

DRAINAGE INFORMATION SHEET

PROJECT TITLE: MOTEL FOR DINESH KHOLWAD ZONE ATLAS/DRNG. FILE #: H17/D61
 LEGAL DESCRIPTION: LOT 22-A, BLOCK 22 TIMOTEO CHAVEZ ADD
 CITY ADDRESS: 2412 CARLISLE, NE
 ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank Lovelady
 ADDRESS: 7408 Morrow Ave. NE 87110 PHONE: 883-7973
 OWNER: DINESH KHOLWAD CONTACT: DINESH KHOLWAD
 ADDRESS: ~~3920~~ 2412 CARLISLE PHONE: 880-0080
 ARCHITECT: JERRY TORR CONTACT: JERRY TORR
 ADDRESS: 3920 JUAN TABO PHONE: 293-7978
 SURVEYOR: LOVELADY & ASSOC. CONTACT: FRANK LOVELADY
 ADDRESS: 7408 MORROW NE PHONE: 883-7973
 CONTRACTOR: TEE TEE BUILDERS 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
 ✓ _____ CALCULATIONS TO SHOW CAPACITY OF OFF-SITE FLOW CHANNEL _____ X CERTIFICATE OF OCCUPANCY APPROVAL
 _____ ROUGH GRADING PERMIT APPROVAL

DATE SUBMITTED: JANUARY 24, 1992 _____ GRADING/PAVING PERMIT APPROVAL

BY: Frank D. Lovelady OTHER _____ (SPECIFY)
 Frank D. Lovelady, P.E.

91035769

0009167

DRAINAGE EASEMENT

This DRAINAGE EASEMENT made this 7th day of May, 1991, by Denish C. Kholwad, OWNER of the property described as follows:

A certain tract of land comprising portions of Lots 3, 4, 5, 20, 21 and 22, Block 22, and vacated alley adjacent to said lots all as shown on the plat of TIMOTEO CHAVEZ ADDITION to the City of Albuquerque, New Mexico as the same are shown and designated on the revised Plat of said Addition filed in the office of the County Clerk of Bernalillo County, New Mexico, on June 29, 1949, the parcel of land herein described also being known as a portion of Tract lettered "N" of the TIMOTEO CHAVEZ ADDITION to the City of Albuquerque, New Mexico, as the same is shown and designated on the plat of Tracts A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, and R of said Addition, filed in the office of the County Clerk of Bernalillo County, New Mexico, on January 16, 1958, and being more particularly described by metes and bounds survey as follows:

BEGINNING at the Northwest corner of the tract herein described, being a point on the East right-of-way of Carlisle Blvd. N.E., whence the Northeast corner of lot 22, Block 22 of said plat, filed on June 29, 1949, bears S 89° 42' 00" E, 108.08' distant;

Thence from said point of beginning, S 04° 04' 00" E, 150.44 feet along said East right-of-way to the Southwest corner;

Thence leaving said right-of-way, S 89° 42' 00" E, 138.55 feet to the Southeast corner;

Thence, N 00° 18' 00" E, 150.00 feet to the Northeast corner;

Thence, N 89° 42' 00" W, 150.00 feet to the point of beginning, and containing 21,641.5569 square feet, more or less, which parcel is hereinafter referred to as "The Property".

The OWNER (which term includes successors and assigns) of The Property, grant a blanket drainage easement for Lots 3, 4, 5, 20, 21, and 22 and the vacated alley for the purpose of conveying storm water runoff, any excess water resulting from irrigation of landscaping, or any excess water from any other ordinary light-commercial use, from any one of the said lots across any or all of the other said lots, including the vacated alley, as may be required to discharge said water to either Carlisle Boulevard or the Embudo Diversion Channel.

OWNER of The Property.

Dinesh C. Kholwad

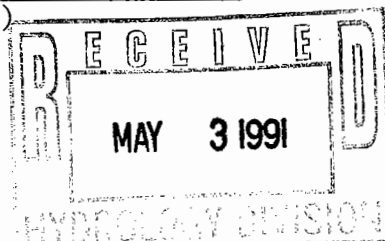
DINESH C. Kholwad

(Signature)

ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)

BERNALILLO COUNTY) ss



The foregoing instrument was acknowledged before me this 7th day of May, 1991, by Denish C. Kholwad, OWNER of The Property herein described.

Carol Christine Power

(Notary Public)

My Commission Expires: 6-22-92



OFFICIAL SEAL

CAROL CHRISTINE POWER

Notary Public, State of New Mexico
Notary Bond Filed with Secretary of State

My Commission Expires 6-22-92



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 31, 1992

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

RE: ENGINEER'S CERTIFICATION FOR MOTEL FOR DINESH KHOLWAD
& ADDITIONAL HYDRAULIC CALCULATIONS (H-17/D61) CERTIFICATION
STATEMENT DATED JANUARY 17, 1992 AND ADDITIONAL INFORMATION
RECEIVED JANUARY 24, 1992

Dear Mr. Lovelady:

Based on the information provided on your submittal of January 17 and 24, 1992, Engineer's Certification for the referenced site is approved.

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+2650)

PUBLIC WORKS DEPARTMENT

1/24/92 F.D.L.

H17/D61

Model FOR DINESH KHOLWAD. HYDRAULIC
CALCULATIONS FOR OFF-SITE FLOW CHANNEL
AT N.W. CORNER OF SITE

$$Q = 1.54 \text{ CFS. SLOPE} = (27.71 - 27.39) / 29 = 0.0110$$

WIDTH = 1'-6" AT NARROWEST POINT.

$$\text{DEPTH} = 4" = 0.33' \quad A = 0.33 \times 1.5 = 0.50$$

$$P = 0.33 + 1.5 + 0.33 = 2.16 \quad R = 0.5 / 2.16 = 0.23$$

$$Q = A (1.486 / N) (R)^{2/3} (S)^{1/2} \quad N = 0.013 \text{ CONC.}$$

$$= 0.5 (1.486 / 0.013) (0.23)^{2/3} (0.0110)^{1/2}$$

$$= 2.25 \text{ CFS} > 1.54 \quad \text{CHANNEL HAS ADEQUATE CAPACITY FOR } Q_{100}.$$

CHECK INLET CAPACITY. WIDTH = 4'

$$\text{WEIR EQUATION } Q = C L H^{3/2} \quad C = 2.65$$

$$L = 4.0 \quad H = 0.33'$$

$$Q = 2.65 \times 4.0 \times 0.33^{3/2} = 2.01 \text{ CFS} > 1.54$$

INLET HAS ADEQUATE
CAPACITY FOR Q_{100}

JAN 24 1992



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 7, 1991

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

RE: DRAINAGE PLAN FOR A MOTEL FOR DINESH KHOLWAD
(H-17/D61) ENGINEER'S STAMP DATED APRIL 30, 1991

Dear Mr. Lovelady:

Based on the information provided on your submittal of May 3, 1991, the referenced site is approved for building permit.

Please attach a copy of this approved plan to the construction sets prior to Certificate of Occupancy release.

Also, prior to Certificate of Occupancy release, Engineer's Certification per the DPM Checklist is required for review.

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

xc: Alan Martinez

BJM/bsj
(WP+2650)

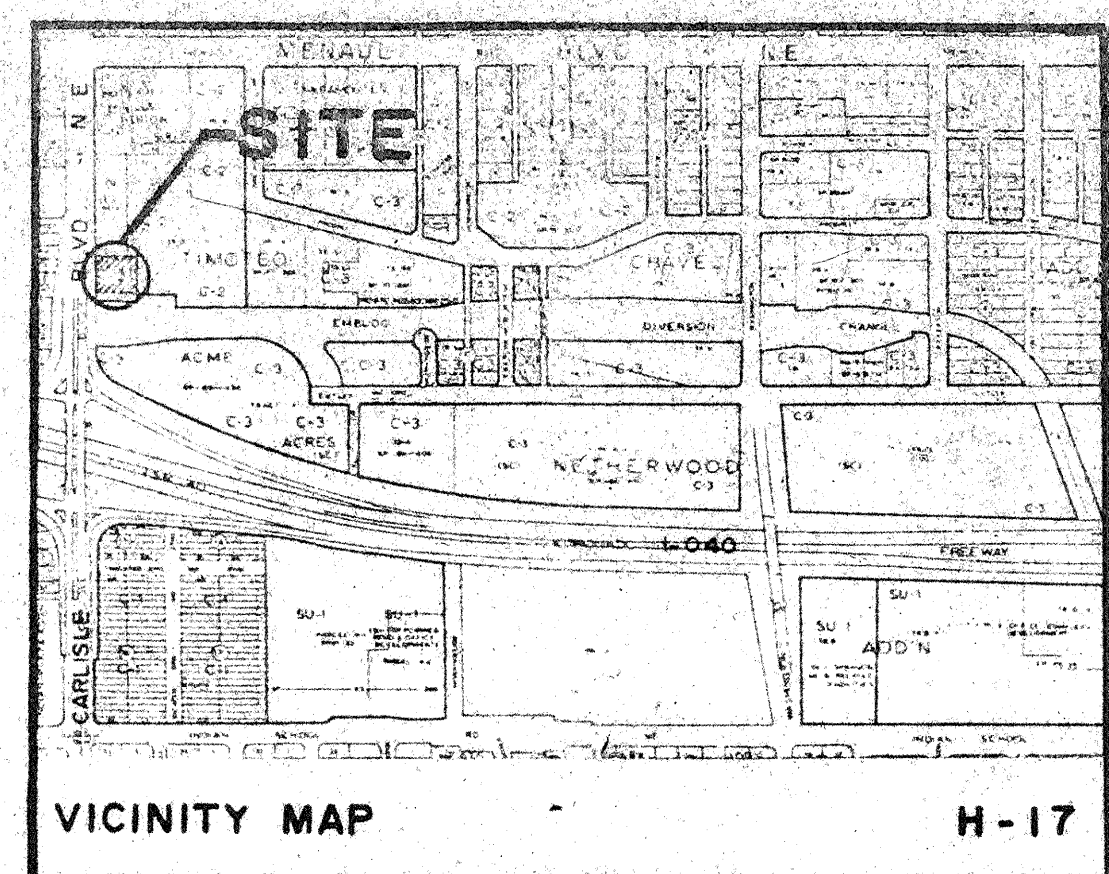
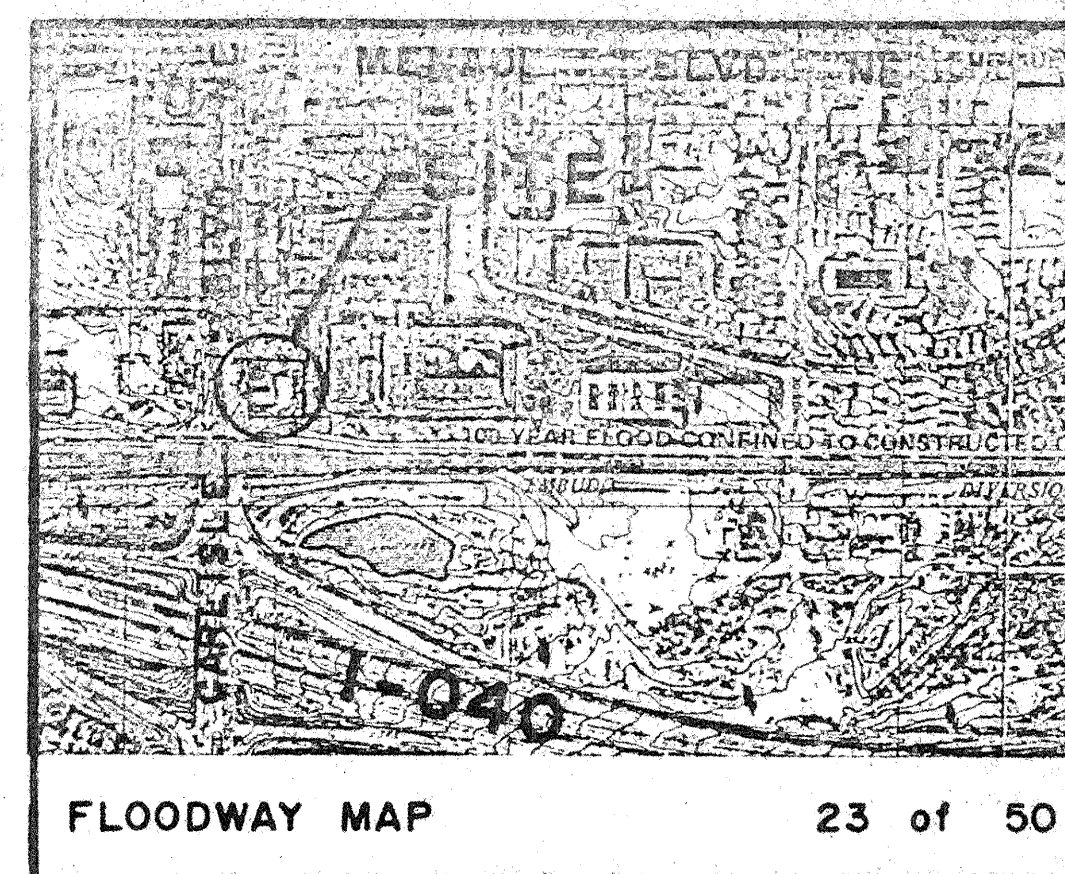
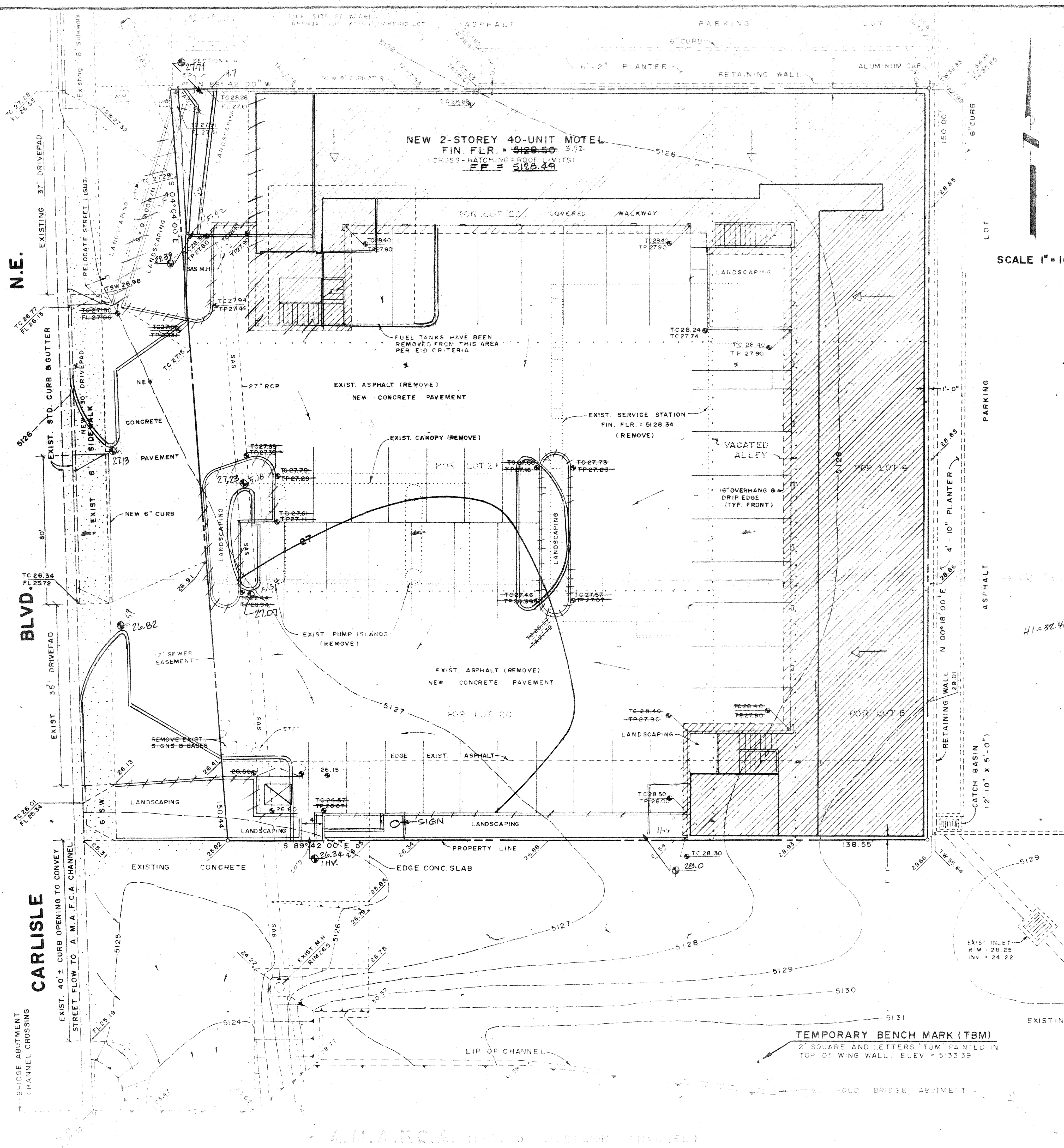
PUBLIC WORKS DEPARTMENT

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

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER



DRAINAGE CALCULATIONS			
EXISTING DRAINAGE CONDITIONS:			
THE SITE IS PRESENTLY OCCUPIED BY AN ABANDONED SERVICE STATION. THE SITE IS NEARLY ENTIRELY IMPERVIOUS EXCEPT FOR A TRASH PIT ALONG THE SOUTH PROPERTY LINE AND THE AREA WHERE THE UNDERGROUND STORAGE TANKS WERE REMOVED. RUNOFF MOSTLY ENTERS CARLISLE BOULEVARD WHERE IT AGAIN LEAVES THE STREET NEAR THE SOUTHWEST CORNER OF THE SITE AND ENTERS THE EMBUDO DIVERSION CHANNEL THROUGH A 20'-WIDE INLET CHANNEL.			
DEVELOPED DRAINAGE CONDITIONS:			
THE SITE IS PROPOSED TO BE DEVELOPED AS A 40-UNIT, TWO-STORY MOTEL AS SHOWN. ALL DRIVING SURFACES WILL BE PAVED WITH CONCRETE AND SLOPED TOWARD THE SOUTH BOUNDARY WHERE IT WILL BE DISCHARGED THROUGH CONCRETE-LINED CHANNELS INTO THE AMARCA RIGHT-OF-WAY, WHICH IS ALREADY PAVED WITH CONCRETE AT THE POINT OF DISCHARGE. THIS PAVED AREA IS THE COLLECTING BASIN FOR THE 20'-WIDE INLET INTO THE EMBUDO DIVERSION CHANNEL.			
OFF-SITE DRAINAGE CONDITIONS:			
RUNOFF FROM THE AREA SOUTH OF THE SITE FLOWS DIRECTLY INTO THE EXISTING 20'-WIDE INLET INTO THE EMBUDO DIVERSION CHANNEL. RUNOFF FROM THE AREA EAST OF THE SITE IS ALL COLLECTED IN THE EXISTING DRAINAGE INLET THAT IS NEAR THE SOUTHWEST CORNER OF THE SITE. IT IS CARRIED IN A LARGE-DIAMETER PIPE IN A SOUTHEASTERLY DIRECTION TO ANOTHER INLET WITH GRATE. THIS INLET COLLECTS ALL RUNOFF IN THE IMMEDIATE VICINITY AND DISCHARGES INTO THE EMBUDO DIVERSION CHANNEL. THIS IS THE SYSTEM THAT DRAINS A LARGE PART OF THE FOUR-SEASONS MOTOR HOTEL. RUNOFF FROM THE AREA NORTH OF THE SITE COLLECTS AGAINST THE PLANTER CURB AND ENTERS THE SITE BEGINNING AT THE NORTH END OF THE PLANTER AND CONTINUING WEST TO THE NORTHWEST CORNER OF THE SITE. THE FLOW IS SHEET FLOW ACROSS THE EXISTING ASPHALT EXCEPT THAT IT IS SOMEWHAT MORE CONCENTRATED NEAR THE END OF THE PLANTER. THIS FLOW IS ACCEPTED BUT IT WILL HAVE TO ENTER THE SITE AT A POINT BEYOND THE WEST END OF THE PROPOSED MOTEL. THIS WILL NOT IN ANY WAY CAUSE WATER TO FLOW SINCE THE GRADE ALONG THE NORTHERLY PROPERTY LINE IS IN A WESTERLY DIRECTION.			
TIME OF CONCENTRATION:			
USE TGA (10) MINUTES, MINIMUM TIME OF CONCENTRATION.			
SOIL INFORMATION:			
(REFER TO "SOIL SURVEY OF BERNALILLO COUNTY", JUNE 1977.) SOIL IS G ₂ , CUT AND FILL LAND, HYDROLOGIC "SOIL GROUP" "A". (ASSUME SOIL BEHAVES AS GROUP "B".)			
RAINFALL, 100-YEAR, 6-HOUR:			
(REFER TO D.P.M., PLATE 22, D-1) $R_p = 2.25$ INCHES.			
RAINFALL INTENSITY:			
$I = R_p \times 6.84 \times 10^{-5} \times 10^{(10 - 0.51)} = 2.25 \times 6.84 \times 10^{-5} \times 10^{9.49} = 4.76$ INCHES PER HOUR			
OFF-SITE FLOW:			
PARKING LOT NORTH OF SITE, APPROXIMATELY 100' X 150' = 15000 SF = 0.34 ACRE.			
$Q_{100} = CIA = 0.95 \times 4.76 \times 0.34 = 1.54$ CFS; $Q_{10} = 0.657 \times 1.54 = 1.01$ CFS.			
$100' = (2.05 \times 15000) / 12 = 2562$ CFS; $V_{10} = 0.657 \times 2562 = 1683$ CF.			
CHANNEL TO ACCEPT OFF-SITE FLOW:			
USE WEIR EQUATION TO CALCULATE ENTRANCE WIDTH, THEN USE MANNING'S EQUATION TO CALCULATE CHANNEL WIDTH. WEIR EQUATION, $Q = C W^{1.5} L^{1.75} H^{1.75}$ OR $2.611 W^{1.5} L^{1.75} H^{1.75}$ $Q = 1.61$ CFS > 1.54 CFS (ADEQUATE). CHECK CHANNEL OF 1.75' WIDE WITH 6" HIGH SIDES.			
PLAN DEPTH = 0.25' DEEP, $S = 0.01$ FT./FT., $n = 0.013$ FT., $P = 2.25$, $E = 2.25$, $R = 0.1911$.			
$n = 0.013$, $V = (1.486/0.013) (0.1911)^{2/3} / 4.76 = 3.79$ FPS			
$Q = AV = 0.43 \times 3.79 = 1.63$ CFS > 1.54 CFS (ADEQUATE).			
CHANNEL TO DISCHARGE SITE FLOW:			
TOTAL $Q = 2.08 + 1.54 = 3.62$ CFS. USE WEIR EQUATION, $Q = C W^{1.5} L^{1.75} H^{1.75}$ $Q = 2.51 \times 4.0(0.51)^{1/2} = 3.67$			
3.67 CFS > 3.62 CFS (ADEQUATE).			

PRE-DESIGN CONFERENCE FINDINGS:

1. DRAINAGE PLAN PER D.P.M. GUIDELINES REQUIRED PRIOR TO BUILDING PERMIT RELEASE.
2. CROSS-LOT LINE DRAINAGE WILL REQUIRE EITHER A REPLAT OR EASEMENTS.
3. EXISTING RUNOFF WILL BE USED TO DRAIN SITE INTO THE EMBUDO ARROYO.
4. SUBMIT TOP OF DRAINAGE PLAN TO CLIFF ANDERSON AT A.M.A.F.C.A. FOR DISCHARGE INTO THE ARROYO.

PROGNOSE CONTROL NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERM AT THE PROPERTY LINES AND WEETING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

LEGAL DESCRIPTION:

A certain tract of land comprising portions of Lots 3, 4, 5, 20, 21, and 22, Block 22, and vacated alley adjacent to said lots all as shown on the plat of TIMOTHY CHAVEZ ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, as the same are shown and designated on the plat of Tracts A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, and T of said addition, filed in the office of the County Clerk of Bernalillo County, New Mexico, on January 16, 1958, and being more particularly described by metes and bounds survey as follows:

BEGINNING at the Northeast corner of the tract herein described, being a point on the East right-of-way of Carlisle Blvd., S.E., where the North-east corner of Lot 22, Block 22 of said plat, filed on June 28, 1949, bears S 89° 42' 00" E, 108.08 feet distant;

Thence from said point of beginning, S 04° 00' 00" E, 150.44 feet along said East right-of-way to the Southwest corner;

Thence leaving said right-of-way, S 89° 42' 00" E, 138.55 feet to the Southeast corner;

Thence, N 00° 16' 00" E, 150.00 feet to the Northeast corner;

Thence, N 89° 42' 00" W, 150.00 feet to the point of beginning, and containing 21,641.5569 square feet, more or less.

LEGEND:		
EXISTING	NEW	DESCRIPTION
22.00	27	CONTOUR
28.00	28.00	SPOT ELEVATION
○ PP	TC	ROOF DRAINAGE
	TSW	SHEET FLOW
	TW	POWER POLE
	TP	TOP CURB
	TA	TOP SIDEWALK
	FL	TOP WALL
		TOP PAVEMENT
		TOP ASPHALT
		FLOW LINE

NOTE:
SEE SITE PLAN FOR LAYOUT DIMENSIONS

ENGINEER'S CERTIFICATION:

I hereby certify that I have personally inspected the site and that the conditions shown on this plan are in substantial conformance with the approved grading and drainage plan, engineer's stamp dated April 30, 1991.

Frank J. Davalos
(Signature)

1/17/92
(Date)

NOTE:
NO CONSTRUCTION IS ALLOWED ON AMAFCA PROPERTY (EMBUDO DIVERSION CHANNEL) 5/6/91

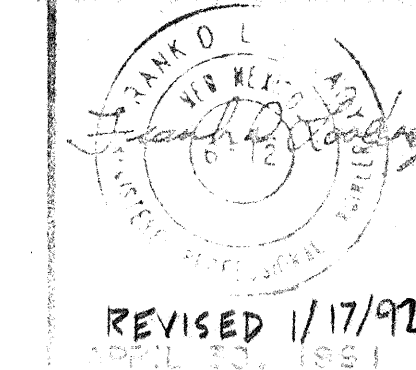
JAN 24 1992

A.M.A.F.C.A. APPROVAL

Cliff Anderson
(Signature)

DRAINAGE ENGINEER

DATE



GRADING AND DRAINAGE PLAN
MOTEL FOR DINESH KHOLWAD
2412 CARLISLE BLVD. N.E.
ALBUQUERQUE, NEW MEXICO