

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 29, 1992

Frank Lovelady, P.E.
Lovelady & Associates
7408 Morrow, NE
Albuquerque, New Mexico 87110

RE: REVISED DRAINAGE PLAN FOR 50 ROOM MOTEL (K-21/D16E)
REVISION DATE OF MAY 12, 1992

Dear Mr. Lovelady:

Based on the information provided on your resubmittal of May 12, 1992, the referenced site is approved for revisions as shown.

Please advise your client that once the asphalt bump to re-route the flows in constructed, they will need to call for a reinspection.

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

Cordially,

Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj
(WP+2823)

PUBLIC WORKS DEPARTMENT

PROJECT TITLE: T.P. Builders ZONE ATLAS/DRNG. FILE #: k-21 / D-16ELEGAL DESCRIPTION: Tract 1-C1A-4 and Tract 1-C1A-5, Horne Development Addition

CITY ADDRESS: _____

ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank LoveladyADDRESS: 7408 Morrow Ave. NE 87110 PHONE: 883-7973OWNER: T.P. Builders CONTACT: Jerry TorrADDRESS 3900 Juan Tabo NE 87111 PHONE: 293-7978ARCHITECT: Jerry Torr CONTACT: Jerry TorrADDRESS: 3900 Juan Tabo NE 87111 PHONE: 293-7978SURVEYOR: Lovelady & Associates CONTACT: Frank LoveladyADDRESS: 7408 Morrow NE 87110 PHONE: 883-7973

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES

DRB NO. _____

☒ NO

EPC NO. _____

☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

PROJECT NO. _____

TYPE OF SUBMITTAL:

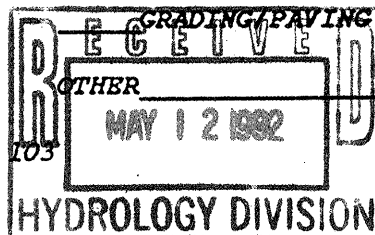
CHECK TYPE OF APPROVAL SOUGHT:

☐ 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☐ ENGINEER'S CERTIFICATION☐ FOUNDATION PERMIT APPROVAL

SHOWED AS-CONSTRUCTED GRADES ON
NORTH SIDE. SHOWED PROPOSED ASPHALT
SPEED BUMP TO DIVERT RUNOFF FROM
DRIVEWAY PER APPROVED PLAN, ATTACHED.
SITE DEV. PLAN SHOWS ACCESS EASEMENT
FOR PAVEMENT NORTH OF N. PROP. LINE
DATE SUBMITTED: MAY 12, 1992

☐ CERTIFICATE OF OCCUPANCY APPROVAL☐ ROUGH GRADING PERMIT APPROVAL☐ GRADING/PAVING PERMIT APPROVALBY: Frank D. Lovelady
Frank D. Lovelady, P.E.

OTHER _____ (SPECIFY)





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 18, 1991

Frank Lovelady
Lovelady & Associates
7408 Morrow, NE
Albuquerque, New Mexico 87110

RE: REVISED DRAINAGE PLAN FOR 50 ROOM MOTEL
(K-21/D16E) REVISION DATED AUGUST 26, 1991

Dear Mr. Lovelady:

Based on the information provided on your submittal of September 3, 1991, the above referenced plan is approved for Building Permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

Please be advised that a separate permit is required for construction within City right-of-way. A copy of this approval letter must be on hand when applying for the excavation permit.

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

Cordially,

Bernie J. Montoya, C.E.
Engineering Assistant

xc: Darlene Saavedra
Alan Martinez

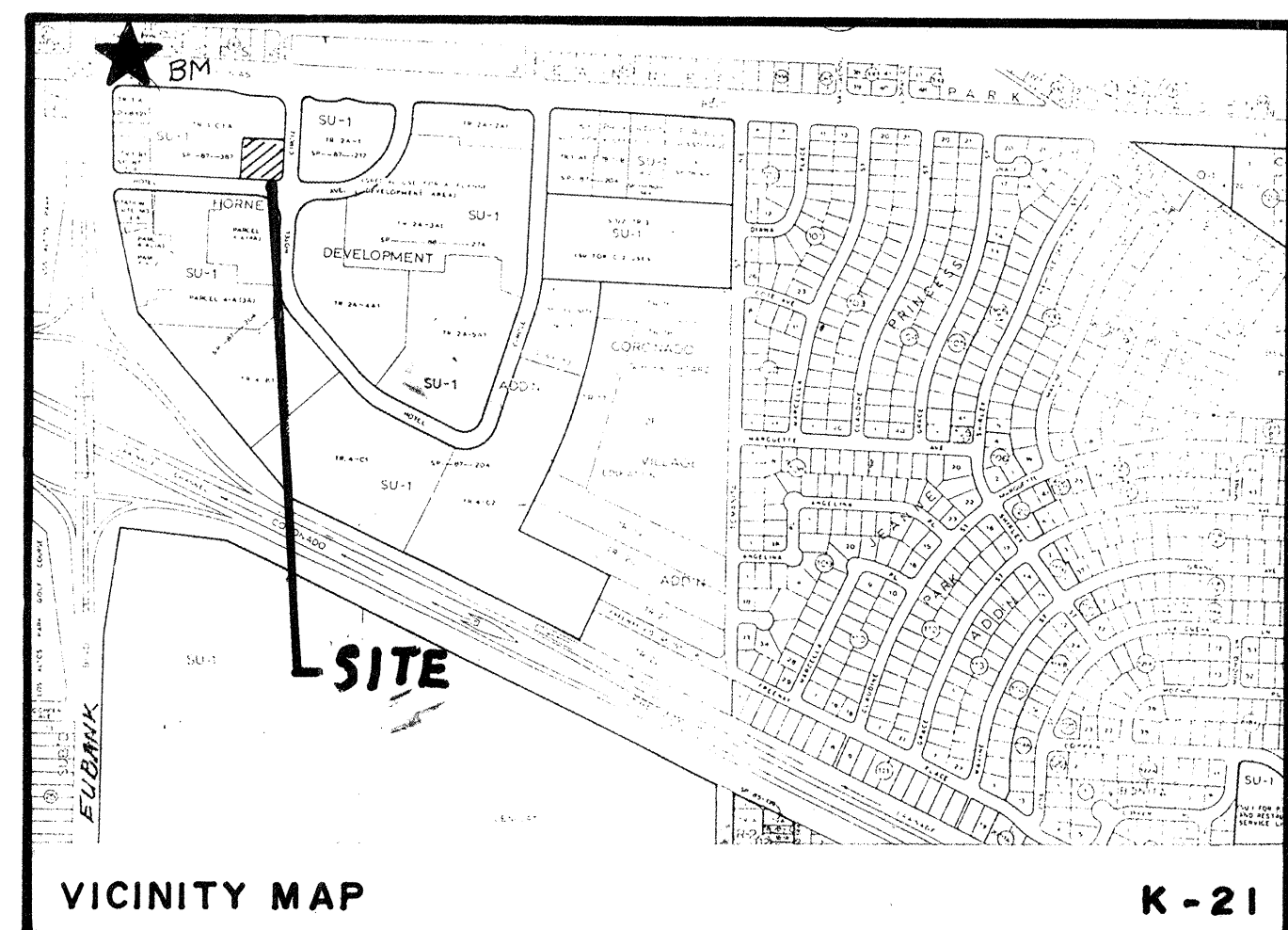
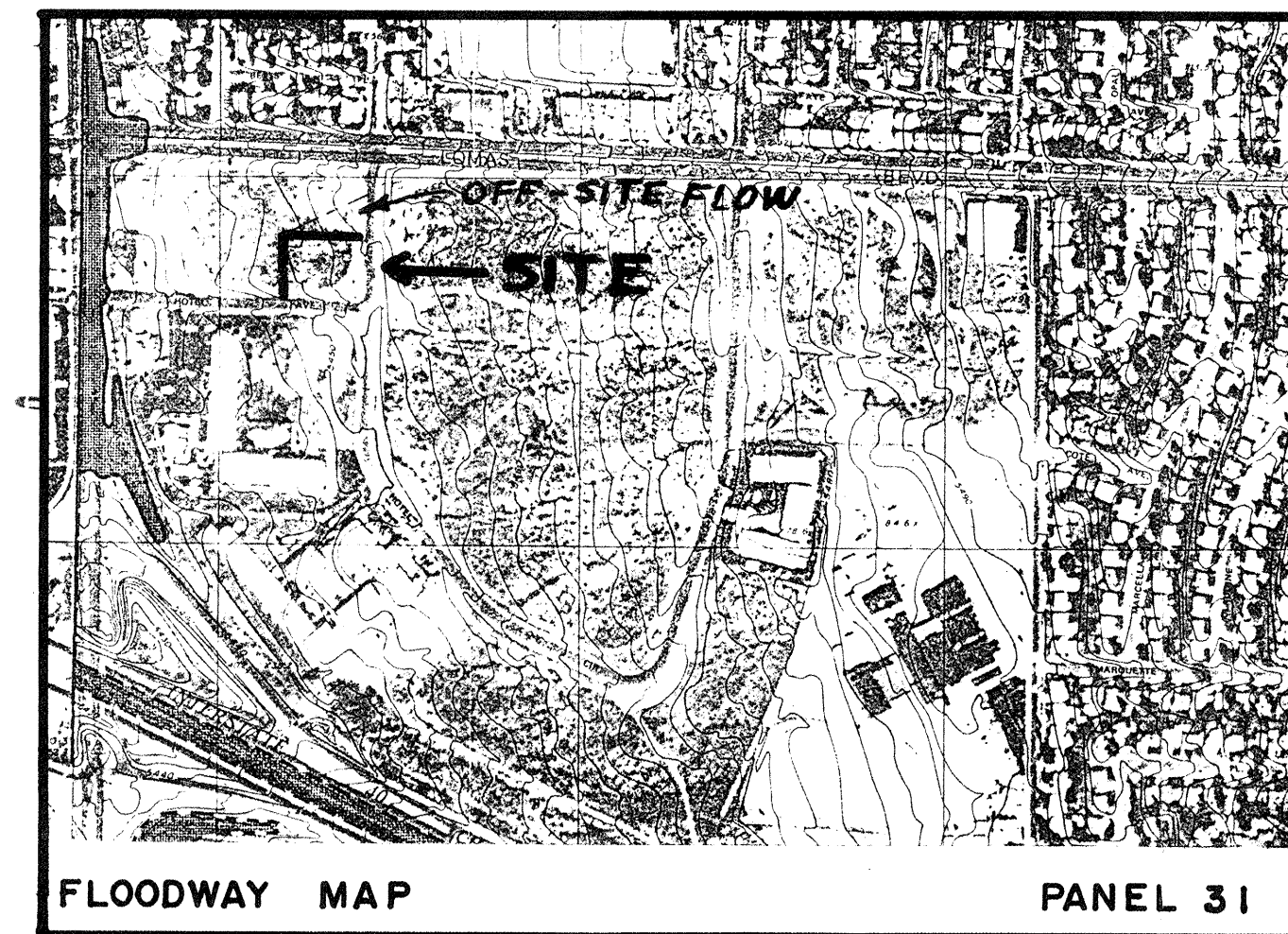
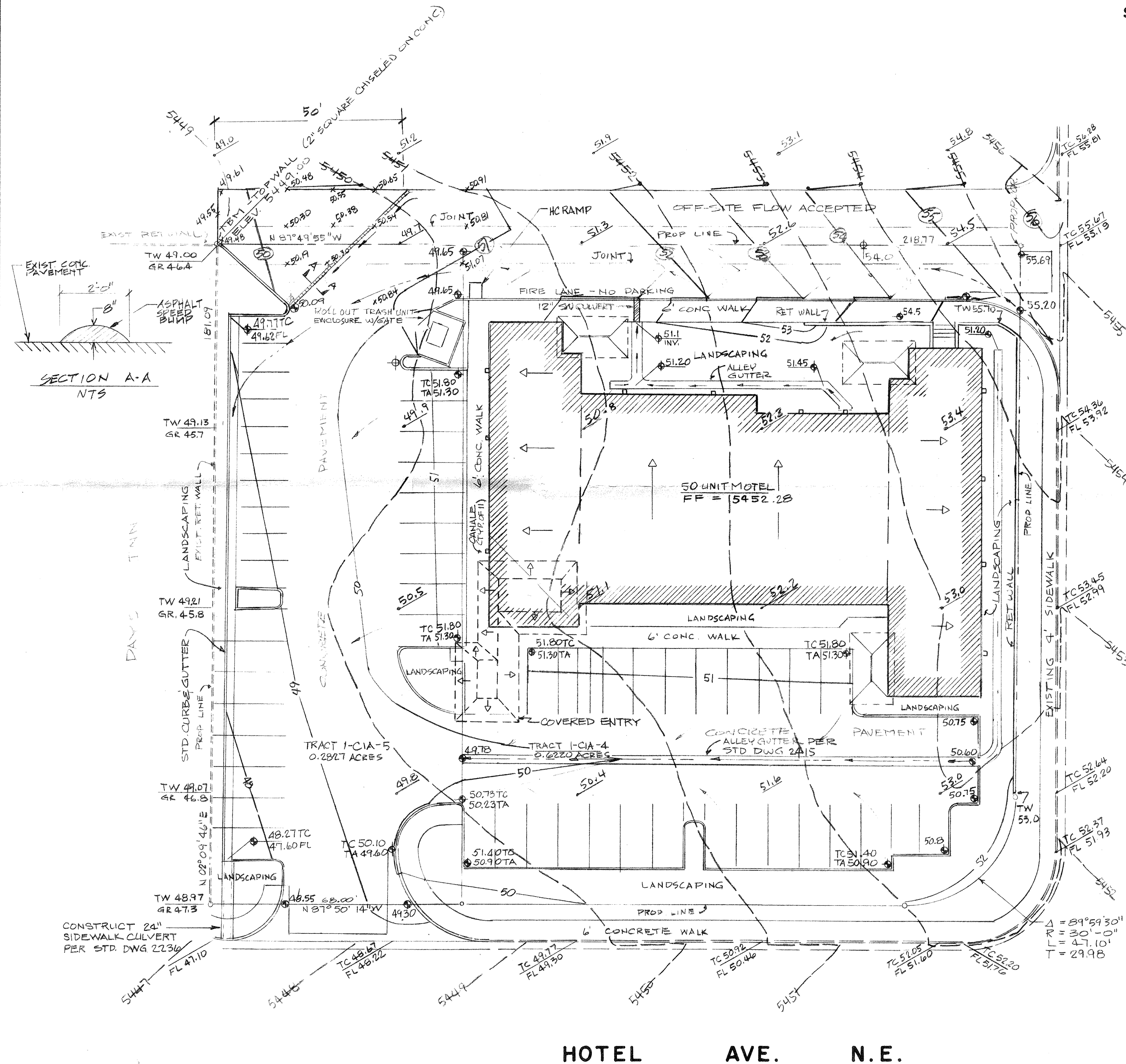
BJM/bsj
(WP+2823)

PUBLIC WORKS DEPARTMENT

LEGEND:		
EXISTING	NEW	DESCRIPTION
		CONTOUR
		SPOT ELEVATION
		SWALE
		SHEET FLOW
		PROPERTY LINE
		TA TOP OF ASPHALT
		TC TOP OF CURB
		FL FLOW LINE
		ROOF SLOPE

SCALE 1"=20'

N. E.
CIRCLE
HOTEL



EROSION CONTROL NOTES:

- The contractor shall be responsible for compliance with the following:
 - Nop sediment-bearing water shall be allowed to discharge from the site during construction.
 - During grading operations and until the project has been completed, all adjacent property, rights-of-way, and easements shall be protected from flooding by runoff from the site.
 - Should the contractor fail to prevent sediment-bearing water from entering public right-of-way or adjacent private property, he shall promptly remove all sediment originating from the site.
 - Control of sediment-bearing waters will be accomplished by use of a compacted earth berm of adequate height. The berm shall be located along the downstream perimeter of the property.

BENCH MARK:

Station 12-121, located at the N.E. corner of the intersection of Eubank Boulevard N.E. and Lomas Boulevard, N.E., at the mid-point between curb returns. A 3/4" aluminum cap imbedded in the concrete at top of curb. Preliminary Elevation 5438.40 Feet.

LEGAL DESCRIPTION:

Tract 1-CIA-4 and Tract 1-CIA-5 of Horne Development Addition.

CITY OF ALBUQUERQUE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (S.O. 19) NOTICE TO CONTRACTOR

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- ALL WORK DETAILED ON THIS PLAN TO BE PERFORMED UNDER CONTRACT, EXCEPT AS STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE-CALL SYSTEM, INC., 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- THE ADDRESS OF THE PROPERTY SERVED IS _____

APPROVALS:

HYDROLOGY	(NAME)	(DATE)
INSPECTOR	(NAME)	(DATE)
CONSTRUCTION	(NAME)	(DATE)

DRAINAGE CALCULATIONS

EXISTING CONDITIONS:

The site is presently unpaved with some natural vegetation. The site slopes in a westerly / southwesterly direction. Property north of the site is undeveloped. Property west of the site is developed as a Days Inn motel. There is an existing retaining wall along the west boundary of the site. The existing streets that are east and south of the site are paved with curb and gutter and sidewalk. The east half of the site has piles of concrete rubble and dirt covering much of the area. These are not reflected by the existing contours shown.

PROPOSED CONDITIONS:

It is proposed to construct a 50-unit motel on the site as shown. Discharge is in accordance with the conceptual drainage plan update dated May 2, 1989, which shows the runoff from the site discharging into Hotel Avenue. The only exception is that the fire lane along the north boundary of the site is shown draining directly west into Eubank. Since no downstream development has occurred along this proposed flow path, it appears more appropriate to discharge this water to Hotel Avenue, also.

SOIL INFORMATION:

(Refer to "Soil Survey of Bernalillo County", June, 1977). Soil is TgB, Tijeras gravelly fine sandy loam, 1 to 5 percent slopes, hydrologic soil group "B".

TIME OF CONCENTRATION:

Use ten (10) minutes, minimum time of concentration.

RAINFALL, 100-YEAR, 6-HOUR:

(Refer to D.P.M., Plate 22.2 D-1). $R_6 = 2.45$ inches.

RAINFALL INTENSITY:

$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.45 \times 6.84 \times 10^{-0.51} = 5.18$ inches per hour.

SITE IMPERVIOUSNESS:

Type of Surface	"C"	"CN"	Direct Runoff	Existing Area (Sq.Ft.)	Developed Area (Sq.Ft.)
Roof	0.90	98	2.30	-	18400
Asphalt	0.95	98	2.30	-	14230
Landscaping	0.25	01	0.25	-	6779
Undeveloped	0.40	82	0.90	39409	-
Totals				39409	39409

WEIGHTED "C" VALUE:

Existing: $C = 0.40$
 Developed: $C = \frac{(18400 \times 0.90 + 14230 \times 0.95 + 6779 \times 0.25)}{39409} = 0.81$

PEAK DISCHARGE:

Existing: $Q_{100} = CIA = 0.40 \times 5.18 \times 0.9047 = 1.87$ cfs
 $Q_{10} = 0.657 \times 1.87 = 1.23$ cfs
 Developed: $Q_{100} = CIA = 0.81 \times 5.18 \times 0.9047 = 3.80$ cfs
 $Q_{10} = 0.657 \times 3.80 = 2.50$ cfs

VOLUME, 100-YEAR, 6-HOUR:

Existing: $V_{100} = 39409 (0.90 / 12) = 2956$ cf
 $V_{10} = 0.657 \times 2956 = 1942$ cf
 Developed: $V_{100} = \frac{(2.30(18400 + 14230) + 6779 \times 0.25)}{12} = 6395$ cf
 $V_{10} = 0.657 \times 6395 = 4202$ cf

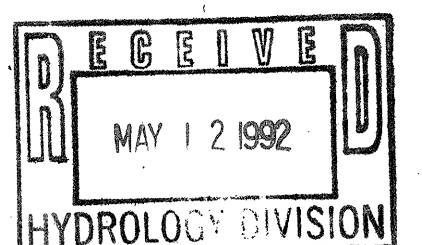
OFF-SITE FLOW:

Off-site flow is generated by a triangular area (approximately $\frac{1}{2}(218 \times 110)$, or 0.28 acre (11990 sf)

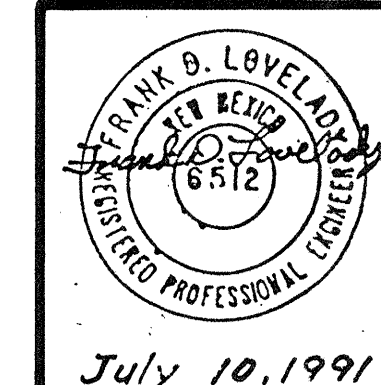
$Q_{100} = 0.40 \times 5.18 \times 0.28 = 0.58$ cfs
 $Q_{10} = 0.657 \times 0.58 = 0.38$ cfs
 $V_{100} = 11990 (0.90 / 12) = 899$ cf
 $V_{10} = 0.657 \times 899 = 591$ cf

SIDEWALK CULVERT:

Use Orifice Equation, $Q = CA (2GH)^{1/2}$ $A = 2 \times 0.67 = 1.34$ SF $C = 0.6$
 $H = 0.33'$ $Q = 0.6 \times 1.34 (2 \times 32.2 \times 0.33)^{1/2} = 3.71$ CFS
 Actual flow = $2.50 + 0.58 = 3.08$ CFS 2.0' sidewalk culvert is adequate.



REVISED 8/26/91 REVISED MAY 12 1992 (REVISION DATE SHOWN ON ORIGINAL)



GRADING AND DRAINAGE PLAN 50 ROOM MOTEL TRACTS 1-CIA-4 & 1-CIA-5 OF HORNE DEVELOPMENT ADDITION