City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 1, 2003

John Arthur Blessen, PE
Claudio Vigil Architects
1305 Tijeras NW
Albuquerque, NM 87102

Re: St Pius HS Weight Room Grading & Drainage Plan
Engineer's Stamp dated 4-2-03, (G11/D40)

Dear Mr. Blessen,

Based upon the information provided in your submittal dated 4-4-03, 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.

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

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

G-11/D40

PROJECT TITLE: St Pius High School Weight Room ZONE MAP/DRG. FILE #: G-11/D40
DRB #: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LANDS OF UNIVERSITY OF ALBUQUERQUE
CITY ADDRESS: 5301 ST JOSEPHS DRIVE NW

ENGINEERING FIRM: CLAUDIO VIGIL ARCHITECTS
ADDRESS: 1801 RIO GRANDE BLDV
CITY, STATE: ABQ. NM

CONTACT: ARTHUR BLESSEN
PHONE: 842-1113
ZIP CODE: 87104

OWNER: ARCHDIOSE OF SANTA FE
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

ARCHITECT: CLAUDIO VIGIL ARCHITECTS
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: _____
ADDRESS _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- X DRAINAGE REPORT
- ____ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL GRADING & DRAINAGE PLAN
- X GRADING PLAN
- ____ EROSION CONTROL PLAN
- ____ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEERS CERTIFICATION (TCL)
- ____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ____ SIA / FINANCIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D. APPROVAL
- ____ S. DEV. PLAN FOR BLDG. PERMIT 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 (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ____ YES
- X NO
- ____ COPY PROVIDED

RECEIVED
APR 04 2003
BY: _____
HYDROLOGY SECTION

DATE SUBMITTED: 4-4-03

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature , location and scope ot 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.

DRAINAGE PLAN
ST. PIUS X HIGH SCHOOL
UPDATE OF DRAINAGE BASIN I

LOCATION:

The site is located on the northeast corner of the intersection of Coors Road NW and St. Joseph's Drive NW. The site contains approximately 57.9369 acres. The site is currently developed and slopes to the northwest corner of the site for Basin I (40.9 acres) and the east for Basin II (17.0 acres). Runoff from Basin I is collected and detained in an existing pond at the northeast corner of the property. Runoff from Basin II collects in an existing pond at the east property line that discharges to the downstream property to the east.

PURPOSE:

The purpose of the report is to update the hydrology in Basin I (shown on previous drainage plan sheet C1.5 from Chavez-Grieves, modified by Larry Read) due to changes in the basin since the August 13, 1993, Grading and Drainage Plan was completed. These changes are discussed below. This study is based on the same survey used to prepare the April 7, 1987, Grading and Drainage Plan and was updated only by visual inspection of the current conditions in Basin I.

CHANGED CONDITIONS SINCE AUGUST 13, 1993, GRADING AND DRAINAGE PLAN:

Original:
The drainage basins as shown on the August 1993, Grading and Drainage Plan remain unchanged. The facilities proposed in the April 1987, Grading and Drainage Plan, including a new Athletic Building (28,000 sq. ft.), a running track and football field, and paved parking lot, have been constructed in Basin I. The pond and 36" diameter outfall proposed in Basin I by that Grading and Drainage Plan have been constructed.

First Revision:
In August 1993, the installation of a new temporary building (1,680 sq. ft.) and two sidewalks to the building (804 sq. ft.) south of Lourdes Hall was completed. This building is supported on six three foot square footings that elevates the steel runners about two inches above ground. The building did not alter existing drainage patterns.

This Revision:
In August 1998, new bleachers with accompanying sidewalk are proposed. The sidewalk and bleachers will convert 6811 square feet of landscaping area into impervious treatments.

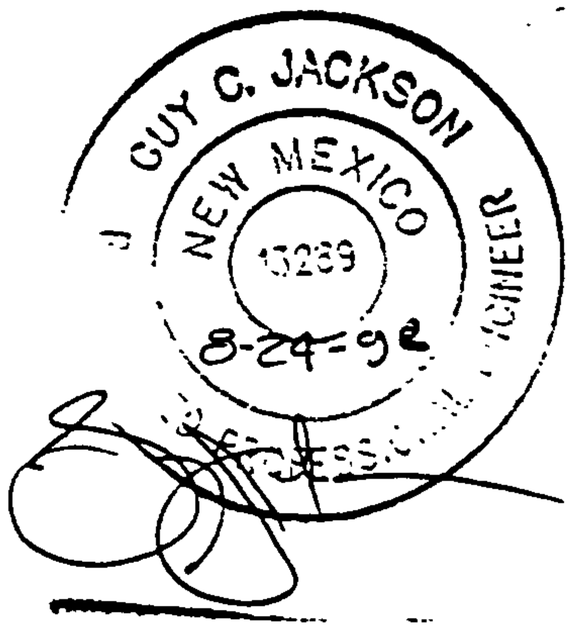
CALCULATION FROM OLD DPM SECTION 22.2:

Area = 40.9 acres

I = 2.2 in./hr. Plate 22.2 D-2

6 hour 100 year rainfall = 2.2 in. Plate 22.2 D-1

i = (2.2) (2.2) = 4.84 in./hr. tc = 10 min.



BASIN I

ORIGINAL:
EXISTING ON-SITE CONDITIONS (April, 1987):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.36	8.89	
Roofs	0.90	1.98	1.78	
Lawns, Landscaping	0.25	24.19	6.05	
Undeveloped	0.40	5.37	2.15	
		40.9	18.87	0.46

Q_{100} = (0.46)(4.84)(40.9) = 91.06 cfs

Q_{10} = (91.06 cfs)(0.657) = 59.83 cfs

CN = Previously 55 Plate 22.2 C-2 28% Impervious
CN_{comp} = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in. Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,560)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,238 cu. ft.

FIRST REVISION:
EXISTING ON-SITE CONDITIONS (August 1993):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets. Drives, Walks	0.95	9.38	8.91	
Roofs	0.90	2.02	1.82	
Lawns, Landscaping	0.25	24.17	6.04	
Undeveloped	0.40	5.33	2.13	
		40.9	18.90	0.46

Q_{100} = (0.46)(4.84)(40.9) = 91.06 cfs

Q_{10} = (91.06)(0.657) = 59.83 cfs

CN Pervious 55 Plate 22.2 C-2 28% Impervious
CN comp = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,560)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,328 cu. ft.

THIS REVISION:
PROPOSED ON-SITE CONDITIONS (August 1998):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.54	9.06	
Roofs	0.90	2.02	1.82	
Lawns, Landscaping	0.25	24.01	6.00	
Undeveloped	0.40	5.33	2.13	
		40.9	19.01	0.465

Q_{100} = (0.465)(4.84)(40.9) = 92.01 cfs

Q_{10} = (92.01)(0.657) = 60.45 cfs

CN Pervious 55 Plate 22.2 C-2 28% Impervious
CN comp = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,546)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,328 cu. ft.

This shows less than 1 cfs increase in peak discharge from Basin I in the detention pond.

CALCULATIONS FOR NEW DPM SECTION 22.2:

AFTER FIRST REVISION:
EXISTING ON-SITE CONDITIONS (August 1993):

From Table A-11 (Rational Method Coefficient, C)

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.27	5.33	1.44
Lawn/Landscaping	B	0.43	24.17	10.39
Roof/Paving	D	0.93	11.40	10.60
				22.43

Peak intensity for Zone 1 = 4.70 in./hr.

Q_{peak} = i(sum C x A) = 4.70 (22.43) = 105.4 cfs (This is a 14 cfs increase due to change in design criteria and methods.)

From Table A-8 Excess Precipitation, E (inches) 6 hour storm

V = Sum E x A (43560/12)

Zone 1

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.44	5.33	2.35
Lawn/Landscaping	B	0.67	24.17	16.19
Roof/Paving	C	1.97	11.40	22.46
				41.00

V = Sum E x A (43560/12) = 148,820 cf

CALCULATIONS FOR NEW DPM SECTION 22.2:

SECOND REVISION:
PROPOSED ON-SITE CONDITIONS (August 1998):

From Table A-11 (Rational Method Coefficient, C

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.27	5.33	1.44
Lawn/Landscaping	B	0.43	24.01	10.32
Roof/Paving	D	0.93	11.56	11.75
				22.52

Peak intensity for Zone 1 = 4.70 in./hr.

Q_{peak} = i (sum C x A) = 4.70 (22.52) = 105.8 cfs (Only 0.4 cfs increase due to site changes.)

From Table A-8 Excess Precipitation, E (inches) 6 hour storm

V = Sum E x A (43560/12)

Zone 1

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.44	5.33	2.35
Lawn/Landscaping	B	0.67	24.01	16.09
Roof/Paving	C	1.97	11.56	22.77
				41.21

V = Sum E x A (43560/12) = 149,590 cfs (An increase of 770 cu. ft.)

As shown in the calculations on the preceding pages, the existing ponding volume and the currently required volume (under 1993 Revision to DPM Section 22.2) are significantly different. The existing pond volume constructed = 210,400 cu. ft. at elevation 5105.0. The existing pond discharges storm drain water into the Ladera storm drain system on Coors Boulevard. The existing pond discharge pipe has a check valve to prevent water from the Ladera storm drain from flowing back into the detention pond on St. Pius property.

The new criteria for ponding volume yields a required proposed volume of 149,590 cu. ft. which is an increase of 770 cu. ft. over the existing conditions. The pond has storage capacity for the site even under the new (Post 1993) storm drain design criteria. The system will again be revised/updated by a project for Coors Boulevard currently being designed by Chavez-Grieves. The extent on the storm drain redesign will be reviewed after the funding for repaving and parking improvements are finalized.

The proposed changes to the site will have a minimal effect on the existing site drainage patterns and will cause minimal changes to erosion problems. The increase described above is less than 1% increase in flowrate and in required ponding volume. The existing pond will contain all runoff from current and proposed development in Basin I.

CITY OF
Albuquerque

August 31,1998

Guy Jackson
BPLW
6200 Uptown Blvd. NE Suite 400
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR ST. PIUS HIGH SCHOOL FOOTBALL BLEACHERS
(G11-D40) ENGINEER'S STAMP DATED 8/24/98

Dear Mr. Jackson:

Based on the information provided on your August 25,1998 submittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

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

If I can be of further assistance, please feel free to contact me at 924-3986.

Sincerely

Bernie J. Montoya CE
Associate Engineer

C: Andrew Garcia
File

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 14, 2003

Guy C. Jackson
BPLW
6200 Uptown Boulevard, Suite 400
Albuquerque, New Mexico

RE: Grading and Drainage Plan St. Pius High School Baseball Field Bleachers (G11-D40) Dated January 10, 2003

Dear Mr. Biazar:

The above referenced drainage plan is approved for Building Permit. Upon the completion of the project please certify the project per the DPM.

.

If you have any questions please call me at 924-3982.

Sincerely,

Carlos A. Montoya
City Floodplain Administrator

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV. 1/11/2002)

PROJECT TITLE: St. Pius H.S. Football Field Bleachers ZONE MAP/DRG. FILE #: G11\D40
DRB#: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lands of University of Albuquerque
CITY ADDRESS: 5301 St. Joseph Drive NW, Albuquerque, New Mexico

ENGINEERING FIRM: BPLW — CONTACT: Guy C. Jackson, PE
ADDRESS: 6200 Uptown Blvd., Suite 400 — PHONE: 881-2759
CITY, STATE: _____ — ZIP CODE: _____

OWNER: St. Pius H.S — CONTACT: _____
ADDRESS: 5301 St. Joseph Drive NW — PHONE: (See Architect)
CITY, STATE: Albuquerque, New Mexico — ZIP CODE: _____

ARCHITECT: BPLW — CONTACT: Charlie Otero
ADDRESS: 320 Central Ave SW — PHONE: 881-2759
CITY, STATE: _____ — ZIP CODE: _____

SURVEYOR: ~~SURV-TEK~~ — CONTACT: _____
ADDRESS: _____ — PHONE: _____
CITY, STATE: _____ — ZIP CODE: _____

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

CHECK TYPE OF SUBMITTAL:
__ DRAINAGE REPORT
_X DRAINAGE PLAN
__ CONCEPTUAL GRADING & DRAINAGE PLAN
___ GRADING PLAN
__ EROSION CONTROL PLAN
___ ENGINEER'S CERTIFICATION(HYDROLOGY)
___ CLOMR/LOMR
___ TRAFFIC CIRCULATION LAYOUT (TCL)
___ ENGINEER'S CERTIFICATION(TCL)
___ ENGINEER'S CERTIFICATION(DRB APPR. SITE PLAN)
OTHER

CHECK TYPE OF APPROVAL SOUGHT:
_ SIA / FINANCIAL GUARANTEE RELEASE
_ PRELIMINARY PLAT APPROVAL
_ S. DEV. PLAN FOR SUB'D APPROVAL
_ S. DEV. PLAN FOR BLDG. PERMIT 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 _____ (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED
____ YES
__X__ NO
____ COPY PROVIDED

RECEIVED
JAN 13 2003
HYDROLOGY SECTION

DATE SUBMITTED: January 9, 2003 BY: Guy C. Jackson, PE

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.
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.

BPLW

Architects & Engineers, Inc.

6200 Uptown Blvd. NE
Suite 400
Albuquerque, New Mexico 87110
(505) 881-BPLW (2759)
FAX (505) 881-1230
web site: http://www.bplw.com

January 10, 2003

Brad Bingham, PE
Hydrology Chairman
COA - Public Works
PO Box 1293
Albuquerque, New Mexico 87103

Re: Grading Plan for St. Pius HS

Dear Brad:

Attached for your review are the following

One (1) Drainage Information Sheet

Two (2) sets of drawings

One (1) set of calculations dated 8/24/98 (For Information Only)

The site is located at 5301 St. Joseph Drive NW. Presently, the campus is fully developed. This submittal shows a proposed set of bleachers to be built on an existing concrete pad that is adjacent to an existing baseball field. I believe that the exiting concrete pad must have been built sometime after August 24, 1998 (the date of my last involvement with this campus). The concrete pad (and accompanying proposed bleachers) consists of approximately 900sf of impervious area. (15' X 20' X 3-bleachers) The bleachers shown on the site are not drawn to scale. Because of the impervious area being less that 1000sf, I have not provided hydrology calculations with this submittal. Therefore, I feel that the additional developed flow from this 18.9-acre site is deemed negligible.

Please contact me if you have any questions or comments.

Sincerely,

BPLW ARCHITECTS & ENGINEERS, INC.

RECEIVED
JAN 13 2003
HYDROLOGY SECTION

Guy Jackson, PE
Senior Vice President

Attachments:

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 8, 1999

Stephen Crawford, P.E.
Crawford Development Services
3634 Highway 47
Peralta, NM 87042

RE: ARCHDIOCESE OF SANTA FE, PARKING LOT REHABILITATION, ST. PIUS HIGH SCHOOL. (G11-D40). DRAINAGE PLAN FOR PAVING AND SO#19 PERMIT APPROVALS. ENGINEER'S STAMP DATED FEBRUARY 24, 1999.

Dear Mr. Crawford:

Based on the information provided on your February 25, 1999 submittal, the above referenced project is approved for both Paving and SO#19 Permits.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

A separate permit is required for construction within City right-of-way. A copy of this approval letter must be on hand when applying for the excavation permit.

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, P.E.
Hydrology

c: Arlene Portillo
D. Salas, St. Maint.
Andrew Garcia
File

PUBLIC WORKS DEPARTMENT

MARCH 8, 1999

INTEROFFICE CORRESPONDENCE HYDROLOGY DIVISION

TO: Desiderio Salas, Street Maintenance Division

FROM: John P. Murray, P.E., Hydrology, PWD

SUBJECT: **PRIVATE DRAINAGE FACILITIES WITHIN PUBLIC RIGHT-OF-WAY DRAINAGE FILE NUMBER (G11-D40).**

Transmitted herewith is a copy of the approved drainage plan for the referenced project incorporating the SO #19 design.

This plan is being submitted to you for permitting and inspection. Please provide this section with a signed-off copy per the signature block upon construction and acceptance by your office.

As you are aware, the signed off SO #19 is required by this office for Certificate of Occupancy release; therefore your expeditious processing of this plan would be greatly appreciated and would avoid any unnecessary delay in the release of the Certificate of Occupancy.

Thank you for your cooperation and if you should have any questions and/or comments, please feel free to call me at 924-3984.

Attachment

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Archdiocese of Santa Fe ZONE ATLAS/DRNG. FILE #: G-11 / D40

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lands of the University of Albuquerque

CITY ADDRESS: 4000 St Joseph's Place, NW

ENGINEERING FIRM: Crawford Development Services CONTACT: Steve

ADDRESS: 3634 Highway 47 Peralta, NM 87042 PHONE: 865-6442

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: Albuquerque Surveying Co. CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
X DRAINAGE PLAN
____ CONCEPTUAL GRADING & DRAINAGE PLAN
____ GRADING PLAN
____ EROSION CONTROL PLAN
____ ENGINEER'S CERTIFICATION
____ OTHER _____

PRE-DESIGN MEETING:

____ YES
____ NO
____ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL
____ 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 APPROVAL
____ GRADING PERMIT APPROVAL
X PAVING PERMIT APPROVAL
____ S.A.D. DRAINAGE REPORT
____ DRAINAGE REQUIREMENTS
____ SUBDIVISION CERTIFICATION
X OTHER S.O. 19 (SPECIFY)

RECEIVED
FEB 25 1999
HYDROLOGY SECTION

DATE SUBMITTED: Feb 25, 1999

BY: _____

CITY OF
Albuquerque

August 31,1998

Guy Jackson
BPLW
6200 Uptown Blvd. NE Suite 400
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR ST. PIUS HIGH SCHOOL FOOTBALL BLEACHERS
(G11-D40) ENGINEER'S STAMP DATED 8/24/98

Dear Mr. Jackson:

Based on the information provided on your August 25,1998 submittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

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

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia
File

Sincerely

Bernie J. Montoya CE
Associate Engineer

DRAINAGE PLAN

for

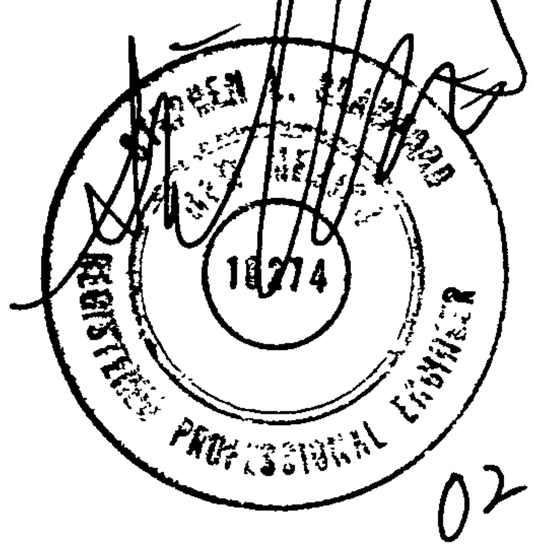
ARCHDIOCESE OF SANTA FE

PARKING LOT REHABILITATION

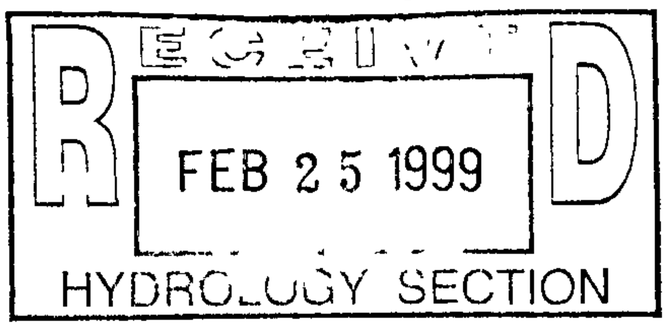
COORS BLVD/ST. JOSEPH PLACE

ALBUQUERQUE, NEW MEXICO

FEBRUARY 1999



02-24-99



Crawford Development Services
Founded 1989

Stephen L. Crawford, P.E.

3634 HIGHWAY 47, PERALTA, NM 87042 865-6442

Table of Contents

I. SITE LOCATION:

This 57.9 acre site is located at the northeast corner of Coors Road & St. Joseph's Place on Albuquerque's west side. The westerly portion of the site is the St Pius X High School and the northerly and easterly portions of the site contain administrative and operational buildings for the Archdiocese of Santa Fe. See vicinity map on the Cover Sheet in the map pocket of this report.

II PROPOSED PROJECT:

The proposed project consists of rehabilitating some existing parking and driveway areas on the northern and eastern portions of the site. Specifically, the work will be as follows: the north driveway and the parking area between Lourdes Hall and Madonna Hall will be pulverized, releveled and paved with 2 inches of new asphalt concrete paving; a small area of the site north of Madonna Hall will have asphalt concrete paving installed over the current gravel parking area; the parking area south and west of Lourdes Hall and the service road east of Madonna Hall will receive a 1.5 inch asphalt overlay; the existing parking lot south of the Catholic Center will receive a 1.5 inch asphalt overlay; and a small area south of the Catholic Center will have asphalt concrete paving installed over the current compacted earth parking area. The Basin and Composite Map (sheet CG.0) indicates where the work shown on sheets CG.1 through CG.5 is located on the site.

III. EXISTING CONDITIONS:

Previous drainage studies (see Hydrology file # G-11/D40) performed on this site have characterized the existing conditions in a fair amount of detail. There are no offsite drainage basins that drain across this site and it is not situated in the FEMA 100-year floodplain per FIRM Community Panel #35001C0114 D dated September 20, 1996.

The most recent modifications to the project's drainage report (see Appendix A) were performed by Mr. Guy Jackson, P.E. of BPLW Architects to support the installation of bleachers and some sidewalks adjacent to one of the site's athletic fields. These calculations are important because they updated the original master plan computations using the current AHYMO methodology. These calculations demonstrate that the original design for the detention pond at the northwest corner of the site is still conservative. Specifically, the new methodology indicates that the total runoff from Basin I of the site is 149,590 cuft and the pond's constructed volume (to elevation 5105.0) is some 210,400 cuft. Therefore, not counting any discharge to the Coor's Road storm drain, the pond conservatively has more than adequate capacity to hold the runoff from the 100 year storm.

The discharge from Basin II of the project site has historically been to the east with portions of the basin being routed through a detention pond and portions of the site free discharging by sheet flow directly to the east. The recently approved drainage report for the Oxbow Bluff subdivision (see Hydrology file #G-11/14A) took into account the existing flows from Basin II of the subject site and its streets/storm drain system were sized for those flows.

IV. PROPOSED CONDITIONS:

The majority of the parking lot rehabilitation work (pulverizing & repaving or overlaying) will result in no change in the runoff patterns or intensities from the site. There are two areas where new paving is being installed where there was previously either native vegetation or dirt/gravel parking areas.

1) The first area of new paving is situate north of Madonna Hall and the existing drainage pattern has the majority of this runoff contained within Basin II. The proposed construction will redirect the flows from Basin II into Basin I (and its oversized detention pond). The existing condition for this new paving area was not evaluated (because it is being redirected into Basin I) and the total runoff from the proposed paving which will be added to the Basin I ponding area is as follows:

Land Treatments: D = 100% (0.33 ac)

Rainfall Zone: 1

$Q_{100} = 0.33(4.37) = 1.44$ cfs

$V_{100}(6hr) = 0.33(1.97)/12 = 0.054$ acft = 2352 cf

$V_{100}(24hr) = [(0.054x12)+0.33x(2.66-2.20)]/12 = 0.067$ acft = 2920 cf

The increase in runoff of 2920 cuft will raise the total runoff tributary to the pond from 149,590 cuft to 152,510 cuft. This 2% increase in runoff volume will easily be contained in the 210,400 cuft constructed pond volume.

2) The second area of new paving is situate south of the Catholic Center building and its runoff (both before and after the proposed parking lot construction) discharges into the new Oxbow Drive right-of-way and eventually enters the Oxbow Bluff subdivision's storm drain system. Appendix B contains excerpts of the existing conditions drainage basin map and the proposed conditions drainage basin map for the Oxbow Bluff subdivision. The proposed parking lot expansion is located in developed Basin "N" of the Oxbow Bluff subdivision which has a total area of 4.08 acres and a projected discharge rate of 9.40 cfs. The following calculations include both the before (compacted earth parking lot) and the after (asphalt paving) runoff calculation for the "new" asphalt paved area to the east of the existing paved lot on the south side of the Catholic Center building.

BEFORE:

Land Treatments: C = 100% (0. ac)

Rainfall Zone: 1

Q_{100} = 0.12(2.87) = 0.34 cfs

V_{100}(6hr) = 0.12(0.99)/12 = 0.010 acft = 436 cf

V_{100}(24hr) = [(0.010x12)+0.00x(2.66-2.20)]/12 = 0.010 acft = 436 cf

AFTER:

Land Treatments: D = 100% (0.12 ac)

Rainfall Zone: 1

Q_{100} = 0.12(4.37) = 0.52 cfs

V_{100}(6hr) = 0.12(1.97)/12 = 0.020 acft = 871 cf

V_{100}(24hr) = [(0.020x12)+0.12x(2.66-2.20)]/12 = 0.025 acft = 1089 cf

The increase in discharge of 0.52-0.34 = 0.18 cfs in Basin "N" of the Oxbow Bluff subdivision represents only a 2% increase in this one basin and will have no measurable effect on street flow depths or storm drain hydraulic grade lines in the Oxbow Bluff subdivision.

V. NORTH DRIVEWAY DIP DRAINAGE:

There is an existing low area (historic small playa) on the north side of St. Clair Hall that "floods" to a depth of about six inches during major storms. When the north driveway on the site was originally constructed, the paving was very flat in all areas and the dip area was not "filled in" and as a result, it floods occasionally. This project proposes to install a small storm drain system and to "roll" the profile of the north driveway when it is reconstructed to eliminate the nuisance flooding that is being experienced at this point in time. The original drainage plan (and all of its computational updates) assumed that all the runoff from Basin I (including the dip on the north side of St. Clair Hall) discharged into the pond. Therefore the installation of this minor storm drain will not change any of the drainage patterns or computed runoff volumes.

The actual tributary flows and hydraulic grade line elevations were not calculated because, in a major storm, the majority of the site's runoff will sheet flow to the west and enter the pond. Once the detention pond has drained into the Coors Road storm drain system, this minor storm drain will allow the nuisance ponding to recede into the detention pond. It will also drain the dip area fairly quickly after minor storm events.

VI. SUMMARY/CONCLUSIONS:

The rehabilitation and minor expansion of the parking/driveway areas shown on the proposed plans will cause a slight increase in runoff from the site. The existing detention pond on the northwest corner of the site and the streets/storm drain system in the Oxbow Bluff subdivision will not be adversely affected by this project and the resulting parking lot/driveway improvements will improve parking conditions and traffic circulation on the project site.

APPENDIX A

DRAINAGE PLAN - PHASE I

ST. PIUS X HIGH SCHOOL

SEE UPDATE FOR BASIN I DATED AUG. 25, 1998 (ATTACHED)

SEE UPDATE FOR BASIN I DATED AUG. 13, 1993 (ATTACHED)

LOCATION AND EXISTING CONDITION:

The site is located on the northeast corner of the intersection of Coors Road and St. Joseph's Drive N.W. containing approximately 57.9369 acres. The site is currently developed and slopes to the northwest corner of the site (Basin I-40.9 acres) and to the east (Basin II-17 acres). Runoff from Basin I is collected in an existing pond and overflows to Coors Road. Runoff from Basin II runs across the east property line and outfalls into the Rio Grande via existing grades and existing catch basins with outlet pipes. No offsite runoff enters the site due to existing grades.

PROPOSED CONDITION:

Proposed development of the site includes two new buildings, a new track/football field, and a new paved parking lot.

The basins will remain approximately the same as existing, but runoff will be increased due to the new development.

The pond in Basin I will be enlarged and connected to an existing 60" RCP storm sewer located on the west side of Coors Road (Ladera Drainage System-Outfall Facility) and discharge to the Ladera Outfall (Mariposa Channel). The enlarged detention pond in Basin I will be designed to store the entire 100-year developed runoff volume from Basin I and half of the future development of Coors Road. The maximum water surface elevation of the pond will be set at the same elevation of the hydraulic grade line elevation in the 60" RCP during peak discharge corresponding to the point where the outlet will tie to the Ladera outfall (approximately 5102.5 feet). An automatic drainage (flap) gate will be installed as part of the outlet system from the detention basin to prevent reverse flow from the Ladera Outfall during pressurized conditions in the 60" RCP. No overflow spillway structures will be provided because the basin will be designed to store the total on-site 100-year storm volume.

As an interim solution in Phase I, the pond in Basin II will be designed to retain all runoff due to the new development. In Phase II, a controlled discharge system will be installed from the pond to a single outlet point. This single outlet point will intercept two other existing outlet points and control the discharge rate to the downstream property. 100-year storm runoff from this site will be reduced with the Phase II construction and downstream conditions will be improved. The outfall point of the Phase II storm drain improvements will be improved with riprap erosion control installed to the property line.

SEE UPDATE FOR BASIN I DATED AUG. 25, 1998 (ATTACHED)

BASIN I — SEE UPDATE DATED AUG. 13, 1993 (ATTACHED)

CALCULATIONS:

Area = 40.9 acres
I = 2.2 in./hr. Plate 22.2 D-2
6-hour, 100-year rainfall = 2.2 in. Plate 22.2 D-1
i = (2.2)(2.2) = 4.84 in./hr.

Existing 36" RCP turned under Coors Rd. (Contractor is to acquire all necessary permits from the S.H.D. for this const.)

Rim 5107.80
INV 5096.29

Connected into exist. M.H. with outfall on outfall drainage syst.

INV @ RP 5090

60" RCP

0.58
2.45

DRAINAGE PLAN
ST. PIUS X HIGH SCHOOL
UPDATE OF DRAINAGE BASIN I

LOCATION:

The site is located on the northeast corner of the intersection of Coors Road NW and St. Joseph's Drive NW. The site contains approximately 57.9369 acres. The site is currently developed and slopes to the northwest corner of the site for Basin I (40.9 acres) and the east for Basin II (17.0 acres). Runoff from Basin I is collected and detained in an existing pond at the northeast corner of the property. Runoff from Basin II collects in an existing pond at the east property line that discharges to the downstream property to the east.

PURPOSE:

The purpose of the report is to update the hydrology in Basin I (shown on previous drainage plan sheet C1.5 from Chavez-Grieves, modified by Larry Read) due to changes in the basin since the August 13, 1993, Grading and Drainage Plan was completed. These changes are discussed below. This study is based on the same survey used to prepare the April 7, 1987, Grading and Drainage Plan and was updated only by visual inspection of the current conditions in Basin I.

CHANGED CONDITIONS SINCE AUGUST 13, 1993, GRADING AND DRAINAGE PLAN:

Original:
The drainage basins as shown on the August 1993, Grading and Drainage Plan remain unchanged. The facilities proposed in the April 1987, Grading and Drainage Plan, including a new Athletic Building (28,000 sq. ft.), a running track and football field, and paved parking lot, have been constructed in Basin I. The pond and 36" diameter outfall proposed in Basin I by that Grading and Drainage Plan have been constructed.

First Revision:
In August 1993, the installation of a new temporary building (1,680 sq. ft.) and two sidewalks to the building (804 sq. ft.) south of Lourdes Hall was completed. This building is supported on six three foot square footings that elevates the steel runners about two inches above ground. The building did not alter existing drainage patterns.

This Revision:
In August 1998, new bleachers with accompanying sidewalk are proposed. The sidewalk and bleachers will convert 6811 square feet of landscaping area into impervious treatments.

CALCULATION FROM OLD DPM SECTION 22.2:

Area = 40.9 acres

I = 2.2 in./hr. Plate 22.2 D-2

6 hour 100 year rainfall = 2.2 in. Plate 22.2 D-1

i = (2.2) (2.2) = 4.84 in./hr. tc = 10 min.

BASIN I

ORIGINAL:
EXISTING ON-SITE CONDITIONS (April, 1987):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.36	8.89	
Roofs	0.90	1.98	1.78	
Lawns, Landscaping	0.25	24.19	6.05	
Undeveloped	0.40	5.37	2.15	
		40.9	18.87	0.46

Q_{100} = (0.46)(4.84)(40.9) = 91.06 cfs

Q_{10} = (91.06 cfs)(0.657) = 59.83 cfs

CN = Previously 55 Plate 22.2 C-2 28% Impervious
CN_{comp} = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in. Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,560)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,238 cu. ft.

FIRST REVISION:
EXISTING ON-SITE CONDITIONS (August 1993):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.38	8.91	
Roofs	0.90	2.02	1.82	
Lawns, Landscaping	0.25	24.17	6.04	
Undeveloped	0.40	5.33	2.13	
		40.9	18.90	0.46

Q_{100} = (0.46)(4.84)(40.9) = 91.06 cfs

Q_{10} = (91.06)(0.657) = 59.83 cfs

CN Pervious 55 Plate 22.2 C-2 28% Impervious
CN comp = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in. Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,560)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,328 cu. ft.

THIS REVISION:
PROPOSED ON-SITE CONDITIONS (August 1998):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.54	9.06	
Roofs	0.90	2.02	1.82	
Lawns, Landscaping	0.25	24.01	6.00	
Undeveloped	0.40	5.33	2.13	
		40.9	19.01	0.465

Q_{100} = (0.465)(4.84)(40.9) = 92.01 cfs

Q_{10} = (92.01)(0.657) = 60.45 cfs

CN Pervious 55 Plate 22.2 C-2 28% Impervious
CN comp = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,546)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,328 cu. ft.

This shows less than 1 cfs increase in peak discharge from Basin I in the detention pond.

CALCULATIONS FOR NEW DPM SECTION 22.2:

AFTER FIRST REVISION:
EXISTING ON-SITE CONDITIONS (August 1993):

From Table A-11 (Rational Method Coefficient, C)

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.27	5.33	1.44
Lawn/Landscaping	B	0.43	24.17	10.39
Roof/Paving	D	0.93	11.40	10.60
				22.43

Peak intensity for Zone 1 = 4.70 in./hr.

Q_{peak} = i(sum C x A) = 4.70 (22.43) = 105.4 cfs (This is a 14 cfs increase due to change in design criteria and methods.)

From Table A-8 Excess Precipitation, E (inches) 6 hour storm

V = Sum E x A (43560/12)

Zone 1

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.44	5.33	2.35
Lawn/Landscaping	B	0.67	24.17	16.19
Roof/Paving	C	1.97	11.40	22.46
				41.00

V = Sum E x A (43560/12) = 148,820 cf

CALCULATIONS FOR NEW DPM SECTION 22.2:

SECOND REVISION:
PROPOSED ON-SITE CONDITIONS (August 1998):

From Table A-11 (Rational Method Coefficient, C

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.27	5.33	1.44
Lawn/Landscaping	B	0.43	24.01	10.32
Roof/Paving	D	0.93	11.56	11.75
				22.52

Peak intensity for Zone 1 = 4.70 in./hr.

Q_{peak} = i (sum C x A) = 4.70 (22.52) = 105.8 cfs (Only 0.4 cfs increase due to site changes.)

From Table A-8 Excess Precipitation, E (inches) 6 hour storm

V = Sum E x A (43560/12)

Zone 1

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.44	5.33	2.35
Lawn/Landscaping	B	0.67	24.01	16.09
Roof/Paving	C	1.97	11.56	22.77
				41.21

V = Sum E x A (43560/12) = 149,590 cfs (An increase of 770 cu. ft.)

As shown in the calculations on the preceding pages, the existing ponding volume and the currently required volume (under 1993 Revision to DPM Section 22.2) are significantly different. The existing pond volume constructed = 210,400 cu. ft. at elevation 5105.0. The existing pond discharges storm drain water into the Ladera storm drain system on Coors Boulevard. The existing pond discharge pipe has a check valve to prevent water from the Ladera storm drain from flowing back into the detention pond on St. Pius property.

The new criteria for ponding volume yields a required proposed volume of 149,590 cu. ft. which is an increase of 770 cu. ft. over the existing conditions. The pond has storage capacity for the site even under the new (Post 1993) storm drain design criteria. The system will again be revised/updated by a project for Coors Boulevard currently being designed by Chavez-Grieves. The extent on the storm drain redesign will be reviewed after the funding for repaving and parking improvements are finalized.

The proposed changes to the site will have a minimal effect on the existing site drainage patterns and will cause minimal changes to erosion problems. The increase described above is less than 1% increase in flowrate and in required ponding volume. The existing pond will contain all runoff from current and proposed development in Basin I.

APPENDIX B

ENGINEER'S SEAL

REV	DESCRIPTION	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

BOHANNAN-HUSTON INC.

ENGINEERS • PLANNERS • PHOTOGRAMMETRISTS • SURVEYORS • LANDSCAPE ARCHITECTS

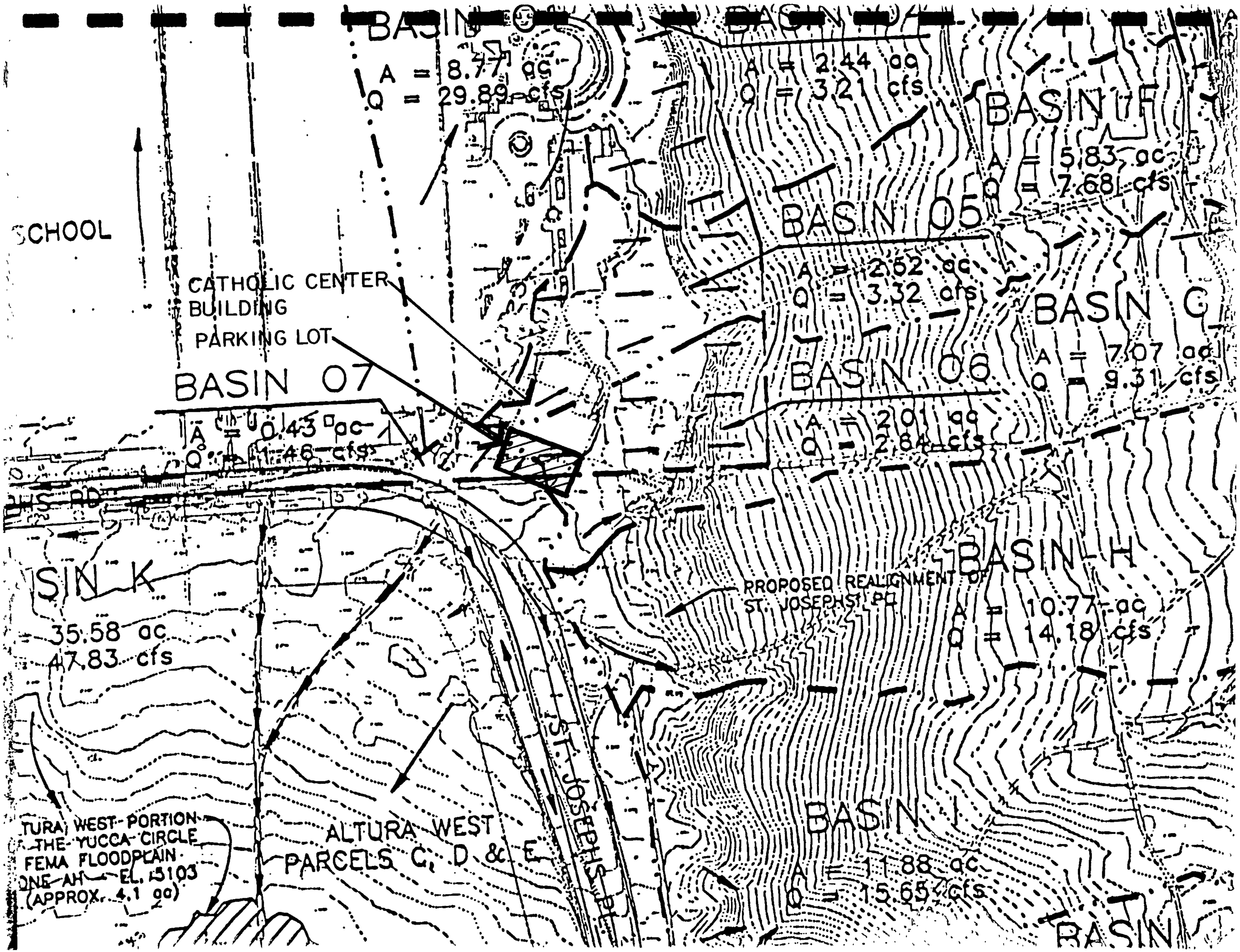
ALBUQUERQUE LAS CRUCES SANTA FE

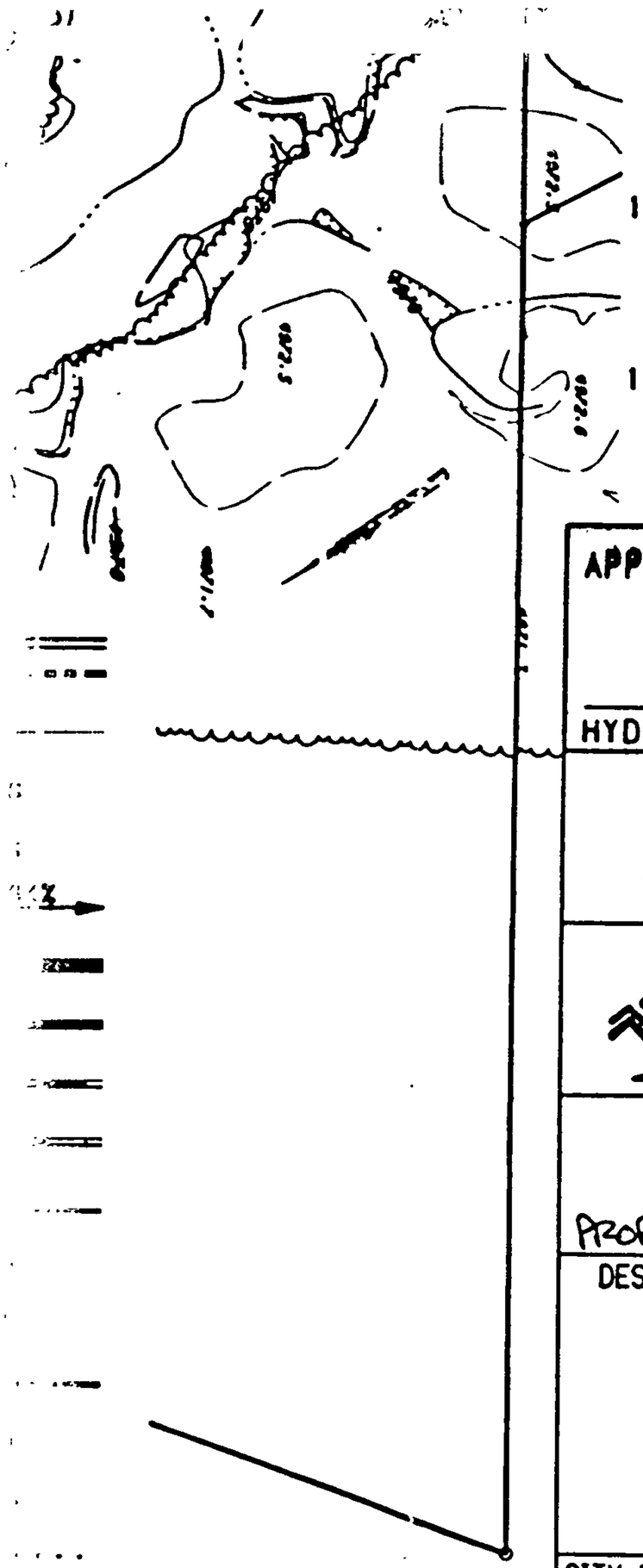
ALTURA WEST & ARCHDIOCESE OF SANTA FE EXIST. DRAINAGE CONDITIONS

PROJECT NUMBER: 1-950244C.2482

SHEET 1 OF 1

DATE: 8/24/96


BASIN
A = 8.77 ac
Q = 29.89 cfs
BASIN
A = 2.44 ac
Q = 3.21 cfs
BASIN 05
A = 2.52 ac
Q = 3.32 cfs
BASIN 06
A = 2.01 ac
Q = 2.84 cfs
BASIN
A = 5.83 ac
Q = 7.68 cfs
BASIN G
A = 7.07 ac
Q = 9.31 cfs
SCHOOL
CATHOLIC CENTER
BUILDING
PARKING LOT
BASIN 07
A = 0.43 ac
Q = 1.46 cfs
BASIN K
35.58 ac
47.83 cfs
PROPOSED REALIGNMENT OF
ST. JOSEPH ST.
BASIN H
A = 10.77 ac
Q = 14.18 cfs
BASIN I
A = 11.88 ac
Q = 15.65 cfs
ALTURA WEST
PARCELS C, D & E
ST. JOSEPH ST.
ALTURA WEST PORTION
THE YUCCA CIRCLE
FEMA FLOODPLAIN
ONE AH EL. 5103
(APPROX. 4.1 ac)



T IN DI SAI TE
THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

11 PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATIONS.

12 ALL SPOT ELEVATIONS ARE TO FLOW LINE UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOW LINE ELEVATION.

APPROVED FOR ROUGH GRADING (± 1')

HYDROLOGY ENGINEER _____ DATE _____

NO.	DATE	REMARK

REVISIONS

DESIGN

DESIGNED BY KP

DRAWN BY SAR

CHECKED BY KP

BOHANNAN-HUSTON INC.
ENGINEERS • PLANNERS • PHOTOGRAMMETRISTS • SURVEYORS • LANDSCAPE ARCHITECTS
ALBUQUERQUE LAS CRUCES SANTA FE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

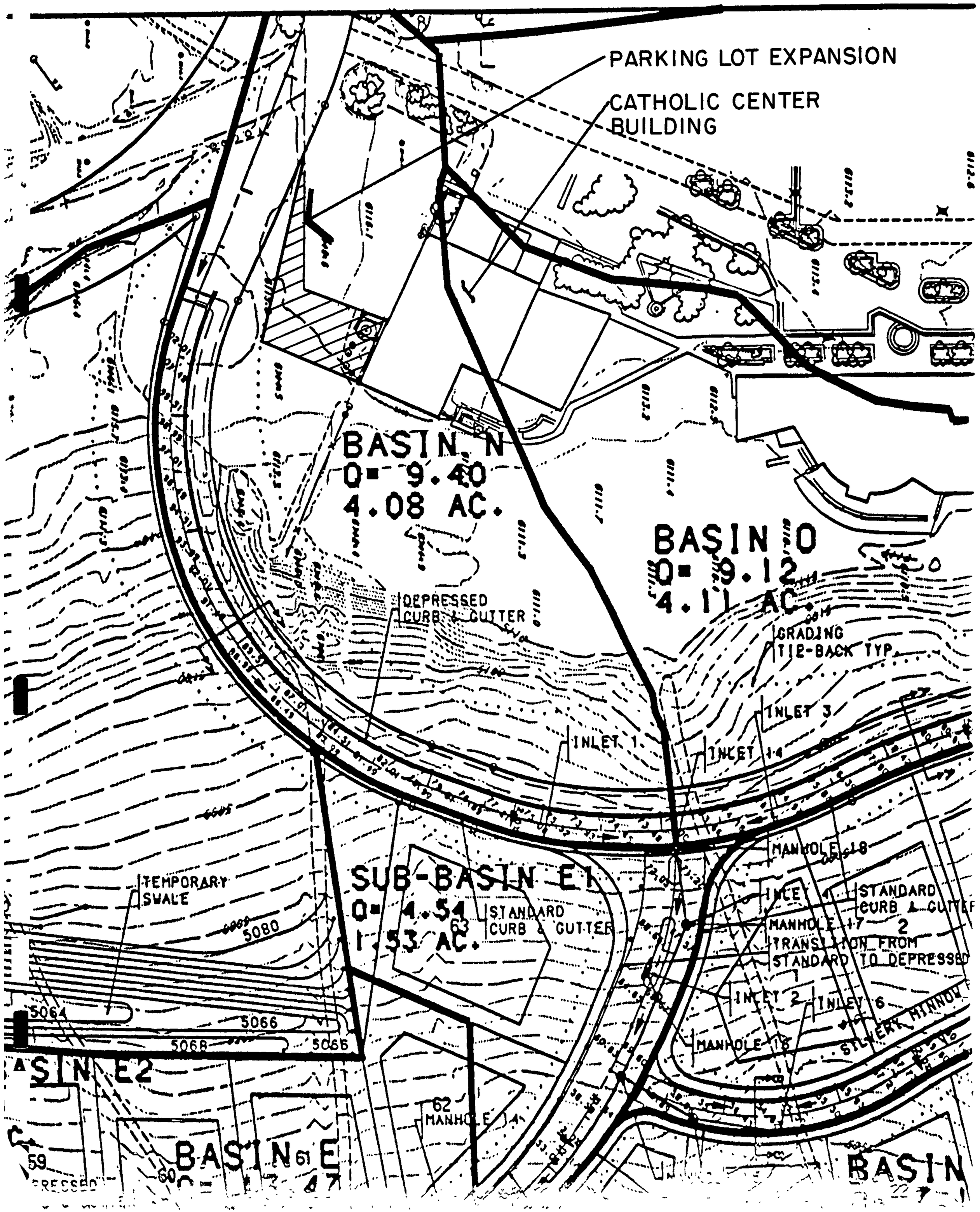
OXBOW BLUFF SUBDIVISION - TRACT F

PROPOSED CONDITIONS ~~PRELIMINARY GRADING PLAN~~ BASIN MAP

DESIGN REVIEW BOARD NO.	APPROVAL DATE	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
97-237	__/__/__			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
YY'Y.YY	G-11	X	X

DHI JOB NO C05244A2400


PARKING LOT EXPANSION
CATHOLIC CENTER BUILDING
BASIN N
Q= 9.40
4.08 AC.
BASIN O
Q= 9.12
4.11 AC.
DEPRESSED CURB & GUTTER
GRADING TIE-BACK TYP
INLET 3
INLET 1
INLET 4
TEMPORARY SWALE
SUB-BASIN E1
Q= 4.54
1.53 AC.
STANDARD CURB & GUTTER
MANHOLE 18
MANHOLE 17
TRANSITION FROM STANDARD TO DEPRESSED
INLET 2
INLET 6
MANHOLE 16
SILVERY MINNOW
5080
5064
5066
5068
5065
62
MANHOLE 14
BASIN E2
BASIN E1
BASIN

G-11/D40

DRAINAGE STUDY

FOR

ST. PIUS HIGH SCHOOL CLASSROOM ADDITION

Albuquerque, New Mexico

6-11-99

DRAINAGE STUDY

FOR

ST. PIUS HIGH SCHOOL CLASSROOM ADDITION

Albuquerque, New Mexico

INTRODUCTION

This project is to add a classroom at St. Pius X High School. The property is owned by the Archdiocese of Santa Fe, and it is located northeast of the intersection at Coors Boulevard and St. Joseph's drive. Please see the enclosed zone atlas maps, F-11 and G-11.

Fred Aguirre and Amy Driscoll met May 27, 1999 to discuss this project. Please see the attached Conference Recap of that meeting.

EXISTING CONDITIONS

Bohannan-Huston prepared the Master Drainage Plan for Altura West and the Archdiocese of Santa Fe Properties Near St. Pius High School, dated October 21, 1997. In the Master Drainage Plan, this site is located within Basin 01. The Basin 01 is 8.77 acres, and the flows for developed conditions are 29.89 cfs. Please see the enclosed copy of the Bohannan-Huston plan sheet, "Altura West and Archdiocese of Santa Fe Existing Drainage Conditions" that shows Basin 01.

Currently the site has a dirt parking lot to the north and Assumption Hall to the south and west. It drains by surface flow to an inlet in the furthest east parking lot. This inlet drains to a pond sitting above the Oxbow Bluff Subdivision. Another pipe that receives drainage from the southern portion of Basin 01 also drains to this pond. Per the 1987 Drainage Plan for St. Pius High School by Chavez-Grieves, the pond is required to hold 4937 cf, however it actually holds 10,289 cf as shown by a 1999 Chavez-Grieves survey.

This pond drains to a stormwater manhole and storm sewer. The storm sewer follows along the northern and eastern edge of the Oxbow Bluff Subdivision and goes to the desilting basin and energy dissipater that discharges to the Rio Grande. Please see the Drainage Report for Oxbow Bluff Subdivision by Bohannan-Huston, dated November 26, 1997, and the enclosed Bohannan-Huston plan sheet, "Oxbow Bluff Subdivision Proposed Conditions Basin Map". The Oxbow Bluff Subdivision is designed to accept developed flows from the St. Pius property.

PROPOSED CONDITIONS

This project will add a classroom building which will create a courtyard. The area involved (Subbasin 01-A) is 0.72 acres. No flows are being directed to this area from other parts of the property. Please see the enclosed "Existing and Proposed Basin Map" that shows Basin 01 and Subbasin 01-A.

The proposed drainage improvements are 3 interconnected inlets within the courtyard that drain by a 12 inch PVC pipe to the existing pond that goes to the existing stormwater manhole. Please see the sizing of the 12 inch PVC pipe and the enclosed construction grading and drainage plans for the St. Pius Classroom Addition. The pond and stormwater manhole are already sized to receive developed flows from Basin 01 of the St. Pius property per the Drainage Report for Oxbow Bluff Subdivision. Basin 01 is 8.77 acres, and the flows for developed conditions are 29.89 cfs.

Based upon the developed flows from the Master Drainage Plan, this project site, which is 0.72 acres, should proportionally contribute 2.45 cfs. The Master Drainage Plan allows for 50% impervious area in Basin 01. However, this project site is 54% impervious. Please see the attached AHYMO run that shows this project site contributes 2.79 cfs for a 100 year storm and a 54% impervious area.. The 0.34 cfs difference between the Master Drainage Plan (based on 50% impervious area) and our AHMYO run (based on 54 % impervious area) is not significant because the rest of Basin 01 is not 50% impervious at this time. Thus, the existing pond and Oxbow Bluff Subdivision stormwater drain are sufficiently sized to accept the increase in flows from this project site.

CONCLUSION

The St. Pius Classroom Addition project will be adding inlets and a stromwater pipe that will drain to an existing pond. The existing pond and stormwater drainage system in Oxbow Bluff subdivision are sufficiently sized to accept additional flows from St. Pius as a result of this project.

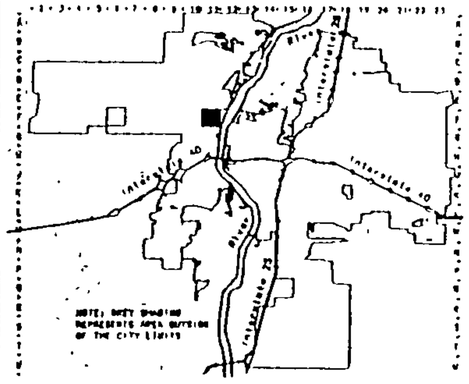
G:\vo5\115\document\drnrpt

ZONE ATLAS MAPS

F-11 AND G-11

GRAPHIC SCALE IN FEET

250 0 500 1000



Zone Atlas Page

F-11-Z

Map Amended through
February 27, 1998

CITY OF
Albuquerque

A Albuquerque G Geographic I Information S System
PLANNING DEPARTMENT

N
W E
S

GRAPHIC SCALE IN FEET

250 0 500 1000

CONFERENCE RECAP

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
DEVELOPMENT SERVICE / HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO. G11-D28 **DATE:** 5/27/99
PLANNING DIVISION NO'S: EPC: **ZONING:**SU-1 **DRB:**
SUBJECT: St Pius Classroom Addition
STREET ADDRESS (IF KNOWN):
SUBDIVISION NAME:

APPROVAL REQUESTED: Site Plan and Building Permit

ATTENDANCE: Fred J. Aguirre-City Hydrologist
Amy Driscoll

FINDINGS:
An updated drainage plan is required for the basin the proposed development is within. This plan will need to include the downstream capacity information prepared by Bohannan Huston for the Oxbow Bluff project. Include the pertinent information from the Bohannan's report that relates to the downstream system designed to accommodate the developed flows from the St Pius site. Include a Traffic circulation Layout (T.C.L.) with your submittal per the City Engineer's memo dated 4/15/99. Include in your submittal details of the pond and your recommendations for any upgrading if needed.

THE UNDERSIGNED AGREES THAT THE ABOVE FINDINGS ARE SUMMARIZED ACCURATELY AND ARE SUBJECT TO CHANGE IF FURTHER INVESTIGATION REVEALS THAT THEY ARE NOT REASONABLE OR THAT THEY ARE BASED ON INACCURATE INFORMATION.

SIGNED: Fred J. Aguirre
TITLE : City Hydrologist

SIGNED:
TITLE :

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH YOUR DRAINAGE SUBMITTAL.

ALTURA WEST

AND

ARCHDIOCESE OF SANTA FE

EXISTING DRAINAGE CONDITIONS

OXBOW BLUFF SUBDIVISION

PROPOSED CONDITIONS
BASIN MAP

EXISTING AND PROPOSED BASIN MAP

SIZING OF 12" PIPE

After Last Inlet
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\project2.fm2
Worksheet	St. Pius Classroom Addition
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Full Flow Diameter

Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.008800	ft/ft
Discharge	2.79	cfs

Results		
Depth	11.2	in
Diameter	11.21	in
Flow Area	0.69	ft²
Wetted Perimeter	2.94	ft
Top Width	0.00	ft
Critical Depth	0.73	ft
Percent Full	100.00	
Critical Slope	0.009747	ft/ft
Velocity	4.07	ft/s
Velocity Head	0.26	ft
Specific Energy	FULL	ft
Froude Number	FULL	
Maximum Discharge	3.00	cfs
Full Flow Capacity	2.79	cfs
Full Flow Slope	0.008800	ft/ft

→ USE 12"

ST. PIUS
CLASSROOM ADDITION

GRADING AND DRAINAGE PLANS

AHYMO RUN

AHYMO 100-YEAR INPUT

```
*S**************************************************************************
*S**************    CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.
**************
*S**************              ST. PIUS CLASSROOM ADDITION          **************
*S**************************************************************************
*S*  FILENAME:  G:\V05\115\CALCS\AHYMOIN
*S**************************************************************************
*S******* 100 YEAR, 6 HOUR STORM (Section 22.2 Hydrology)
START               0.00
RAINFALL            TYPE=1 RAIN QUARTER=0.0 RAIN ONE=2.14
                    RAIN SIX=2.60  RAIN DAY=3.10 DT=0.03333
*S**************************************************************************
*S************************DEVELOPED CONDITIONS*******************************
*S**************************************************************************
COMPUTE NM HYD      ID=1 HYD=BASINA DA=0.001119 SQ MI
                    %A= 00.00 %B= 46 %C= 7.50 %D= 54
                    TP=0.1333  RAINFALL=-1
PRINT HYD           ID=1 CODE=1
FINISH
```

AHYMO SUMMARY OUTPUT

```
AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -                        - VERSION:  1997.02c      RUN DATE (MON/DAY/YR) =06/10/1999
INPUT FILE = G:\V05\115\CALCS\AHYMOIN.TXT                                                 USER NO.= AHYMO-I3Chavez-Grieves-C

                                FROM  TO                    PEAK        RUNOFF                    TIME TO    CFS       PAGE =   1
                     HYDROGRAPH   ID   ID        AREA      DISCHARGE    VOLUME      RUNOFF         PEAK     PER
COMMAND       IDENTIFICATION     NO.  NO.      (SQ MI)      (CFS)      (AC-FT)    (INCHES)      (HOURS)   ACRE      NOTATION

*S**************************************************************************
*S**************    CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.
*S**************              ST. PIUS CLASSROOM ADDITION          **************
*S**************************************************************************
*S*  FILENAME:  G:\V05\115\CALCS\AHYMOIN
*S**************************************************************************
*S******* 100 YEAR, 6 HOUR STORM (Section 22.2 Hydrology)
START                                                                                                    TIME=       .00
RAINFALL  TYPE= 1                                                                                        RAIN6=    2.600
*S**************************************************************************
*S*************************DEVELOPED CONDITIONS*****************************
*S**************************************************************************
COMPUTE NM HYD       BASINA   -     1        .00112        2.79        .099      1.66357    1.500    3.894 PER IMP=  50.23
FINISH
```

AHYMO 100 YR DETAILED OUTPUT

```
   AHYMO PROGRAM (AHYMO_97) -                              - Version:  1997.02c
        RUN DATE (MON/DAY/YR) = 06/10/1999
        START TIME (HR:MIN:SEC) = 11:09:30     USER NO.= AHYMO-I3Chavez-Grieves-C
        INPUT FILE = G:\V05\115\CALCS\AHYMOIN.TXT

*S**************************************************************************
*S**************    CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.
**************
*S**************              ST. PIUS CLASSROOM ADDITION          **************
*S**************************************************************************
*S*  FILENAME:  G:\V05\115\CALCS\AHYMOIN
*S**************************************************************************
*S******* 100 YEAR, 6 HOUR STORM (Section 22.2 Hydrology)
START               0.00
RAINFALL            TYPE=1 RAIN QUARTER=0.0 RAIN ONE=2.14
                    RAIN SIX=2.60  RAIN DAY=3.10 DT=0.03333

                COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
                DT =    .033330 HOURS       END TIME =     5.999400 HOURS
                   .0000   .0027   .0055   .0084   .0113   .0143   .0173
                   .0204   .0236   .0269   .0302   .0337   .0372   .0408
                   .0445   .0484   .0523   .0564   .0606   .0649   .0694
                   .0741   .0789   .0839   .0892   .0946   .1003   .1063
                   .1126   .1192   .1262   .1322   .1385   .1452   .1597
                   .1922   .2422   .3139   .4119   .5407   .7049   .9093
                  1.1588  1.3904  1.4871  1.5687  1.6414  1.7074  1.7683
                  1.8247  1.8775  1.9270  1.9735  2.0174  2.0589  2.0982
                  2.1354  2.1707  2.2041  2.2359  2.2661  2.2737  2.2807
                  2.2875  2.2939  2.3001  2.3060  2.3117  2.3172  2.3226
                  2.3277  2.3328  2.3376  2.3423  2.3470  2.3514  2.3558
                  2.3601  2.3643  2.3683  2.3723  2.3762  2.3801  2.3838
                  2.3875  2.3911  2.3947  2.3982  2.4016  2.4050  2.4083
                  2.4115  2.4147  2.4179  2.4210  2.4241  2.4271  2.4301
                  2.4330  2.4359  2.4388  2.4416  2.4444  2.4472  2.4499
                  2.4526  2.4553  2.4579  2.4605  2.4631  2.4656  2.4681
                  2.4706  2.4731  2.4755  2.4779  2.4803  2.4827  2.4850
                  2.4873  2.4896  2.4919  2.4942  2.4964  2.4986  2.5008
                  2.5030  2.5052  2.5073  2.5094  2.5115  2.5136  2.5157
                  2.5177  2.5198  2.5218  2.5238  2.5258  2.5277  2.5297
                  2.5317  2.5336  2.5355  2.5374  2.5393  2.5412  2.5430
                  2.5449  2.5467  2.5486  2.5504  2.5522  2.5540  2.5557
                  2.5575  2.5593  2.5610  2.5627  2.5645  2.5662  2.5679
                  2.5696  2.5713  2.5729  2.5746  2.5762  2.5779  2.5795
                  2.5811  2.5828  2.5844  2.5860  2.5876  2.5891  2.5907
                  2.5923  2.5938  2.5954  2.5969  2.5984  2.6000

*S**************************************************************************
*S*************************DEVELOPED CONDITIONS*********************************
*S**************************************************************************
COMPUTE NM HYD      ID=1 HYD=BASINA DA=0.001119 SQ MI
                    %A= 00.00 %B= 46 %C= 7.50 %D= 54
                    TP=0.1333  RAINFALL=-1
      *****WARNING*****  SUM OF TREATMENT TYPES DOES NOT EQUAL 100 PERCENT OR TOTAL AREA


      K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE CONSTANT, N =  7.106420
      UNIT PEAK =   2.2192    CFS   UNIT VOLUME =    .9941       B =   526.28      P60 = 2.1400
      AREA =      .000562 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .033330


      K =   .130187HR    TP =   .133300HR    K/TP RATIO =   .976648     SHAPE CONSTANT, N =  3.616133
      UNIT PEAK =   1.3733    CFS   UNIT VOLUME =    .9905       B =   328.71      P60 = 2.1400
      AREA =      .000557 SQ MI    IA =    .47897 INCHES    INF =   1.19112 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .033330

PRINT HYD           ID=1 CODE=1

                                HYDROGRAPH FROM AREA BASINA
```

```
    RUNOFF VOLUME =     1.66357 INCHES     =        .0993 ACRE-FEET
    PEAK DISCHARGE RATE =       2.79 CFS  AT   1.500 HOURS   BASIN AREA =   .0011 SQ. MI.


FINISH

    NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 11:09:30
```

DRAINAGE INFORMATION SHEET

PROJECT TITLE St. Pius H.S. Football Field Bleachers ZONE ATLAS/DRWG. FILE #: G 11\D40

DRB#: _____ EPC #_____ WORK ORDER #_____

LEGAL DESCRIPTION:Lands of University of Albuquerque

CITY ADDRESS: 5301 St. Joseph Drive NW, Albuquerque, NM

ENGINEERING FIRM: BPLW CONTACT: Guy Jackson

ADDRESS: 6200 Uptown Blvd. NE, Suite 400 PHONE: 881-2759

OWNER: St. Pius H.S. CONTACT: _____
ADDRESS: 5301 St. Joseph Drive NW, Albuquerque, NM PHONE: _____

ARCHITECT: BPLW CONTACT: DAVE ELLIN

ADDRESS: 6200 Uptown Blvd. NE, Suite 400 PHONE: 881-2759

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: ___

CONTRACTOR: --- CONTACT: _____

ADDRESS: --- PHONE: _____

TYPE OF SUBMITTAL:

__ DRAINAGE REPORT
_x_DRAINAGE PLAN
__ CONCEPTUAL GRADING & DRAINAGE PLAN
__ GRADING PLAN
__ EROSION CONTROL PLAN
__ENGINEER'S CERTIFICATION
OTHER _____

PRE-DESIGN MEETING:
__ YES
_X_ NO
__ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

_ SKETCH PLAT APPROVAL
_ 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
_X_ BUILDING PERMIT APPROVAL
_ CERTIFICATE OF OCCUPANCY APPROVAL
_ GRADING PERMIT APPROVALS
_ PAVING PERMIT APPROVAL
_ S.A.B. DRAINAGE REPORT
_ DRAINAGE REQUIREMENTS
OTHER _____ (SPECIFY)

DATE SUBMITTED: AUGUST248, 1998
BY: GUY JACKSON

BPLW

Architects & Engineers, Inc.

6200 Uptown Blvd. NE
Suite 400
Albuquerque, New Mexico 87110
(505) 881-BPLW (2759)
FAX (505) 881-1230
e-mail: bplwnm@bplw.com
web page: http://www.bplw.com

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Jason M. Weaver, PE

August 24,1998

Bernie Montoya, CE
Hydrology Department
COA - Public Works
PO Box 1293
Albuquerque, New Mexico 87103

Re: Revised Drainage Plan for St. Pius H.S.
BPLW Project Number A97059

Dear Bernie:

Per our discussion, I am submitting the attached items for your review.

One (1) Drainage Information Sheet

Two (2) sets of revised Drainage Plan

Two (2) sets of calcs with project descriptions

The site is located at 5301St. Joseph Drive NW. As shown in the accompanying calcs and description of work, bleachers and accompanying concrete sidewalk are proposed to be built adjacent to the existing football field. I have also included a copy of the construction plans of the bleachers for your use.

Please contact me if you have any questions or comments.

Sincerely,

BPLW ARCHITECTS & ENGINEERS, INC.

Guy Jackson, PE
Director of Civil Engineering

Attachments:

xc: Charlie Otero, BPLW

DRAINAGE PLAN
ST. PIUS X HIGH SCHOOL
UPDATE OF DRAINAGE BASIN I

LOCATION:

The site is located on the northeast corner of the intersection of Coors Road NW and St. Joseph's Drive NW. The site contains approximately 57.9369 acres. The site is currently developed and slopes to the northwest corner of the site for Basin I (40.9 acres) and the east for Basin II (17.0 acres). Runoff from Basin I is collected and detained in an existing pond at the northeast corner of the property. Runoff from Basin II collects in an existing pond at the east property line that discharges to the downstream property to the east.

PURPOSE:

The purpose of the report is to update the hydrology in Basin I (shown on previous drainage plan sheet C1.5 from Chavez-Grieves, modified by Larry Read) due to changes in the basin since the August 13, 1993, Grading and Drainage Plan was completed. These changes are discussed below. This study is based on the same survey used to prepare the April 7, 1987, Grading and Drainage Plan and was updated only by visual inspection of the current conditions in Basin I.

CHANGED CONDITIONS SINCE AUGUST 13, 1993, GRADING AND DRAINAGE PLAN:

Original:
The drainage basins as shown on the August 1993, Grading and Drainage Plan remain unchanged. The facilities proposed in the April 1987, Grading and Drainage Plan, including a new Athletic Building (28,000 sq. ft.), a running track and football field, and paved parking lot, have been constructed in Basin I. The pond and 36" diameter outfall proposed in Basin I by that Grading and Drainage Plan have been constructed.

First Revision:
In August 1993, the installation of a new temporary building (1,680 sq. ft.) and two sidewalks to the building (804 sq. ft.) south of Lourdes Hall was completed. This building is supported on six three foot square footings that elevates the steel runners about two inches above ground. The building did not alter existing drainage patterns.

This Revision:
In August 1998, new bleachers with accompanying sidewalk are proposed. The sidewalk and bleachers will convert 6811 square feet of landscaping area into impervious treatments.

CALCULATION FROM OLD DPM SECTION 22.2:

Area = 40.9 acres

I = 2.2 in./hr. Plate 22.2 D-2

6 hour 100 year rainfall = 2.2 in. Plate 22.2 D-1

i = (2.2) (2.2) = 4.84 in./hr. tc = 10 min.

BASIN I

ORIGINAL:
EXISTING ON-SITE CONDITIONS (April, 1987):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.36	8.89	
Roofs	0.90	1.98	1.78	
Lawns, Landscaping	0.25	24.19	6.05	
Undeveloped	0.40	5.37	2.15	
		40.9	18.87	0.46

Q_{100} = (0.46)(4.84)(40.9) = 91.06 cfs

Q_{10} = (91.06 cfs)(0.657) = 59.83 cfs

CN = Previously 55 Plate 22.2 C-2 28% Impervious
CN_{comp} = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in. Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,560)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,238 cu. ft.

FIRST REVISION:
EXISTING ON-SITE CONDITIONS (August 1993):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.38	8.91	
Roofs	0.90	2.02	1.82	
Lawns, Landscaping	0.25	24.17	6.04	
Undeveloped	0.40	5.33	2.13	
		40.9	18.90	0.46

Q_{100} = (0.46)(4.84)(40.9) = 91.06 cfs

Q_{10} = (91.06)(0.657) = 59.83 cfs

CN Pervious 55 Plate 22.2 C-2 28% Impervious
CN comp = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,560)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,328 cu. ft.

THIS REVISION:
PROPOSED ON-SITE CONDITIONS (August 1998):

Surface Type	"C" Value	A (acres)	"C" x A'	Composite C' = "C" + A/A
Streets, Drives, Walks	0.95	9.54	9.06	
Roofs	0.90	2.02	1.82	
Lawns, Landscaping	0.25	24.01	6.00	
Undeveloped	0.40	5.33	2.13	
		40.9	19.01	0.465

Q_{100} = (0.465)(4.84)(40.9) = 92.01 cfs

Q_{10} = (92.01)(0.657) = 60.45 cfs

CN Pervious 55 Plate 22.2 C-2 28% Impervious
CN comp = 67 Plate 22.2 C-3

Direct Runoff = 0.31 in Plate 22.2 C-4

V_{100} = (0.31)(40.9)(43,546)/12 = 46,025 cu. ft.

V_{10} = (46,025)(0.657) = 30,328 cu. ft.

This shows less than 1 cfs increase in peak discharge from Basin I in the detention pond.

CALCULATIONS FOR NEW DPM SECTION 22.2:

AFTER FIRST REVISION:
EXISTING ON-SITE CONDITIONS (August 1993):

From Table A-11 (Rational Method Coefficient, C)

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.27	5.33	1.44
Lawn/Landscaping	B	0.43	24.17	10.39
Roof/Paving	D	0.93	11.40	10.60
				22.43

Peak intensity for Zone 1 = 4.70 in./hr.

Q_{peak} = i(sum C x A) = 4.70 (22.43) = 105.4 cfs (This is a 14 cfs increase due to change in design criteria and methods.)

From Table A-8 Excess Precipitation, E (inches) 6 hour storm

V = Sum E x A (43560/12)

Zone 1

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.44	5.33	2.35
Lawn/Landscaping	B	0.67	24.17	16.19
Roof/Paving	C	1.97	11.40	22.46
				41.00

V = Sum E x A (43560/12) = 148,820 cf

CALCULATIONS FOR NEW DPM SECTION 22.2:

SECOND REVISION:
PROPOSED ON-SITE CONDITIONS (August 1998):

From Table A-11 (Rational Method Coefficient, C

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.27	5.33	1.44
Lawn/Landscaping	B	0.43	24.01	10.32
Roof/Paving	D	0.93	11.56	11.75
				22.52

Peak intensity for Zone 1 = 4.70 in./hr.

Q_{peak} = i (sum C x A) = 4.70 (22.52) = 105.8 cfs (Only 0.4 cfs increase due to site changes.)

From Table A-8 Excess Precipitation, E (inches) 6 hour storm

V = Sum E x A (43560/12)

Zone 1

Surface Type	Treatment	"C"	A (Acres)	"C" X A
Undeveloped	A	0.44	5.33	2.35
Lawn/Landscaping	B	0.67	24.01	16.09
Roof/Paving	C	1.97	11.56	22.77
				41.21

V = Sum E x A (43560/12) = 149,590 cfs (An increase of 770 cu. ft.)

As shown in the calculations on the preceding pages, the existing ponding volume and the currently required volume (under 1993 Revision to DPM Section 22.2) are significantly different. The existing pond volume constructed = 210,400 cu. ft. at elevation 5105.0. The existing pond discharges storm drain water into the Ladera storm drain system on Coors Boulevard. The existing pond discharge pipe has a check valve to prevent water from the Ladera storm drain from flowing back into the detention pond on St. Pius property.

The new criteria for ponding volume yields a required proposed volume of 149,590 cu. ft. which is an increase of 770 cu. ft. over the existing conditions. The pond has storage capacity for the site even under the new (Post 1993) storm drain design criteria. The system will again be revised/updated by a project for Coors Boulevard currently being designed by Chavez-Grieves. The extent on the storm drain redesign will be reviewed after the funding for repaving and parking improvements are finalized.

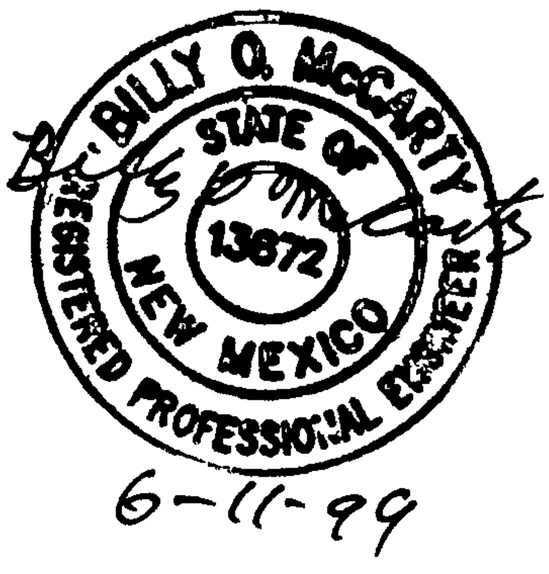
The proposed changes to the site will have a minimal effect on the existing site drainage patterns and will cause minimal changes to erosion problems. The increase described above is less than 1% increase in flowrate and in required ponding volume. The existing pond will contain all runoff from current and proposed development in Basin I.

DRAINAGE STUDY

FOR

ST. PIUS HIGH SCHOOL CLASSROOM ADDITION

Albuquerque, New Mexico



DRAINAGE STUDY

FOR

ST. PIUS HIGH SCHOOL CLASSROOM ADDITION

Albuquerque, New Mexico

INTRODUCTION

This project is to add a classroom at St. Pius X High School. The property is owned by the Archdiocese of Santa Fe, and it is located northeast of the intersection at Coors Boulevard and St. Joseph's drive. Please see the enclosed zone atlas maps, F-11 and G-11.

Fred Aguirre and Amy Driscoll met May 27, 1999 to discuss this project. Please see the attached Conference Recap of that meeting.

EXISTING CONDITIONS

Bohannan-Huston prepared the Master Drainage Plan for Altura West and the Archdiocese of Santa Fe Properties Near St. Pius High School, dated October 21, 1997. In the Master Drainage Plan, this site is located within Basin 01. The Basin 01 is 8.77 acres, and the flows for developed conditions are 29.89 cfs. Please see the enclosed copy of the Bohannan-Huston plan sheet, "Altura West and Archdiocese of Santa Fe Existing Drainage Conditions" that shows Basin 01.

Currently the site has a dirt parking lot to the north and Assumption Hall to the south and west. It drains by surface flow ~~to an inlet in the~~ furthest east parking lot. This inlet drains to a pond sitting above ~~the~~ Oxbow Bluff Subdivision. Another pipe that receives drainage from the southern portion of Basin 01 also drains to this pond. Per the 1987 Drainage Plan for St. Pius High School by Chavez-Grieves, the pond is required to hold 4937 cf, however it actually holds 10,289 cf as shown by a 1999 Chavez-Grieves survey.

This pond drains to a stormwater manhole and storm sewer. The storm sewer follows along the northern and eastern edge of the Oxbow Bluff Subdivision and goes to the desilting basin and energy dissipater that discharges to the Rio Grande. Please see the Drainage Report for Oxbow Bluff Subdivision by Bohannan-Huston, dated November 26, 1997, and the enclosed Bohannan-Huston plan sheet, "Oxbow Bluff Subdivision Proposed Conditions Basin Map". The Oxbow Bluff Subdivision is designed to accept developed flows from the St. Pius property.

PROPOSED CONDITIONS

This project will add a classroom building which will create a courtyard. The area involved (Subbasin 01-A) is 0.72 acres. No flows are being directed to this area from other parts of the property. Please see the enclosed "Existing and Proposed Basin Map" that shows Basin 01 and Subbasin 01-A.

The proposed drainage improvements are 3 interconnected inlets within the courtyard that drain by a 12 inch PVC pipe to the existing pond that goes to the existing stormwater manhole. Please see the sizing of the 12 inch PVC pipe and the enclosed construction grading and drainage plans for the St. Pius Classroom Addition. The pond and stormwater manhole are already sized to receive developed flows from Basin 01 of the St. Pius property per the Drainage Report for Oxbow Bluff Subdivision. Basin 01 is 8.77 acres, and the flows for developed conditions are 29.89 cfs.

Based upon the developed flows from the Master Drainage Plan, this project site, which is 0.72 acres, should proportionally contribute 2.45 cfs. The Master Drainage Plan allows for 50% impervious area in Basin 01. However, this project site is 54% impervious. Please see the attached AHYMO run that shows this project site contributes 2.79 cfs for a 100 year storm and a 54% impervious area.. The 0.34 cfs difference between the Master Drainage Plan (based on 50% impervious area) and our AHMYO run (based on 54 % impervious area) is not significant because the rest of Basin 01 is not 50% impervious at this time. Thus, the existing pond and Oxbow Bluff Subdivision stormwater drain are sufficiently sized to accept the increase in flows from this project site.

AHYMO for Basin 01 exist & prop?

CONCLUSION

The St. Pius Classroom Addition project will be adding inlets and a stromwater pipe that will drain to an existing pond. The existing pond and stormwater drainage system in Oxbow Bluff subdivision are sufficiently sized to accept additional flows from St. Pius as a result of this project.

G:\vo5\115\document\drnrpt

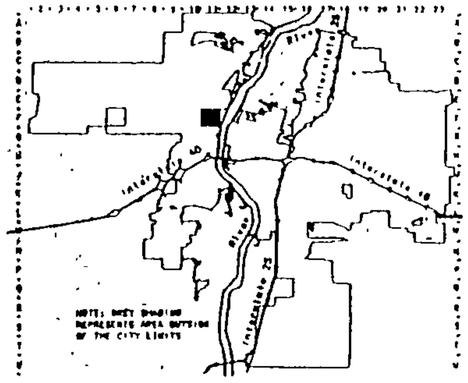
ZONE ATLAS MAPS

F-11 AND G-11

ST. PIUS X HIGH SCHOOL
CLASSROOM ADDITION

GRAPHIC SCALE IN FEET

250 0 500 1000



Zone Atlas Page

F-11-Z

Map Amended through
February 27, 1998

CITY OF
Albuquerque

A Albuquerque G Geographic I Information S System
PLANNING DEPARTMENT

N
W E
S

GRAPHIC SCALE IN FEET

250 0 500 1000

CONFERENCE RECAP

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
DEVELOPMENT SERVICE / HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO. G11-D28 **DATE:** 5/27/99
PLANNING DIVISION NO'S: EPC: **ZONING:**SU-1 **DRB:**
SUBJECT: St Pius Classroom Addition
STREET ADDRESS (IF KNOWN):
SUBDIVISION NAME:

APPROVAL REQUESTED: Site Plan and Building Permit

ATTENDANCE: Fred J. Aguirre-City Hydrologist
Amy Driscoll

FINDINGS:
An updated drainage plan is required for the basin the proposed development is within. This plan will need to include the downstream capacity information prepared by Bohannan Huston for the Oxbow Bluff project. Include the pertinent information from the Bohannan's report that relates to the downstream system designed to accommodate the developed flows from the St Pius site. Include a Traffic circulation Layout (T.C.L.) with your submittal per the City Engineer's memo dated 4/15/99. Include in your submittal details of the pond and your recommendations for any upgrading if needed.

THE UNDERSIGNED AGREES THAT THE ABOVE FINDINGS ARE SUMMARIZED ACCURATELY AND ARE SUBJECT TO CHANGE IF FURTHER INVESTIGATION REVEALS THAT THEY ARE NOT REASONABLE OR THAT THEY ARE BASED ON INACCURATE INFORMATION.

SIGNED: Fred J. Aguirre
TITLE : City Hydrologist

SIGNED:
TITLE :

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH YOUR DRAINAGE SUBMITTAL.

ALTURA WEST

AND

ARCHDIOCESE OF SANTA FE

EXISTING DRAINAGE CONDITIONS

OXBOW BLUFF SUBDIVISION

PROPOSED CONDITIONS
BASIN MAP

EXISTING AND PROPOSED BASIN MAP

SIZING OF 12" PIPE

After Last Inlet
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\project2.fm2
Worksheet	St. Pius Classroom Addition
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Full Flow Diameter

Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.008800	ft/ft
Discharge	2.79	cfs

Results		
Depth	11.2	in
Diameter	11.21	in
Flow Area	0.69	ft²
Wetted Perimeter	2.94	ft
Top Width	0.00	ft
Critical Depth	0.73	ft
Percent Full	100.00	
Critical Slope	0.009747	ft/ft
Velocity	4.07	ft/s
Velocity Head	0.26	ft
Specific Energy	FULL	ft
Froude Number	FULL	
Maximum Discharge	3.00	cfs
Full Flow Capacity	2.79	cfs
Full Flow Slope	0.008800	ft/ft

→ USE 12"

ST. PIUS
CLASSROOM ADDITION

GRADING AND DRAINAGE PLANS

AHYMO RUN

AHYMO 100-YEAR INPUT

```
*S**************************************************************************
*S**************    CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.
**************
*S**************              ST. PIUS CLASSROOM ADDITION          **************
*S**************************************************************************
*S*  FILENAME:  G:\V05\115\CALCS\AHYMOIN
*S**************************************************************************
*S******* 100 YEAR, 6 HOUR STORM (Section 22.2 Hydrology)
START               0.00
RAINFALL            TYPE=1 RAIN QUARTER=0.0 RAIN ONE=2.14
                    RAIN SIX=2.60  RAIN DAY=3.10 DT=0.03333
*S**************************************************************************
*S*************************DEVELOPED CONDITIONS*****************************
*S**************************************************************************
COMPUTE NM HYD      ID=1 HYD=BASINA DA=0.001119 SQ MI
                    %A= 00.00 %B= 46 %C= 7.50 %D= 54
                    TP=0.1333  RAINFALL=-1
PRINT HYD           ID=1 CODE=1
FINISH
```

AHYMO SUMMARY OUTPUT

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02c RUN DATE (MON/DAY/YR) =06/10/1999
INPUT FILE = G:\V05\115\CALCS\AHYMOIN.TXT USER NO.= AHYMO-I3Chavez-Grieves-C

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 = 1 NOTATION
*S**********										
*S**********	CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.									
*S**********	ST. PIUS CLASSROOM ADDITION **********									
*S**********										
S FILENAME: G:\V05\115\CALCS\AHYMOIN										
*S**********										
*S******* 100 YEAR, 6 HOUR STORM (Section 22.2 Hydrology)										
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.600
*S**********										
*S**********DEVELOPED CONDITIONS**********										
*S**********										
COMPUTE NM HYD	BASINA	-	1	.00112	2.79	.099	1.66357	1.500	3.894	PER IMP= 50.23
FINISH										

AHYMO 100 YR DETAILED OUTPUT

```
   AHYMO PROGRAM (AHYMO_97) -                                - Version:  1997.02c
        RUN DATE (MON/DAY/YR) = 06/10/1999
        START TIME (HR:MIN:SEC) = 11:09:30     USER NO.= AHYMO-I3Chavez-Grieves-C
        INPUT FILE = G:\V05\115\CALCS\AHYMOIN.TXT

*S**************************************************************************
*S**************    CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.
**************
*S**************             ST. PIUS CLASSROOM ADDITION          **************
*S**************************************************************************
*S*  FILENAME:  G:\V05\115\CALCS\AHYMOIN
*S**************************************************************************
*S******* 100 YEAR, 6 HOUR STORM (Section 22.2 Hydrology)
START                0.00
RAINFALL             TYPE=1 RAIN QUARTER=0.0 RAIN ONE=2.14
                     RAIN SIX=2.60  RAIN DAY=3.10 DT=0.03333

                COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
                DT =     .033330 HOURS        END TIME =     5.999400 HOURS
                   .0000   .0027   .0055   .0084   .0113   .0143   .0173
                   .0204   .0236   .0269   .0302   .0337   .0372   .0408
                   .0445   .0484   .0523   .0564   .0606   .0649   .0694
                   .0741   .0789   .0839   .0892   .0946   .1003   .1063
                   .1126   .1192   .1262   .1322   .1385   .1452   .1597
                   .1922   .2422   .3139   .4119   .5407   .7049   .9093
                  1.1588  1.3904  1.4871  1.5687  1.6414  1.7074  1.7683
                  1.8247  1.8775  1.9270  1.9735  2.0174  2.0589  2.0982
                  2.1354  2.1707  2.2041  2.2359  2.2661  2.2737  2.2807
                  2.2875  2.2939  2.3001  2.3060  2.3117  2.3172  2.3226
                  2.3277  2.3328  2.3376  2.3423  2.3470  2.3514  2.3558
                  2.3601  2.3643  2.3683  2.3723  2.3762  2.3801  2.3838
                  2.3875  2.3911  2.3947  2.3982  2.4016  2.4050  2.4083
                  2.4115  2.4147  2.4179  2.4210  2.4241  2.4271  2.4301
                  2.4330  2.4359  2.4388  2.4416  2.4444  2.4472  2.4499
                  2.4526  2.4553  2.4579  2.4605  2.4631  2.4656  2.4681
                  2.4706  2.4731  2.4755  2.4779  2.4803  2.4827  2.4850
                  2.4873  2.4896  2.4919  2.4942  2.4964  2.4986  2.5008
                  2.5030  2.5052  2.5073  2.5094  2.5115  2.5136  2.5157
                  2.5177  2.5198  2.5218  2.5238  2.5258  2.5277  2.5297
                  2.5317  2.5336  2.5355  2.5374  2.5393  2.5412  2.5430
                  2.5449  2.5467  2.5486  2.5504  2.5522  2.5540  2.5557
                  2.5575  2.5593  2.5610  2.5627  2.5645  2.5662  2.5679
                  2.5696  2.5713  2.5729  2.5746  2.5762  2.5779  2.5795
                  2.5811  2.5828  2.5844  2.5860  2.5876  2.5891  2.5907
                  2.5923  2.5938  2.5954  2.5969  2.5984  2.6000

*S**************************************************************************
*S************************DEVELOPED CONDITIONS*******************************
*S**************************************************************************
COMPUTE NM HYD       ID=1 HYD=BASINA DA=0.001119 SQ MI
                     %A= 00.00 %B= 46 %C= 7.50 %D= 54
                     TP=0.1333  RAINFALL=-1
      *****WARNING*****  SUM OF TREATMENT TYPES DOES NOT EQUAL 100 PERCENT OR TOTAL AREA


      K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE CONSTANT, N =  7.106420
      UNIT PEAK =   2.2192    CFS   UNIT VOLUME =    .9941       B =   526.28      P60 = 2.1400
      AREA =      .000562 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .033330


      K =   .130187HR    TP =   .133300HR    K/TP RATIO =   .976648     SHAPE CONSTANT, N =  3.616133
      UNIT PEAK =   1.3733    CFS   UNIT VOLUME =    .9905       B =   328.71      P60 = 2.1400
      AREA =      .000557 SQ MI    IA =    .47897 INCHES    INF =   1.19112 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .033330

PRINT HYD            ID=1 CODE=1

                                        HYDROGRAPH FROM AREA BASINA
```

```
    RUNOFF VOLUME =     1.66357 INCHES      =         .0993 ACRE-FEET
    PEAK DISCHARGE RATE =       2.79 CFS  AT    1.500 HOURS   BASIN AREA =    .0011 SQ. MI.


FINISH

    NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 11:09:30
```

City of Albuquerque

September 10, 1999

Billy O. McCarty, P.E.
Chavez-Grieves
5639 Jefferson NE
Albuquerque, New Mexico

RE: Grading and Drainage Plan for St. Pius High School Classroom Addition (G11/D40)
Submitted for Site Development Plan for Building Permit Approval and Building Permit Approval, Engineer's Stamp Dated 8/16/99.

Dear Mr. McCarty:

Based on the information provided in the submittal of August 17, 1999, the above referenced plan is approved for Site Development plan for Building Permit approval by the DRB.

The plan dated August 16, 1999 is also approved for Building Permit release since this is a minor addition to the existing drainage basin. Prior to any future improvement to this site, however, a complete analysis of the existing pond will be required.

Please be aware that if City Transportation provides comments regarding the traffic circulation layout (TCL), this may result in changes to the Site Plan. If significant changes occur to the site plan due to the TCL, then the grading plan must be updated to match.

The Engineer's Certification must be provided prior to release of the Certificate of Occupancy for this classroom addition.

If you have any questions, please call me at 924-3982.

Sincerely,

Susan M. Calongne, P.E.
City/County Floodplain Administrator

c: Tom Schellenbach, Archdiocese of Santa Fe
File

Printed August 17, 1999 (1:08PM)

CHAVEZ - GRIEVES / CONSULTING ENGINEERS, Inc.

5639 Jefferson Street NE, Albuquerque, New Mexico 87109 *Phone (505) 344-4080 - Fax (505) 343-8759*

FACSIMILE TRANSMITTAL LETTER

TO: Susan Calongne, City of Albuquerque

FAX: 924-3982

FROM: Amy Driscoll

DATE: August 17, 1999

PROJECT: St. Pius Classroom Addition

NUMBER: V05-115-5199

RE: Drainage Info Sheet

NUMBER OF PAGES TRANSMITTED: 2
(INCLUDING THIS COVER PAGE)

COMMENTS:

Attached is the drainage information sheet that goes with the submittal for the St. Pius Classroom Addition that was delivered earlier today.

SENT [ ]
G:\v05\115\pm\fax1

PMM 6.D.

DRAINAGE INFORMATION

PROJECT TITLE: St. Pius Classroom Addition ZONE ATLAS/DRNG. FILE #: K-11 & G-11/D040

DRB#: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Tract A-1 Archdiocese of Santa Fe

CITY ADDRESS: 5301 St. Joseph Dr. NW

ENGINEERING FIRM: Chavez-Grieves CONTACT: Amy Driscoll

ADDRESS: 5639 Jefferson NE PHONE: 344-4080

OWNER: Archdiocese of Santa Fe CONTACT: Tom Schellenbach

ADDRESS: 5301 St. Joseph Drive NW PHONE: 944-8100

ARCHITECT: Claudio Vigil Architects CONTACT: Art Blessen

ADDRESS: 1305 Tijeras NW PHONE: 842-1113

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

__X__ DRAINAGE REPORT
____ DRAINAGE PLAN
____ CONCEPTUAL GRADING & DRAINAGE PLAN
____ GRADING PLAN
____ EROSION CONTROL PLAN
____ ENGINEER'S CERTIFICATION
____ MASTER DRAINAGE STUDY

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL
____ PRELIMINARY PLAT APPROVAL
____ S. DEV. PLAN FOR SUB'D. APPROVAL
__X__ S. DEV. PLAN FOR BLDG. PRMT. APPROVAL
____ SECTOR PLAN APPROVAL
____ FINAL PLAT APPROVAL
____ FOUNDATION PERMIT APPROVAL
__X__ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY APPROVAL
____ GRADING PERMIT APPROVAL
____ PAVING PERMIT APPROVAL
____ S.A.D. DRAINAGE REPORT
____ DRAINAGE REQUIREMENTS
____ OTHER

PRE-DESIGN MEETING:

__X__ YES
____ NO
____ COPY PROVIDED

RECEIVED
AUG 17 1999
HYDROLOGY SECTION

DATE SUBMITTED: August 17, 1999

BY: Amy Driscoll

RECEIVED
AUG 17 1999
HYDROLOGY SECTION

THE ENGINEERING FIRM OF CHOICE

CHAVEZ · GRIEVES
CONSULTING ENGINEERS, INC.

5639 JEFFERSON STREET NE • SUITE 1 • ALBUQUERQUE, NEW MEXICO 87109 • PHONE (505) 344-4080 • FAX (505) 343-8759

August 16, 1999

Ms. Susan Calongne
City/County Floodplain Administrator
City of Albuquerque
PO Box 1293
Albuquerque, New Mexico 87103

RE: Drainage Report and Grading and Drainage Plan for St. Pius High School Classroom Addition (G11/D40) Engineer's Stamp Dated 6/11/99

Dear Ms. Calongne:

The following are responses to your comments of July 15, 1999:

1. The existing pond has been identified on the enclosed sheets, "Existing and Proposed Basin Map" and "Sheet C2, Grading and Drainage". This is an existing private pond on the Archdiocese's property. It is not a part of the Oxbow Bluff Subdivision.

   The storm drain is already shown on the "Existing and Proposed Basin Map" and "Sheet C2, Grading and Drainage". Labels have been added to these sheets.

   The private pond and storm drain are located on the Archdiocese's property so drainage easements are not required for them.

2. Drainage Basin 01 was used to size the pond. This basin is shown on "Altura West and Archdiocese of Santa Fe Existing Drainage Conditions", "Oxbow Bluff Subdivision - Tract F Proposed Conditions Basin Map", and "Existing and Proposed Basin Map".

   Basin 01 is the only basin contributing to the pond.

   The design volume for the pond is 4937 cf. The actual volume of the pond is 10, 289 cf as shown by a 1999 Chavez-Grieves survey. 3' deep

   The Master Drainage Plan for Altura West and Archdiocese of Santa Fe Properties Near St. Pius High School by Bohannan-Huston does not contain AHYMO printouts. However, tables summarizing the existing and proposed basins were included in Appendix A of the Master Plan. These tables are enclosed with this submittal. For the 100 year storm, Basin 01, which is 8.77 acres, contributes 26.62 cfs during existing conditions and contributes 29.91 cfs during proposed conditions.

The St. Pius Classroom Addition involves Subbasin 01-A which is 0.72 acres. Based upon the developed flows from the Master Drainage Plan, this Subbasin should contribute 2.45 cfs. Because our project has slightly more impervious area than what the Master Drainage Plan used (54% instead of 50%), we did our own AHYMO calculations which resulted in Subbasin 01-A contributing 2.79 cfs. Since the pond volume is double what is required, the pond is sufficiently sized for the additional 0.34 cfs. In addition, the Oxbow Bluff Subdivision storm sewer system is sized to accept the free discharge of developed flows (29.9 cfs) from Basin 01. Since we are continuing to utilize the existing pond, the flow to the Oxbow Bluff Subdivision is well below the allowable discharge of 29.9 cfs.

3. The finished floor elevation has been revised to reflect the mean sea level. Please see the enclosed, "Sheet C2, Grading and Drainage".

If you have any questions, please contact me.

Sincerely,

CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.

Billy O. McCarty

Billy O. McCarty, PE
Project Engineer

c.c. Mr. Art Blessen, Claudio Vigil

BOM/cmte

G \V05\115\DOCUMENT\drainresponse wpd

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 15, 1999

Billy O. McCarty, P.E.
Chavez-Grieves
5639 Jefferson NE
Albuquerque, New Mexico

RE: Drainage Report and Grading and Drainage Plan for St. Pius High School Classroom Addition (G11/D40) Engineer's Stamp Dated 6/11/99.

Dear Mr. McCarty:

Prior to approval of the above referenced plan for Site Development Plan for Building Permit approval by the DRB, or release of the Building Permit, the plan must be revised to address the following comments:

1. The report mentions the Oxbow Bluff Subdivision, however, this site was not located on the maps. Where is the Oxbow Bluff pond located? Are the pond and storm drain located within drainage easements? These must be identified on the plan.

2. Show the drainage basin used to size the pond. Was it designed to accept runoff only from drainage basin 01? What was the design volume for this pond? Provide the AHYMO calculation for all of basin 01 for the existing and the proposed condition. What impact does the runoff from the proposed building addition have on the existing pond?

3. The proposed finish floor elevation must be given to mean sea level.

4. With respect to the traffic circulation layout, this will be reviewed by City Transportation when the Site plan goes through the DRC process.

Only one copy of the report and plan need to be resubmitted. If you have any questions regarding these comments, please call me at 924-3982.

Sincerely,

Susan M. Calongne, P.E.
City/County Floodplain Administrator

c: Tom Schellenbach, Archdiocese of Santa Fe
File

DRAINAGE MASTER PLAN FOR ALTURA WEST PROPERTIES COORS & ST. JOSEPH DRIVE
PROPOSED CONDITIONS

BASIN	AREA (ACRES)	% LAND TREATMENT* A	B	C	D	ZONE 1 PEAK DISCHARGE - (CFS/ACRE)** A	B	C	D	Q(100-YR) DEVELOPED (CFS)
A	27.21	0.00	7.50	7.50	85.00	1.29	2.03	2.87	4.37	111.07
B	31.45	0.00	7.50	7.50	85.00	1.29	2.03	2.87	4.37	128.38
C	20.83	0.00	36.90	36.90	26.20	1.29	2.03	2.87	4.37	61.51
D	11.65	0.00	36.90	36.90	26.20	1.29	2.03	2.87	4.37	34.40
E	22.85	0.00	36.90	36.90	26.20	1.29	2.03	2.87	4.37	67.48
K	33.12	0.00	21.57	21.57	56.86	1.29	2.03	2.87	4.37	117.30
L	38.01	0.00	31.00	31.00	38.00	1.29	2.03	2.87	4.37	120.86
01	8.77	0.00	25.00	25.00	50.00	1.29	2.03	2.87	4.37	29.91
02	1.83	0.00	25.00	25.00	50.00	1.29	2.03	2.87	4.37	6.24
03	0.78	97.00	0.00	3.00	0.00	1.29	2.03	2.87	4.37	1.04
04	2.44	97.00	0.00	3.00	0.00	1.29	2.03	2.87	4.37	3.26
05	2.52	97.00	0.00	3.00	0.00	1.29	2.03	2.87	4.37	3.37
06	2.01	97.00	0.00	3.00	0.00	1.29	2.03	2.87	4.37	2.69
07	0.43	0.00	25.00	25.00	50.00	1.29	2.03	2.87	4.37	1.47
08	6.26	0.00	5.00	10.00	85.00	1.29	2.03	2.87	4.37	25.68
09	1.74	0.00	5.00	10.00	85.00	1.29	2.03	2.87	4.37	7.14
010	1.26	0.00	5.00	10.00	85.00	1.29	2.03	2.87	4.37	5.17
011	1.12	0.00	5.00	10.00	85.00	1.29	2.03	2.87	4.37	4.60
012	1.79	0.00	5.00	10.00	85.00	1.29	2.03	2.87	4.37	7.34
013	2.15	0.00	5.00	10.00	85.00	1.29	2.03	2.87	4.37	8.82
										747.73

NOTES:
Obtained from Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, January, 1993
* Table A-4
** Table A-9

DRAINAGE MASTER PLAN FOR ALTURA WEST PROPERTIES COORS & ST. JOSEPH DRIVE
EXISTING CONDITIONS

BASIN	AREA (ACRES)	% LAND TREATMENT* A	B	C	D	ZONE 1 PEAK DISCHARGE - (CFS/ACRE)** A	B	C	D	Q(100-YR) UNDEVELOPED (CFS)
A1	16.63	90.00	10.00	0.00	0.00	1.29	2.03	2.87	4.37	22.68
A2	10.58	90.00	10.00	0.00	0.00	1.29	2.03	2.87	4.37	14.43
B1	10.97	90.00	10.00	0.00	0.00	1.29	2.03	2.87	4.37	14.96
B2	20.49	90.00	10.00	0.00	0.00	1.29	2.03	2.87	4.37	27.95
C	5.06	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	6.99
D	11.22	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	15.51
E	0.48	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	0.66
F	5.83	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	8.06
G	7.07	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	9.77
H	10.77	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	14.89
I	11.88	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	16.42
J	3.48	0.00	97.00	0.00	3.00	1.29	2.03	2.87	4.37	7.31
K	35.58	90.00	10.00	0.00	0.00	1.29	2.03	2.87	4.37	48.53
L	38.01	90.00	10.00	0.00	0.00	1.29	2.03	2.87	4.37	51.85
O1	8.77	0.00	25.00	50.00	25.00	1.29	2.03	2.87	4.37	26.62
O2	1.83	0.00	25.00	50.00	25.00	1.29	2.03	2.87	4.37	5.55
O3	0.78	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	1.08
O4	2.44	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	3.37
O5	2.52	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	3.48
O6	2.01	97.00	0.00	0.00	3.00	1.29	2.03	2.87	4.37	2.78
O7	0.43	0.00	25.00	50.00	25.00	1.29	2.03	2.87	4.37	1.31
O8	6.26	0.00	5.00	85.00	10.00	1.29	2.03	2.87	4.37	18.64
O9	1.74	0.00	5.00	85.00	10.00	1.29	2.03	2.87	4.37	5.18
O10	1.26	0.00	5.00	85.00	10.00	1.29	2.03	2.87	4.37	3.75
O11	1.12	0.00	5.00	85.00	10.00	1.29	2.03	2.87	4.37	3.34
O12	1.79	0.00	5.00	85.00	10.00	1.29	2.03	2.87	4.37	5.33
										340.46

C33-150

0573103

DIOCESE OF SANTA FE

AND DEDICATED R/W

EPH'S PLACE N.W.
OF ALBUQUERQUE
NALILLO COUNTY, NEW MEXICO
ANUARY 1987

Surface 767-1276
Gabriel Chumley
7801 Cahuenga Blvd
Hollywood, Ca 90028-7960
323-128-4767

L19

State of New Mexico } SS
County of Bernalillo }
This instrument was filed for record on

JUN 9 1987

At 9 o'clock A.M. and recorded in Vol C33
of records of said County, Folio 150

DESCRIPTION

All of that certain tract of land belonging to the Roman Catholic Church, Archdiocese of Santa Fe, a corporation sole, as the same is described by warranty deed filed on April 7, 1950 in the office of the County Clerk for Bernalillo County in Book D-107, page 637, and being situate within the town of Albuquerque Grant, City of Albuquerque, Bernalillo County, State of New Mexico, being more particularly described by metes and bounds survey, utilizing the New Mexico State Plane Grid Bearings (Central Zone) and ground distances, as follows:

Beginning at the southeast corner of the parcel herein described, from which NGS Triangulation "Jensen", for which the New Mexico State Plane Coordinates in the Central Zone thereof are N=1,501,035.33 and E=1,502,246.75 bears N. 64°27'50" W., 919.09 feet distant; thence from said southeast corner, N. 00°03'33" W., 1,322.53 feet distant to the southeast corner defined by a 1/2 inch rebar with aluminum cap stamped in the paved median of St. Joseph Drive, thence N. 89°10'58" E., 1070.00 feet distant to the northeast corner defined by an aluminum cap on the easterly right of way line of Coors Boulevard, N.W., thence N. 00°32'33" E., 1,287.12 feet distant to an angle point defined by a 1/2 inch rebar with aluminum cap stamped, thence S. 17°03'38" E., 200.07 feet distant to the northeast corner defined by a 1/2 inch rebar with aluminum cap stamped, thence S. 81°52'09" E., 2187.74 feet distant to an angle point defined by a 1/2 inch rebar with

S87°06'31"E
269.07'
S20°15'12"E
20'
428.02'
S00°10'58"E
105.78'
S14°51'03"E
1117.74'
S03°13'58"E
117.94'
ALBUQUERQUE NATIONAL
C/D BK. KELLER, P
VOL. C/D, FOLIO

SISTERS OF ST. FRANCIS
WARRANTY DEED FILED
DEC. 3, 1970

N00°25'50"E 1227.12'

S07°03'31"E
269.97'

23.03'

N00°43'40"E 656.32'

N89°43'40"E 320.43'

S00°10'53"W
150.00'

300'

S03°02'44"W
100.32'

TRACT A-1
2,464,420 SQ.FT.
(56.580 ACRES)

TRACT A-2
DEDICATED R/W
77103 SQ.FT.

THIS SECTION OF EXISTING WATERLINE
EASEMENT DEDICATED MAY 30, 1974
IS TO BE VACATED EFFECTIVE UPON
APPROVAL OF THIS PLAT
VACATION ORDINANCE No. V-87-37

S20°16'12"E 429.02'

S14°51'03"E
1117.74'

S00°16'12"E

S09°47'05"W
55.33'

WATERLINE EASEMENT
GRANTED UPON
APPROVAL OF THIS PLAT

N09°51'30"E
80.23'

S00°12'55"W
122.94'

S89°47'05"E
56.15'

274.00'

WATERLINE EASEMENT
GRANTED UPON
APPROVAL OF THIS
PLAT

S89°51'30"W
79.62'

WATERLINE EASEMENT
GRANTED UPON APPROVAL
OF THIS PLAT.

S46°21'40"W
15.55'

S00°10'58"E
404.80'

S09°10'50"E
95.76'

S00°10'58"E
117.94'

THIS SECTION OF EXISTING WATERLINE
EASEMENT DEDICATED MAY 30, 1974
IS TO BE VACATED EFFECTIVE UPON
APPROVAL OF THIS PLAT
VACATION ORDINANCE No. V-87-37

ALBUQUERQUE NATIONAL BANK, TRUSTEE
C/D ELL. HEIGHTS PLAT FILED JAN. 20, 1963
VOL. C 15, FOLIO 67-102

N00°10'53"E 1499.29'

S00°10'53"W 1111.37'

ROAD

DOORS

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 15, 1999

Billy O. McCarty, P.E.
Chavez-Grieves
5639 Jefferson NE
Albuquerque, New Mexico

RE: Drainage Report and Grading and Drainage Plan for St. Pius High School Classroom Addition (G11/D40) Engineer's Stamp Dated 6/11/99.

Dear Mr. McCarty:

Prior to approval of the above referenced plan for Site Development Plan for Building Permit approval by the DRB, or release of the Building Permit, the plan must be revised to address the following comments:

1. The report mentions the Oxbow Bluff Subdivision, however, this site was not located on the maps. Where is the Oxbow Bluff pond located? Are the pond and storm drain located within drainage easements? These must be identified on the plan.

2. Show the drainage basin used to size the pond. Was it designed to accept runoff only from drainage basin 01? What was the design volume for this pond? Provide the AHYMO calculation for all of basin 01 for the existing and the proposed condition. What impact does the runoff from the proposed building addition have on the existing pond?

3. The proposed finish floor elevation must be given to mean sea level.

4. With respect to the traffic circulation layout, this will be reviewed by City Transportation when the Site plan goes through the DRC process.

Only one copy of the report and plan need to be resubmitted. If you have any questions regarding these comments, please call me at 924-3982.

Sincerely,

Susan M. Calongne, P.E.
City/County Floodplain Administrator

c: Tom Schellenbach, Archdiocese of Santa Fe
File

DRAINAGE INFORMATION

G11-D40

PROJECT TITLE: St. Pius Classroom Addition ZONE ATLAS/DRNG. FILE #: F-11 & G-11

DRB#: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Tract A-1 Archdiocese of Santa Fe

CITY ADDRESS: 5301 St. Joseph Dr. NW

ENGINEERING FIRM: Chavez-Grieves CONTACT: Amy Driscoll

ADDRESS: 5639 Jefferson NE PHONE: 344-4080

OWNER: Archdiocese of Santa Fe CONTACT: Tom Schellenbach

ADDRESS: 5301 St. Joseph Drive NW PHONE: 944-8100

ARCHITECT: Claudio Vigil Architects CONTACT: Art Blessen

ADDRESS: 1305 Tijeras NW PHONE: 842-1113

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

__X__ DRAINAGE REPORT

_____ DRAINAGE PLAN

_____ CONCEPTUAL GRADING & DRAINAGE PLAN

_____ GRADING PLAN

_____ EROSION CONTROL PLAN

_____ ENGINEER'S CERTIFICATION

_____ MASTER DRAINAGE STUDY

PRE-DESIGN MEETING:

__X__ YES

_____ NO

__X__ COPY PROVIDED

RECEIVED
JUN 11 1999
HYDROLOGY SECTION

CHECK TYPE OF APPROVAL SOUGHT:

_____ SKETCH PLAT APPROVAL

_____ PRELIMINARY PLAT APPROVAL

_____ S. DEV. PLAN FOR SUB'D. APPROVAL

__X__ S. DEV. PLAN FOR BLDG. PRMT. APPROVAL

_____ SECTOR PLAN APPROVAL

_____ FINAL PLAT APPROVAL

_____ FOUNDATION PERMIT APPROVAL

__X__ BUILDING PERMIT APPROVAL

_____ CERTIFICATE OF OCCUPANCY APPROVAL

_____ GRADING PERMIT APPROVAL

_____ PAVING PERMIT APPROVAL

_____ S.A.D. DRAINAGE REPORT

_____ DRAINAGE REQUIREMENTS

_____ OTHER

DATE SUBMITTED: June 11, 1999

BY: Amy Driscoll

CHAVEZ · GRIEVES
CONSULTING ENGINEERS, INC.
5639 JEFFERSON STREET NE • SUITE 1 • ALBUQUERQUE, NEW MEXICO 87109 • PHONE (505) 344-4080 • FAX (505) 343-8759

LETTER OF TRANSMITTAL

TO: CITY OF ALBUQUERQUE, PUBLIC WORKS
600 2nd ST NW
ALB NM 87102
ATTN: FRED AGUIRRE

DATE: 6/11/99
JOB # V05-115-5199
RE: ST PIUS HIGH SCHOOL
CLASSROOM ADDITION

WE ARE SENDING YOU ✓ **ATTACHED** ___ **UNDER SEPARATE COVER, THE FOLLOWING ITEMS:**

____SHOP DRAWINGS	____PLANS	____SPECIFICATIONS	____DISKETTE
____CHANGE ORDER	____PRINTS	____CALCULATIONS	____PROPOSAL INFO
____COPY OF LETTER	____SAMPLES	____REPORT	____ _____

COPIES	DATE	NO.	DESCRIPTION
2	6/11/99		DRAINAGE STUDY
1	6/11/99		DRAINAGE INFORMATION SHEET
2	6/11/99	3	SITE PLAN

THESE ARE TRANSMITTED AS CHECKED BELOW:

____FOR YOUR USE	✓ FOR REVIEW & COMMENT
____AS REQUESTED	____RETURNED AFTER LOAN TO US
____PLEASE CORRECT AND RESUBMIT	____SUBMIT____COPIES FOR DISTRIBUTION
____RESUBMITTAL IS NOT REQUIRED	____RETURN____CORRECTED PRINTS
CORRECTIONS, IF ANY, ARE NOTED	____BIDS/PROPOSALS DUE _____ 199_

REMARKS: THE SITE PLAN IS BEING PROVIDED FOR TRAFFIC CIRCULATION APPROVAL. THE ONLY CHANGES IN THE PARKING AREA ARE ADDING A HANDICAP RAMP AND SOME STRIPING.

RECEIVED
JUN 11 1999
HYDROLOGY SECTION

COPIES TO: _____ **SIGNED:** Amy Lucero

IF ENCLOSURES ARE NOT AS NOTED, KINDLY NOTIFY US AT ONCE. *REV.9/95*

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 8, 2000

Michael A. Brewer, P.E.
Chavez-Grieves Consulting Engineers, Inc.
5639 Jefferson Steet NE
Albuquerque, NM 87109

RE: ST. PIUS X HIGH SCHOOL, CLASSROOM ADDITION (G11-D40). ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY APPROVAL. ENGINEER'S STAMP DATED AUGUST 3, 2000.

Dear Mr.Brewer:

Based on the information provided on your August 4, 2000 submittal , 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.

Sincerely,

John P. Murray, P.E.
Hydrology

c: Whitney Reierson
File

MAIN FILE 2.

DRAINAGE INFORMATION

PROJECT TITLE: St Pius Classroom Addition

FILE #: G11/D40

DRB#: _____ EPC #: _____ WORK ORDER #_____

LEGAL DESCRIPTION: Tract A-1 Archdiocese of Santa Fe

CITY ADDRESS: 5301 St. Joseph Drive,N.W

ENGINEERING FIRM: Chavez-Grieves CONTACT: Michael A. Brewer, P.E.

ADDRESS: 5639 Jefferson NE Suite 1 PHONE: (505) 344-4080

Albuquerque, NM 87109

OWNER: Archdiocese of Santa Fe CONTACT: Tom Schellenbach

ADDRESS: 5301 St. Joseph Drive, N.W. PHONE: (505) 944-8100

Albuquerque, NM 87103

ARCHITECT: Claudio Vigil Architects CONTACT: Art Blessen

ADDRESS: 1305 Tijeras N.W. PHONE: (505) 842-1113

Albuquerque, NM 87102

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

_____

CONTRACTOR: Enterprise Builders CONTACT: _____

ADDRESS: P.O. Box 3987 PHONE: (505) 857-0050

Albuquerque, NM 87190

TYPE OF SUBMITTAL:

_____DRAINAGE REPORT

_____DRAINAGE PLAN

_____CONCEPTUAL GRADING & DRAINAGE PLAN

GRADING PLAN

_____EROSION CONTROL PLAN

__X__ENGINEER'S CERTIFICATION

_____OTHER

PRE-DESIGN MEETING:

_____YES

_____NO

_____COPY PROVIDED

DATE SUBMITTED: 8/3/00

BY: Michael A. Brewer

CHECK TYPE OF APPROVAL SOUGHT:

_____SKETCH PLAT APPROVAL

_____PRELIMINARY PLAT APPROVAL

_____S. DEV. PLAN FOR SUB'D. APPROVAL

S. DEV. PLAN FOR BLDG. PRMT. APPROVAL

_____SECTOR PLAN APPROVAL

_____FINAL PLAT APPROVAL

_____FOUNDATION PERMIT APPROVAL

_____BUILDING PERMIT APPROVAL

__X__CERTIFICATE OF OCCUPANCY APPROVAL

_____GRADING PERMIT APPROVAL

_____PAVING PERMIT APPROVAL

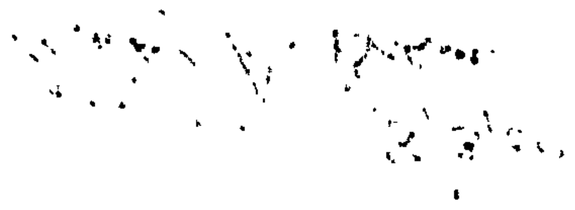
_____S.A.D. DRAINAGE REPORT

_____DRAINAGE REQUIREMENTS

_____OTHER

Rwb 8/14/00

JM



CHAVEZ • GRIEVES
CONSULTING ENGINEERS, INC.
5639 Jefferson NE, Albuquerque, NM 87109
Phone (505) 344-4080 Fax (505) 343-8759

LETTER OF TRANSMITTAL

DATE: 8/3/00	**PROJECT:** St. Pius Classroom Addition
TO: Hydrology Division	**PROJECT NO.:**
COMPANY / ADDRESS / PHONE: City of Albuquerque-Hydrology Division Plaza Del Sol 600 2nd Street N.W. Albuquerque, New Mexico 87103	**SENT BY:** Michael Brewer, P.E.

We are sending you the following items ☒ **attached:** ☐ **under separate cover:**

☐ Shop Drawings	☒ Plans	☐ Specifications	☐ Other:
☐ Change Order	☐ Prints	☐ Diskette	1.
☐ Copy of Letter	☐ Report	☐ Calculations	2.
☐ Samples			3.

COPIES:	DATE:	SUBMITTAL NO.	DESCRIPTION:
1	8/3/00		Drainage Information Sheet - St. Pius Classroom Addition
1	8/3/00		Engineer Certified Grading&Drainage Plan - St. Pius Classroom Addition
1			
1			

These items are transmitted for the purposes indicated below:

☒ For Your Use	☐ For Review & Comment	☐ As Requested
☐ Returned After Loan to Us	☐ Please Correct & Resubmit	☐ Submit ( ) Copies
☐ Resubmittal not Required Corrections Noted	☐ Return ( ) Corrected Prints for Distribution	Other: 1. 2.

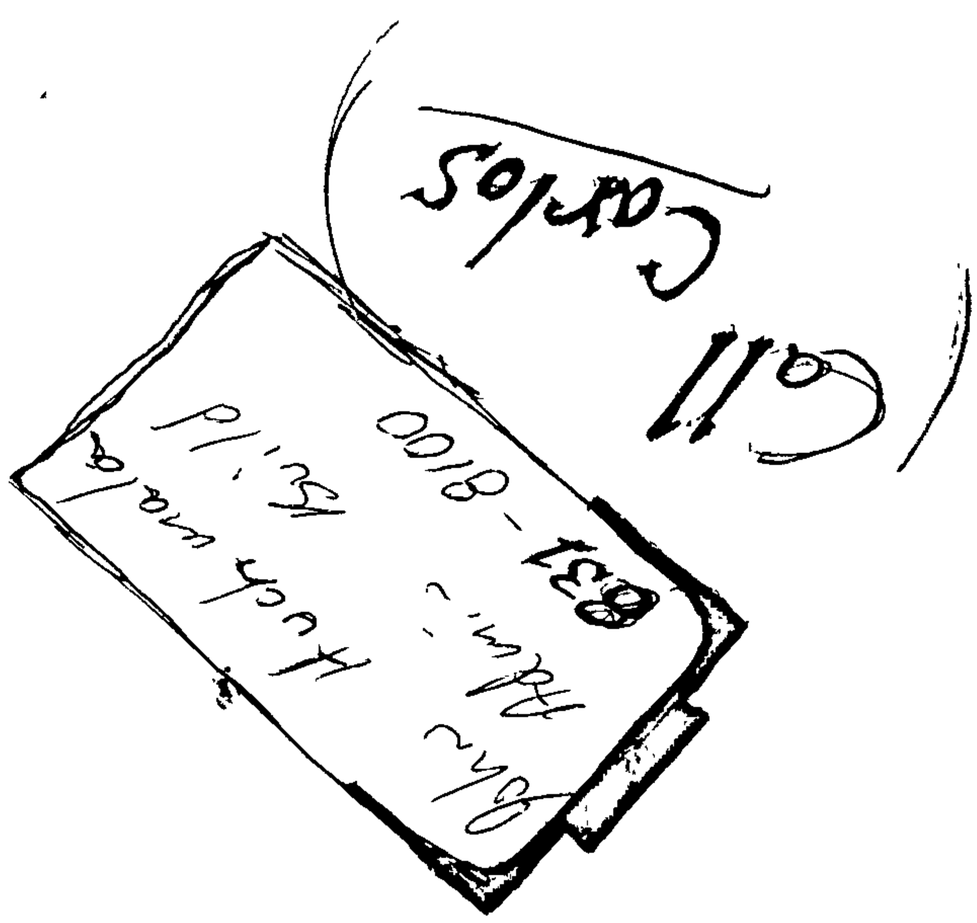
Comments: If you have any questions or require additional information, please contact me at (505) 342-6250.

Sent via: ☐ Fax ☐ Mail ☒ Runner ☐ Call for Pick-up ☐ Other:

Copy To: Art Blessen, Claudio Vigil Architects
April Guerrero, Enterprise Builders Corp.
Project File

RECEIVED
AUG 04 2000
HYDROLOGY SECTION

If enclosures are not as noted, please notify us at once. Thank you


Call Carlos
Buy Hulk wafers
Pdwr: 831-8100

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 4, 2004

John Arthur Blessen, P.E.
Claudio Vigil Architects
1801 Rio Grande Blvd. NW
Albuquerque, NM 87104

Re: St. Pius High School Weight Room, 5301 St. Joseph's Drive, Certificate of Occupancy

Engineer's Stamp dated 4-02-03 (G11/D40)

Certification dated 1-29-04

Dear Mr. Blessen,

Based upon the information provided in your submittal received 2-02-04, 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 924-3981.

Sincerely,

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

C: Phyllis Villanueva
file

G-11 | D40

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: St Pius HS Weight Room — ZONE MAP/DRG. FILE #: G11 - D40
DRB #: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LANDS OF UNIVERSITY OF ALBUQUERQUE
CITY ADDRESS: 5301 ST JOSEPH'S DRIVE

ENGINEERING FIRM: Claudio Vigil Architects — CONTACT: Arthur Blessen
ADDRESS: 1801 Rio Grande Blvd NW — PHONE: 505.842.1113
CITY, STATE: Albuquerque, NM — ZIP CODE: 87104

OWNER: _____ — CONTACT: _____
ADDRESS: _____ — PHONE: _____
CITY, STATE: _____ — ZIP CODE: _____

ARCHITECT: Claudio Vigil Architects — CONTACT: CLAUDIO VIGIL
ADDRESS: 1801 Rio Grande Blvd NW — PHONE: 505.842.1113
CITY, STATE: Albuquerque, NM — ZIP CODE: 87104

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

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

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☒ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☒ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. 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
- ☐ WORK ORDER APPROVAL
- ☐ OTHER (SPECIFY)

Need stamp date 4/2/03

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

RECEIVED
FEB 02 2004
HYDROLOGY SECTION

DATE SUBMITTED: February 02 2004 — BY: J Arthur Blessen

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature , location and scope ot the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Planning Department
Transportation Development Services Section

February 4, 2004

Claudio Vigil, Registered Architect
1801 Rio Grande NW
Albuquerque, NM 87104

Re: Certification Submittal for Final Building Certificate of Occupancy for
St. Puis HS Weight Room, [G-11 / D40]
5301 St. Joseph Dr
Architect's
Stamp Dated 02/04/04

Dear Mr. Vigil:

The TCL / Letter of Certification submitted on February 2, 2004 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

G-11/D40

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

G-11/D40

PROJECT TITLE: St Pius HS Weight Room — ZONE MAP/DRG. FILE #: G11 - D40
DRB #: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LANDS OF UNIVERSITY OF ALBUQUERQUE
CITY ADDRESS: 5301 ST JOSEPH'S DRIVE

ENGINEERING FIRM: Claudio Vigil Architects — CONTACT: Arthur Blessen
ADDRESS: 1801 Rio Grande Blvd NW — PHONE: 505.842.1113
CITY, STATE: Albuquerque, NM — ZIP CODE: 87104

OWNER: _____ — CONTACT: _____
ADDRESS: _____ — PHONE: _____
CITY, STATE: _____ — ZIP CODE: _____

ARCHITECT: Claudio Vigil Architects — CONTACT: CLAUDIO VIGIL
ADDRESS: 1801 Rio Grande Blvd NW — PHONE: 505.842.1113
CITY, STATE: Albuquerque, NM — ZIP CODE: 87104

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

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

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☒ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☒ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. 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
- ☐ WORK ORDER APPROVAL
- ☐ OTHER (SPECIFY)

Need stamp date 4/2/03

RECEIVED
FEB 02 2004
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: February 02 2004 — BY: J Arthur Blessen

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature , location and scope ot 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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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.

CLAUDIO VIGIL ARCHITECTS

February 2, 2004

RE: St. Pius High School Weight Room Addition
5301 St. Joseph Drive, Albuquerque, N.M.
Tract A-1 Archdiocese of Santa Fe

ZONE MAP # F-11 AND G-11

Wilfred A. Gallegoes, P.E.
City of Albuquerque
Traffic Engineering, Planning Department
PO Box 1293
Albuquerque, New Mexico 87103

Dear Wilfred A. Gallegoes, P.E.,

This letter is our certification that the work on this project is complete and built in substantial compliance with the drawings and approval comments. This project was the subject of an Administrative Amendment (Project # 1000438), and all work in accordance with the plans and approved administrative amendment are complete and constructed per plan.

Sincerely,

Claudio Vigil
Architect, AIA

STATE OF NEW MEXICO
CLAUDIO ANTONIO VIGIL
1236
2/4/04
REGISTERED ARCHITECT

RECEIVED
FEB 04 2004
HYDROLOGY SECTION