

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 18, 1993

Frank Lovelady, P.E.
Lovelady & Associates
7400 Morrow Avenue NE
Albuquerque, N.M. 87112

RE: DRAINAGE PLAN FOR WESTWAY EXPRESS SHOP ADDITION (D-18/D10)
RECEIVED MAY 6, 1993 FOR BUILDING PERMIT APPROVAL
ENGINEER'S STAMP DATED MAY 11, 1991; AS REVISED MAY 5, 1993

Dear Mr. Lovelady:

Based on the information included in the submittal referenced above, City Hydrology APPROVES THIS PROJECT for Building Permit.

Include a copy of the Drainage Plan in the set of construction documents submitted for Building Permit.

Engineer's Certification of Grades per DPM checklist must be approved before any Certificate of Occupancy will be released.

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
PWD/Hydrology

xc: Alan Martinez

WPHYD+3001;jpc

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

PROJECT TITLE: WESTWAY EXPRESS (FORMERLY R. DEXPRESS)
SHOP ADDITION ZONE ATLAS/DRNG. FILE #: D-18/D-10

LEGAL DESCRIPTION: lots 25 & 26, BLOCK 5 TRACT A UNIT A
NORTH ALBUQUERQUE ACRES

CITY ADDRESS: 5601 SAN FRANCISCO DR. NE

ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank Lovelady

ADDRESS: 7408 Morrow Ave. NE 87110 PHONE: 883-7973

OWNER: WESTWAY EXPRESS CONTACT: JEFF MARTIN

ADDRESS 5601 SAN FRANCISCO NE PHONE: 821-4145

ARCHITECT: Doyle Seymore CONTACT: Doyle Seymore

ADDRESS: 13505 Terragon Dr NE PHONE: 296-3448

SURVEYOR: SOUTHWEST SURVEY CO. CONTACT: DAN GRANEY

ADDRESS: 833 LOMAS BLVD. NE PHONE: 847-4444

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

_____ CERTIFICATE OF OCCUPANCY APPROVAL

_____ ROUGH GRADING PERMIT APPROVAL

DATE SUBMITTED: October 23, 1991 _____ GRADING/PAVING PERMIT APPROVAL

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

INDEMNIFICATION AGREEMENT AND COVENANT

The City of Albuquerque (City), and Louis C. Miller, Marjorie A. Miller, his wife and David A. Gressett and Wanda Gressett, his wife (Owners, which term includes successors and assigns) agree:

RECITAL

Owners are the owners of the following described real

Property:

Lot numbered Twenty-five (25) and Twenty-six (26) in Block numbered Five (5) of Tract A, Unit A, North Albuquerque Acres, Township 11 North, Range 3 East, of New Mexico Principal Meridian, New Mexico, as the same are shown and designated on the Plat of said Addition, filed in the Office of the County Clerk of Bernalillo County, New Mexico, on March 17, 1937.

The Owners have presented a drainage plan to the City as a condition of obtaining a building permit on the above described property. The City has rejected said drainage plan for the reasons set forth herein and notwithstanding such rejection the owner has constructed a building on said property.

The above described real property's southern boundary abuts San Francisco Street. The construction of the building's finished floor elevation does not conform to the City of Albuquerque's "Flood Plain Ordinance", Section 7B.2 which states that the lowest floor level shall be elevated one foot above the base flow elevation.

The City requires Owners to enter into this Agreement as a condition of its approval of Owners' drainage plan, and as a condition of the issuance of appropriate building permits for this site.

UNDERSTANDING OF EXPOSURE

Owners agree and understand that the building as sited does not provide protection for the Owners' property and is subject to flood and water run off damage resulting from noncompliance with the Flood Plain Ordinance.

INDEMNIFICATION AND HOLD HARMLESS

The Owners agree to defend, indemnify and hold harmless the City, its officials, agents and employees from and against any and all claims, actions, suits or proceedings of any kind brought against the parties for or on account of any matter arising from the failure of the Owner to comply with the Flood Plain Ordinance.

COVENANT RUNNING WITH THE PROPERTY

The obligations of the Owners set forth herein shall be binding upon the Owners, their heirs, successors and assigns and the property described herein and will run with said property until released by the City.

ISSUANCE OF PERMITS

Upon execution of this Agreement, the City will not withhold approval of permit issuance for reasons related to noncompliance to the referenced Ordinance for the building project on this property.

OWNERS

Louis C. Miller

Marjorie A. Miller

David A. Gressett

Wanda Gressett

REVIEWED & APPROVED BY THE
LEGAL DEPARTMENT

Malcolm W. Delvest
Assistant City Attorney

Charles M. Easterling
Principal Asst. Engineer-
Hydrology

Frank A. Kleinhenz
Chief Administrative Officer

626

ACKNOWLEDGMENTS

STATE OF NEW MEXICO)
) SS
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me by
LOUIS C. MILLER and MARJORIE A. MILLER, his wife, on this ____
day of June, 1982.

Notary Public

My Commission Expires:

September 18, 1984

STATE OF NEW MEXICO)
) SS
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me by
DAVID A. GRESSETT and WANDA GRESSETT, his wife, on this 11th day
of February, 1982.

Wanda A. Gressett
Notary Public

My Commission Expires:

6-20-85

STATE OF NEW MEXICO)
) SS.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me on
this 26th day of February, 1982, by FRANK A.
KLEINHENZ, Chief Administrative Officer of the City of
Albuquerque, a Municipal Corporation, on behalf of said
corporation.

Robert L. Hunt
Notary Public

My Commission Expires:
December 18, 1984

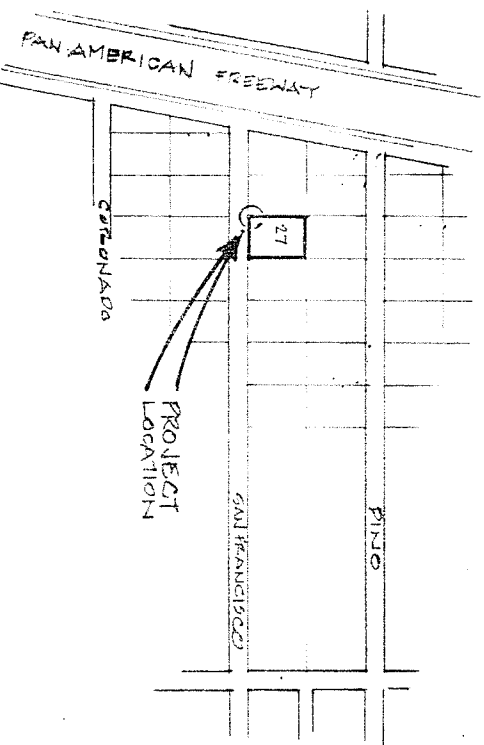
STATE OF NEW MEXICO
COUNTY OF BERNALILLO
FILED FOR RECORD

MAR 29 9 35 AM '82

JERRY C. OLIVER
COUNTY CLERK
DEPUTY

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



VICINITY MAP



LEGAL DESCRIPTION

LOT 27, BLK 5, TRACT A,
UNIT A, NORTH ALBUQUERQUE

OWNER:
DAVID A. GRESSETT
5601 SAN FRANCISCO RD, NE
ALBUQUERQUE, NM 87109



NOTICE TO CONTRACTOR

1. 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.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with "Contract Documents for City-Wide Utilities and Cash Paving No. 30"
3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. 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.
5. Backfill compaction shall be according to ARTERIAL street use.

APPROVALS	NAME	DATE	TITLE:	PERMIT NO.	MAP NO.
A.C.E./DESIGN	<i>D. Gressett</i>	12 March 2022	CURB DRAIN	07369	B-19
INSPECTOR			GRESSETT TRUCKING	0	2
A.C.E./FIELD			5525 SAN FRANCISCO RD, NE	1 OF 2	NO. D-18-Z

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



APPROVALS	NAME	DATE	TITLE:
A.C.E./DESIGN	<i>[Signature]</i>	<i>12/14/82</i>	CURB DRAIN
INSPECTOR	<i>[Signature]</i>		GRESSETT TRUCKING
5x/ftch			5525 SAN FRANCISCO RD., NE
			PERMIT NO.
			MAP
			SHEET 2 OF 2
			NO. D.18.2

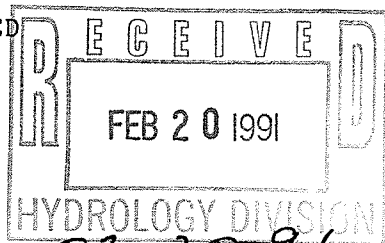
PROJECT TITLE: RANCHITOS VILLAGE ZONE ATLAS/DRNG. FILE #: D18/D13
DRB #: _____ EPC #: _____ WORK ORDER #: 4001.90
LEGAL DESCRIPTION: LOT X-1, U-A, TR-A, BLK 13, N. ALB. ACRES
CITY ADDRESS: RANCHITOS AVE NE
ENGINEERING FIRM: JEFF MORTENSEN & ASSOC. CONTACT: JEFF MORTENSEN
ADDRESS: 6010-B MIDWAY PARK BLVD NE PHONE: 345-4250
OWNER: MISS ELDERLY HOUSING CONTACT: JOSEPH GLENN
1800 CENTURY BLVD-SUITE 1260
ADDRESS: ATLANTA GA 30345 PHONE: 404-321-0232
ARCHITECT: WHITNEYBELL ARCHITECTS CONTACT: DOUG WHITNEYBELL
1102 E. MISSOURI AVE.
ADDRESS: PHOENIX, AZ 85014 PHONE: 602-265-1891
SURVEYOR: JEFF MORTENSEN & ASSOC CONTACT: JEFF MORTENSEN
ADDRESS: 6010-B MIDWAY PARK BLVD NE PHONE: 345-4250
CONTRACTOR: BRADBURY & STAMM CONTACT: GINA ZAMORA
ADDRESS: _____ PHONE: 765-1200

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
☐ DRAINAGE PLAN
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☒ ENGINEER'S CERTIFICATION
☐ OTHER

PRE-DESIGN MEETING:

- ☐ YES
☐ NO
☐ COPY PROVIDED



DATE SUBMITTED:

BY: JEFFREY G. MORTENSEN

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
☐ OTHER _____ (SPECIFY)

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 1, 1991

Jeff Mortensen, P.E.
Jeff Mortensen & Associates, Inc.
6010-B Midway Park Boulevard, NE
Albuquerque, New Mexico 87109

RE: ENGINEER'S CERTIFICATION FOR RANCHITOS VILLAGE
(MISS HANDICAP HOUSING) (D-18/D13) CERTIFICATION
STATEMENT DATED FEBRUARY 19, 1991

Dear Mr. Mortensen

Based on the information provided on your submittal of February 20, 1991,
Certification for the referenced site is acceptable.

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

Cordially,

Fred J. Aguirre
Fred J. Aguirre, P.E.
Hydrologist

xc: Alan Martinez

BJM:FJA/bsj
(WP+1490)

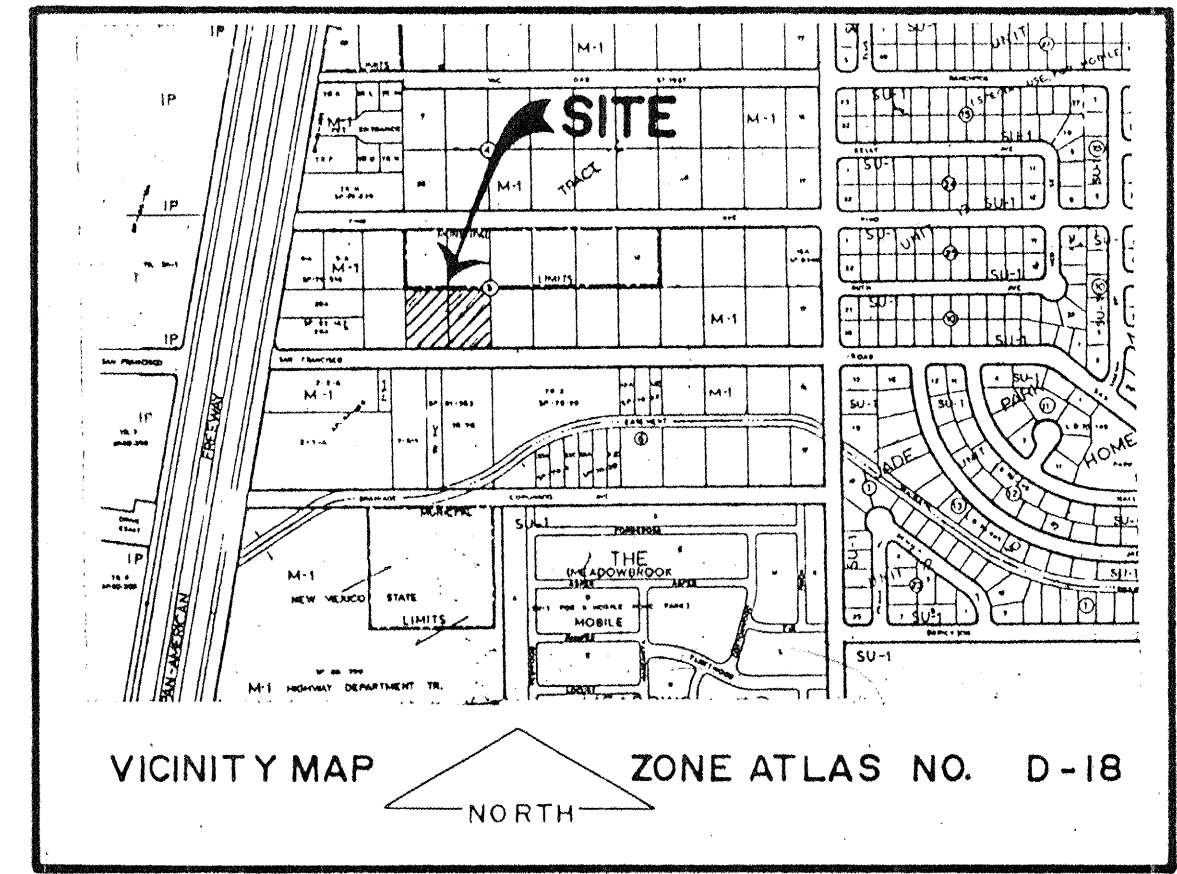
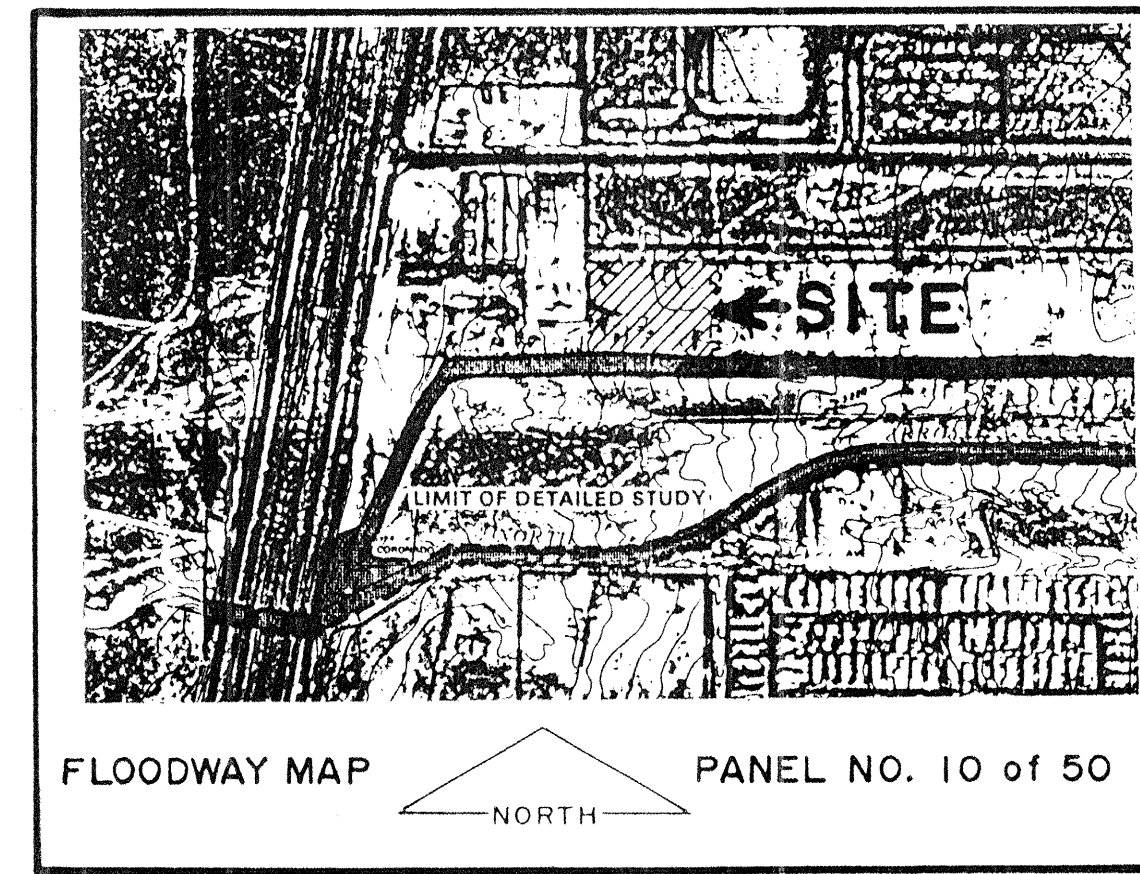
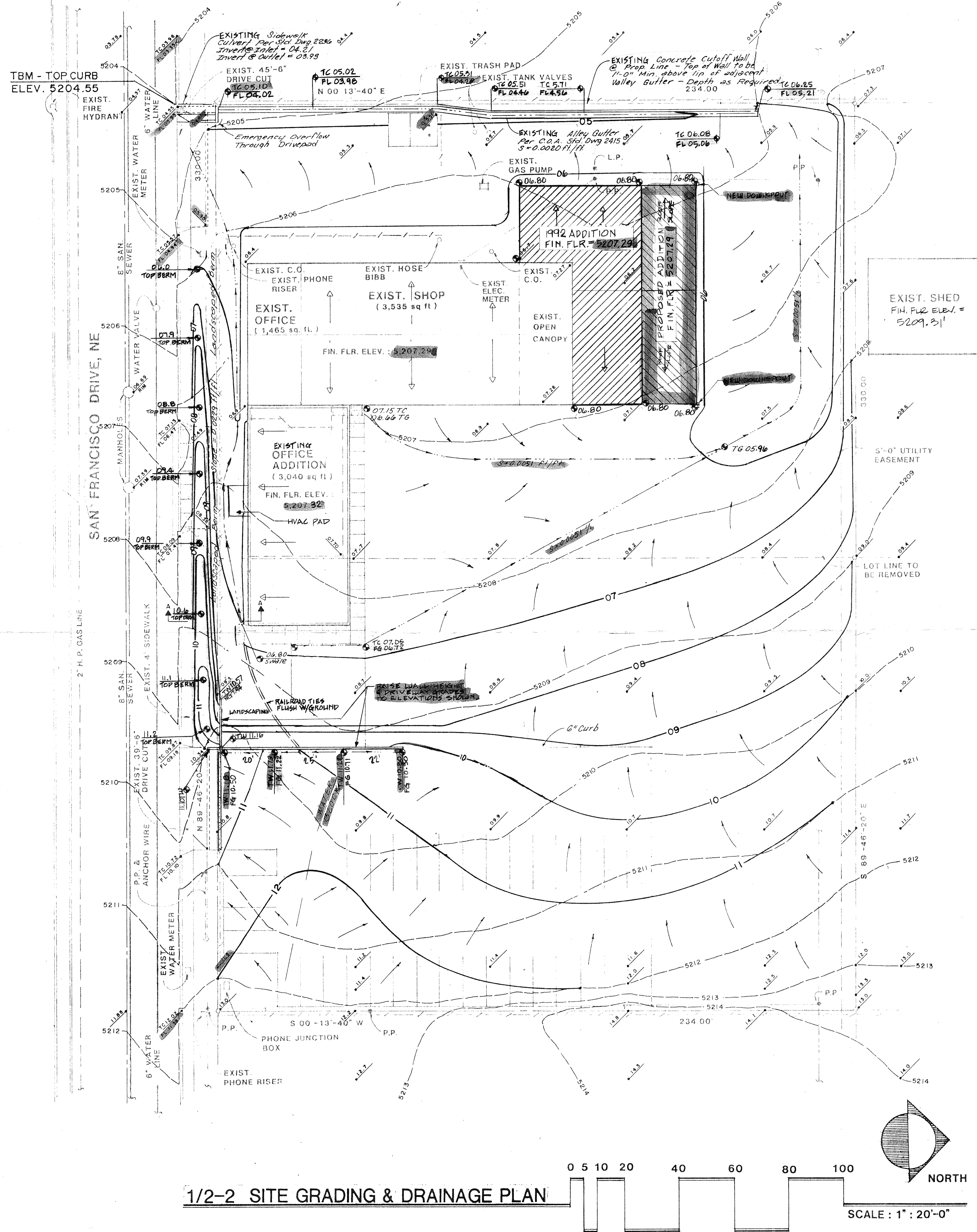
PUBLIC WORKS DEPARTMENT

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

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER



- PRE-DESIGN CONFERENCE FINDINGS:**
1. PLATTING ACTIONS REQUIRE AN APPROVED FINAL GRADING & DRAINAGE PLAN, AS DOES BUILDING PERMIT APPROVAL.
 2. SITE DEVELOPMENT PLAN APPROVAL REQUIRES AN APPROVED CONCEPTUAL GRADING AND DRAINAGE PLAN.
 3. THIS SITE IS AN "A0"; ANY NEW BUILDINGS MUST HAVE A F.P. ELEV. & GUTTER ELEVATION PLUS 2.0'. WE WILL REVIEW ANY ALTERNATIVE PLAN (SUCH AS A BERM, ETC.) WHICH PROVIDES THE SAME PROTECTION.
 4. REF: TRACTS 21-2 OF TRACT A, NORTH ALBUQUERQUE ACRES, FEMA REPORT.

- RESPONSE TO PRE-DESIGN CONFERENCE FINDINGS:**
1. THIS PLAN IS SUBMITTED PER THE REQUIREMENT FOR PLATTING ACTION AND BUILDING PERMIT APPROVAL.
 2. A SITE DEVELOPMENT PLAN IS NOT REQUIRED FOR THE PROPOSED DEVELOPMENT.
 3. THE ALTERNATIVE PLAN FOR FLOOD PROTECTION IS TO PROVIDE A WATER BLOCK AND CURB TO PREVENT WATER FROM ENTERING THE SITE THROUGH THE DRIVEWAY. AND A LANDSCAPED BERM A MINIMUM OF 2.0' ABOVE GUTTER FLOWLINE ELEVATION BETWEEN THE BUILDING AND THE DRIVEWAY ON SAN FRANCISCO DRIVE, THE FULL LENGTH OF THE NEW BUILDING.
 4. THE REFERENCED FEMA REPORT DOES NOT GIVE RELIEF FROM THE FLOOD PROTECTION REQUIREMENT BUT DOES SHOW THAT FREE DISCHARGE FROM THE SITE IS PERMITTED.

- OTHER COMMENTS:**
1. AN EXISTING BERM ALONG THE EAST SIDE OF THE PROPERTY BLOCKS ALL OFF-SITE FLOW FROM THE EAST.
 2. THERE IS MINIMAL OFF-SITE FLOW FROM THE NORTH. THIS OFF-SITE FLOW IS ACCEPTED.

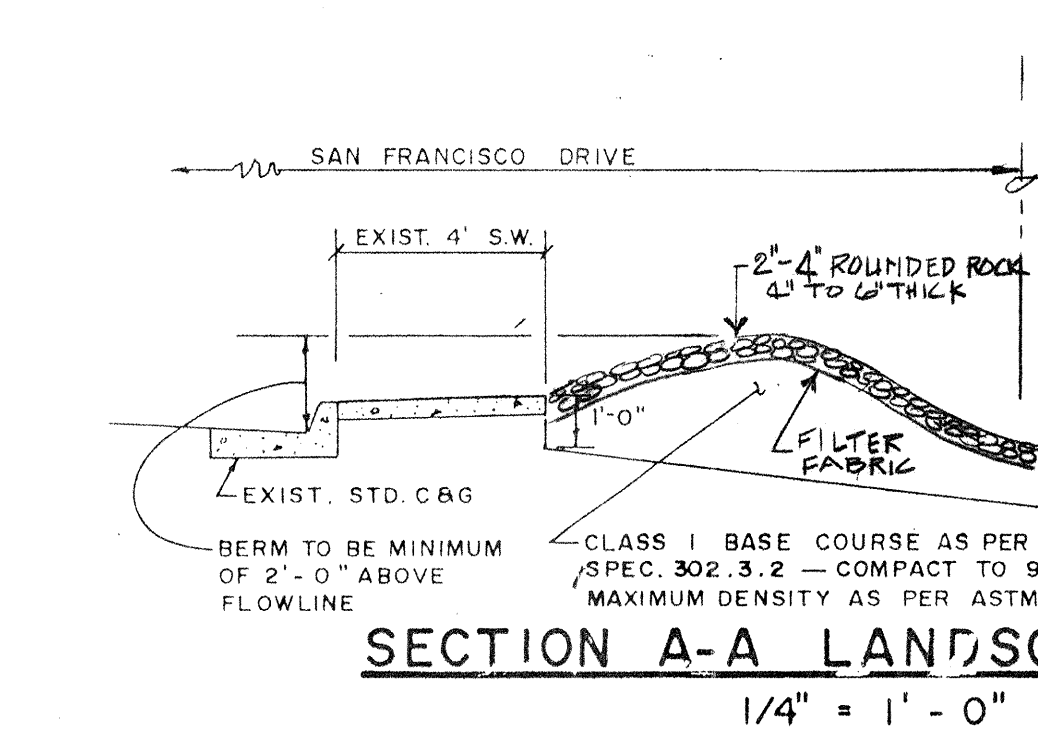
BENCH MARK:
STATION 7-018, LOCATED ON THE EAST SIDE OF U.S. INTERSTATE HIGHWAY 25 EAST FRONTAGE ROAD, ABOUT 0.2 MILES SOUTH OF THE JUNCTION WITH PINE AVE. STATION MARK IS AN "X" CHISELED ON THE WEST BONNET BOLT OF A FIRE HYDRANT. STATION ELEVATION IS 5190.962 FEET.

TEMPORARY BENCH MARK:
A TEMPORARY BENCH MARK (TBM) IS LOCATED ON TOP OF CURB OF SAN FRANCISCO DRIVE AT THE WEST END OF THE DRIVEWAY AS SHOWN. SEE PLAN FOR ELEVATION.

EROSION CONTROL PLAN:
DURING CONSTRUCTION OF THE BUILDING, ALL RUNOFF FROM THE SITE SHALL BE CONTAINED BY THE USE OF A POND, BERM, OR OTHER SUITABLE CONTAINMENT FROM WHICH SEDIMENT FREE WATER SHALL BE RELEASED AT A CONTROLLED RATE. ALL SEDIMENT SHALL BE SETTLED OR FILTERED OUT BEFORE RELEASING THE WATER TO THE PUBLIC RIGHT-OF-WAY.

LEGAL DESCRIPTION:
LOTS NUMBERED TWENTY-FIVE (25) AND TWENTY-SIX (26), BLOCK NUMBERED FIVE (5), TRACT A, UNIT A, NORTH ALBUQUERQUE ACRES AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT THERE OF FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON MARCH 17, 1937.

LEGEND:	EXISTING	NEW	DESCRIPTION
	5207	07	CONTOUR
		07.00	SPOT ELEVATION
			PROPERTY LINE
			SWALE
			SHEET FLOW
			DOWN SPOUT
			ROOF DRAINAGE
		TA	TOP OF ASPHALT
		TC	TOP OF CURB/CONCRETE
		FL	FLOWLINE



DRAINAGE CALCULATIONS

SOIL INFORMATION: (REFER TO SCS SOIL SURVEY OF BERNALILLO COUNTY.)
SOIL IS EMB, EMBUDO GRAVELLY FINE SANDY LOAM, HYDROLOGIC SOIL GROUP "B".
RAINFALL, 100-YEAR, 6-HOUR: (REFER TO D.P.M., PLATE 22.2 D-1)
 $R_6 = 2.25$ INCHES.
TIME OF CONCENTRATION: (REFER TO D.P.M. SECTION 22.2, PAGE 3)
USE TEN (10) MINUTES, MINIMUM TIME OF CONCENTRATION.
RAINFALL INTENSITY: (REFER TO PLATE 22.2 D-2)
 $I = R_6 \times 6.84 \times T_c^{-0.51} = 2.25 \times 6.84 \times (10)^{-0.51} = 4.76$ INCHES PER HOUR.
CURVE NUMBER: (REFER TO D.P.M. PLATE 22.2 D-2)
ON MINOR EXISTING AREA NEW AREA
EXISTING PAVEMENT 98 2.10 14724 29441
BUILDINGS AND PAVEMENT 98 2.10 14724 29441
LANDSCAPING 61 0.10 1200 1200
UNPAVED GRAVEL 85 1.05 6880 6880
UNPAVED DIRT 82 0.85 61296 46579
TOTAL AREAS 77220 = 1.773 AC 77220
WEIGHTED CURVE NUMBER (CN_w):
EXISTING $CN_w = 85$ DEVELOPED $CN_w = 88$
DIRECT RUNOFF: (REFER TO D.P.M. PLATE 22.2 C-4)
EXISTING $Q_p = 1.05$ DEVELOPED $Q_p = 1.30$
RUNOFF COEFFICIENTS: (REFER TO "NOTICE OF EMERGENCY RULE", CITY OF ALBUQUERQUE, JANUARY 14, 1986.)
UNDEVELOPED (UNPAVED) 0.70 69638 54921
LANDS AND LANDSCAPING 0.25 1200 1200
POOLS 0.90 6880 6880
STREETS, DRIVES, WALKS 0.95 382 12219
TOTAL AREAS 77220 77220
WEIGHTED "C" FACTORS: EXISTING $CN_w = 85$ DEVELOPED $CN_w = 88$
EXISTING CONDITIONS:
RUNOFF BY RATIONAL EQUATION, $Q = CIA$
 $Q = 0.21 \times 4.76 \times 1.773 = 1.773$
VOLUME BY SCS METHOD, $V = 0.67 \times (12) \times A$, WHERE A = AREA IN SQUARE FEET.
 $V = 77220 (1.05/12) = 6682$
DEVELOPED CONDITIONS:
 $Q = 0.76 \times 4.76 \times 1.773 = 6.41$ CFS
 $V = 77220 (1.30/12) = 7722$ CFS
SWALE AT WEST PROPERTY LINE:
THE ENTIRE 6.41 CFS DOES NOT DRAIN TO THIS SWALE SINCE PORTIONS OF THE SITE DRAIN DIRECTLY TO THE STREET.
SOUTH HALF OF BUILDING, $Q = 0.90 \times 4.76 \times 0.06$ AC = 0.026 AC
AREA SOUTH OF WATER BLOCK, $Q = 0.95 \times 4.76 \times 0.08$ AC = 0.038 AC
TOTAL Q NOT FLOWING TO SWALE = 0.064 CFS
USE MANNINGS EQUATION - $Q = A(1.486/N)R^{2/3}S^{1/2}$ A = 2.66 SF P = 6.5 FT.
 $R = A/P = 2.66/6.5 = 0.41$ S = 0.0020 ft./ft. N = 0.013 (CONCRETE)
N = 0.015 (ASPHALT) WEIGHTED N = $(2.67 \times 0.013) + (3.83 \times 0.015) = 0.0154$
 $Q = 2.66(1.486/0.0154)(0.41)^{2/3}(0.0020)^{1/2} = 6.41$ CFS (6.41 - 0.62 = 5.79)
SIDEWALK CULVERT:
SINCE THIS SITE IS NEAR THE LOWER END OF THE DRAINAGE BASIN, THE SITE RUNOFF WILL PEAK AND ENTER THE STREET BEFORE THE PEAK RUNOFF FOR THE BASIN PASSES THE SITE. THEREFORE, THE DRAINAGE END OF THE SW CULVERT IS ASSUMED TO BE UNSUBMERGED. $P = 0.67 + 2.0 + 0.67 + 3.34$ FT. A = 0.57 X 2.34 = 1.33 SF
 $R = A/P = 1.33/3.4 = 0.39$ S = 0.02 FT./FT. $Q = 1.34(1.486/0.013)(0.39)^{2/3}(0.0200)^{1/2} = 2.74$ cfs
 $Q = 1.34(1.486/0.013)(0.40)^{2/3}(0.0200)^{1/2} = 2.74$ cfs
A 1.0' SIDEWALK CULVERT IS ADEQUATE. EXCESS FLOW WILL FLOW OUT THROUGH THE DRIVEWAY. 5.28 cfs

DRAINAGE CALCULATIONS FOR PROPOSED ADDITION

DESIGN SYNOPSIS:
The existing site has been developed in accordance with the approved grading and drainage plan dated May 11, 1989. As-constructed elevations have been shown for the berm along San Francisco Drive and the concrete alley gutter and cutoff wall adjacent to the west property line. The retaining wall adjacent to the easterly driveway was found to be below the design elevations. The wall and driveway grades will be raised to the elevations shown in conjunction with the proposed addition. The surface will remain unpaved gravel due to the difficulty of maintaining asphalt pavement with heavy truck traffic.

1993 ADDITION - REVISED DRAINAGE CALCULATIONS:
This addition simply adds 20' to the north end of the existing 1992 addition. The above design synopsis applies to the 1992 addition which is complete and has been certified. The drainage pattern for the 1993 addition will remain essentially unchanged.

REVISED PEAK DISCHARGE & VOLUME FOR 1993 ADDITION:
Area of proposed addition = 20' X 80' = 1600 sf
Peak Discharge Increase = $(0.90 - 0.40)(1600 / 43560)4.76 = 0.09$ cfs
New $Q_{100} = 6.57 + 0.09 = 6.66$ cfs $Q_{10} = 0.657 \times 6.66 = 4.36$ cfs
Peak Volume Increase = $(2.10 - 1.05)(1600 / 12) = 140$ cfs
New $V_{100} = 6986 + 140 = 7126$ cfs New $V_{10} = 0.657 \times 7126 = 4682$ cfs

ENGINEER'S CERTIFICATION:
Having inspected the site on June 9, 1992, and having field-inspected and verified critical elevations, I hereby certify that this plan is in substantial conformance with the approved grading and drainage plan dated May 11, 1991 and revised October 22, 1991.
Frank D. Lovelady, P.E. June 10, 1992
Date

Architect

FRANK D. LOVELADY, P.E.
REGISTERED PROFESSIONAL ENGINEER
MAY 11, 1989
Engineer
REVISED OCT. 22, 1991
REVISED JUNE 10, 1992
REVISED MAY 6, 1992
1993
Changed on ORIGINAL

ROAD EXPRESS
SHOP ADDITION
5601 SAN FRANCISCO DRIVE, NE
ALBUQUERQUE, NEW MEXICO

proj. no. 2-89
dwn. by FDL
app. by
date 5-15-89
revisions
REVISED 6-1-89

MAY - 6 1992
A2