



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 10, 1991

Santiago Romero, Jr.
Santiago Romero Jr. & Associates
6139 Edith Blvd., NE
Albuquerque, New Mexico 87107

RE: ENGINEER'S CERTIFICATION FOR BLACK-EYED PEA RESTAURANT
(K-21/D20A) CERTIFICATION STATEMENT DATED NOVEMBER 26, 1991

Dear Mr. Romero:

Based on the information provided on your resubmittal of December 2, 1991, Engineer's Certification is acceptable for the referenced site.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya
Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj
(WP+2767)

PUBLIC WORKS DEPARTMENT

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

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

PROJECT TITLE: BLACK EYED PEA RESTAURANT ZONE ATLAS/DRNG. FILE #: K-21/D20ALEGAL DESCRIPTION: SOUTHERLY PORTION OF TRACT A-2- PRINCESS JEAN ADDN - BLOCK 123CITY ADDRESS: 601 JUAN TABO NEENGINEERING FIRM: SANTIAGO ROMERO JR & Assoc. CONTACT: SANTIAGO ROMERO JR.ADDRESS: 6139 EDITH BLVD NE PHONE: 345-2733OWNER: UNIGATE RESTAURANTS CONTACT: WALT CARUCCI8115 PRESTON RD. SUITE 600
ADDRESS DALLAS TX 75225 PHONE: (214) 363-9513

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: SANTIAGO ROMERO JR & Assoc. CONTACT: SANTIAGO ROMERO JR.ADDRESS: 6139 EDITH BLVD NE PHONE: 345-2733CONTRACTOR: S & J ENTERPRISES CONSTRUCTION CONTACT: DENNIS WILLIAMS3535 PRINCETON DR NE
ADDRESS: ALBUQUERQUE NM 87107 PHONE: 884-6234

PRE-DESIGN MEETING:

____ YES

DRB NO. _____

X NO

EPC NO. _____

____ COPY OF CONFERENCE RECAP
SHEET PROVIDED

PROJECT NO. _____

TYPE OF SUBMITTAL:

CHECK TYPE OF APPROVAL SOUGHT:

____ DRAINAGE REPORT

____ SKETCH PLAT APPROVAL

____ DRAINAGE PLAN

____ PRELIMINARY PLAT APPROVAL

____ CONCEPTUAL GRADING & DRAIN. PLAN

____ SITE DEVELOPMENT PLAN APPROVAL

____ GRADING PLAN

____ FINAL PLAT APPROVAL

____ EROSION CONTROL PLAN

____ BUILDING PERMIT APPROVAL

X ENGINEER'S CERTIFICATION

____ FOUNDATION PERMIT APPROVAL

X CERTIFICATE OF OCCUPANCY APPROVAL

____ ROUGH GRADING PERMIT APPROVAL

____ GRADING/PAVING PERMIT APPROVAL

DATE SUBMITTED: 12/2/91BY: [Signature]
SANTIAGO ROMERO JR.

OTHER _____ (SPECIFY)



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 2, 1991

Santiago Romero, Jr.
Santiago Romero Jr. & Associates
6139 Edith Blvd., NE
Albuquerque, New Mexico 87107

RE: REVISED DRAINAGE PLAN FOR BLACK-EYED PEA RESTAURANT (K-21/D20A)
ENGINEER'S STAMP DATED JULY 30, 1991, RECEIVED JULY 30, 1991

Dear Mr. Romero:

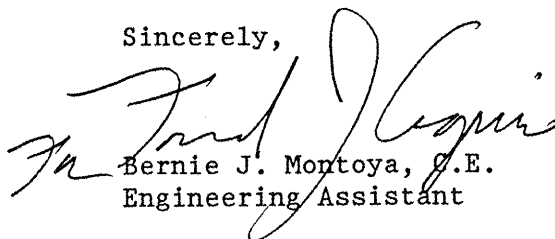
Based on the information provided on your July 30, 1991 resubmittal, the above referenced site is approved for Building Permit.

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

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

If I can be of further assistance, please feel free to contact me at 768-2650.

Sincerely,


Bernie J. Montoya, C.E.
Engineering Assistant

cc: Alan Martinez, Drainage Inspector

BJM:jc
WP+2767

PUBLIC WORKS DEPARTMENT

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

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 22, 1991

Santiago Romero, Jr.
Santiago Romero, Jr. & Associates
6139 Edith Boulevard, NE
Albuquerque, New Mexico 87107

RE: REVISED DRAINAGE PLAN FOR BLACK-EYED PEA RESTAURANT
(K-21/D20A) RECEIVED JULY 15, 1991

Dear Mr. Romero

Based on the information provided on your submittal of June 20, 1991, listed you will find some concerns that will need to be addressed prior to final approval.

1. ✓ Key note #1 must be changed to reflect the weir width.
2. ✓ Remove or cross through the calculations pertaining to the culverts and curb cuts.
3. ✓ You may want to recompute your intensity.
 $I = (6 \text{ hr rainfall}) 6.84(10)^{-.51}$ it will probably give you a smaller answer.
4. ✓ How did you determine your pipe culvert capacity? Did you use the charts?
5. ✓ Please identify that the perimeter wall top elevation will be higher than the 100 year water surface.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya
Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj
(WP+2767)

PUBLIC WORKS DEPARTMENT



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 10, 1991

Santiago Romero, Jr.
Santiago Romero, Jr. & Associates
6139 Edith Boulevard, NE
Albuquerque, New Mexico 87107

RE: DRAINAGE PLAN FOR BLACK-EYED PEA RESTAURANT
(K-21/D20A) RECEIVED JUNE 20, 1991

Dear Mr. Romero

Based on the information provided on your submittal of June 20, 1991, listed you will find some concerns that will need to be addressed prior to final approval.

1. Your calculations for determining the capacity of the existing 2 - 24" cmfs does not take into account inlet and outlet control. You may want to use culvert design aids by the U.S. Bureau of Public Roads Culvert Capacity Charts to determine your true capacity.
2. Your calculation for the depressed curb 4' wide will need to be treated as a weir.

If I may be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj
(WP+2767)

PUBLIC WORKS DEPARTMENT

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

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notes.dwg

DRAINAGE REPORT
FOR
BLACK-EYED PEA

LOCATION AND DESCRIPTION:

The site is located on the NW corner of I-40 and Juan Tabo Boulevard, NE in Albuquerque, New Mexico. The overall site, consisting of the Olive Garden Restaurant, the China Wok, miscellaneous stripe shops and undeveloped land contains approximately 6 acres. Presently slopes are from the northwest to the southeast at an average of one percent. The site is not located within the 500 year flood plain.

EXISTING CONDITIONS:

Presently, runoff from the site discharges to the SW corner where it is intercepted by 2 24" CMP culverts. Runoff then enters an existing concrete lined channel along I-40. Off-site grading along the I-40 and the installation of a soils mat has been completed. No further construction along I-40 will be required. No off-site flows enters the site due to existing elevations.

PROPOSED CONDITIONS:

Proposed development of the site will be in two additional phases: construction of the Black-Eyed Pea Restaurant and construction of Retail Space. The restaurant will be completed at this time; it is unknown when construction of the retail space will be completed. (A site specific grading plan will be submitted for the retail space for review by Hydrology prior to construction of the retail space.) Construction of the Black-eyed Pea Restaurant will include related parking and landscaping.

Due to the proposed and future developments, runoff from the site will increase from 24.58 CFS to 29.11 CFS. The flow will be routed to the existing 2 24" CMP pipes via asphalt swales. The runoff will continue to drain into the concrete lined channel along I-40.

CALCULATIONS: (Based on the City of Albuquerque Development Process Manual)

AREA = 6.0 acres
 $I = (6.84)(T_c)^{-0.51} = (6.84)(10)^{-0.51} = 2.1138$
6-HOUR, 100-YEAR RAINFALL = 2.45 in
 $i = (2.45)(2.1138) = 5.1787 = 5.18 \text{ in/hr}$

EXISTING OVERALL ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A(acres)	"C" x A	COMPOSITE "C"=CxA/A
Paving & Walks	0.95	3.4	3.23	
Roofs	0.90	0.7	0.63	
Lawns & Landscaping	0.25	0.3	0.07	
Undeveloped	0.40	1.6	0.64	
TOTALS		6.0	4.57	0.76

$Q(100) = (0.76)(5.18)(6.0) = 23.62 \text{ CFS}$
 $Q(10) = (0.657)(23.62) = 15.52 \text{ CFS}$
CN = 80
Direct Runoff = 0.7 in
 $V(100) = (0.7)(6.0)(43560)/12 = 15,246 \text{ cf}$
 $V(10) = (0.657)(15,246) = 10,017 \text{ cf}$

PROPOSED OVERALL ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A(acres)	"C" x A	COMPOSITE "C"=CxA/A
Paving & Walks	0.95	4.7	4.47	
Roofs	0.90	0.9	0.81	
Lawns & Landscaping	0.25	0.4	0.10	
Undeveloped	0.40	0.0	0.00	
TOTALS		6.0	5.38	0.90

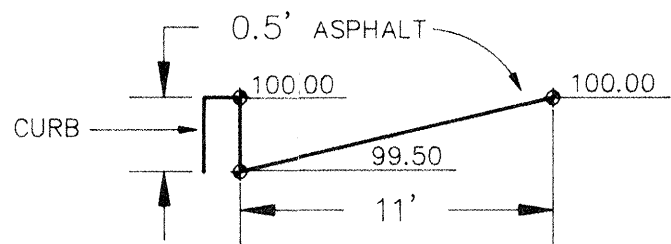
$Q(100) = (0.90)(5.18)(6.0) = 27.97 \text{ CFS}$
 $Q(10) = (0.657)(27.97) = 18.38 \text{ CFS}$
CN = 90
Direct Runoff = 1.3 in
 $V(100) = (1.3)(6.0)(43560)/12 = 28,314 \text{ cf}$
 $V(10) = (0.657)(28,314) = 18,602 \text{ cf}$

NOTE: Calculations include future development

CAPACITY OF WEST DRIVE:

$n = 0.013$
 $S = 0.01$
 $A = (0.5)(b)(h) = (0.5)(11)(0.5) = 2.75 \text{ sq ft}$
 $R = (0.5)+(11^2+0.5^2)^{0.5} = 11.51 \text{ ft}$

$Q = (1.49/n)(A)(R)^{0.6667}(S)^{0.5}$
 $Q = (1.49/0.013)(2.75)(11.51)^{0.6667}(0.01)^{0.5} = 160 \text{ CFS} \gg 29.11 \text{ CFS required o.k.}$



	NORTHING	EASTING	COMMENTS
1	1483636.19	420331.97	PROPERTY CORNER
2	1483832.07	420339.88	PROPERTY CORNER
3	1483826.47	420478.44	PROPERTY CORNER
4	1483893.79	420481.16	PROPERTY CORNER
5	1483891.24	420544.11	PROPERTY CORNER
6	1483821.12	420541.28	PROPERTY CORNER
7	1483812.54	420718.02	PROPERTY CORNER
8	1483780.89	420713.29	PROPERTY CORNER
9	1483780.66	420695.26	PROPERTY CORNER
10	1483780.95	420545.26	PROPERTY CORNER
11	1483631.95	420528.04	PROPERTY CORNER
50	1483776.17	420504.28	BUILDING CORNER
51	1483709.06	420501.57	BUILDING CORNER
100	1483648.15	420362.06	BACK OF CURB
101	1483640.84	420542.91	BACK OF CURB
102	1483665.56	420633.10	BACK OF CURB
103	1483788.72	420692.00	BACK OF CURB
104	1483786.65	420709.63	BACK OF CURB
105	1483812.88	420713.48	BACK OF CURB
200	1483664.14	420360.71	RADIUS POINT
201	1483706.10	420376.69	RADIUS POINT
202	1483704.60	420389.14	RADIUS POINT
203	1483691.76	420397.29	RADIUS POINT
204	1483763.80	420379.27	RADIUS POINT
205	1483799.54	420396.71	RADIUS POINT
206	1483801.64	420406.73	RADIUS POINT
207	1483796.47	420534.63	RADIUS POINT
208	1483776.28	420534.81	RADIUS POINT
209	1483781.00	420544.83	RADIUS POINT
210	1483705.33	420531.95	RADIUS POINT
211	1483699.34	420519.19	RADIUS POINT
212	1483685.40	420517.63	RADIUS POINT
213	1483664.18	420555.79	RADIUS POINT
214	1483657.07	420548.07	RADIUS POINT
215	1483696.23	420567.61	RADIUS POINT
216	1483709.22	420568.13	RADIUS POINT
217	1483708.06	420625.13	RADIUS POINT
218	1483705.01	420632.23	RADIUS POINT
219	1483692.73	420624.16	RADIUS POINT
220	1483740.20	420569.38	RADIUS POINT
221	1483773.17	420570.72	RADIUS POINT
222	1483735.87	420651.78	RADIUS POINT
223	1483738.34	420652.50	RADIUS POINT
224	1483768.08	420659.62	RADIUS POINT
225	1483770.84	420653.19	RADIUS POINT
226	1483817.16	420698.44	RADIUS POINT
227	1483801.01	420664.51	RADIUS POINT
228	1483804.15	420571.97	RADIUS POINT
229	1483828.57	420537.25	RADIUS POINT
230	1483864.11	420538.40	RADIUS POINT
231	1483865.08	420506.77	RADIUS POINT
232	1483829.50	420505.68	RADIUS POINT

CAPACITY OF WEIR (DEPRESSED CURB CALCULATIONS):

Determine height of water in west drive:

TRY HEIGHT OF WATER AT 3"=0.25':

$A = (0.5)(5.5)(0.25) = 0.69 \text{ sf}$
 $R = (0.25)+(5.5^2+0.25^2)^{0.5} = 5.76 \text{ ft}$
 $Q = (1.49/0.013)(0.69)(5.76)^{0.6667}(0.01)^{0.5} = 25.41 \text{ cfs}$

TRY HEIGHT OF WATER AT 3 1/4"=0.27':

$A = (0.5)(5.96)(0.27) = 0.80 \text{ sf}$
 $R = (0.27)+(5.96^2+0.27^2)^{0.5} = 6.24 \text{ ft}$
 $Q = (1.49/0.013)(0.80)(6.24)^{0.6667}(0.01)^{0.5} = 31.08 \text{ cfs}$

Use Height of Water 3 1/4" = 0.27'

Weir width to be 5.96 feet = 6 feet or 2 each 3 foot weirs

PIPE CULVERT ANALYSIS:

Assumptions:
Each pipe to flow 15 cfs of runoff
2 feet of tail water (worst case)

Results:
Headwater outlet controlled 2.74'

Existing conditions:
Headwall height 2.65'

Limits of 100 year storm:
Elevation 5532.26

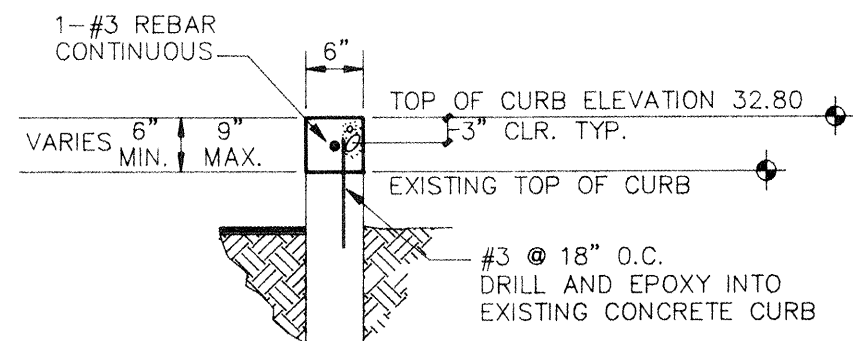
* Computer program entitled "PIPE CULVERT ANALYSIS" Version 1.7 by Dodson & Associates, Inc. as used by the City of Albuquerque

GENERAL NOTES:

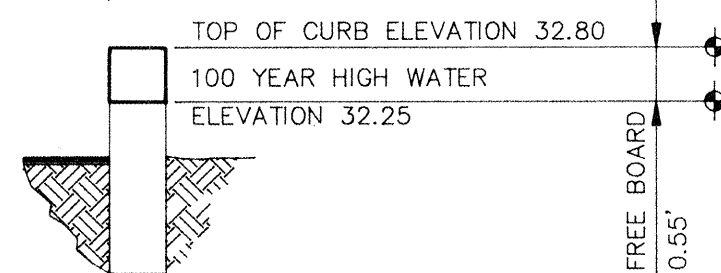
1. THE CONTRACTOR WILL NOT WILLFULLY INSTALL ITEMS AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT CONDITIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSES FOR ANY REVISIONS NECESSARY.
2. ALL WORK SHALL BE PREFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. CONSTRUCTION WHICH IS EXISTING AND NOT TO BE REMOVED WHICH IS DAMAGED OR DISPLACED SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTION. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. DIMENSIONS IN THE PARKING AREA AND DRIVES ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
6. NO SOIL SHALL BE ERODE FROM THE SITE INTO THE PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
7. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL, SHALL BE INCIDENTAL TO CONSTRUCTION AND NO PAYMENT SHALL BE MADE THEREFORE. THE CONSTRUCTION AREA SHALL BE WATERED FOR DUST POLLUTION ABATEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.
8. UTILITY LINES SHOWN ON THESE PLANS ARE IN AN APPROXIMATE MANNER ONLY. OTHER LINES MAY EXIST WHERE NOT SHOWN. FIELD VERIFY ALL UTILITIES BEFORE COMMENCING WORK. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTACT THE LINE LOCATING SERVICE, 260?1990 FOR THE LOCATION OF EXISTING UTILITIES.
9. COORDINATE WITH THE UTILITY COMPANIES TO PREVENT EXISTING SERVICE DISRUPTION.
10. VERIFY INVERT ELEVATIONS OF RELEVANT SANITARY SEWER LINES BEFORE SETTING NEW INVERTS. SHOULD INVERTS DIFFER, NOTIFY THE ENGINEER SO THAT ANY CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

4000 PSI CONCRETE. PROVIDE 1/2" EXPANSION JOINTS @ FIXED OBJECTS. ALL EXPOSED CONCRETE CORNERS TO HAVE 3/4" RADI.

INSTALL "HEADER WALL EXTENSION" TO ALL EXISTING CONCRETE CURB BELOW ELEVATION 32.80 AS SHOWN ON THE GRADING AND DRAINAGE PLAN.



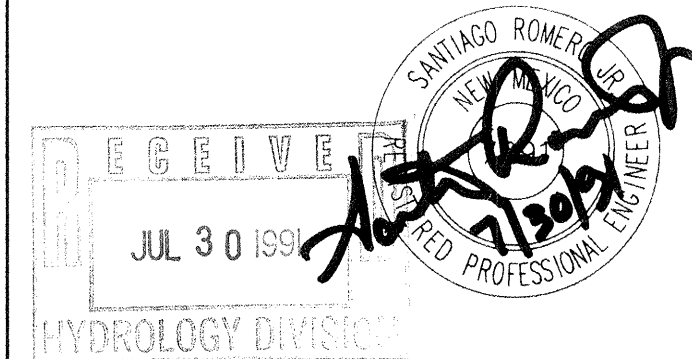
CONSTRUCTION DETAIL



HYDROLOGY DETAIL

HEADER WALL EXTENSION DETAIL

NOT TO SCALE

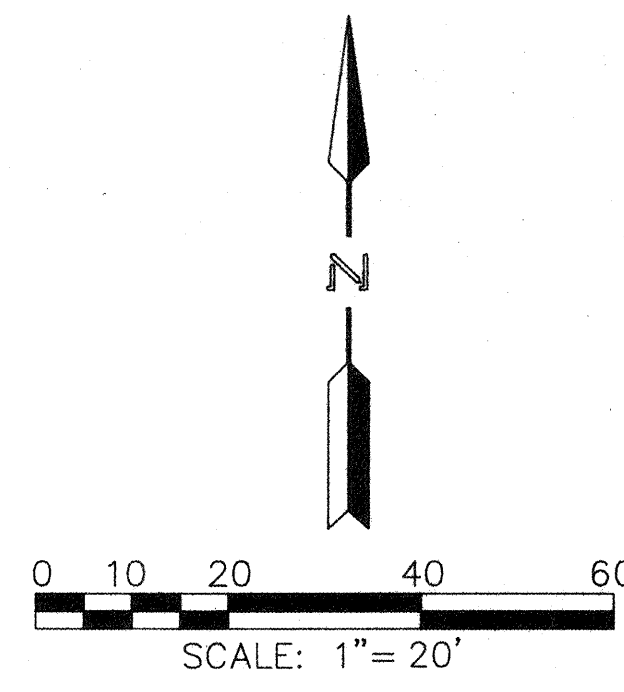


1	7-30-91	-REVISED CALCS FOR HYDRO
		-DETAIL ADDED OF CURB
		EXTENSION
REV.	DATE	PURPOSE

S&A Santiago Romero, Inc.
ENGINEERS and Associates, Inc.
SURVEYORS
ALBUQUERQUE, NEW MEXICO 87107
(505)348-2753

NOTE SHEET FOR
BLACK-EYED PEA RESTAURANT

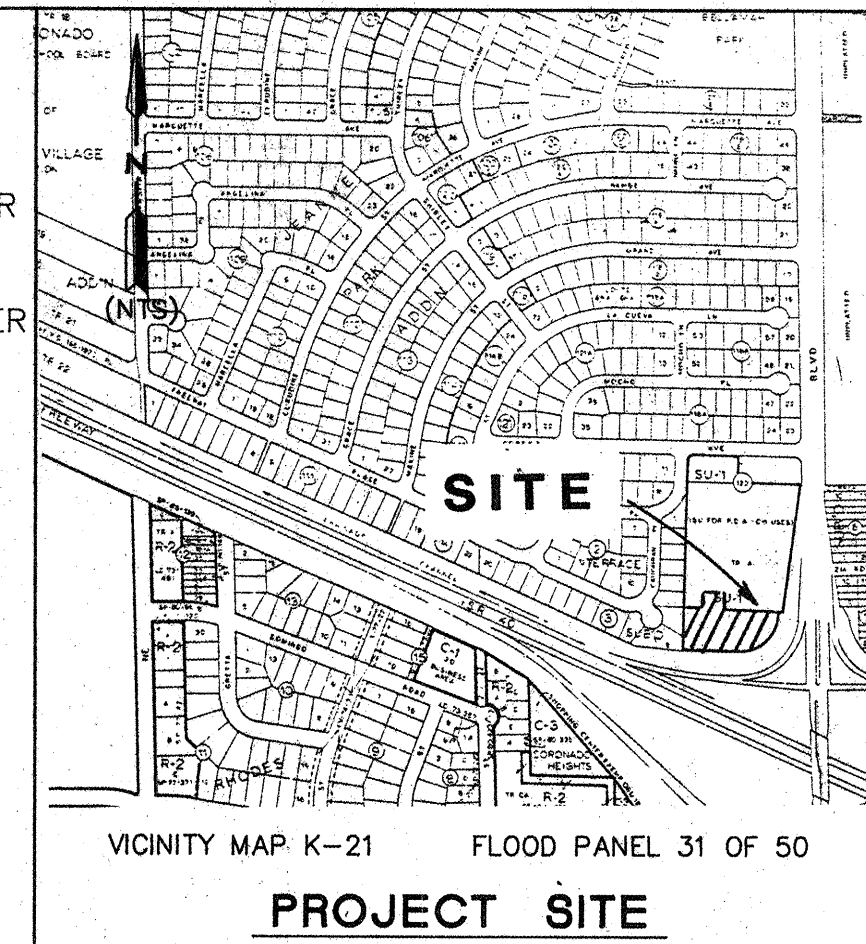
REVISIONS:	DATE:	JOB NO.
	JUNE 1991	91-01-14
DESIGNED BY:	DRAWN BY:	CHECKED BY:
R.S.	R.S.	B.T., R.G.S.
		SHEET:
		C2 OF



C-1	CURVE DATA	
	THIS SURVEY	PLAT
DELTA	96°29'04"	96°29'11"
LENGTH	252.60'	252.60'
RADIUS	150.00'	150.00'
TANGENT	168.01'	168.01'
CHORD	223.79'	223.79'

NOTE:
BOUNDARY INFORMATION WAS TAKEN FROM THE PLAT OF TRACTS A-1 AND A-2 BLOCK 123, DALE J. BELLAMAH'S PRINCESS JEANNE PARK ADDITION, FILED IN THE OFFICE OF THE COUNTY CLERK ON APRIL 14, 1987, BOOK C33, PAGE 91.

LEGEND	
	EXIST. TREE
	EXIST. CURB & GUTTER
	EXIST. ASPHALT
	EXIST. SANITARY SEWER
	EXIST. WATER
	EXIST. GAS
	EXIST. WATER VALVE
	NEW CURB & GUTTER
	NEW CONTOUR
	EXIST. CONTOUR
	TOP OF ASPHALT
	TOP OF CONCRETE
	EXIST. TOP OF CURB ELEVATION



LEGAL DESCRIPTION:
THE SOUTHERLY PORTION OF TRACT "A-2" OF THE PRINCESS JEAN ADDITION BLK 123

SURVEY DATA:
TOPOGRAPHICAL AND BOUNDARY SURVEY PROVIDED BY SANTIAGO ROMERO JR. & ASSOCIATES. L.S. 7924.

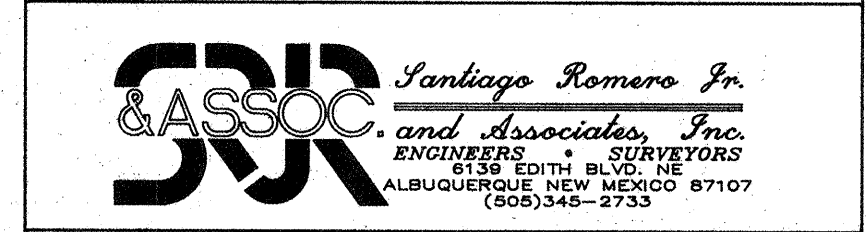
BENCH MARK:
THE PROJECT BENCH MARK IS A NMSHC BRASS CAP LOCATED ON THE SOUTH SIDE OF THE JUAN TABO BOULEVARD OVERPASS ON THE CONCRETE BARRIER WALL OF THE NORTH BOUND TRAFFIC. ELEVATION = 5561.73

TEMPORARY BENCH MARK:
THE T.B.M. IS AT THE TOP OF NE BONNET BOLT OF THE WESTERN MOST FIRE HYDRANT. SEE PLAN FOR LOCATION. ELEVATION = 5536.57

- KEYED NOTES:**
- 1 DEPRESS CURB 3' WIDE TO ALLOW WATER TO FLOW OVER
 - 2 ADJUST CLEAN-OUT TO NEW ELEVATION.
 - 3 100 YEAR HIGH WATER ELEVATION

AS-BUILT CERTIFICATION
I, SANTIAGO ROMERO JR., NEW MEXICO REGISTERED PROFESSIONAL ENGINEER NO 7291, DO HEREBY CERTIFY THAT THE ELEVATIONS AND GRADES SHOWN ON THIS DRAWING REPRESENT AS-BUILT CONDITIONS AND COMPLY WITH THE GRADING AND DRAINAGE PLAN (K-21/B20A) APPROVED BY THE CITY OF ALBUQUERQUE DATED AUGUST 2, 1991. THE WORDS "CERTIFICATION" AND "CERTIFY" AS USED HEREIN ARE UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE ENGINEER, BASED ON MY BEST KNOWLEDGE AND BELIEF. AS SUCH, NEITHER CONSTITUTES A GUARANTEE NOR A WARRANTY, EXPRESSED OR IMPLIED.

Santiago Romero Jr. 11/26/91
SANTIAGO ROMERO JR., N.M.P.E. NO 7291 DATE



**GRADING + DRAINAGE PLAN
BLACK-EYED PEA RESTAURANT**

REVISIONS:	DATE:	JOB NO.
DESIGNED BY:	DRAWN BY:	JUNE 1991 91-01-14
CHECKED BY:	R.S.	SHEET: C6 OF

AS BUILT

AS BUILT

