HYDROLOGY D17/D4 2 PLANS

D17/D4

3 PLANS

DRAINAGE REPORT

LOT 2A, UNIT V
INTERSTATE INDUSTRIAL TRACT

JULY 1978

FRED DENNEY & ASSOCIATES, INC.
5643 PARADISE BLVD., NW
ALBUQUERQUE, NM 87114

DRAINAGE REPORT

LOT 2A, UNIT V
INTERSTATE INDUSTRIAL TRACT

JULY 1978

FRED DENNEY & ASSOCIATES, INC.
5643 PARADISE BLVD., NW
ALBUQUERQUE, NM 87114

I, Louis W. Gross, hereby certify that the enclosed documents and drawings were prepared under my supervision and are true and correct to the best of my knowledge and belief.

Louis W. Gross

New Mexico Registered Professional
Engineer and Land Surveyor No. 4100

LOUIS W. GROSS
NEW MEXICO
4100
REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR

Drainage Report

Lot 2A, Unit V
Interstate Industrial Tract

Lot 2A is located in Quad D-17 as shown on the attached City of Albuquerque Precipitation Map. By interpolation between isopluvials, a 100 year - 6 hour rainfall of 2.3 inches was obtained. Sheet flow enters the property from the east. However, no defined channels traverse the lot.

Since no drainage easements exist from the rear of the lot, it is planned to contain the entire 100 year - 6 hour storm runoff from the rear portion of the lot. Part of the front portion of the lot will be ponded and the natural runoff will discharge to Hawkins Street. (See attached Grading Plan.)

The natural runoff from the undeveloped lot is calculated as follows:

2.3/12 x 296.9 x 130 x .4 = 2959 cf

The runoff from the developed lot is calculated as follows:

2.3/12 x 296.9 x 130 x .9 = 6658 cf

The volume required to pond:

6658 cf minus 2959 cf = 3699 cf

The runoff and required ponding calculations for each area are as follows:

Area A-1

Runoff volume:

2.3/12 x 27,008 x 0.9 = 4659 cf

Ponding volume:

Pond entire 100 year - 6 hour runoff volume in Ponding Area A-1.

Area A-2

Runoff volume:

2.3/12 x 3846 x .9 = 663 cf

Ponding volume:

Pond A-2 will pond 320 cf and the remaining 343 cf will overflow to Hawkins Street.

Area A-3 and A-5

Runoff volume:

2.3/12 x (5023 + 1910) x 0.9 = 1196 cf

All the runoff volume from A-3 and A-5 will discharge to Hawkins Street.

Area A-4

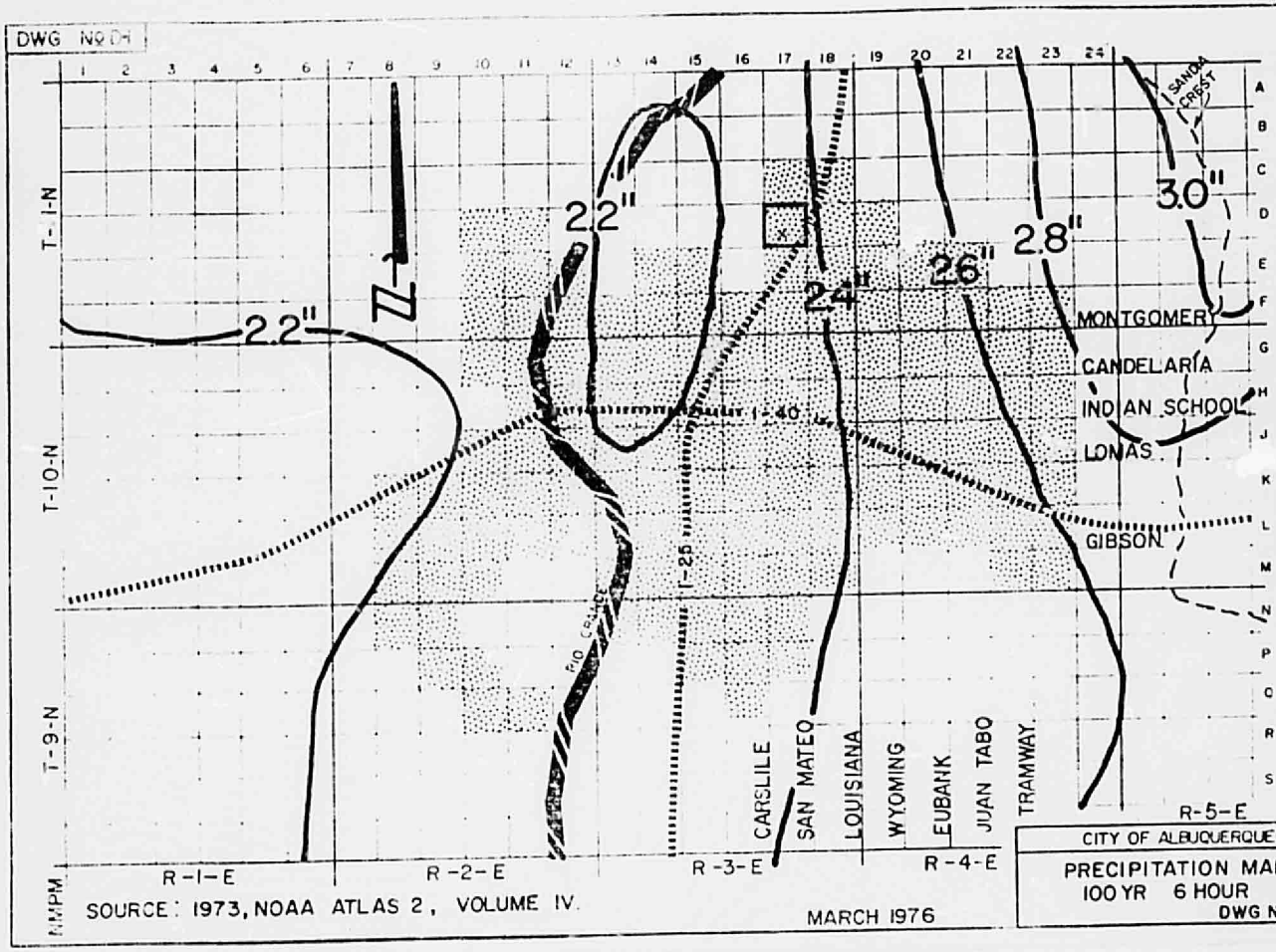
Runoff volume:

2.3/12 x 810 x 0.9 = 140 cf

Area A-4 is a zero runoff area and will store the 140 cf.

Summary (100 yr. - 6 hr. runoff)

Area	Ponding	Discharge
A-1	4659 cf	0
A-2	320 cf	343 cf
A-3 and A-5	0 cf	1196 cf
A-4	140 cf	0 cf
TOTAL	5119 cf	1539 cf
Required:	3699 cf	Allowable: 2959 cf


DWG Nº D-1
2.2"
2.2"
2.4"
2.6"
2.8"
3.0"
SANDIA CREST
MONTGOMERY
CANDELARIA
INDIAN SCHOOL
LOMAS
GIBSON
I-40
I-25
RIO GRANDE
CARSLILE
SAN MATEO
LOUISIANA
WYOMING
EUBANK
JUAN TABO
TRAMWAY
T-11-N
T-10-N
T-9-N
R-1-E
R-2-E
R-3-E
R-4-E
R-5-E
NMPM
SOURCE: 1973, NOAA ATLAS 2, VOLUME IV.
MARCH 1976
CITY OF ALBUQUERQUE
PRECIPITATION MAP
100 YR 6 HOUR
DWG Nº D-1

Address 4820 A Pan American Engr/~~Arch~~ N.W.Y N.C Vaugr

Plans Approved 7-28-82 Cond.

Comments: F-17-D26 F17-D27

Inspection Requested 4/4/83 Contractor

Appr. Disappr. 4/6/83 30 Day Temp.

Comments: Regrade North side of warehouse so that downspout flows will flow towards the west. Also revised plan required reflecting change in the grades on the west side of property must accept ~~outside~~ off-site flows

Reinspection and/or comments:

DRAINAGE REPORT SUBMITTED
TO BRUCE ARNOLD AUG 1

4615 HAWKINS STREET

STANDARD REQUIREMENTS FOR DRAINAGE PLANS

PURPOSE: The increasing volume of drainage plans submitted to this office makes it mandatory that such plans be standardized as much as possible in order to expedite reviews. This standardization is as much to the advantage of the developer and engineer as it is to the Hydrology Section which enforces the AMAFCA RES. 72-2. For parcels of land less than 20,000 sq. ft. in surface area no formal drainage report is required; the construction plans need only to include the standard form attached herein and the site drainage plan. Developers for larger parcels of land will have to submit a formal drainage report as specified in the Resolution.

RUNOFF PONDING: In most instances on site ponding is mandatory, with dispersal in the ground of the excess runoff arising from newly created impervious surfaces. The only exception allowed, is for those properties adjacent to a diversion channel which was designed for higher standard than 100 years frequency storm (existing conditions). For detailed computations of the runoff before and after development the assumed runoff coefficient recommended are C = 0.4 for undeveloped, landscaped or similar open areas and C = 0.9 for all other impervious surfaces, including areas in southwestern type landscaping with underlying polyethylene film and gravel covered parking areas where vehicular traffic will compact the soil and render it impervious. Due to the inadequacy of the existing drainage facilities in the valley area and to the limited capabilities of the City for providing relief, ponding requirements in the valley are higher than elsewhere.

COMPUTATION OF VOLUME OF RETENTION:

Valley Area $= 1.0 \times \frac{2.2''}{12''} \times \text{Area (ft.)} = 0.18 \times A$

East and West Mesa $= (0.9 - 0.4) \times \frac{2.4''}{12''} \times \text{Area (ft.)} = 0.1 \times A$

In order to facilitate the design of drainage facilities, a checklist that will be followed in the review process is listed below:

CHECK LIST

1 - Flooding potential - adjacent water courses

Is property located in the flood plain?

If so, is the finished floor above the 100 yrs. flood level?

Is property adjacent to a natural or artificial water course?

If so, what are the specific AMAFCA or City requirements?

GARY TIBLJAS AUG 1st SUBMITTED

Are drainage R.O.W or easements shown on, or in the proximity of property? If so, are there drainage problems?

2 - Relation of property to surroundings

Per topo map, does property intercept other drainage upstream?

If so, how is runoff conveyed across property?

May there be erosion associated with offsite runoff conveyance?

May erosion or siltation result from proposed construction activities?

Does development block drainage from adjacent property?

3 - Site grading

Does site plan show contours before development (extending a minimum of 25 ft. beyond property lines)?

Does site plan show proposed grading with adequate swale definition to convey water to ponds?

Is all runoff conveyed to ponding areas before it overflows to public facilities?

Does the proposed grading plan indicate that under cutting or back-filling adjacent to property lines may require retention walls?

Is there continuity between proposed new contours and old contours offsite?

Is elevation of property line at least 0.3 ft. above top of curb?

4 - Storm water retention

Is ponding volume adequate (supply detailed computation)?

Are ponds balanced with areas they drain (can area draining to each pond be easily identified and will actually water flow there)? The plot plan must outline each drainage area.

Can pond volume be computed and verified?

Are ponds practical, can they be built as shown?

5 - Safety

Do the drainage provisions constitute an attractive nuisance, or safety hazard?

If the pond depth is greater than 18",are safety provisions supplied? (Minimum 3.0 ft. high chain link fence or similar physical barrier of ponding areas are adjacent to public R.O.W.?)

In general, ponds of depth greater than 18" will not be accepted for both safety consideration and for long term effectiveness of the facilities. In those cases where limited space is available for ponding, the use of gravel pits under the parking areas is suggested. It must be pointed out that mainstream and effectiveness of these facilities is necessary and is the responsibility of the owner. Existing or planned City facilities (streets, channels, storm sewers) can accommodate the natural runoff volumes. Greater discharges would cause flooding downstream and need to be limited at the source.

FRED DENNEY & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 PARADISE BLVD., N.W.
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-2457

July 19, 1978

Mr. Bruno Conegliano
Drainage Engineer
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

RE: Drainage Report for
Lot 2A, Unit V
Interstate Industrial Tract
F.D. Job No. GEN-4

Dear Bruno:

Transmitted herewith is a drainage study and plan including a grading plan for the proposed Fred Denney & Associates, Inc. office building. As you can see, the plan is well within the parameters of your requirements and I recommend that you approve the plan.

If you have any questions, please give me a call.

Very truly yours,

Louis W. Gross

Louis W. Gross, P.E.

LWG:cst

Enclosure

D17-D4

DRAINAGE COVENANT

81 54452

120

THIS COVENANT made this 2nd day of October, 1981, by and between the City of Albuquerque, a municipal corporation, (City) and Sun Belt Partnership (Owner, which term includes successors and assigns.)

RECITAL

The Owner is owner of certain real property located at 3715 Hawkins, N.E. in Albuquerque, New Mexico, (the Property) and more particularly described as follows:

INTERSTATE INDUSTRIAL TRACT UNIT #IV

LOT 16

ZONE MAP D-17

That pursuant to City ordinances, regulations, and other applicable laws, the Owner is required to install and/or maintain certain drainage facilities on the Property, and the parties wish to provide for an agreement as to the obligations and responsibilities for same.

DESCRIPTION OF FACILITIES

The following facilities are to be constructed and/or maintained by the owner:

Water Retension Pond

Total Volume 18,424 cubic feet

Total 6 hr. run off 15,985 cubic feet

Surface Area 9,360 s.f.

CONSTRUCTION OF DRAINAGE FACILITIES

The Owner shall construct the drainage facilities in accordance with standards, plans, and specifications prescribed and approved by the City.

MAINTENANCE OF FACILITIES

The Owner shall, at his cost in accordance with the standards, plans, and specifications prescribed by the City, maintain said drainage facility. The City shall have the right to enter periodically upon the Property to inspect the drainage facility.

FAILURE TO COMPLY AND LIEN

In the event that the Owner shall fail to construct the drainage facility in accordance with standards, plans, and specifications prescribed and approved by the City or fail to adequately maintain said facilities, the City shall give the Owner notice in writing to construct, correct, or maintain said

facilities, and if the Owner fails to comply therewith within _____ days, the City may enter upon said property to perform the necessary construction or maintenance. The cost of the City's performing such construction or maintenance shall be paid by the Owner. In the event the Owner fails to pay said cost within thirty (30) days after being billed for same, the City may file a lien against the Property.

LIABILITY

The City shall not be liable for any damages to the Owner resulting from its construction, modification, or maintenance of said facilities.

NOTICE

The written notice provided for herein shall be accomplished by mailing same to:

Sun Belt Business Centers, Inc.
4924 Jefferson NE
Albuquerque, N.M. 87109

The Owner may change said address by giving written notice, certified mail, return receipt requested, to the City Engineer, City Hall, at 505 Marquette Street, Albuquerque, New Mexico, 87103.

INDEMNIFICATION AND HOLD HARMLESS

The Owner agrees to defend, indemnify, and hold harmless, the City, its officials, agents and employees from and against any and all claims, actions, suits, or proceedings of any kind brought against said parties for or on account of any matter arising from the drainage facility provided for herein or the Owner's failure to construct, maintain, or modify the drainage facility under this Covenant.

COVENANT RUNNING WITH THE PROPERTY

The obligation of the Owner set forth herein shall be binding upon the Owner, his heirs, and assigns, and the property of the Owner as described herein and will run with said property until released by the City.

REVIEWED BY HYDROLOGY SECTION
CITY ENGINEER'S OFFICE

By: _____

OWNER

By: _____

Title: Managing Partner

REVIEWED BY THE LEGAL DEPARTMENT:

_____
Assistant City Attorney

CITY OF ALBUQUERQUE

_____
Chief Administrative Officer

ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this _____day of _____, 1981, by _____
_____, _____
(Name of Officer) (Title)
_____, a _____
(Name of Corporation) (State of Incorporation)
corporation, on behalf of said corporation.

_____
Notary Public

My Commission Expires:
_____

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this 2 day of October, 1981, by _____
William F. Wieman
(Name of Acknowledging Partner or Partners)
on behalf of Sun Belt Partnership,
(Name of Partnership)
a partnership.

Bernie B. Wieman
Notary Public

My Commission Expires:
July 22, 1985

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me by _____, on this _____day of _____, 1981.

_____
Notary Public

My Commission Expires:
_____

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this 13th day of October, 1981, by James C. Jaramillo Chief Administrative Officer of the City of Albuquerque, municipal corporation, on behalf of said corporation.

Karen M. Aceves
Notary Public

My Commission Expires:
2/24/85

OFFICIAL SEAL
KAREN M. ACEVES
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires 2/24/85

STATE OF NEW MEXICO
COUNTY OF BERNALILLO
FILED

OCT 14 11 00 AM '81
BK. Misc 885 PG. 120-122
TERRY R. HUBER
CO. CLERK AND EX-OFFICIO RECORDER
Melissa West DEPUTY

DRAINAGE COVENANT

THIS COVENANT made this _____day of _____, 1982, by and between the City of Albuquerque, a municipal corporation, (City) and Harlan Seeley (Owner, which term includes successors and assigns.)

RECITAL

The Owner is owner of certain real property located at 4908 Hawkins Street NE in Albuquerque, New Mexico, (the Property) and more particularly described as follows:

Lot 13 A & 13 B Unit V Interstate Indrustrial Tract

RECEIVED

APR 12 1982

ENGINEERING

That pursuant to City ordinances, regulations, and other applicable laws, the Owner is required to install and/or maintain certain drainage facilities on the Property, and the parties wish to provide for an agreement as to the obligations and responsibilities for same.

DESCRIPTION OF FACILITIES

The following facilities are to be constructed and/or maintained by the owner:

Ponding and grading as shown on Grading Plan
Specification Building for Harlan Seeley

CONSTRUCTION OF DRAINAGE FACILITIES

The Owner shall construct the drainage facilities in accordance with standards, plans, and specifications prescribed and approved by the City.

MAINTENANCE OF FACILITIES

The Owner shall, at his cost in accordance with the standards, plans, and specifications prescribed by the City, maintain said drainage facility. The City shall have the right to enter periodically upon the Property to inspect the drainage facility.

FAILURE TO COMPLY AND LIEN

In the event that the Owner shall fail to construct the drainage facility in accordance with standards, plans, and specifications prescribed and approved by the City or fail to adequately maintain said facilities, the City shall give the Owner notice in writing to construct, correct, or maintain said

facilities, and if the Owner fails to comply therewith within 30 days, the City may enter upon said property to perform the necessary construction or maintenance. The cost of the City's performing such construction or maintenance shall be paid by the Owner. In the event the Owner fails to pay said cost within thirty (30) days after being billed for same, the City may file a lien against the Property.

LIABILITY

The City shall not be liable for any damages to the Owner resulting from its construction, modification, or maintenance of said facilities.

NOTICE

The written notice provided for herein shall be accomplished by mailing same to:

Harlan Seeley
4800 Hawkins St NE
Albuquerque, NM 87113

RECEIVED
APR 12 1982
ENGINEERING

The Owner may change said address by giving written notice, certified mail, return receipt requested, to the City Engineer, City Hall, at 505 Marquette Street, Albuquerque, New Mexico, 87103.

INDEMNIFICATION AND HOLD HARMLESS

The Owner agrees to defend, indemnify, and hold harmless, the City, its officials, agents and employees from and against any and all claims, actions, suits, or proceedings of any kind brought against said parties for or on account of any matter arising from the drainage facility provided for herein or the Owner's failure to construct, maintain, or modify the drainage facility under this Covenant.

COVENANT RUNNING WITH THE PROPERTY

The obligation of the Owner set forth herein shall be binding upon the Owner, his heirs, and assigns, and the property of the Owner as described herein and will run with said property until released by the City.

OWNER

By: _____

Title: _____

REVIEWED BY THE LEGAL DEPARTMENT:

_____
Assistant City Attorney

CITY OF ALBUQUERQUE

_____
Chief Administrative Officer

ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this _____day of _____, 1981, by _____
_____, _____
(Name of Officer) (Title)
_____, a _____
(Name of Corporation) (State of Incorporation)
corporation, on behalf of said corporation.

_____
Notary Public

My Commission Expires:
_____

RECEIVED

APR 12 1982

ENGINEERING

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this _____day of _____, 1981, by _____
_____
(Name of Acknowledging Partner or Partners)
on behalf of _____,
(Name of Partnership)
a partnership.

_____
Notary Public

My Commission Expires:
_____

X STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me by Harlan W. Seeley, on this 5th day of April, 1981.

_____
Notary Public

OFFICIAL SEAL
Signature Berta White
BERTA WHITE
NOTARY PUBLIC - NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires 05-24-82

My Commission Expires:
_____

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this _____day of _____, 1981, by _____
Chief Administrative Officer of the City of Albuquerque, municipal corporation, on behalf of said corporation.

_____
Notary Public

My Commission Expires:
_____

Legal Dept

79 60048

LIEN AGREEMENT

RECEIVED
AUG 15 1979
CITY ENGINEER

The City of Albuquerque (City), and Caribe Food Products, Inc., (Caribe), a corporation, agree:

1. First Recital. Caribe is the owner of the following described property:

> Tracts, A-1, Caribe Addition to the City of Albuquerque, being a summary replat of all of Tracts A-2 and A-3 of the re-division of Tract "A", Caribe Addition, Bernalillo County, New Mexico, as the same are shown and designated on the plat thereof filed in the office of the County Clerk of Bernalillo County, New Mexico, on February 14, 1978; and tract C-2, Group Nine Industrial Park, being a replat of Tract C, Group Nine Industrial Park, Benalillo County New Mexico as the same are shown and designated on the plat thereof filed in the office of the County Clerk of Bernalillo County, New Mexico, on May 9, 1978.

E17-D19

Caribe has presented a drainage plan and plot plan to the City as a condition of obtaining site development plan approval for the development of the above-described property. City requires Caribe to enter into this Agreement as a condition of its approval of Caribe's drainage plan and approval of its site development plan and as a condition of the issuance of building permits on this site.

2. Second Recital. The above-described property's southwestern boundary abuts a drainage easement which is over a natural arroyo (the arroyo). City Resolution 59-1976 provides that abutting landowners shall share equally in the cost of design and construction of arroyo modification or alteration, for arroyos of this size.

3. Drainage Right-of-Way Improvement Cost. In accordance with the Leonard Rice Report adopted by the City of Albuquerque, the arroyo adjacent to the property requires improvement consisting of two drop structures. Installation of the two drop structures will complete the required permanent improvements. When the City places these permanent improvements wthin this arroyo, the property is burdened with the duty to pay fifty percent of the actual cost of these permanent improvements of the drainage right-of-way, not to exceed $20,000.00. City will provide written notice of its decision to permanently improve the drainage right-of-way.

4. It is further understood by Caribe that these arroyo improvements do not provide for erosion protection measures for Caribe's property and that the burden is upon Caribe to make these improvements. If Caribe selects to not make erosion control improvements, they agree to hold the City harmless and release the City from any claims for damage to their property resulting from the lack of these improvements.

5. Terms of Payment. City will notify Caribe of the amount of the obligation. Payment of the obligation will be upon such terms as City and Caribe may agree, but payment in full will not be required prior to completion of the permanent improvements.

6. City Approval. Upon execution of this Agreement, City will not withhold approval for reasons related to drainage right-of-way improvement of any plats, site development plans, or building permits of the property.

7. Addresses. Written notice may be provided to the parties by mailing notices to: Caribe Food Products, Inc., 5801 Kircher Boulevard, Albuquerque, New Mexico 87109; City of Albuquerque, City Engineer, 400 Marquette, N.W., Albuquerque, New Mexico 87102.

8. Nature of Lien and Obligation. The obligation is binding upon the property and will run with the property until payment as provided for herein is made in full. This obligation will constitute a lien on the property as provided for herein. This Lien Agreement may be recorded by City in order to provide notice of the lien and obligation to subsequent purchasers of and interested parties in the property.

9. Release from Lien and Obligation. Upon payment in full of the obligation, the property will be released from the lien and obligation. If the City exercises its option to construct the improvements and payment in full is made, the City will execute and record a release of lien and obligation.

10. Subordination. The lien will be subordinate to any first encumbrance placed on the property by Caribe. This provision is self-operative, but City, upon request of Caribe, will promptly sign and deliver any document required to confirm this subordination.

CARIBE FOOD PRODUCTS, INC.

By _____

ITS Assistant Secretary

Approved as to Form
Edward P. Armstrong

CITY OF ALBUQUERQUE

By _____
Chief Administrative Officer

REVIWED AND APPROVED BY
LEGAL DEPARTMENT:

_____

ACKNOWLEDGEMENTS

STATE OF INDIANA)
) ss.
COUNTY OF ALLEN)

The foregoing instrument was acknowledged before me this 20th day of June, 1979, by William H. Small.

Assistant Secretary of Caribe Food Products, Inc., a corporation, on behalf of said corporation.

_____
Notary Public Susan K. Burnworth
Resident of Allen County, Indiana

My Commission Expires:

May 27, 1982

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this 9th day of August, 1979, by Arthur A. Blumenfeld, Acting Chief Administrative Officer of the City of Albuquerque, a municipal corporation, on behalf of said corporation.

Orlando O. Valdez
Notary Public

My commission expires:
Jan. 10, 1982

STATE OF NEW MEXICO
COUNTY OF BERNALILLO
FILED FOR RECORD

AUG 10 9 58 AM '79
Misc. B. 710 56-58
COUNTY CLERK AND RECORDER