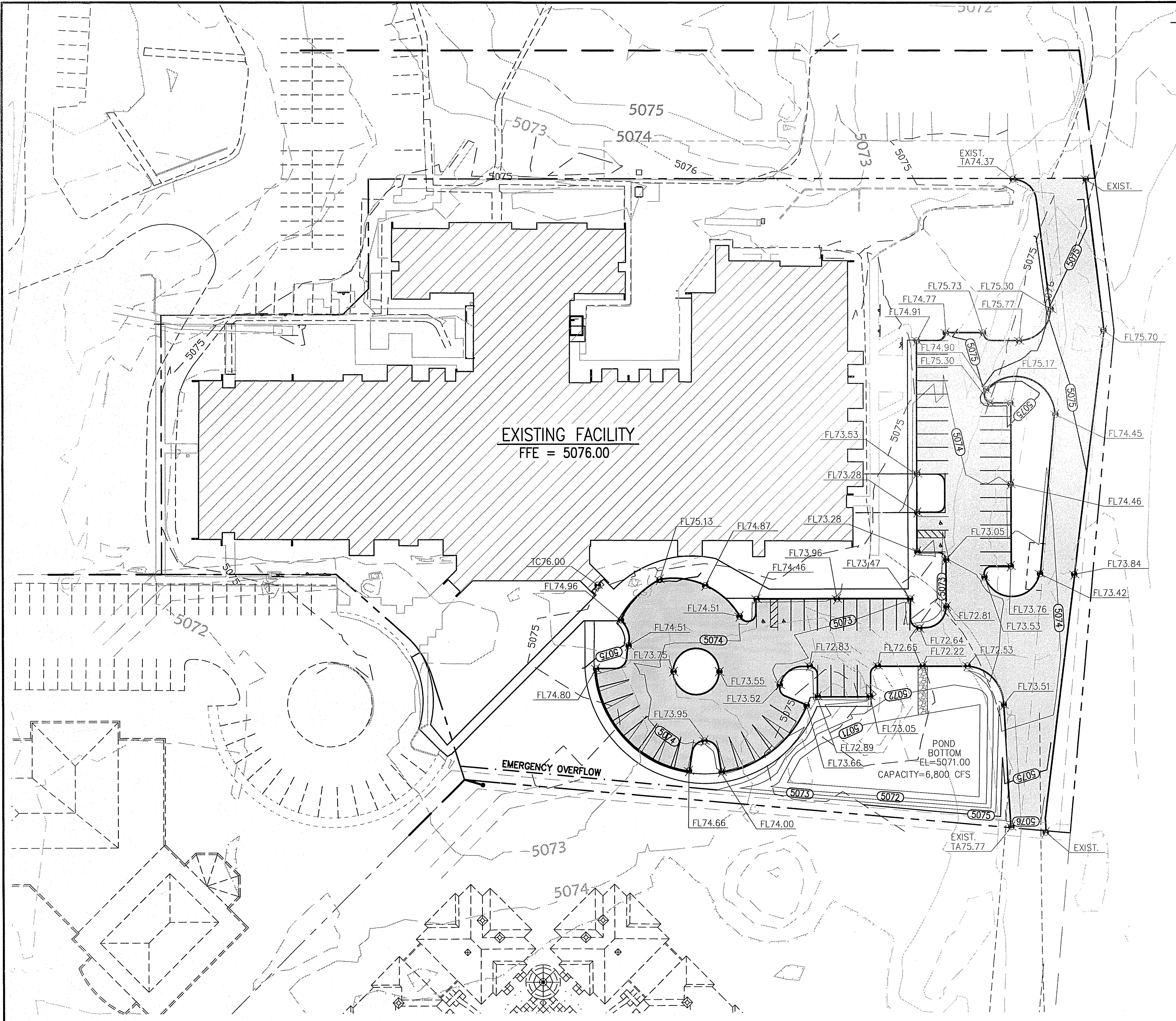


HYDROLOGY FOR NEW PAVEMENT

TRACT 3B-2-A AREA = 1.33 ac.

DRAINAGE ZONE 2

PRECIPITATION:		
	360 =	2.35 in.
	1140 =	2.75 in.
	10day =	3.95 in.

	EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A	0.53 in.	1.56 cfs/ac.
TREATMENT B	0.78 in.	2.28 cfs/ac.
TREATMENT C	1.13 in.	3.14 cfs/ac.
TREATMENT D	2.12 in.	4.70 cfs/ac.

	EXISTING CONDITIONS: AREA	PROPOSED CONDITIONS: AREA
TREATMENT A	0 ac.	0 ac.
TREATMENT B	1.328 ac.	0 ac.
TREATMENT C	0 ac.	0 ac.
TREATMENT D	0 ac.	1.328 ac.

<u>EXISTING EXCESS PRECIPITATION:</u>

Weighted E = (0.53)x(0.00)+(0.78)x(1.33)+(1.13)x(0.00)+(2.12)x(0.00)/ 1.33 ac.
= 0.78 in.
V100-360 = (0.78)x(1.33)/ 12 = 0.086298 ac-ft = 3759 cf

<u>EXISTING PEAK DISCHARGE:</u>

Q100 = (1.56)x(0.00)+(2.28)x(1.33)+(3.14)x(0.00)+(4.70)x(0.00)= 3.03 cfs

<u>PROPOSED EXCESS PRECIPITATION:</u>

Weighted E = (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.00)+(2.12)x(1.33)/ 1.33 ac.
= 2.12 in.
V100-360 = (2.12)x(1.33)/ 12.0 = 0.234554 ac-ft = 10217 cf

V100-1440 = (0.23)+(1.33)x(2.75 - 2.35)/ 12 = 0.278809 ac-ft = 12145 cf

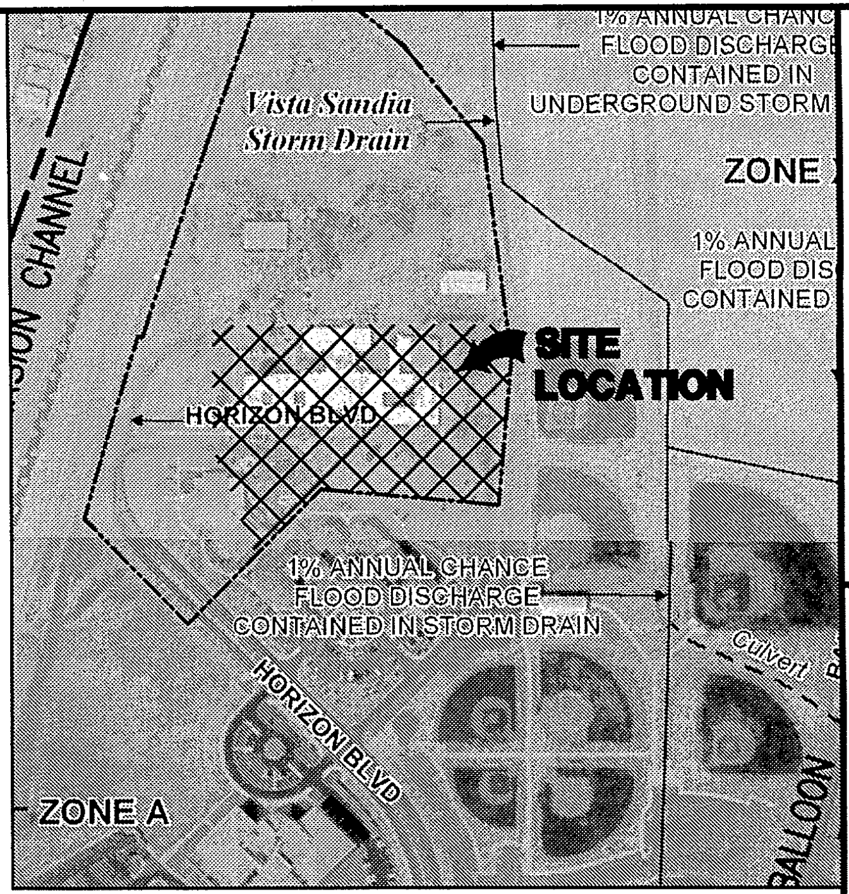
V100-10day = (0.23)+(1.33)x(3.95 - 2.35)/ 12 = 0.411576 ac-ft = 17928 cf

<u>PROPOSED PEAK DISCHARGE:</u>

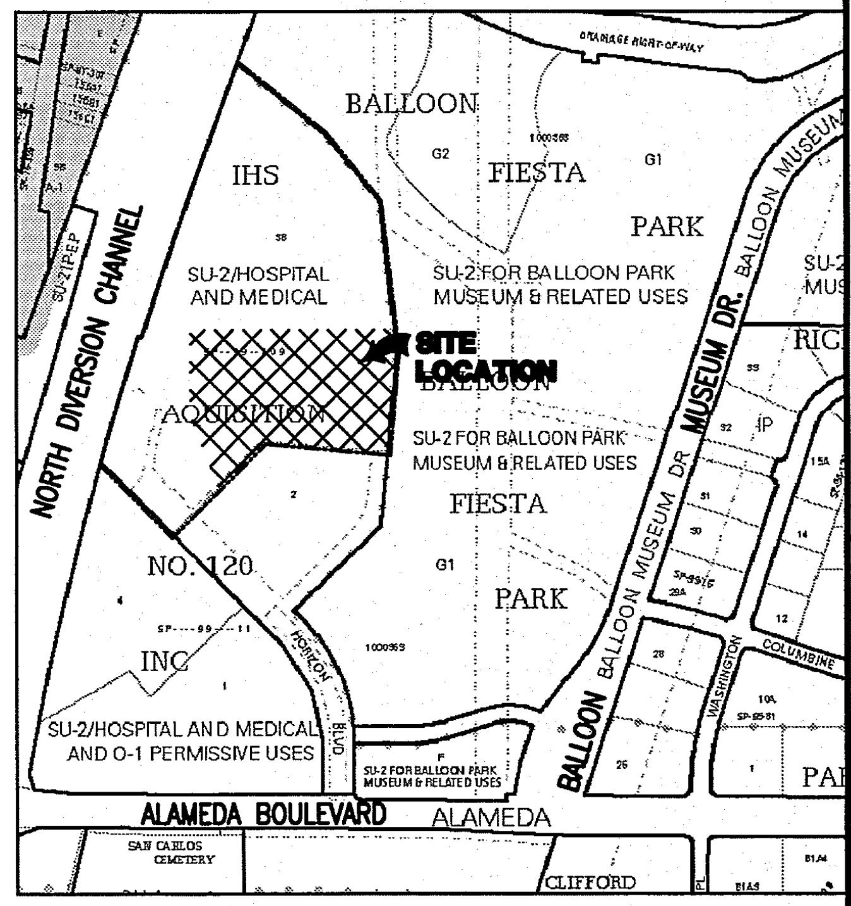
Q100 = (1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.00)+(4.70)x(1.33)= 6.24 cfs

<u>RESULTS</u>

6.24 - 3.03 = 3.21 cfs	Increase in peak discharge
10217 - 3759 = 6458 cf	Increase in runoff volume



FLOOD ZONE 35001C0128G & 0136G



ZONE ATLAS B-17-Z & C-17-Z

FLOOD ZONE

THIS PROPERTY DOES NOT LIE IN AN AREA COVERED BY A FORMAL F.E.M.A. FLOOD STUDY. REFERENCE: FLOOD INSURANCE RATE MAP, ALBUQUERQUE, NEW MEXICO PANELS 35001C0128G & 35001C0136G EFFECTIVE DATE: NOVEMBER 26, 2008.

SOURCE OF EXISTING SURVEY

TOPOGRAPHIC SURVEY PERFORMED BY RIO GRANDE SURVEY DATED 1996

EXISTING CONDITIONS

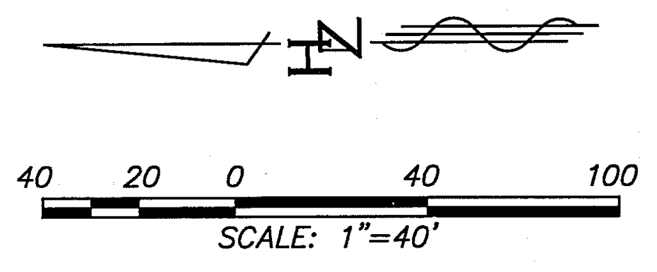
EXISTING SITE IS IN VARIOUS STAGES OF DEVELOPMENT. HYDROLOGY PRESENTED HEREIN ARE FOR FULLY DEVELOPED CONDITIONS.

PROPOSED CONDITIONS

THE PROPOSED IMPROVEMENTS, WHICH ARE PART OF THIS PROJECT AND ANALYZED BY THIS DRAINAGE REPORT CONSIST OF A NEW PARKING LOT ON LOT 3–B–2–A. THE EXISTING BUILDING ON LOT 3–B–2–A SHALL HAVE RENOVATIONS TO THE INTERIOR AND EXTERIOR, BUT NO NEW SQUARE FOOTAGE SHALL BE ADDED TO THE FACILITY OR EXISTING ROOF DRAINAGE SHALL NOT BE MODIFIED. THIS GRANDING AND DRAINAGE PLAN IS IN ACCORDANCE WITH THE CONCEPUTAL GRADING AND DRAINAGE MASTER DEVELOPMENT PLAN INCLUDED IN THE SUBDIVISION OF TRACT 3B INTO 3–B–1, 3–B–2 AND 3–B–3. THIS APPLICATION IS FOR SITE DEVELOPMENT PLAN FOR BUILDING PERMIT ON TRACT 3–B–2–A, APPROXIMATELY 4.28 ACRES. IMPROVEMENTS INCLUDE A NEW PARKING AREA WHICHI IS 39,198 SF (0.9 AC) ON PREVIOUSLY UNDISTURBED LANDS. THE APPROVED DRAINAGE MANAGEMENT PLAN FOR TRACTS 3–B–1, 3–B–2, AND 3–B–3 HAD LAND TREATMENTS OF 0% A, 5% B, 5% C, AND 90% D. THIS PROJECT IS INCOMPLIANCE WITH THESE LAND TREATMENS AND IS IN ACCORDANCE WITH PART A– PROCEDURE FOR 40 ACRE AND SMALLER BASIN SECTION 22.2–HYDROLOGY CITY OF ALB. DEVELOPMENT PROCESS MANUAL.

GENERAL LEGEND

▨	RENOVATED STRUCTURE
▒	NEW PARKING AREA & ACCESS AISLE
▓	RIPRAP
━	MINOR DESIGN CONTOUR
─	MAJOR DESIGN CONTOUR
┈	EXISTING MINOR DESIGN CONTOUR
┄	EXISTING MAJOR DESIGN CONTOUR
TCXX.XX FLXX.XX	TOP OF CURB ELEVATION FLOW LINE OF CURB ELEVATION



AS BUILT INFORMATION

CONTRACTOR	DATE
WORK STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO–FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

ALBUQUERQUE CONTROL SURVEY "ACS, NDC_7_1A, 1983"
NM STATE PLANE COORDINATES
X=1,534,929.428
Y=1,524,419.502
GRID TO GROUND = 0.999674775
CENTRAL ZONE
Da=–0012'12.5"
ELEV=4987.20 (NGVD88)

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

SCOTT A. EDDINGS
NEW MEXICO
12856
REGISTERED PROFESSIONAL ENGINEER
9/27/11

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY: DATE:
DRAWN BY: DATE:
DWG NAME: PROJ #:
CHECKED BY: DATE:

Designed By:

HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

CAUWELS & STUVE
Construction & Design, L.L.C.
6001 Indian School Rd. N.E.
Suite 400
Albuquerque, New Mexico 87110
Voice: 505.266.5711
Fax: 505.255.9922
www.cauwels-stuve.com

TITLE: SITE PLAN FOR BUILDING PERMIT TRACT 3-B-2-A

GRADING PLAN

City Project No.	Zone Map No.	Sheet	Of
	C-17-Z		C100

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