = 379.69	201 SHAPE		E-FEET BASIN AREA =	·ω	CFS	FLOW			METHOD - DT	.83000
	.0003 SQ. MI.	2.000	HRS	TIME			$\Gamma = .033330$	INCHES PER	69 P60 =	PE CONSTANT, N		.0013 SQ. MI.	2.000	HRS	TIME			r = .033330	INCHES PER

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 11:37:15





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 23, 1993

Scott McGee Albuquerque, NM 87108 Isaacson & Arfman 128 Monroe NE

RE: ENGINEER'S CERTIFICATION FOR HOPE CHRISTIAN SCHOOL (D18-D9) ENGINEER'S STAMP DATED 8-20-93; RECEIVED AUGUST 20, 1993 FOR CERTIFICATE OF OCCUPANCY APPROVAL

Dear Mr. McGee:

Based on the information included in the submittal referenced above, City Hydrology RELEASES the Certificate of Occupancy for this project.

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E. Civil Engineer/Hydrology

XC: Alan Martinez

WPHYD+7663;jpc

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

Telephone (505) 768-2500

Walter H. Nickerson, Jr., P.E. Assistant Director Public Works

ISAACSON & ARFMAN, P.A.

SUBJECT HOE CHRISTIAN SCHOOL JOB NO.0775
BY SM DATE 3/94 SHEET NO. OF





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 5, 1993

Scott McGee Isaacson & Arfman 128 Monroe NE Albuquerque, NM 87108

RE: GRADING PLAN FOR HOPE CHRISTIAN SCHOOL (D18-D9) ENGINEER'S STAMP DATED 4-28-93; RECEIVED APRIL 28, 1993 FOR BUILDING PERMIT APPROVAL

Dear Mr. McGee:

Based on the information included in the submittal referenced above, City Hydrology APPROVES this project for Building Permit.

Included a copy of the Grading Plan in the set of construction documents submitted for Building Permit.

Engineer's Certification of grades per DPM checklist must be approved before any Certificate of Occupancy will be released.

If you have any questions about this project, you may contact me at 768-2727.

Sincerely,

John P. Curtin. P.E. PWD/Hydrology

xc: Alan Martinez

WPHYD+7663; jpc

PUBLIC WORKS DEPARTMENT

Telephone (505) 768-2500

Walter H. Nickerson, Jr., P.E. Assistant Director Public Works

ENGINEERING GROUP



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION 123 Central NW, Albuquerque, NM 87102 (505) 766-7644

April 26, 1984

Mr. Tom Mann Tom Mann & Associates 811 Dallas NE Albuquerque, NM 87108

REF: HOPE HIGH ADDITION (D18-D9) April 18, 1984

Dear Tom:

Based on the information provided on your submittal of April 19, 1984, the above referenced drainage plan is approved.

Also advise your clients that if any further development is to take place on the vacant areas, a drainage plan/report will be required per the DPM.

If you have any further questions, feel free to call me at 766-7644.

Sincerely,

restrict. Most

Bernie J. Montoya Hydrologic Engineering Tech. CE

BJM:mrk

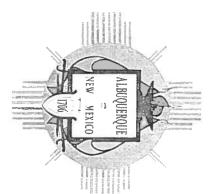
MUNICIPAL DEVELOPMENT DEPARTMENT

= AN EQUAL OPPORTUNITY EMPLOYER

ENGINEERING DIVISION

C. Dwayna Shappard, P.E., City Engineer

Telephone (505) 766-7467



Sould a sond fond of the soul fine, D

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

D18 - D9

November 25, 1981

Mr. Jeff Mortensen Tom Mann & Associates, Inc. 811 Dallas N.E. Albuquerque, N.M. 87110

RE: HOPE HIGH SCHOOL DRAINAGE REPORT

Dear Jeff:

The referenced drainage report is approved based on your revised submittal dated November 22, 1981 and received in our office November 24, 1981.

If I can be of any help, please call.

Sincerely,

un

Jim Fink Civil Engineer/Hydrology

JF/tsl

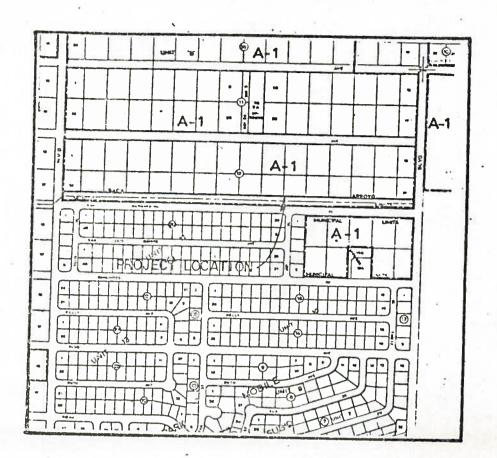
MUNICIPAL DEVELOPMENT DEPARTMENT

ENGINEERING DIVISION

Richard S. Heller, P.E., City Engineer

Telephone (505) 766-7467





VICINITY MAP

SCALE: I" = 800'

D-18-Z

NOTICE TO CONTRACTOR

- 1. An excavation/construction permit will be required before beginning ar work within City right-of-way. An approved copy of these plans must t submitted at the time of application for this permit.
- 2. All work detailed on these plans to be performed, except as otherwis stated or provided hereon, shall be constructed in accordance wit "Contract Documents for City-Wide Utilities and Cash Paving No. 30"
- 3. Two working days prior to any excavation, contractor must contact Lin Locating Service, 765-1234, for location of existing utilities.
- 4. Prior to construction, the contractor shall excavate and verify th norizontal and vertical locations of all obstructions. Should a conflic exist, the contractor shall notify the engineer so that the conflict cabe resolved with a minimum amount of delay.
- 5. Backfill compaction shall be according to N/A

APPROVALS NAME DATE TITLE: 6800 PALOMAS AVE. N.E. HOPE HIGH SCHOOL 11/182 A.C.E./DESIGN DRAINAGE RUNDOWN INSPECTOR 10-7-82 PERMIT NO. MAP ACE. / FIELD SHEET I OF 3 NO. D

