DRAINAGE PLAN

THE SUBJECT PROPERTY IS LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF MOUNTAIN ROAD NE AND SAN PEDRO BLVD. NE. AS SHOWN ON PANEL 30 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD BOUNDARY AND FLOODWAY MAP, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD AREA.

THE PLANNED IMPROVEMENTS TO THE SUBJECT PROPERTY INCLUDE AN ADDITION TO THE EXISTING BUILDING, NEW LANDSCAPING, AND THE REVISION TO THE ENTRANCE ON SAN PEDRO BLVD. THE PROPERTY HAS THREE (3) EXISTING ENTRANCES (DRIVEPADS). THE TWO (2) ENTERING FROM MOUNTAIN ROAD WILL NOT BE CHANGED. THE DRIVEPAD ENTERING THE SITE FROM SAN PEDRO WILL BE REMOVED AND REPLACED WITH A NEW PRIVATE ENTRANCE (SEE PLAN). OTHER THAN THE ASPHALT REMOVAL TO ACCOMPLISH THE CONSTRUCTION OF THE ADDITION AND NEW LANDSCAPING, ALL EXISTING ASPHALT IS TO REMAIN IN PLACE INSOFAR AS POSSIBLE. MINOR REMOVAL AND REPLACEMENT MAY BE REQUIRED TO FACILITATE DESIRED DRAINAGE PATTERNS.

THIS PLAN CONSIDERS THIS SITE AND IN-FILL SITE AND AS SUCH, DISCHARGES ITS RUNOFF TO THE EXISITING CITY STORM SEWER FACILITIES. (NOTE THE NET RESULT OF THE PROPOSED IMPROVEMENTS IS A REDUCTION OF BOTH VOLUMETRIC RUNOFF AND PEAK DISCHARGE.

THE TOPOGRAPHY SHOWN HEREON WAS PROVIDED BY RIO GRANDE SURVEYING FROM A FIELD SURVEY PERFORMED ON FEBRUARY 5, 1995. A SUBSEQUENT FIELD INSPECTION PERFORMED BY THIS OFFICE REVEALED THAT ALL THE INFORMATION SHOWN IS CONSISTANT WITH THE ACTUAL CONDITIONS THAT EXIST IN THE FIELD.

NOTE: BOTH CURB RETURNS FOR PRIVATE ENTRANCE ARE COMPOUND RETURNS.

CURVE DATA CURB NORTH:

Δ = 51°10'31"	Δ = 128°17'39"
R = 25.00	R = 5.00
L = 22.33	L = 11.20

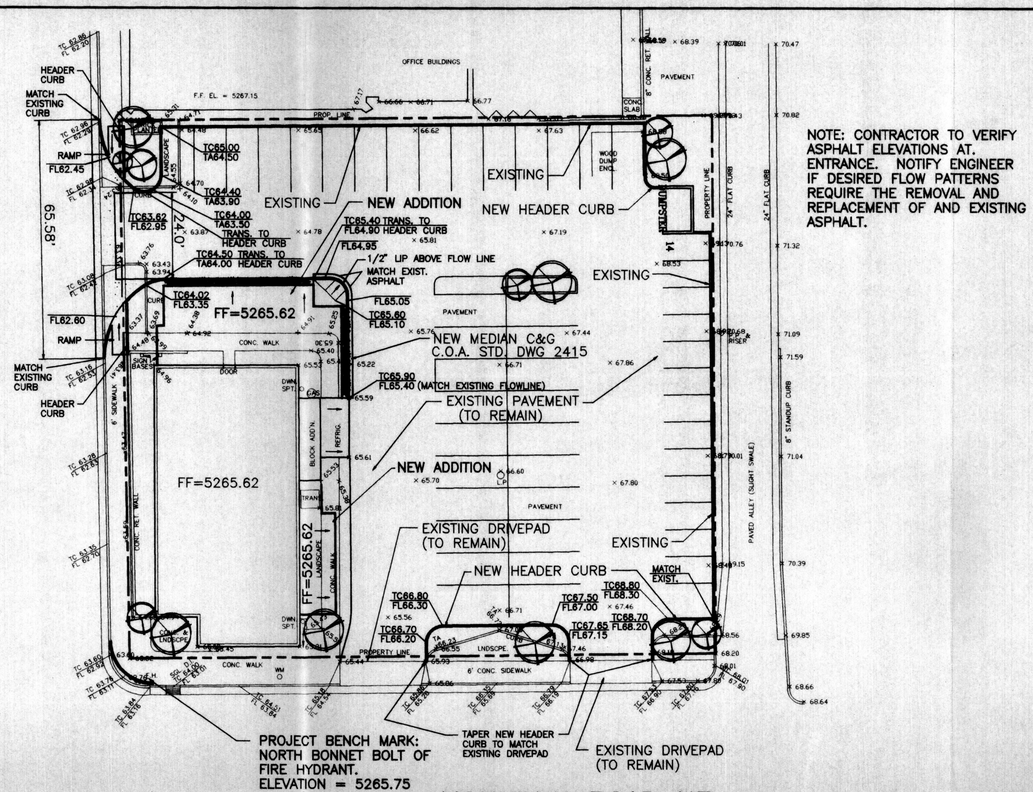
CURVE DATA CURB SOUTH:

Δ = 57°05'10"	Δ = 31°17'36"
R = 25.00	R = 10.00
L = 24.91	L = 5.46

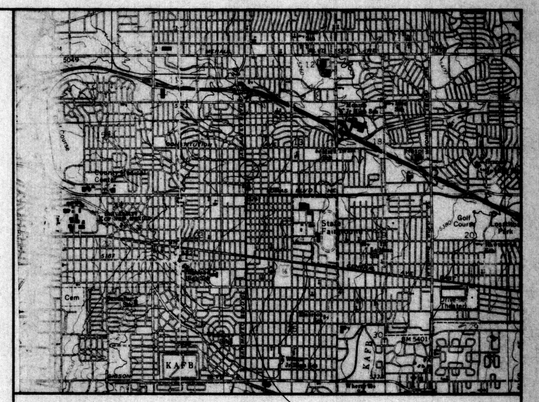
(VALUES ARE TO FACE OF CURB)

CONSTRUCT NEW ENTRANCE PER C.O.A. STD. DETAIL DWG. 2426

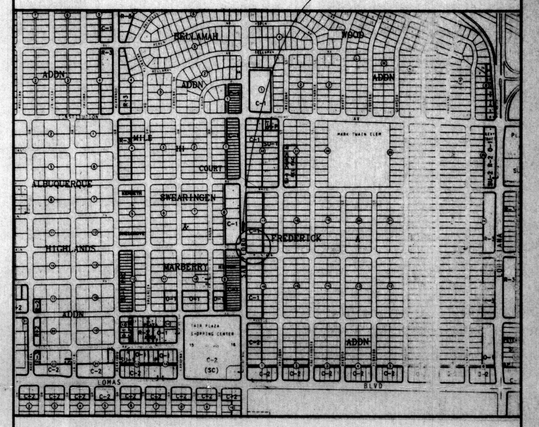
CONTRACTOR TO SURVEY AND RECORD EXISTING GUTTER ELEVATIONS. INSTALL NEW VALLEY GUTTER TO SAME. REMOVE EXISTING SIDEWALK, CURB AND GUTTER TO NEAREST JOINT (FULL STONE).



NOTE: CONTRACTOR TO VERIFY ASPHALT ELEVATIONS AT ENTRANCE. NOTIFY ENGINEER IF DESIRED FLOW PATTERNS REQUIRE THE REMOVAL AND REPLACEMENT OF AND EXISTING ASPHALT.



LOCATION MAP — PROJECT LOCATION



ZONE MAP J-18

FLOOD BOUNDARY MAP — PROJECT LOCATION

CALCULATIONS

THE FOLLOWING CALCULATIONS WERE DEVELOPED USING THE CITY OF ALBUQUERQUE DPM SECTION 22.2

SITE CHARACTERISTICS:
SITE LOCATION: ZONE 3
PRECIPITATION: P = 2.60 inches

LAND TREATMENT:
UNCOMPACTED SOIL – TREATMENT A
LANDSCAPE – TREATMENT B
COMPACTED SOIL – TREATMENT C
BUILDINGS & PAVING – TREATMENT D

EXCESS PRECIPITATION:
TREATMENT A E = 0.66 inches
TREATMENT B E = 0.92 inches
TREATMENT C E = 1.29 inches
TREATMENT D E = 2.36 inches

PEAK DISCHARGE:
TREATMENT A = 1.87 cfs/acre
TREATMENT B = 2.60 cfs/acre
TREATMENT C = 3.45 cfs/acre
TREATMENT D = 5.02 cfs/acre

		EXISTING		PROPOSED	
TOTAL AREA	= 0.568 AC.				
TREATMENT A	= 0.000 AC.	= 0.0%		0.000 AC. =	0.0%
TREATMENT B	= 0.041 AC.	= 7.2%		0.053 AC. =	9.3%
TREATMENT C	= 0.000 AC.	= 0.0%		0.000 AC. =	0.0%
TREATMENT D	= 0.527 AC.	= 92.8%		0.515 AC. =	90.7%

ONSITE – EXCESS PRECIPITATION & VOLUMETRIC RUNOFF:
EXISTING RUNOFF:
WEIGHTED E = [(0.92)(0.041) + (2.36)(0.527)]/0.568
= 2.26 inches
V100–6hr = (2.26)(0.568)/12 = 0.107 acre ft = 4,660 cf

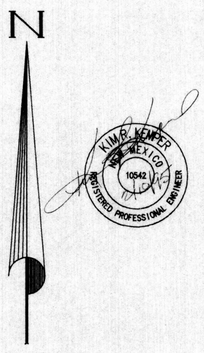
DEVELOPED RUNOFF:
WEIGHTED E = [(0.92)(0.053) + (2.36)(0.515)]/0.568
= 2.23 inches
V100–6hr = (2.23)(0.568)/12 = 0.106 acre ft = 4,620 cf

ONSITE – PEAK DISCHARGE:
EXISTING DISCHARGE:
Q100 = (2.60)(0.041) + (5.02)(0.527) = 2.75 cfs
DEVELOPED DISCHARGE:
Q100 = (2.60)(0.053) + (5.02)(0.515) = 2.72 cfs

RESULTS:
DEVELOPED VOLUMETRIC RUNOFF:
4,620 – 4,660 = 40 cfs DECREASE IN RUNOFF VOLUME
DEVELOPED PEAK DISCHARGE:
2.72 – 2.75 = 0.03 cfs DECREASE IN PEAK DISCHARGE

GENERAL LEGEND

EXISTING CONTOUR	61
PROPOSED CONTOUR	61
PROPOSED SPOT ELEVATION	56.4
FLOWLINE	
FLOW DIRECTION ARROW	
PROPOSED CONCRETE	
TOP OF CURB ELEVATION	TC
TOP OF SIDEWALK ELEVATION	TSW
FLOWLINE ELEVATION	FL
TOP OF WALL ELEVATION	TW



GENERAL NOTES

1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
2. ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHTS-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY BERNALILLO COUNTY FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AND ALL CURRENT UPDATES.
7. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR PERMIT.
8. TWO WORKING DAYS PRIOR TO AN EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE A 260-1990 FOR LOCATION OF EXISTING UTILITIES.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
10. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
11. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

	NAME	DATE
HYDROLOGY		
INSPECTOR		
A.C.E./FIELD		

BENCH MARK

CITY OF ALBUQUERQUE CONTROL STATION 17-J18.
ALUMINUM CAP ON THE CURB IN THE NORTHWEST QUADRANT, INTERSECTION OF LOMAS BLVD. AND SAN PEDRO BLVD. NORTHEAST.
ELEVATION = 5273.53

LEGAL DESCRIPTION

LOTS NUMBERED ONE (1) AND TWO (2) AND THE SOUTHERLY THIRTY FEET OF LOT NUMBERED THREE (3) IN BLOCK NUMBERED SEVENTEEN (17) OF THE FREDERICK FARR ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE MAP OF SAID ADDTION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON OCTOBER 16, 1947.

RECEIVED FEB 28 1995 HYDROLOGY DIVISION

CHRISTY MAE'S RESTAURANT
GRADING AND DRAINAGE PLAN

KEMPER–VAUGHAN
CONSULTING ENGINEERS
3700 COORS RD. N.W. • ALBUQUERQUE, NEW MEXICO 87120 • (505) 831-4520

Designed	KRK	Drawn	SE	Checked	KRK	Sheet	1 of 1
File	CHRISTY	Date	FEBRUARY 1995				