



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 23, 1992

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

RE: REVISED DRAINAGE PLAN FOR AN ADDITION TO MARTIN J. VIGIL BUILDING
(J-14/D91) REVISION DATED MARC9, 1992

Dear Mr. Lovelady:

Based on the information provided on your resubmittal of March 9, 1992,
revisions as indicated are acceptable.

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

Cordially,

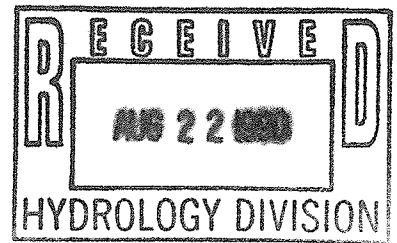
Bernie J. Montoya
Bernie J. Montoya, C.E.
Engineering Assistant

xc: Alan Martinez

BJM/bsj
(WP+2086)

PUBLIC WORKS DEPARTMENT

LOVELADY & ASSOCIATES
7408 Morrow Ave. N.E.
Albuquerque, NM 87110
(505) 883-7973



Fred J. Aguirre, P.E.
Hydrologist
Hydrology Development Section
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

RE: DRAINAGE PLAN FOR AN ADDITION TO MARTIN J. VIGIL BUILDING. (J-14/D-91)
ENGINEER'S STAMP DATED JULY 31, 1990.

Dear Mr. Aguirre:

With regard to your letter of August 10, 1990, increasing the slope to 0.0050 ft./ft. will require the finish floor to be approximately 0.4' higher which the owner feels is unacceptably high. From elevations taken in the alley, it is evident that runoff from the site would not be conveyed by the alley to the closest public street. In discussion with Bernie Monyoya, it was agreed that a grade of 0.0020 ft./ft. would be acceptable on a project of this scale provided the owner holds the City of Albuquerque harmless in the event that construction results in "bird baths" or in the event that other damages result from the use of a substandard slope.

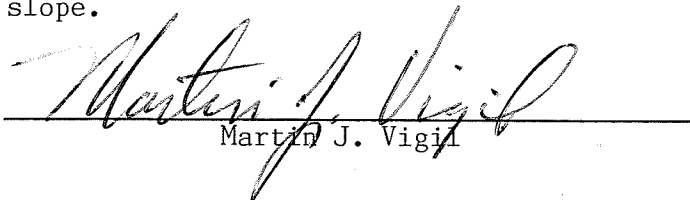
Therefore, the owner has agreed to sign the hold harmless statement below. If you have any questions or require additional information, please do not hesitate to contact me.

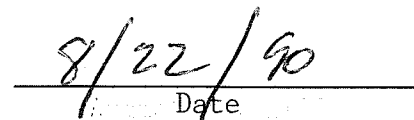
Sincerely,


Frank D. Lovelady, P.E.

HOLD-HARMLESS STATEMENT:

I, Martin J. Vigil, owner of property at 1315 Second Street N.W., hold the City of Albuquerque harmless for any and all damages that may be sustained by my property as a result of constructing the drainage swale at a substandard slope.


Martin J. Vigil


Date

PROJECT TITLE: MARTIN J. VIGIL ZONE ATLAS/DRNG. FILE #: J14/D-91LEGAL DESCRIPTION: LOTS 17 & 18 BLOCK 9, PARIS ADDITION

CITY ADDRESS: _____

ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank LoveladyADDRESS: 7408 Morrow Ave. NE 87110 PHONE: 883-7973OWNER: MARTIN J. VIGIL CONTACT: MARTIN J. VIGILADDRESS 1315 SECOND ST NW PHONE: 242-2969

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☒ YES

DRB NO. _____

☐ NO

EPC NO. _____

☒ COPY OF CONFERENCE RECAP
SHEET PROVIDED
SUBMITTED W/ ORIGINAL SUBMITTAL

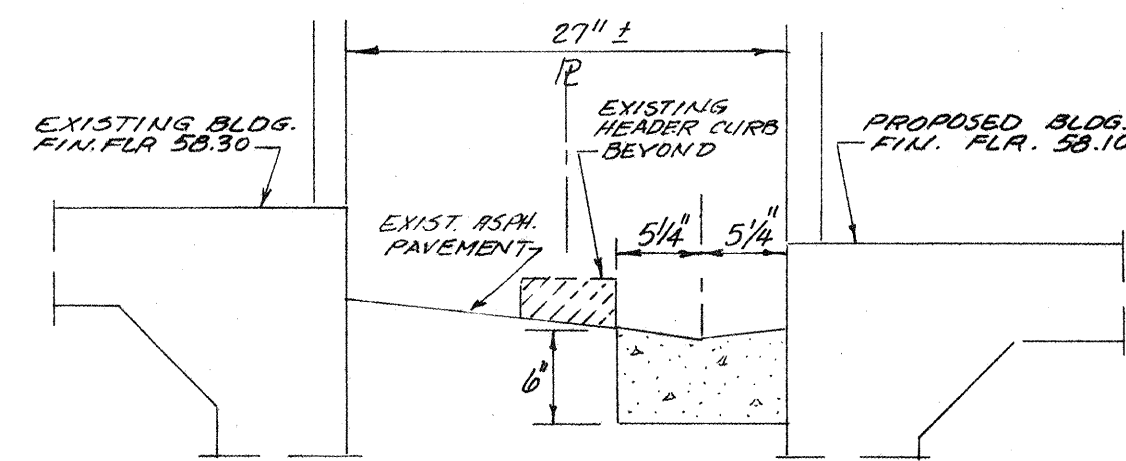
PROJECT NO. _____

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☒ REVISION TO SHOW DRIVEPAD
FOR DRIVEWAY FOR NEW
BUILDING FROM ALLEY☐ CERTIFICATE OF OCCUPANCY APPROVAL☐ ROUGH GRADING PERMIT APPROVALDATE SUBMITTED: MARCH 9, 1992☐ GRADING/PAVING PERMIT APPROVALBY: Frank D. Lovelady
Frank D. Lovelady, P.E.

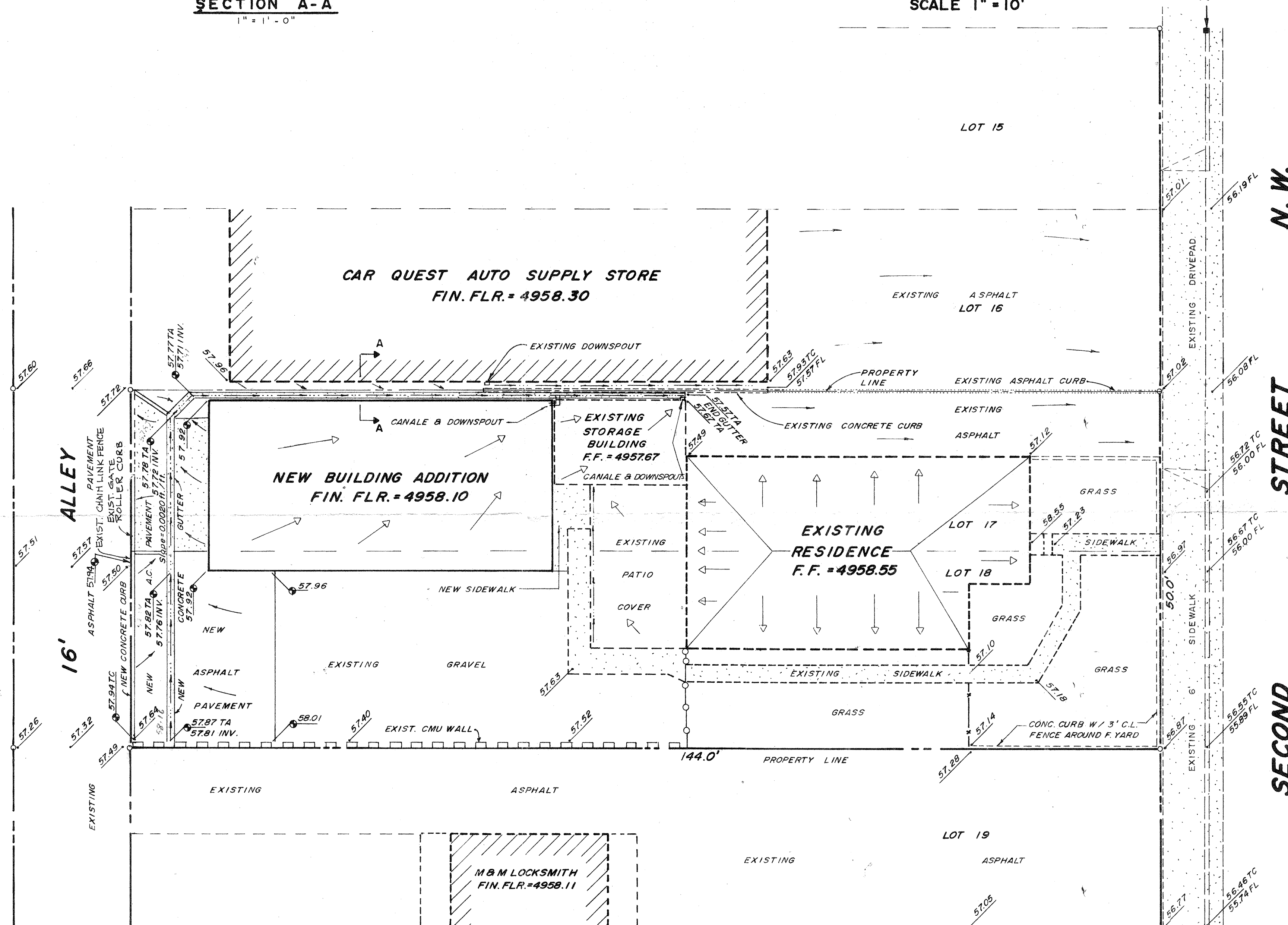
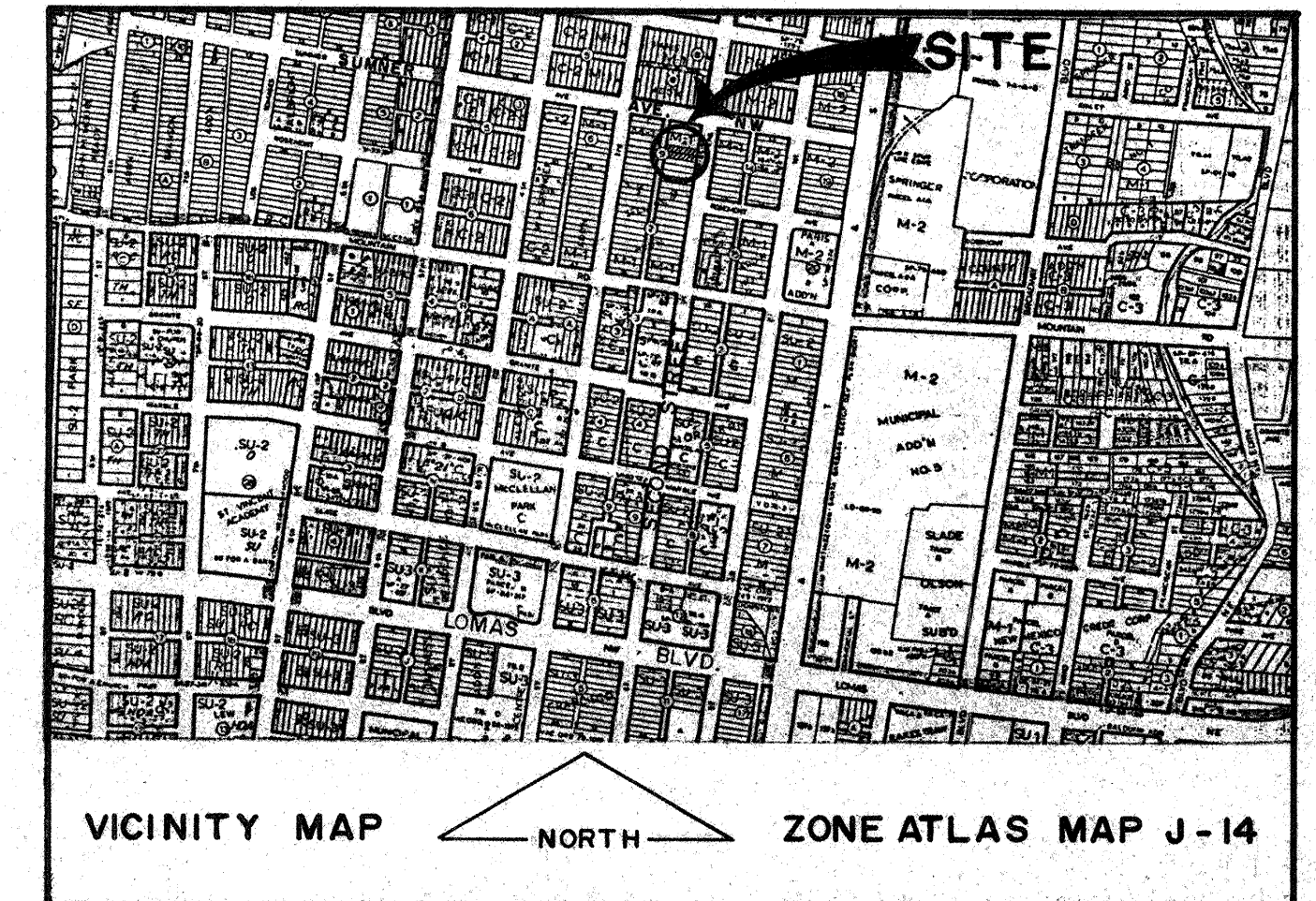
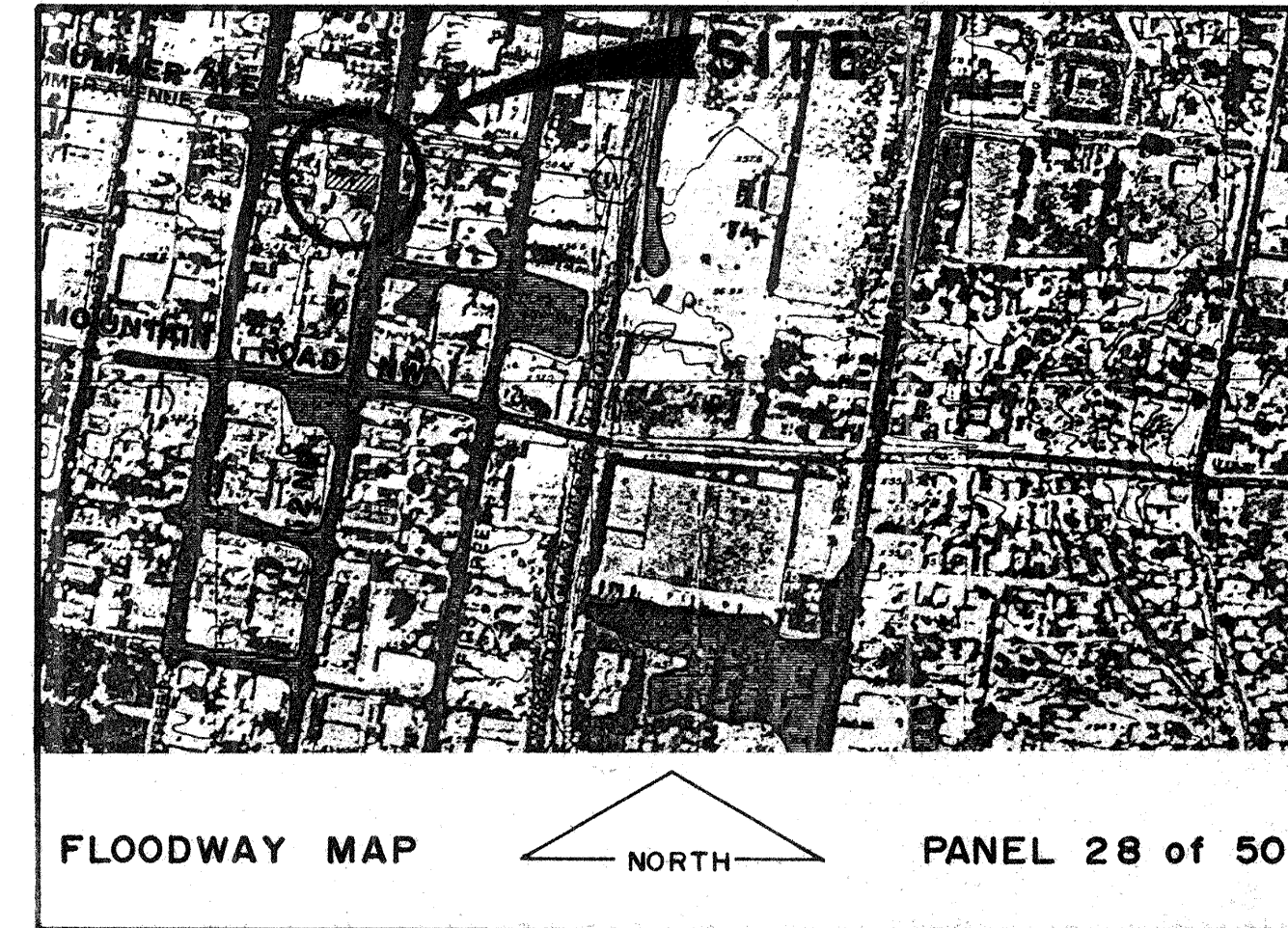
OTHER _____ (SPECIFY)



SECTION A-A
1" = 1'-0"

SCALE 1" = 10'

TEMPORARY BENCH MARK (TBM)
2" SQUARE AND LETTERS "TBM" PAINTED IN
BLACK ON TOP OF CURB AT POINT ADJACENT
TO THE N.E. CORNER OF LOT 15.



EXISTING DRAINAGE CONDITIONS:

THE LOT IS PRESENTLY DEVELOPED WITH A HOUSE CONVERTED TO A DUPLEX APARTMENTS. AT THE REAR OF THE HOUSE IS A COVERED PATIO AND AN EXISTING STORAGE BUILDING WHICH DRAIN AS DESCRIBED BELOW. THE BACK YARD IS GRAVEL WITH A 6' HIGH CHAIN LINK FENCE AT THE WEST PROPERTY LINE. ALONG THE NORTH PROPERTY LINE THERE IS AN EXISTING CONCRETE CURB AND ASPHALT "CURB" WHICH KEEPS DRAINAGE FROM CROSSING THE LOT LINE AND CONVEYS IT TO SECOND STREET. ADJACENT TO THE WESTERLY 35' OF THE CAR QUEST BUILDING, THE LOT IS PAVED WITH ASPHALT BETWEEN THE BUILDING AND THE PROPERTY LINE. THIS GENERATES A SMALL AMOUNT OF OFF-SITE FLOW, WHICH IS ACCEPTED. THIS IS THE ONLY OFF-SITE FLOW RELATIVE TO THIS SITE. THE HOUSE HAS A PITCHED ROOF. THE WESTERLY SLOPE RUNS ONTO THE PATIO COVER WHICH DRAINS ONTO THE EXISTING STORAGE BUILDING ROOF, WHICH DRAINS BY CANALE AND DOWNSPOUT ONTO THE ASPHALT ON THE NORTH SIDE OF THE HOUSE. THE NORTH SIDE OF THE HOUSE DRAINS ONTO THE EXISTING ASPHALT. THE EAST AND SOUTH SIDES DRAIN ONTO THE LAWN. PROPERTIES TO THE NORTH AND SOUTH OF THE SITE ARE LARGELY PAVED WITH ASPHALT AROUND THE EXISTING BUILDINGS. THE EXISTING ALLEY IS PAVED BUT DOES NOT HAVE ADEQUATE CAPACITY TO CONVEY DISCHARGE FROM THE SITE.

PROPOSED DRAINAGE CONDITIONS:

MUCH OF THE SITE WILL REMAIN AS IT PRESENTLY IS. A CONCRETE GUTTER SECTION IS PROPOSED TO CONVEY RUNOFF FROM THE NEW ASPHALT PAVEMENT TO THE NORTHEAST CORNER OF THE EXISTING STORAGE BUILDING. THE NEW BUILDING WILL DISCHARGE BY CANALE AND DOWNSPOUT TO THE CONCRETE GUTTER. THE EXISTING GRAVEL AREA WILL CONTINUE TO DRAIN AS IT PRESENTLY DOES, I.E., IT WILL CONTINUE TO BE ABSORBED WHERE IT FALLS WITH POSSIBLY SOME OF IT RUNNING ONTO THE LAWN AREA WHERE IT IS ABSORBED.

SOIL INFORMATION:

(REFER TO SOIL SURVEY OF BERNALILLO COUNTY, JUNE 1977.) SOIL IS Gk, GLENDALE LOAM, HYDROLOGIC SOIL GROUP "B".

FLOOD ZONE:

THE FLOOD INSURANCE RATE MAP (FIRM), PANEL 28 OF 50, SHOWS THAT THERE IS AN AO-1 FLOOD ZONE IN SECOND STREET. IT IS CONFINED TO THE RIGHT-OF-WAY. THE FINISH FLOOR ELEVATION OF THE PROPOSED ADDITION HAS BEEN SET 2.02' ABOVE THE FLOWLINE ELEVATION ADJACENT TO THE NE CORNER OF LOT 17 TO ENSURE THAT THE FINISH FLOOR WILL BE A MINIMUM OF 1.0' ABOVE THE 100-YEAR FLOOD LEVEL IN SECOND STREET.

RAINFALL, 100-YEAR, 6-HOUR:

(REFER TO D.P.M., PLATE 22.2 D-1.) $R_6 = 2.2$ INCHES

TIME OF CONCENTRATION:

(USE TEN (10) MINUTES, MINIMUM TIME OF CONCENTRATION.)

RAINFALL INTENSITY:

$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times 10^{-0.51} = 4.65$ INCHES PER HOUR.

DRAINAGE CALCULATIONS

SITE IMPERVIOUSNESS:

SURFACE TYPE	"C"	"CN"	DIRECT RUNOFF	AREAS EXISTING	(SQ. FT.) DEVELOPED
BUILDING	0.90	98	2.00	1759	2911
ASPHALT/CONCRETE	0.95	98	2.00	936	1938
GRAVEL OR DIRT	0.40	82	0.80	3299	1145
LAWN/LANDSCAPING	0.25	61	0.15	1206	1206
TOTALS				7200	7200

WEIGHTED "C" VALUE:

EXISTING CONDITIONS:
 $C_w = \frac{(1759 \times 0.90 + 936 \times 0.95 + 3299 \times 0.40 + 1206 \times 0.25)}{7200} = 0.57$

DEVELOPED CONDITIONS:
 $C_w = \frac{(2911 \times 0.90 + 1938 \times 0.95 + 1145 \times 0.40 + 1206 \times 0.25)}{7200} = 0.73$

PEAK RUNOFF:

EXISTING CONDITIONS:
 $Q_{100} = CIA = 0.57 \times 4.65 \times 0.1653 = 0.44$ CFS $Q_{10} = 0.657 \times 0.44 = 0.29$ CFS
DEVELOPED CONDITIONS:
 $Q_{100} = CIA = 0.73 \times 4.65 \times 0.1653 = 0.56$ CFS $Q_{10} = 0.657 \times 0.56 = 0.37$ CFS

6-HOUR VOLUME:

EXISTING CONDITIONS:
 $V_{100} = \frac{(2695 \times 2.0 + 3299 \times 0.80 + 1206 \times 0.15)}{12} = 684$ CF

$V_{10} = 0.657 \times 684 = 449$ CF
 $V_{100} = \frac{(4849 \times 2.0 + 1145 \times 0.80 + 1206 \times 0.15)}{12} = 900$ CF

ANALYSIS OF DOWNSTREAM CAPACITY:

DUE TO THE FLOOD ZONE IN SECOND STREET, AN ANALYSIS OF DOWNSTREAM CAPACITY IS APPROPRIATE. FIRST, THE SITE IS AN "INFILL" SITE. THE ENTIRE AREA WHERE THE SITE IS LOCATED IS AN ESTABLISHED, DEVELOPED AREA. SECOND, THE AMOUNT OF ADDITIONAL RUNOFF FROM THE PROPOSED DEVELOPMENT WILL GENERATE IS VERY MINIMAL, ONLY 0.12 CFS. THIRD, THERE ARE INLETS AT ALL FOUR CORNERS OF MOUNTAIN ROAD AND SECOND STREET WHICH ARE DRAINED BY A 24" RCP IN MOUNTAIN ROAD. ONE BLOCK WEST THE 24" RCP EMPTIES INTO A 48" RCP IN THIRD STREET.

EROSION CONTROL NOTES:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FOLLOWING:

- NO 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, HE SHALL PROMPTLY REMOVE FROM THE PUBLIC RIGHT-OF-WAY ANY AND ALL SEDIMENT ORIGINATING FROM THE SITE.
- CONTROL OF SEDIMENT-LADEN 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.

LEGAL DESCRIPTION:

A CERTAIN TRACT OR PARCEL OF LAND SITUATED WITHIN THE LEGAL LIMITS OF THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO; BEING MORE PARTICULARLY DESCRIBED AS: LOTS 17 AND 18, BLOCK 9, OF THE PARIS ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO.

BENCH MARK:

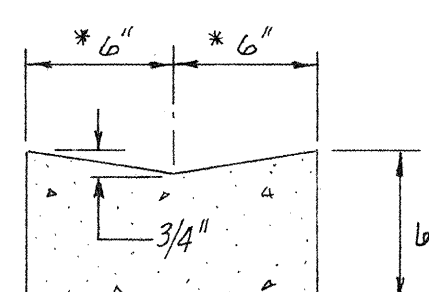
STANDARD USC & GS BRASS CAP STAMPED "L-224 RESET" SET IN THE TOP OF TRAFFIC WARNING LIGHT AT THE INTERSECTION OF MOUNTAIN ROAD NW AND THE A.T. & S.F. RAILROAD TRACK, N.S.L. ELEVATION = 4958.560 FEET.

PRE-DESIGN CONFERENCE FINDINGS: (MEETING OF JULY 16, 1990)

- PROPOSING BUILDING ADDITION IN EXCESS OF 1000 SF AND 2 PAVED PARKING SPACES ON M-1 ZONING.
- A DRAINAGE PLAN IS REQUIRED FOR PROPOSED AND EXISTING IMPROVEMENTS PER D.P.M. CHECKLIST PRIOR TO BUILDING PERMIT APPROVAL.

LEGEND:

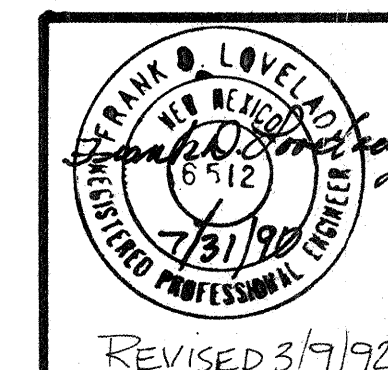
EXISTING	NEW	DESCRIPTION
		CONTOUR (N/A)
		SPOT ELEVATION
		SHEET FLOW
		ROOF DRAINAGE
		SWALE / GUTTER
		PROPERTY LINE
		TA TOP OF ASPHALT
		TC TOP OF CONCRETE
		FL FLOWLINE



CONCRETE GUTTER DETAIL

1'-1/2" = 1' - 0"

* 5 1/4" NEXT TO BUILDING.



REVISED 3/9/92

GRADING AND DRAINAGE PLAN NEW BUILDING ADDITION FOR

MARTIN J. VIGIL
1315 SECOND STREET N.W.
ALBUQUERQUE, NEW MEXICO