L19/D9

1 PLAN

WILSON & COMPANY
ENGINEERS & ARCHITECTS
P.O. BOX 3905
1321 SAN PEDRO N.E. ■ ALBUQUERQUE, NEW MEXICO 87110
505 255-4950
ENGINEERS
ARCHITECTS
PLANNERS

June 24, 1977

Mr. Bruno Conegliano
Assistant City Engineer - Hydrology
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

Re: Warren Louisiana Apartments
Louisiana & Continental Loop SE
Drainage Report

Dear Mr. Conegliano:

Enclosed are two copies of the drainage report for Warren Louisiana Apartments for your review.

I have made the changes you requested this morning. The total volume of storage required is 11,641 cu.ft. The total volume of storage provided is 12,448 cu.ft.

Very truly yours,
WILSON & COMPANY

Robert F. Sykes, P.E.

Enclosures

-sp

drainage file

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR
Harry E. Kinney

CHIEF
ADMINISTRATIVE OFFICER
Frank A. Kleinhenz

June 30, 1977

Mr. Jim Moretz
Michael Baker, Jr., Inc.
P.O. Box 3225
Harrisburg, PA 17105

Dear Jim:

I have forwarded separately a set of plans for the Phase II East Side Arroyo Protection System. I have also mailed to your attention a set of the following reports:

1. Study of the Embudo Arroyo System and Its Tributaries, June 1976.

2. Report On The Preliminary Design For East Side Arroyo Protection System, Phase I-October 1975.

3. Preliminary Engineering Report For East Arroyos Drainage Improvements Project-July 1975.

4. Hydrology Of The Embudo Arroyo System For The City Of Albuquerque-February 1975.

5. Hydrology Of The Embudo Arroyo System For The City Of Albuquerque-November 1974.

The improvements for the second phase have been completed and have been accepted by the City. I will, therefore, like to request the determination by your office of the effects that these improvements will have in reducing the flood levels in the Albuquerque Metropolitan area. The Albuquerque Metropolitan Arroyo Flood Control Authority will forward separately information regarding the La Dera improvement project which affects the western part of the city beyond the Rio Grande River. Due to the

urgency, I would like to obtain a preliminary evaluation of the flood reduction for the Bear Canyon Arroyo area for which information was sent back in April. This office has withheld approval of some plats and is presently under great pressure to release them.

I will sincerely appreciate the attention you will give to this matter.

Very truly yours,

Bruno Conegliano
Assistant City Engineer-Hydrology

BC/kr

cc - Rob Farnham, FIA-HUD
Jim Smith, AMAFCA
H. R. Orr, Jr., Acting Director of Public Works
V. M. Kimmick, City Engineer
Drainage File ✓

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

MAYOR
Harry E. Kinney

CHIEF
ADMINISTRATIVE OFFICER
Frank A. Kleinhenz

drainage file

June 30, 1977

Mr. Gary Robertson
Wilson & Company Engineers
1321 San Pedro N.E.
Albuquerque, New Mexico 87110

Re: Warren Louisiana Apartments
Louisiana & Continental Loop S.E.
Drainage Report

Dear Mr. Robertson:

I have reviewed the drainage report for the Warren Louisiana Apartments, and it is in agreement with our discussion and is approved.

Very truly yours,

Bruno Conegliano
Assistant City Engineer-Hydrology

BC/kr

cc - V. M. Kimmick, City Engineer
Drainage File

WILSON & COMPANY
ENGINEERS & ARCHITECTS
P.O. BOX 3305
1821 SAN PEDRO N.E. ■ ALBUQUERQUE, NEW MEXICO 87110
505 255-4350
ENGINEERS
ARCHITECTS
PLANNERS

August 9, 1977

Mr. Bruno Conegliano
Assistant City Engineer-Hydrology
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

Re: Warren Louisiana Apartments
Lot 5, Block 2, Continental Village
Louisiana & Continental Loop SE
Drainage Report

Dear Mr. Conegliano:

Enclosed are two copies of the drainage report for Warren Apartments. These apartments are north of the project you approved June 30, 1977.

Please give me a call if you have any questions.

Very truly yours,
WILSON & COMPANY

Robert F. Sykes, P.E.

Enclosures

-sp

WILSON & COMPANY
ENGINEERS
ARCHITECTS

P.O. BOX 8305

1821 SAN PEDRO N.E. ■ ALBUQUERQUE, NEW MEXICO 87110

505 255-4350

ENGINEERS
ARCHITECTS
PLANNERS

RECEIVED
AUG 22 1977
CITY ENGINEERS

August 19, 1977

Mr. Bruno Conegliano
Assistant City Engineer-Hydrology
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

Re: Warren Louisiana Apartments
Lot 5, Block 2, Continental Village
Louisiana & Continental Loop SE
Drainage Report

Dear Mr. Conegliano:

Enclosed are two prints showing the revised grading plan so water from parking area will go to the swale in front of the apartment and then to Louisiana Blvd. via of a 2' wide sidewalk and curb opening.

These revisions are as we discussed them this morning.

Very truly yours,
WILSON & COMPANY

Robert F. Sykes, P.E.

Enclosures

-sp

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

MAYOR
Harry E. Kinney

CHIEF
ADMINISTRATIVE OFFICER
Frank A. Kleinheinz

drainage file

August 24, 1977

Mr. Robert F. Sykes
Wilson & Company
3121 San Pedro, NE
Albuquerque, New Mexico 87110

RE: WARREN LOUISIANA APARTMENTS, DRAINAGE REPORT.

I have received the revisions to the drainage plans for Warren Louisiana Apartments, and they are in agreement with our discussion. I will expedite the processing of the construction plans when they will be received, by attaching directly the grading plans.

Very truly yours,

Bruno Conegliano
Assistant City Engineer-Hydrology

BC/kr

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

MAYOR
Harry E. Kinney

CHIEF
ADMINISTRATIVE OFFICER
Frank A. Kleinhenz

August 24, 1977

L19-D9

Mr. Robert F. Sykes
Wilson & Company
3121 San Pedro, NE
Albuquerque, New Mexico 87110

RE: WARREN LOUISIANA APARTMENTS, DRAINAGE REPORT.

I have received the revisions to the drainage plans for Warren Louisiana Apartments, and they are in agreement with our discussion. I will expedite the processing of the construction plans when they will be received, by attaching directly the grading plans.

Very truly yours,

Bruno Conegliano
Assistant City Engineer-Hydrology

BC/kr

WILSON & COMPANY
ENGINEERS & ARCHITECTS

505 262-2116

ENGINEERS
ARCHITECTS
PLANNERS

Office Location... 1321 SAN PEDRO N.E. ■ ALBUQUERQUE, NEW MEXICO 87110

An Equal Opportunity Employer

Mailing Address... P.O. BOX 3548 ■ ALBUQUERQUE, NEW MEXICO 87190

April 13, 1983

Mr. Fred Aguirre
Hydrology Section
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

Re: Revised Drainage Report
Warren Apartments @ Louisiana Blvd. & Continental Loop SE
WCEA File: 83-501

Dear Mr. Aguirre:

Enclosed are two copies of the revised drainage report for the apartment building at Louisiana and Continental Loop SE.

Please give me a call if you have any questions.

Very truly yours,
WILSON & COMPANY

Robert P. Sykes, P.E.

Enclosures

-sap

City of Albuquerque

May 11, 1983

Wilson & Company
1321 San Pedro Drive NE
Albuquerque, NM 87110

REF: Revised Drainage Report - April 1983 (L19-D9)

Dear Mr. Sykes:

The revised drainage is approved. Please see that the contractor is provided with this revised plan and advise him to contact this office for a final drainage inspection.

Sincerely,

Fred Aguirre
Civil Engineer/Hydrology

mrk

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer
LaMonte J. Urban, P.L.S., Chief City Surveyor

ENGINEERING DIVISION

123 Central Avenue N.W.
Albuquerque, New Mexico 87102
Telephone (505) 766-5040

WARREN PROPERTIES

June 3, 1983

City of Albuquerque
Albuquerque, New Mexico

Gentlemen:

By means of this letter, we shall hold the City of Albuquerque harmless in the event of any accident which might occur as a result of water coming from the six (6) downspouts on the North side of the new addition to the Warren South Apartments. The water coming from the downspouts will flow across the sidewalk to the asphalt paved area where it is then controlled through designed surface drainage to it's final destination.

If you have any questions regarding the above, please do not hesitate in contacting me.

Sincerely,

WARREN PROPERTIES

Phil Colbourne

Phil Colbourne

PLC/md

Post Office Box 915 Rancho Santa Fe, California 92067 Telephone (619) 756-3711

ENGINEER'S DRAINAGE REPORT

FOR

WARREN APARTMENTS SANDIA II

AT

LOUISIANA BLVD. & CONTINENTAL LOOP SE

ALBUQUERQUE, NEW MEXICO

WILSON & COMPANY

ALBUQUERQUE, NEW MEXICO

20 JUNE 1973

ENGINEER'S DRAINAGE REPORT
FOR
WARREN APARTMENTS SANDIA II
AT
LOUISIANA BLVD. & CONTINENTAL LOOP SE
ALBUQUERQUE, NEW MEXICO

PURPOSE: The purpose of this report is to determine the amount of run-off entering the study area and the carrying capacity of existing and proposed streets and drives.

CLIMATOLOGICAL INFORMATION: A 100 year design rainfall was used to determine the run-off. The City of Albuquerque has adopted a drainage master plan which presents the following formula for calculating the intensity of rainfall that is probable for a 100 year design storm:

$$i_{100} = \frac{189}{t_c + 25}$$

i_{100} = rainfall inches per hour

t_c = time of concentration in minutes

RUN-OFF CALCULATION: The Rational Method was used to calculate the run-off from the study area. The Rational Formula is:

$Q = CiA$

Q = Quantity of run-off in cubic feet per second

C = Coefficient of run-off expressed in a ratio of rainfall to run-off

i = Rainfall expressed in inches per hour

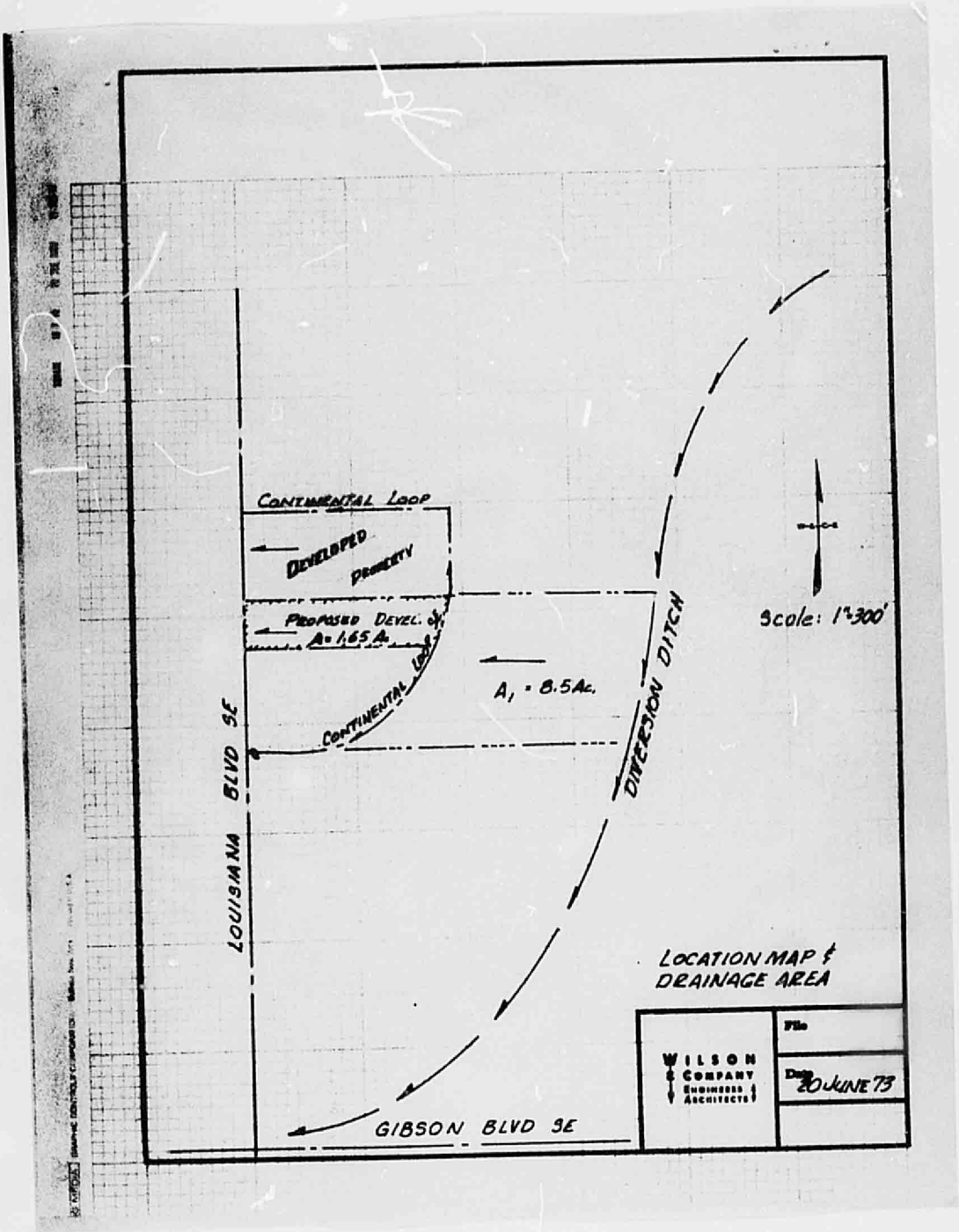
A = Drainage area expressed in acres

DISCUSSION: The proposed improvement is located on Block 2, Unit 2, Continental Village, Albuquerque, New Mexico. The lands slope from the east and all off-site drainage is intercepted by Continental Loop SE. The design flow entering Continental Loop is 28 c.f.s. and the capacity is 58 c.f.s.

The north 210 feet of said Block 2 is developed and drains to Louisiana Blvd.

The site of the proposed development contains 3.65 acres of which only 1.56 acres are to be developed at this time. The proposed development will drain from west to east into Louisiana Blvd. The calculated design run-off is 7.6 c.f.s. when the property is developed. The design run-off is 4.3 c.f.s. for the property as it now stands. The proposed improvements would increase the flow into Louisiana Blvd. by 4.3 c.f.s.

RECOMMENDATIONS: It is recommended that all play areas be depressed to hold 1 to 2 inches of water so that it will percolate into the soil and reduce the amount of run-off.


CONTINENTAL LOOP
DEVELOPED PROPERTY
PROPOSED DEVEL. A= 1.65 Ac.
CONTINENTAL LOOP
A1 = 8.5 Ac.
LOUISIANA BLVD SE
DIVERSION DITCH
GIBSON BLVD SE
Scale: 1"=300'
LOCATION MAP & DRAINAGE AREA
WILSON & COMPANY ENGINEERS & ARCHITECTS
File
Date 20 JUNE 73

Drainage Calculations

AREA A (SITE)

Improved

$A = 1.56\ Ac$ $C = 0.90$ $t_c = 10\ min$

$i_{100} = \frac{189}{t_c + 25} = \frac{189}{10+25} = 5.4\ in/hr$

$Q_{100} = CiA$

$Q_{100} = 0.90 \times 5.4 \times 1.56 = 7.6\ cfs$

Undeveloped

$A = 1.56\ Ac$ $C = 0.65$ $t_c = 15\ min$

$i_{100} = \frac{189}{t_c + 25} = \frac{189}{15+25} = 4.7\ in/hr$

$Q_{100} = CiA$

$Q_{100} = 0.65 \times 4.7 \times 1.56 = 3.3\ cfs$

Increased Run-off: $7.6 - 3.3 = \underline{4.3\ cfs}$

CONTINENTAL LOOP Area A1

$Q_{100} = CiA$

$C = 0.7$ $t_c = 15\ min$

$i = \frac{189}{t_c + 25} = \frac{189}{15+25} = 4.7\ in/hr$

$A = 8.5\ Ac.$

$Q_{100} = 0.7 \times 4.7 \times 8.5 = 28.0\ cfs$

$Q_{cap} = Ax$

$A = \text{Area St.} = 13.88\ sf$ (3' 6"); $S = .0065$ $S^{1/2} = .08$

$V = \text{velocity} = \frac{1.486}{n} \times r^{2/3} s^{1/2}$

$r = .10\ r^{2/3} = .55$ $n = .015$

$V = \frac{1.486}{.015} \times .55 \times .08 = 4.36\ ft/sec$

$Q_{cap} = 13.88 \times 4.36 = 58\ cfs$

St. capacity is adequate.

WILSON COMPANY ENGINEERS ARCHITECTS

File

Date 20 June 78

ENGINEER'S DRAINAGE REPORT
FOR
WARREN LOUISIANA APARTMENTS
ALBUQUERQUE, NEW MEXICO

WILSON & COMPANY
ENGINEERS & ARCHITECTS
1321 SAN PEDRO DR. NE
ALBUQUERQUE, NEW MEXICO

JUNE 1977

(77-521)

WILSON & COMPANY ENGINEERS ARCHITECTS

ENGINEER'S DRAINAGE REPORT
FOR
WARREN LOUISIANA APARTMENTS
ALBUQUERQUE, NEW MEXICO

LOCATION: The property is a 2.2 acre tract of land located at the southeast corner of Louisiana Boulevard and Continental Loop S.E. as shown on Zone Atlas Map L-19.

DESIGN CRITERIA: The 6 hour 100 year rainfall value for Albuquerque is 2.6 inches.

DISCUSSION: It is proposed to drain the parking area to the streets and the flow from the roofs and other areas is to be ponded until the run-off evaporates or percolates into the ground. The run-off from the site as undeveloped property is based on 6 hour 100 year rainfall is 8300 cu.ft. The run-off from the parking lot is 8034 cu.ft.

The property is to be developed as follows:

Paved Parking	39,275 sq.ft.
Roofs	22,200
Swimming Pool	3,600
Sidewalk	7,100
Landscape	23,657
Total	95,832 sq.ft.

Three ponding areas are to be constructed within the courtyard area. The roof drains are to discharge to the ponding areas. These are designated as Area 1, Area 2 and Area 3. The following is a summary of each area:

Area 1:

Storage Volume = 3109 cu.ft.			
Discharge to Area 1			
Bldg.	F	Roof =	802 cu.ft.
2/3 Bldg.	E	Roof =	535
Bldg.	A	Roof =	771
Ponding Area		=	648
Sidewalk and Swimming Pool		=	324
Total			3,080 cu.ft.

Area 2:

Storage Volume = 3119 cu.ft.		
Discharge to Area 2		
1/3 Bldg. E Roof	=	267 cu.ft.
Bldg. B Roof	=	710
2/3 Bldg. D Roof	=	535
Ponding Area	=	774
Sidewalk	=	278
Total		2,564 cu.ft.

Area 3:

Storage Volume = 1806 cu.ft.		
Discharge to Area 3		
1/3 Bldg. D Roof	=	267 cu.ft.
Bldg. C Roof	=	679
Ponding Area	=	453
Sidewalk	=	165
Total		1,698 cu.ft.

The other landscaped areas will be depressed 3 inches below the sidewalk and will act as small ponding areas for local run-off. The volume of storage provided by these depressed areas is 3,634 cu.ft. The swimming pool provides an additional 780 cu.ft. of storage. The total volume of storage required is 11,641 cu.ft. The total volume of storage provided is 12,448 cu.ft.

The offsite drainage is intercepted by Continental Loop. The area to the south drains southwest to Louisiana Boulevard.

Attached is a location map, the computation sheets and a site grading plan.

COMP. R.F Sykes
CK.
DATE 23 June 1977

WILSON & COMPANY
ENGINEERS & ARCHITECTS
BOX 3305
ALBUQUERQUE
NEW MEXICO

LOC. Albuquerque FILE 77-521
PROJ. Warren Apts SHEET 1
SUBJ. Drain. Report OF 3

Runoff Undeveloped 100 yr 6hr = 2.6 inches

Area = 2.2 Ac. C = 0.40

Volume = V = $2.2 \times 43560 \times \frac{2.6}{12} \times .4 =$ 8305 cu. ft.

Runoff Parking Area A = 39,275 sq. ft.

Volume = V = $39,275 \times \frac{2.6}{12} \times .95 =$ 8084 cu ft.

PONDING AREA

Volume Area 1

Contour		
37.5 to 38	$= (.5)(364.5)$	187 cu ft
38.0 to 38.5	$= (.5)[364.5 + 900 + (900 \times 364.5)^{1/2}](1/3) =$	706
38.5 to 39.0	$(.5)[900 + 2000 + (900 \cdot 2000)^{1/2}](1/3) =$	1915
39.0 to 39.75	$(.75)[2000 + 3150 + (2000 \cdot 3150)^{1/2}](1/3) =$	3109 cu. ft.

Discharge Area 1

Bldg F	$= (30)(130)(\frac{2.6}{12})(.95) =$	802 cu. ft.
2/3 Bldg E	$= (.67)(30)(130)(\frac{2.6}{12})(.95) =$	535
Bldg A	$= (30)(125)(\frac{2.6}{12})(.95) =$	771
Ponding Area	$= (3150)(\frac{2.6}{12})(.95) =$	648
5' Sidewalk & Swimpool	$= [(185)(5) + (32.5)(20)](.95)(\frac{2.6}{12}) =$	324

$\Sigma =$ 3080 — Does not exceed Volume 3109 cu. ft

COMP. R.F. Sykes
CK.
DATE 23 June 1977

WILSON & COMPANY ENGINEERS & ARCHITECTS
BOX 3305 ALBUQUERQUE NEW MEXICO

LOC. Albuquerque FILE 77-54
PROJ. Warren Apt SHEET 2
SUBJ. Drain Dept. OF 3

Volume Area 2

Contour

38.0 - 38.5 $(.5)[252 + 900 + (900 \cdot 252)^{1/2}](1/3)$ = 271 cu ft
38.5 - 39.0 $(.5)[900 + 2025 + (900 \cdot 2025)^{1/2}](1/3)$ = 712
39.0 - 39.75 $(.75)[2025 + 3760 + (2025 \cdot 3760)^{1/2}](1/3)$ = 2136
Σ = 3119 cu.ft.

Discharge Area 2

1/2 Bldg. E : $(1/3)(30)(130)(\frac{2.6}{12})(.95)$ = 267 cu.ft.
Bldg B : $(30)(115)(\frac{2.6}{12})(.95)$ = 710
2/3 Bldg D : $(2/3)(30)(130)(\frac{2.6}{12})(.95)$ = 535
Pond Area = $(3760)(\frac{2.6}{12})(.95)$ = 774
5' Sidewalk = $(270)(5)(\frac{2.6}{12})(.95)$ = 278
Σ = 2564 cu.ft. Does Not Exceed Storage 3119 ft³

Volume Area 3

Contour

38.5 - 39.0 = $(30)(12)(.5)$ = 180 cu ft
39.0 - 39.5 = $(.5)[360 + 1200 + (360 \cdot 1200)^{1/2}](1/3)$ = 370
39.5 - 40.25 = $(.75)[1200 + 2200 + (1200 \cdot 2200)^{1/2}](1/3)$ = 1256
Σ = 1806 cu.ft.

Discharge Area 3

1/3 Bldg D $(1/3)(30)(130)(\frac{2.6}{12})(.95)$ = 401 cu.ft.
Bldg C = $(30)(110)(\frac{2.6}{12})(.95)$ = 679
Ponding Area = $(2200)(\frac{2.6}{12})(.95)$ = 453
5' Sidewalk = $(160)(5)(\frac{2.6}{12})(.95)$ = 165
Σ = 1698 cu ft ←

Does not exceed Storage of 1806 cu ft.

BY R.F. Sykes
CK.
DATE 28 June 1977

WILSON & COMPANY
ENGINEERS & ARCHITECTS
BOX 3305
ALBUQUERQUE
NEW MEXICO

LOC. Albuquerque FILE 77-521
PROJ. Warren Apt SHEET 3
SUBJ. Drain Rept. OF 3

Volume Reqd.

Total Area = 95,832 ft²
Parking Area = 39,275 ft²
56,557 ft²

$56,557 \times \frac{2.6}{12} \times .95 = 11,691$ ft³

1. LANDSCAPE AREA DEPRESSED 3"

Volume Storage = $(23,657 - 9,110) \times \frac{3}{12} = 3,634$ ft³
Swim Pool Storage = $3600 \times \frac{2.6}{12}$

Total Volume Storage Provided

Area 1	= 3109 cu ft
Area 2	= 3119
Area 3	= 1806
Depressed Area	= 3634
Swim Pool	= 780
TOTAL	= 12,448 cu ft.

REVISED

ENGINEER'S DRAINAGE REPORT

FOR

WARREN LOUISIANA APARTMENTS

LOT 5, BLOCK 2, CONTINENTAL VILLAGE

ALBUQUERQUE, NEW MEXICO

ZONE ATLAS MAP L-19

WILSON & COMPANY

ENGINEERS & ARCHITECTS

1321 SAN PEDRO DR., NE

ALBUQUERQUE, NEW MEXICO

APRIL 1983

(83-501)

WILSON & COMPANY ENGINEERS ARCHITECTS

REVISED

ENGINEER'S DRAINAGE REPORT

FOR

WARREN LOUISIANA APARTMENTS

LOT 5, BLOCK 2, CONTINENTAL VILLAGE

ALBUQUERQUE, NEW MEXICO

ZONE ATLAS MAP L-19

LOCATION: The property is a 1.9 acre tract at the northeast corner of Louisiana Blvd. and Continental Loop S.E. as shown in Zone Atlas Map L-19.

GENERAL: In August of 1977 a drainage report was prepared and approved for the construction of two apartment buildings on said Lot 5. The unit fronting Louisiana Blvd. was constructed in late 1977, but the construction of the unit fronting Continental Loop was deferred. It has been decided to construct the second unit in January of 1983. In the interim period the drainage ordinances and requirements of the City of Albuquerque have been amended, thus a revised drainage report is deemed advisable.

EXISTING IMPROVEMENTS: The following improvements were constructed in 1977.

1. Building facing Louisiana Blvd.
2. North one-half of the paved parking lot.
3. Swimming pool.
4. Planter-dry well.
5. Swale between Louisiana curb walk and building with sidewalk drain.

Our field survey indicates all constructed improvements are in accordance with plan presented in the original drainage report.

PROPOSED REVISIONS: It is proposed to make the following revisions.

1. Since dry wells are no longer acceptable by the City, it is proposed to remove the east curb of the planter and reconstruct the curb so run-off will flow east in the center of the north half of the parking lot. There would be some detention of run-off behind the traffic bumps, but would only be a very small quantity with a maximum depth of 2 inches.

2. Extend existing traffic bumps south so it will detain more run-off.

3. Construct additional traffic bumps at locations shown on plan.

4. Delete the proposed 2.5 ft. deep ponding area for roof drains. The drains for proposed building will discharge to the paved parking lot.

5. Depress landscaped areas to the south and east of new building about 1½-inches. This will allow the retention of the rainfall that falls within the landscaped areas.

EFFECT OF PROPOSED INCREASE IN RUN-OFF: The storm water run-off from the project discharges to Louisiana Blvd. thence drains north to Anderson Ave. thence west on Anderson. The 1981 Albuquerque Master Drainage Study, Volume II, Plate L 18, indicates 100 year flooding does not occur until the run-off reaches California St. The drainage plan proposes the construction of System 206-02A to alleviate the flooding conditions on Anderson at California. System 206-02A is a high priority project and will probably be constructed when San Mateo Blvd. is improved south from Zuni Road.

COMP. R.F. Sykes
CK.
DATE 11 April 1985

WILSON & COMPANY ENGINEERS ARCHITECTS

LOC Albuquerque FILE 83-501
PROJ Warren Apt SHEET 1
SUBJ Revised Dr. Rpt. OF

Revised Drainage Report Lot 5, Block 2, Continental Village

Area To Be Developed = 36,200 Sq. Ft. = .83Ac

Roof = 8,670 Sq Ft
Parking = 15,080 Sq Ft
Sidewalk 1,840 Sq Ft
E = 25,590

Landscape 10,610

100 yr 6 hr rainfall = 2.4"

C value
Roof & Parking = $\frac{25,590}{36,200}$ × .95 = .67
Landscape (Grass) $\frac{10,610}{36,200}$ × .20 = .12
E = .79

Tc = < 10 min i_{100} = 2.4 × 2.2 = 5.28

Max Rate of Runoff
$Q_{100} = C i_{100} A$
= .79 × 5.28 × .83 = 3.06 cfs.

TOTAL 6 Hr RUNOFF
Vol_{100} = 36,200 × $\frac{2.4}{12}$ = 7,240 cu ft.