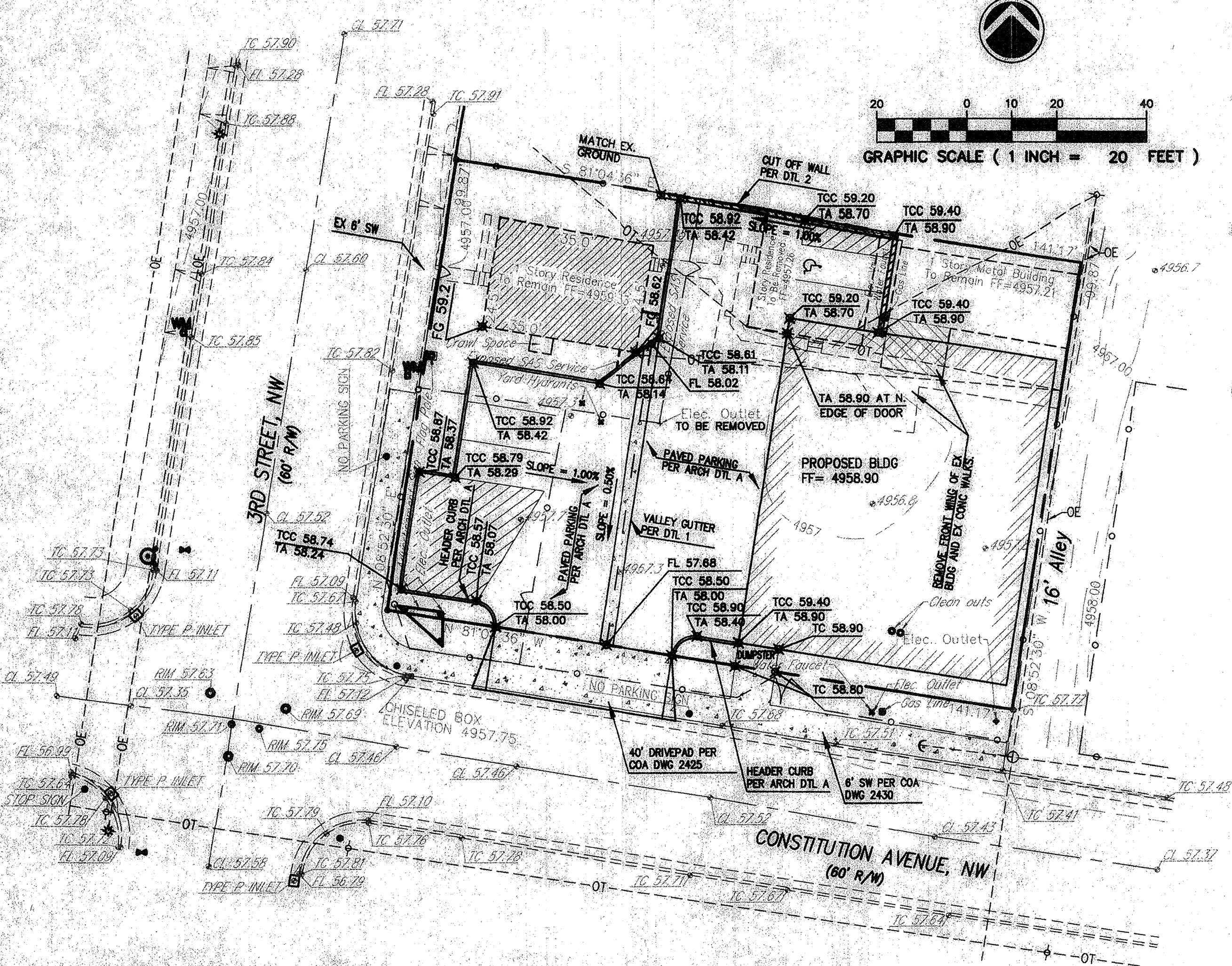
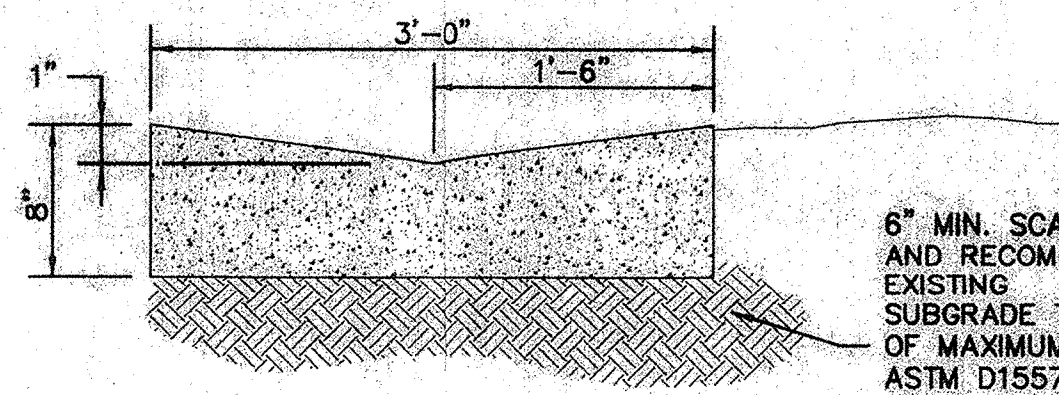


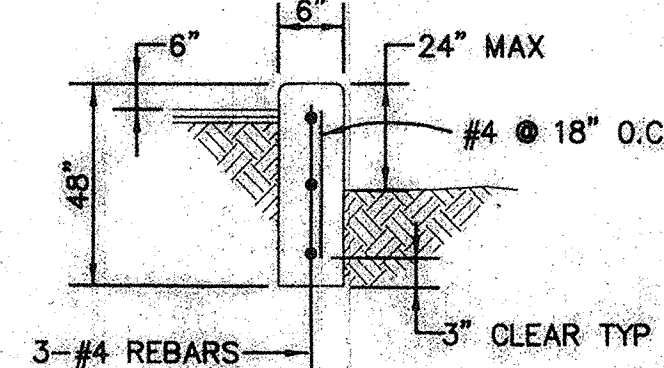


- CONSTRUCTION NOTES:
1. PROVIDE 1/2" EXPANSION JOINTS AT 36' O.C., AT IMMOVABLE OBJECTS AND AT PERPENDICULAR CURBS PER DETAIL THIS SHEET
 2. PROVIDE CONTRACTION JOINTS @ 6' O.C. PER DETAIL THIS SHEET

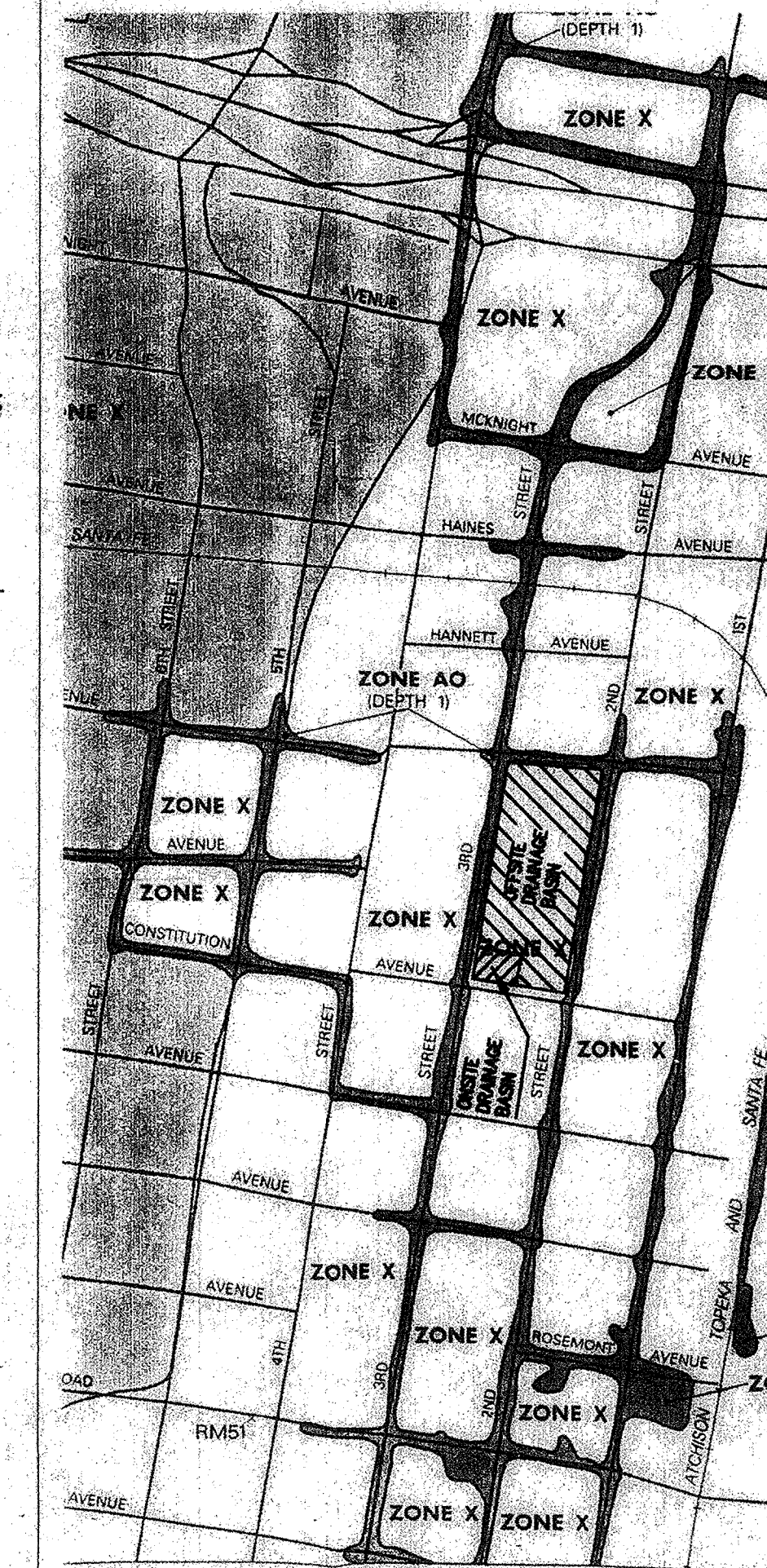


1 CONCRETE VALLEY GUTTER
N. T. S.

- CONSTRUCTION NOTES:
1. PROVIDE 1/2" EXPANSION JOINTS AT 36' O.C., AT IMMOVABLE OBJECTS, AND AT THE BEGINNING AND END OF CURVES.
 2. PROVIDE CONTRACTION JOINTS @ 6' O.C.
 3. ALL EXPOSED CONCRETE CORNERS TO HAVE 3/4" RADII.



2 CUT OFF WALL DETAIL
N. T. S.



NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
BERNALILLO COUNTY,
NEW MEXICO AND
INCORPORATED AREAS

PANEL 332 OF 825
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:
COMMUNITY
ALBUQUERQUE CITY OF
BERNALILLO COUNTY
UNINCORPORATED AREAS

MAP NUMBER
35001C0332 D

EFFECTIVE DATE:
SEPTEMBER 20, 1996

Federal Emergency Management Agency



VICINITY MAP J-14

LEGAL DESCRIPTION

LOTS 8, 9, 10, AND 11, BLOCK 3, ANDERSON ADDITION, ALBUQUERQUE,
BERNALILLO COUNTY, NEW MEXICO

ACS BENCHMARK

ACS MONUMENT "24-J14", LOCATED AT THE NORTHEAST QUADRANT OF
THE INTERSECTION OF FOURTH STREET AND CONSTITUTION AVENUE,
ELEVATION = 4958.37.

SURVEY NOTES

FIELD SURVEY BY:
CARTESIAN SURVEYS
P.O. BOX 44414
RIO RANCHO, NM 87174

SURVEY DATE: SEPT., 1999
PHONE: (505) 896-3050
FAX: (505) 891-0244

THE RECORD INFORMATION SHOWN HEREON WAS FROM THE ALTA/ASCM
SURVEY BY THOMAS W. PATRICK "LS 12651", ENTITLED
"ALTA/ACSM LAND TITLE SURVEY, LOTS 8, 9, 10, AND 11, BLOCK
3, ANDERSON ADDITION", DATED MARCH 19, 1999.

LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS ARE BASED ON
INFORMATION SUPPLIED TO THE SURVEYOR BY THE APPROPRIATE
UTILITY COMPANIES. SURVEYOR DOES NOT GUARANTEE THESE
LOCATIONS NOR THE FACT THAT SOME UTILITIES MIGHT BE LEFT OUT.
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT BLUE
STAKE AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES
PRIOR TO CONSTRUCTION.

THIS IS NOT A BOUNDARY SURVEY AND SHOULD NOT BE USED BY THE
OWNER AS SUCH.

FLOODPLAIN

THE PROPERTY SHOWN HEREON LIES WITHIN ZONE X PER THE FLOOD
INSURANCE RATE MAP OF THE CITY OF ALBUQUERQUE, BERNALILLO
COUNTY, NEW MEXICO, COMMUNITY-PANEL NO. 35001C0332 D, EFFECTIVE
DATE SEPTEMBER 20, 1996 AS SHOWN ON THIS SHEET.

GRADING PLAN

CONSTRUCTION NOTE:

STRUCTURAL MODIFICATIONS REQUIRED TO ACCOMMODATE THE ADDITIONAL FILL ADJACENT TO THE
FOUNDATION OF THE EXISTING RESIDENCE WHICH IS TO REMAIN IS THE RESPONSIBILITY OF
THE OWNER.

DRAINAGE REPORT FOR BLAIR DEVELOPMENT

LOCATION & DESCRIPTION

THE PROPOSED SITE IS 0.38 ACRES LOCATED AT THE NORTHEAST CORNER OF
3RD STREET AND CONSTITUTION AVENUE, AS SHOWN ON THIS SHEET. IT IS
CURRENTLY DEVELOPED WITH TWO (2) RESIDENCES AND A METAL STORAGE
BUILDING. THE REMAINING PORTION OF THE LOT HAS BEEN USED HEAVILY FOR
PARKING AND THEREFORE IS HARD COMPACTED EARTH. THE PROPOSED
IMPROVEMENTS FOR THIS PROJECT INCLUDE REMOVING ONE OF THE
RESIDENCES AND A PORTION OF THE METAL BUILDING. A NEW SHOP BUILDING
AND ASPHALT PARKING LOT WILL BE CONSTRUCTED IN THE LOCATION OF THE
DIRT PARKING LOT AND THE RESIDENCE TO BE REMOVED.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0332 D,
DATED SEPTEMBER 20, 1996 IS NOT WITHIN ANY DESIGNATED 100-YEAR
FLOODPLAIN. HOWEVER, 3RD STREET IS DESIGNATED AS A ZONE AO (DEPTH 1')
FLOODPLAIN AS SHOWN ON THE FIRM PANEL ON THIS SHEET.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK
CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE
DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS
ANALYSIS. THIS SITE IS WITHIN ZONE 2 AS IDENTIFIED IN THE CITY OF
ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES
WITHIN THIS SECTION WAS USED TO ESTABLISH THE 6-HOUR PRECIPITATION,
EXCESS PRECIPITATION, AND PEAK DISCHARGE.

EXISTING DRAINAGE

THIS ENTIRE CITY BLOCK DRAINS TO AN ALLEY AND ENTERS CONSTITUTION
AVENUE MID BLOCK BETWEEN 2ND STREET AND 3RD STREET (SEE FIRM MAP
AND VICINITY MAP ON THIS SHEET). THE SITE TO BE DEVELOPED WAS

ANALYZED AS THE "ONSITE DRAINAGE BASIN" AND THE REST OF THE BLOCK
WAS ANALYZED AS THE "OFFSITE DRAINAGE BASIN" IN ORDER TO DETERMINE
THE TOTAL RUNOFF FOR THIS AREA.

DEVELOPED CONDITION

THE SITE WAS ALSO ANALYZED FOR THE NEW DEVELOPMENT. THE EXISTING
HARD PACKED DIRT PARKING AREA WAS ANALYZED AS LAND TREATMENT C.
THEREFORE, BY REMOVING ONE OF THE EXISTING RESIDENCES, A PORTION OF
THE METAL BUILDING, AND THE ADJOINING SIDEWALKS, A LARGER SHOP
BUILDING CAN BE ADDED TO THIS PROPERTY WITHOUT SIGNIFICANTLY INCREASING
THE RUNOFF. THIS ANALYSIS INCLUDES CONSTRUCTING A 6' SIDEWALK WITHIN
THE STREET RIGHT-OF-WAY ADJACENT TO THIS PROPERTY ON BOTH 3RD
STREET AND CONSTITUTION AVENUE. EVEN WITH THESE PUBLIC INFRA-
STRUCTURE IMPROVEMENTS, THE RUNOFF FROM THIS SITE ONLY INCREASES
THE BLOCK RUNOFF BY 0.36 CFS (1.029 AND 820 CUBIC FEET (1.029)).
THESE CALCULATIONS ARE SHOWN ON THE 100-YEAR HYDROLOGIC
CALCULATIONS TABLE ON THIS SHEET. THE SITE IS BEING GRADED TO
MAINTAIN THE FINISHED FLOOR OF THE NEW BUILDING APPROXIMATELY 1.5'
ABOVE THE FLOW LINE OF 3RD STREET THEREBY PROTECTING IT FROM THE
3RD STREET FLOODPLAIN WITH 0.5' FREEBOARD. THE ALLEY HAS BEEN
EVALUATED CONSERVATIVELY AS A 16' WIDE RECTANGULAR CHANNEL WITH
A MANNING'S 'N' VALUE OF 0.030 AND A SLOPE OF 0.40% BASED ON
MANNING'S EQUATION $Q = (1.49/N) * A * (R^{2/3}) * (S^{1/2})$ THE FLOW DEPTH
IN THE ALLEY FOR 21.26 CFS WILL BE 0.64'. THIS CORRESPONDS TO
A WATER SURFACE ELEVATION OF APPROXIMATELY 4958.4 ADJACENT
TO THIS BUILDING. THEREFORE, IT IS CONCLUDED THAT THESE
IMPROVEMENTS HAVE A NEGLIGIBLE HYDRAULIC IMPACT ON THE
SURROUNDING PROPERTIES.

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
		A (%)	B (%)	C (%)	D (%)						
EXISTING CONDITIONS											
ONSITE	0.3839	0.00	0.00	78.60	21.40	1.34	0.04	1,870	0.05	2,347	1.33
OFFSITE	4.6786	0.00	0.00	10.00	90.00	2.02	0.79	34,323	1.35	58,779	21.26
TOTAL	5.0625					0.83	0.83	36,193	1.40	61,126	22.59
PROPOSED CONDITIONS											
ONSITE	0.3839	0.00	0.00	19.20	80.80	1.93	0.06	2,669	0.10	4,491	1.66
OFFSITE	4.6786	0.00	0.00	10.00	90.00	2.02	0.79	34,323	1.35	58,779	21.26
TOTAL	5.0625					0.85	0.85	37,013	1.45	63,270	22.95
EXCESS PRECIP.											
		0.53	0.78	1.13	2.12	E (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	Q _a (cfs)					
ZONE = 2											
WEIGHTED E (in) = (E ₁)(%A) + (E ₂)(%B) + (E ₃)(%C) + (E ₄)(%D)							P _{6hr} (in.) = 2.35				
V _{6hr} (acre-ft) = (WEIGHTED E)(AREA)/12							P _{6hr} (in.) = 2.75				
V _{10day} (acre-ft) = V _{6hr} + (A ₂)(P _{10day} - P _{6hr})/12							P _{10day} (in.) = 3.95				
Q (cfs) = (Q ₂)(A ₁) + (Q ₂)(A ₂) + (Q ₂)(A ₃) + (Q ₂)(A ₄)											

GRADING AND DRAINAGE PLAN

BLAIR DEVELOPMENT

ALBUQUERQUE, NEW MEXICO

LARRY READ & ASSOCIATES
Civil Engineers
12836-B Lomas Blvd. NE
Albuquerque, New Mexico 87112
(505) 237-8421



REVISION	DATE	DESCRIPTION

FILE NAME: BLAIR_GD 08/29/00

SHEET C2 of 2