

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

May 4, 1999

Harold Bennett Bennett Engineering 4409 Karrol Rd. SW Albuquerque, New Mexico 87105

RE: ENGINEER'S CERTIFICATION FOR MICROTEL INN (K-9/D-10) ENGINEER'S CERTIFICATION DATED 5/3/99.

Dear Mr. Bennett:

Based on the information provided on your May 4, 1999 submittal, Engineer's Certification for the above referenced site is acceptable.

If I can be of any further assistance, please feel free to contact me at 924-3330.

Sincerely,

Andrew Garcia Drainage Inspector

c: file



July 13,1998

Levi Valdez PE George T. Rodriguez Development Consultant 12800 San Juan NE Albuquerque, New Mexico 87123

RE: REVISED CONCEPTUAL DRAINAGE PLAN FOR MICROTEL INN @ AVALON (K9-D10) REVISION DATED 7/8/98

Dear Mr. Valdez:

Based on the information provided on your July 8,1998 resubmittal, the above referenced site is approved for Site Development plan for Building Permit.

Please be advised that the following concerns must be addressed prior to Building Permit release:

- 1. One foot water block at the west drivepad.
- 2. Hydraulics for the proposed 24" inch trough.
- 3. Retaining wall on the east property line.
- 4. Indicate the size of troughs within the parking areas.

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





September 23,1998

Levi J. Valdez PE George T. Rodriguez Development Consultant 12800 San Juan Rd. NE Albuquerque, New Mexico 87123

RE: REVISED DRAINAGE PLAN FOR MICROTEL INN @ AVALON (K9-D10) REVISION DATED 9/21/98

Dear Mr. Valdez:

Based on the information provided on your September 22,1998 resubmittal, 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, a separate permit is required for construction within City R/W. A copy of this approval letter must be on hand when applying for the excavation permit.

Please be advised that 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 Arlene Portillo File Sincerely

Bernie J. Montoya CE Associate Engineer





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

May 4, 1999

Harold Bennett Bennett Engineering 4409 Karrol Rd. SW Albuquerque, New Mexico 87105

RE: ENGINEER'S CERTIFICATION FOR MICROTEL INN (K-9/D-10) ENGINEER'S CERTIFICATION DATED 5/3/99.

Dear Mr. Bennett:

Based on the information provided on your May 4, 1999 submittal, Engineer's Certification for the above referenced site is acceptable.

If I can be of any further assistance, please feel free to contact me at 924-3330.

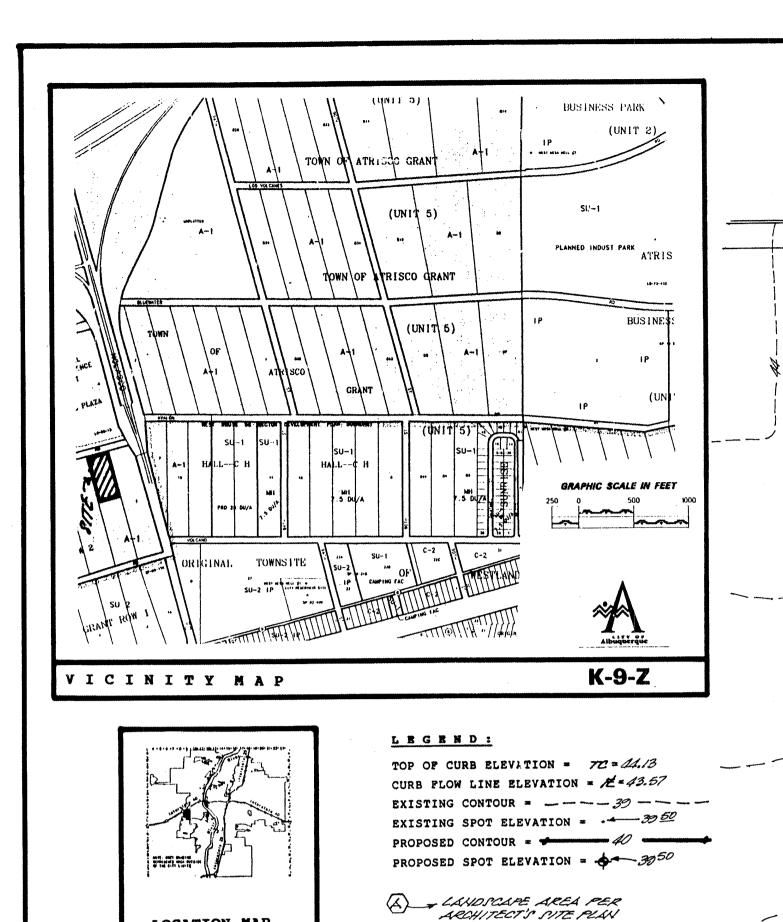
Sincerely,

Andrew Garcia
Drainage Inspector

c: file

#### DRAINAGE INFORMATION SHEET

APPLICANT'S NAME: MICROTE Inn	ZONE ATLAS/DRNG. FILE #: K-9-DIO
DRB #: EPC #:	WORK ORDER #:
LEGAL DESCRIPTION:	
CITY ADDRESS: 9910 Avalon Rd NU	
ENGINEERING FIRM: Bennett Engineering	CONTACT: Beinie J. Montaga
ADDRESS: 4409 Karrol Rd SW.	PHONE: 877-484)
OWNER: Microtel	CONTACT:
ADDRESS:	PHONE
ARCHITECT: RICK Bennelt	CONTACT: 242-1859
ADDRESS:	PHONE:
SURVEYOR:	
ADDRESS:	
CONTRACTOR:	
ADDRESS:	PHONE:
TYPE OF SUBMITTAL:  DRAINAGE REPORT  DRAINAGE PLAN  CONCEPTUAL GRADING & DRAINAGE PLAN  GRADING PLAN  FROSION 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  PAVING PERMIT APPROVAL  S.A.D. DRAINAGE REPORT  DRAINAGE REQUIREMENTS  SUBDIVISION CERTIFICATION  OTHER 15-BUILT PLAN (SPECIFY)
DATE SUBMITTED: 5/3/99  BY: 8. Montage	MAY 0 4 1999 D
Revised 02/98	HYDROLOGY SECTION



#### CONSTRUCTION NOTES:

LOCATION MAP

- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR LOCATION OF EXIST-
- 2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.

BY PROPUSED PAVED AREA

PER ARCHITECTS SITE PLAN

- 3.) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4.) ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PRO-

# EROSION CONTROL MEASURES:

- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES
- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS RE-QUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

# MOTICE TO CONTRACTOR:

- 1.) AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THIS PLANS MUST BE SUBMITTED AT THE TIME OF APPLI-CATION OF THIS PERMIT.
- 2.) ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATION - PUBLIC
- 3.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (2GO-1950) FOR LOCATION OF EXISTING UTILITIES.
- 4.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCT-IONS, SHOULD A CONFLICT EXIST, THE CONTARCTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RE-SOLVED WITH A MINIMUM AMOUNT OF DELAY.
- 5.) BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
- 6.) MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY

OF THE OWNER OF THE PROPERTY SERVED.

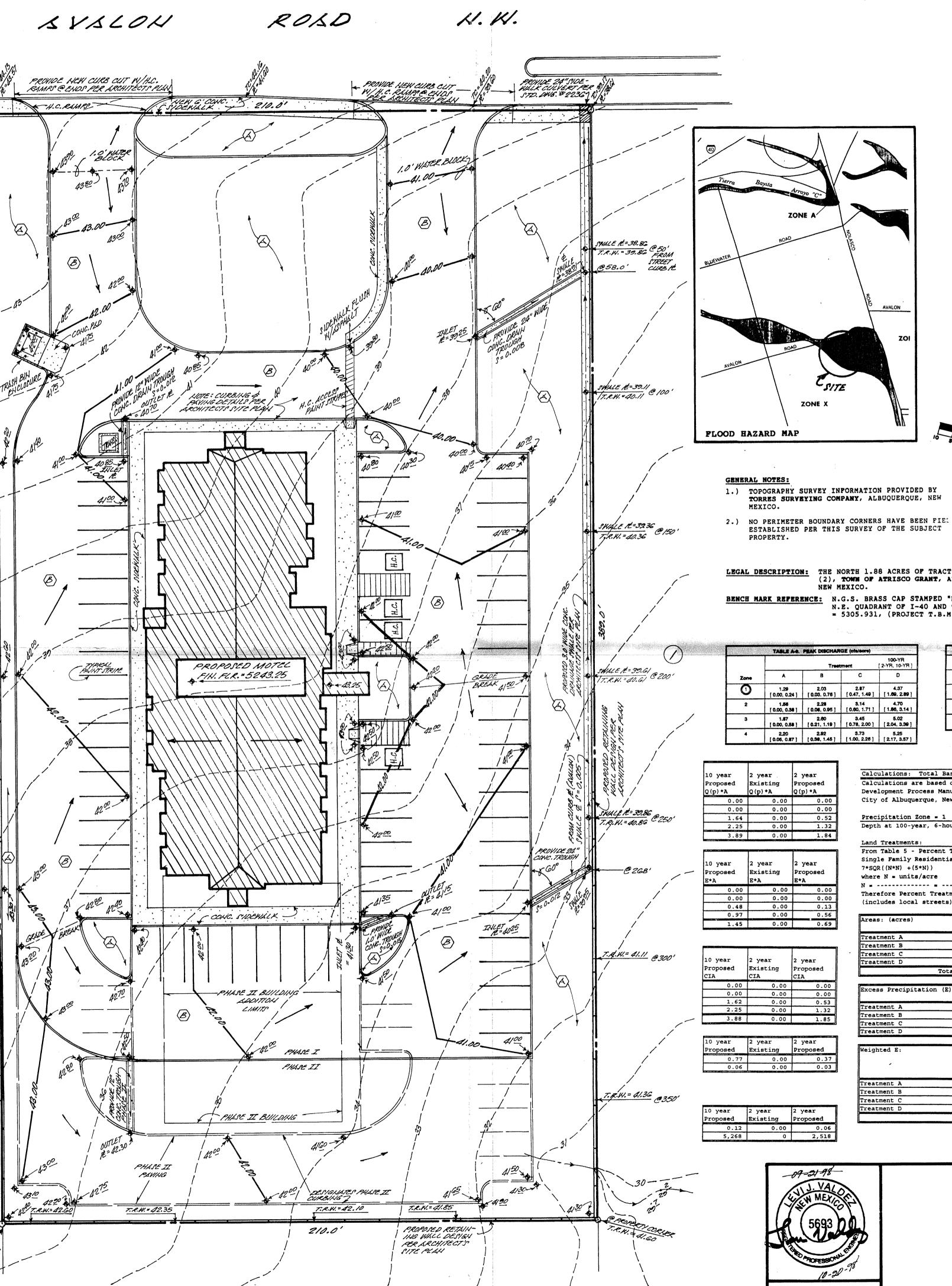
APPROVALS	NAME	DATE
A.C.E./ DESIGN		
INSPECTOR		
A.C.E./FIELD		

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PER-FORMED UNDER SEPARATE PERMIT.

T.B.M. @ TOPOF

REBUR W/CAP

ELEV.=5236.64

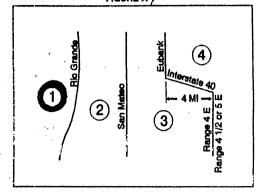


A1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on

TABLE A-1. PRECIPITATION ZONES		
Zone	Location	
Ō	West of the Rio Grande	
2	Between the Rio Grande and San Mateo	
3	Between San Mateo and Eubank, North of interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40	
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40	

FIGURE A-1



zone boundary, use the zone which contains the largest portion of the

DPM SECTION 22.2 - HYDROLOGY January, 1983

Treatment	Land Condition
<b>A</b>	Soil uncompacted by human activity with 0 to 10 percent slopes. Netive grasses, weeds and strubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Bulined arroyos.
8	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes Native grasses, weeds and shrubs, and soil uncompacted by huma activity with slopes greater than 10 percent and less than 20 perce
С	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greate than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greate Native grass, weed and shrub areas with clay or clay loam soils at other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

treatment D, the areal percentages in TABLE A-5 may be employed.

THE FOLLOWING ITEMS CONCERNING THE SUBJECT PROJECT FOR THE MICROTEL INN DRAINAGE PLAN ARE CONTAINED HEREON.

1.) VICINITY MAP

2.) FLOOD HAZARD MAP 3.) CALCULATIONS

AS SHOWN ON THE VICINITY MAF, THE SUBJECT SITE IS LOCATED ON THE SOUTH SIDE CF AVALON ROAD N.W. AND WEST OF 98th STREET N.W.; AT THE PRESENT TIME THE SUBJECT SITE IS UNDEVELOPED. THE PROPOSED IMPROVEMENTS CONSIST OF A NEW MOT: BUILDING AND ASSOCIATED IMPROVEMENTS.

AS SHOWN ON THE FLOOD HAZARD INSURANCE RATE MAP (PANEL 328 OF 825), DATED SEPTEMBER 20, 1996, A PORTION OF THE SUBJECT SITE LIES WITHIN A ZONE "A" DES-IGNATION. IMPROVEMENTS CONSTRUCTED BY THE "FLYING 'J' TRUCK STOP" DEVELOPME: HAS INTERCEPTED THE FLOWS ENTERING FROM THE NORTHWEST. A LARGE DETENTION PO: HAS BEEN CONSTRUCTED UPSTREAM OF THE SITE TO ALLOW THE FLOODPLAIN FLOWS TO BE INTERCEPTED BEFORE ENTERING THE FLYING 'J' FACILITIES AND AVALON ROAD N.W.; THE PLAN HEREON SHOWS: a.) EXISTING AND PROPOSED CONTOURS AT 1.0' INTERVALS, b.) LIMITS AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS.

THE PROPOSED SITE WILL DRAIN THE DEVELOPED RUNOFF ONTO AVALON ROAD N.W. WHICH WILL THEN FOLLOW THE STREET FLOWLINE TO AN EXISTING DOUBLE "C" STORM INLET LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF AFOREMENTIONED AVALON ROAD N.W. AND 98th STREET N.W. .

THE EXISTING INLET IS CONNECTED TO AN EXISTING 36" R.C.P. WHICH DRAINS TO A LARGE DETENTION POND WHICH IS LOCATED AT THE SOUTHWEST CORNER OF THE INTER-SECTION OF LOS VOLCANOS ROAD N.W. AND 98th STREET N.W. .

THE CALCULATIONS WHICH APPEAR HEREON ANALIZE BOTH THE EXISTING AND PROPOSED DEVELOPED CONDITIONS FOR THE 100-YEAR 6 HOUR RAINFALL EVENT. THE PEAK DIS-CHARGE OF RUNOFF HAS BEEN CALCULATED USING THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA, CITY OF ALBUQUERQUE, NEW MEXICO, DATED JANUARY 1993.

LEGAL DESCRIPTION: THE NORTH 1.88 ACRES OF TRACT TWO (2), UNIT "A", ROW TWO (2), TOWN OF ATRISCO GRANT, ALBUQUERQUE, BERNALILLO CCUNTY NEW MEXICO.

BENCH MARK REFERENCE: N.G.S. BRASS CAP STAMPED "N-424 1982", LOCATED AT THE N.E. QUADRANT OF I-40 AND 98th STREET N.W.; ELEVATION = 5305.931, (PROJECT T.B.M. AS SHOWN ON THE PLAN HEREO:

		Treatment		
Zone	A	8	С	D
0	1.29	2.03	2.87	4.37
	[ 0.00, 0.24 ]	[ 0.03, 0.76 ]	[ 0.47, 1.49 ]	[ 1.69, 2.89
2	1.56	2.28 [ 0.08, 0.95 ]	3.14 [ 0.60, 1.71 ]	4.70 [ 1.86, 3.14
3	1.87	2.60	3.45	5.02
	{ 0.00, 0.58 }	[ 0.21, 1.19 ]	[ 0.78, 2.00 ]	[ 2.04, 3.39
4	2.20	2.92	3.73	5.25
	[ 0.06, 0.87 ]	[ 0.38, 1.45 ]	[ 1.00, 2.26 ]	[ 2.17, 3.57

SITE

Constitution .	A-10. PEAK INTENSITY (IN/HR at	100-YR
Zone	Intensity	[2-YR, 10-YR]
0	4.70 [1.84, 3.14]	
2	5.05 [ 2.04, 3.41 ]	
3	5.38 { 2.21, 3.65 }	Note that the second

N =

0.00%

0.00

10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
0,00	0.00	0.00
0.00	0.00	0.00
1.64	0.00	0.52
2.25	0.00	1.32
3.89	0.00	1.84

10 year Proposed E*A	2 year Existing E*A	2 year Proposed E*A
0.00	0.00	0.00
0.00	0.00	0.00
0.48	0.00	0.13
0.97	0.00	0.56
1 45	0.00	0.69

lO year Proposed	2 year Existing CIA	2 year Proposed CIA
0.00	0.00	0.00
0.00	0.00	0.00
1.62	0.00	0.53
2.25	0.00	1.32
3.88	0.00	1.85

10 year Proposed	2 year Existing	2 year Proposed
0.77	0.00	0.37
0.06	0.00	0.03

***************************************		
year	2 year	2 year
oposed	Existing	Proposed
0.12	0.00	0.06
5 260		2 630

Calculations: Total Basin

Calculations are based on "Section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, New Mexico, January 1993 - basins < 40 acres".

Precipitation Zone = 1 Depth at 100-year, 6-hour storm: (Table A-2)

Land Treatments: From Table 5 - Percent Treatment D Single Family Residential = 7\*SQR((N\*N) + (5\*N))

where N = units/acre

N = ----, ok < 6 Therefore Percent Treatment D = (includes local streets)

Areas: (ad	cres)			Existing	Proposed
Treatment	A			1.88	0.00
Treatment	В			0.00	0.00
Treatment	С	····		0.00	1.10
Treatment	D			0.00	0.78
		Total	(acres) =	1.88	1.88
			A STATE OF THE STA		

	1100 yr	10 yr
Treatment A	0.44	0.
Treatment B	0.67	0.
Treatment C	0.99	0.
Treatment D	1.97	1.
Weighted E:		
	100 year	100 year
•	Evieting	Proposed

	100 year Existing E*A	100 year Proposed E*A	10 year Existing E*A
Treatment A	0.83	0.00	0.15
Treatment B	0.00	0.00	0.00
Treatment C	0.00	1.09	0.00
Treatment D	0.00	1.54	0.00
Total	0.83	2.63	0.15

/ Weighted E = Total E\*A/Total Area

Weighted E (inches) = 0.44 1.40

Weighted E (feet) = 0.04 0.12

Volume = Weighted E \* Watershed Area:

		•	Existing
Volume (acre-feet) =	0.07	0.22	0.01
Volume (cubic feet) =	3,003	9,531	546
	Commence of the Commence of the Spirite of	0.500.000.500.0000	

Peak Discharge (cfs/acre) = Q(p):			
(Table A-9)	Q(p)	Q(p)	Q(p)
v i i i i i i i i i i i i i i i i i i i	100 year	10 year	2 year
Treatment A	1.29	0.24	0.00
Treatment B	2.03	0.76	0.03
Treatment C	2.87	1.49	0.47
Treatment D	4.37	2.89	1.69

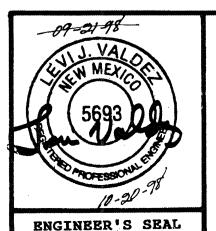
	Existing		10 year Existing Q(p)*A
reatment A	2.43	0.00	0.45
reatment B	0.00	0.00	0.00
reatment C	0.00	3.16	0.00
reatment D	0.00	3.41	0.00
Total Q (cfs) =	2.43	6.57	0.45

RATIONAL METHOD:

Coefficient C. (Table A-11)		20	2 year
	100 year	10 year	
Freatment A	0.27	0.08	0.00
Preatment B	0.43	0.24	0.02
Treatment C	0.61	0.47	0.26
Freatment D	0.93	0.92	0.92
Peak Intensity (in/hour): (Table A-1	4.70	3.14	1.84
) = CIA (cfs):	100	100	10 year
	100 year	100 year	10 year

	100 year Existing CIA	100 year Proposed CIA	10 year Existing CIA
Treatment A	2.39	0.00	0.47
Treatment B	0.00	0.00	0.00
Treatment C	0.00	3.15	0.00
Treatment D	0.00	3.41	0.00
Total Q (cfs) =	2.39	6.56	0.47

REVISION TO GRADES AROUND THE AREA OF THE SIDEWALK AND HANDICAPPED PARKING TO THE MAIN ENTRANCE LOCATED ON THE EAST SIDE OF THE BUILDING IS PER ARCHITECT'S REQUEST ON OCTOBER 20, 1998.



A PROPOSED GRADING AND DRAINS OF POLY 1998

MICROTEL INN (AVSLON ROSD N.W.) SLBUQUERQUE, HEN MEXICO SEPTEMBER, 1998 (REVISED: 10-20-98)

# AS-BUILT DRAINAGE PLAN FOR MICROTEL INN AT 9910 AVALON RD. NW

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, THE MICROTEL INN @ 9910 AVALON RD. NW HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 10/20/98 WITH THE FOLLOWING DEVIATIONS:

- 1. GRADES AT THE WEST SIDE OF BUILDING HAD TO BE RAISED IN ORDER TO LEVEL OFF THE SIDEWALK.
- 2. MINOR GRADE CHANGES IN THE OVERALL SITE.
- 3. MINOR BIRD BATHS WHICH WILL BE CORRECTED BY THE PAVING CO.

THIS DEVIATIONS DO NOT IMPACT THE DRAINAGE CONCEPT IN ANY WAY . THE SITE DRAINAGE WILL FUNCTION IN ACCORDANCE WITH THE PATTERNS ESTABLISHED BY THE APPROVED PLAN. THEREFORE A PERMANENT CERTIFICATE OF OCCUPANCY IS HEREBY RECOMMENDED. THE AS-BUILT INFORMATION SHOWN HEREON WAS OBTAINED BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

HAROLD L. BENNETT, NMPE #10776

**DATE 5-3-99** 

# **PROJECT MICROTEL** AREA = 1.88 ac.

ZONE 1 PRECIPITATION:

TREATMENT C TREATMENT D

360 = 2.20 in.1140 = 2.66 in.10day = 3.67 in.

**EXCESS PRECIPITATION:** 

EXCESS PRECIPITATION:		ION: PEAK	PEAK DISCHARGE:	
TREATMENT A	0.44 in.	1.29	cfs/ac.	
TREATMENT B	0.67 in.	2.03	cfs/ac.	
TREATMENT C	0.99 in.	2.87	cfs/ac.	
TREATMENT D	1.97 in.	4.37	cfs/ac.	
EXISTING CON	DITIONS:	PROPOSED CON	IDITIONS:	
	AREA	AREA		
TREATMENT A	1.88 ac.	0 ac.		
TREATMENT B	0 ac.	0 ac.		

# **EXISTING EXCESS PRECIPITATION:**

Weighted E = (0.44)x(1.88)+(0.67)x(0.00)+(0.99)x(0.00)+(1.97)x(0.00)/ 1.88 V100-360 = (0.44)x(1.88)/12 = 0.068933 ac-ft = 3003 cf

0.881 ac.

# **EXISTING PEAK DISCHARGE:**

Q100 = (1.29)x(1.88)+(2.03)x(0.00)+(2.87)x(0.00)+(4.37)x(0.00)=2.43

# PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.44)x(0.00)+(0.67)x(0.00)+(0.99)x(1.00)+(1.97)x(0.88)/1.88

V100-360 = (1.45)x(1.88)/12.0 = 0.227032 ac-ft = 9889 cf

(0.23)+(0.88)x(2.66-2.20)/12 = 0.260811 ac-ft = 11361 cf

V100-10day = (0.23)+(0.88)x(3.67-2.20)/12 = 0.334979 ac-ft = 14592 cf

# PROPOSED PEAK DISCHARGE:

Q100 = (1.29)x(0.00)+(2.03)x(0.00)+(2.87)x(1.00)+(4.37)x(0.88)=6.72

