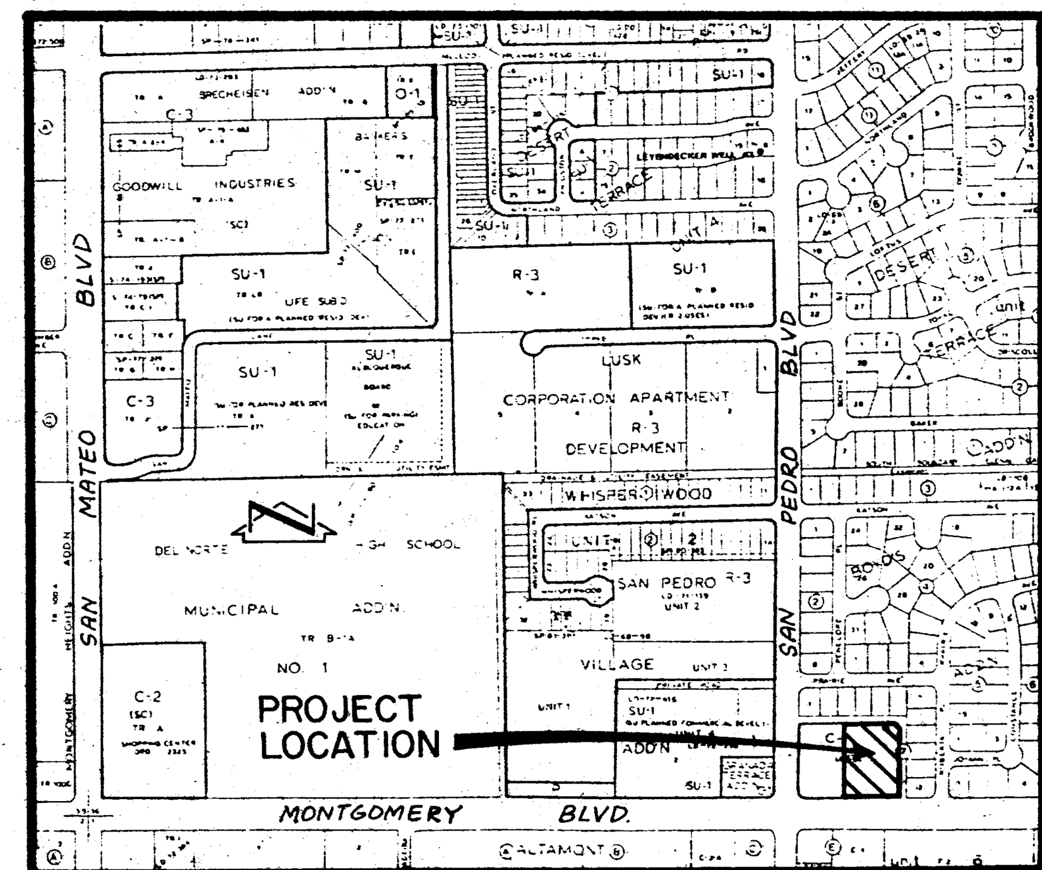
151070



VICINITY MAP
SCALE: 1" = 800' (APPROX.)
F-18

PROJECT BENCHMARK

THE STATION MARK IS A STANDARD ACS BRASS TABLET STAMPED "STA. M-4A," CEMENTED IN A DRILL HOLE IN THE GUTTER PAVEMENT AND FLUSH WITH THE PAVEMENT. THE STATION IS LOCATED AT THE INTERSECTION OF MONTGOMERY BLVD. NE AND SAN PEDRO BLVD NE ON THE WEST MEDIAN

ELEVATION = 5253.31 FEET (M.S.L.D.)

LEGAL DESCRIPTION

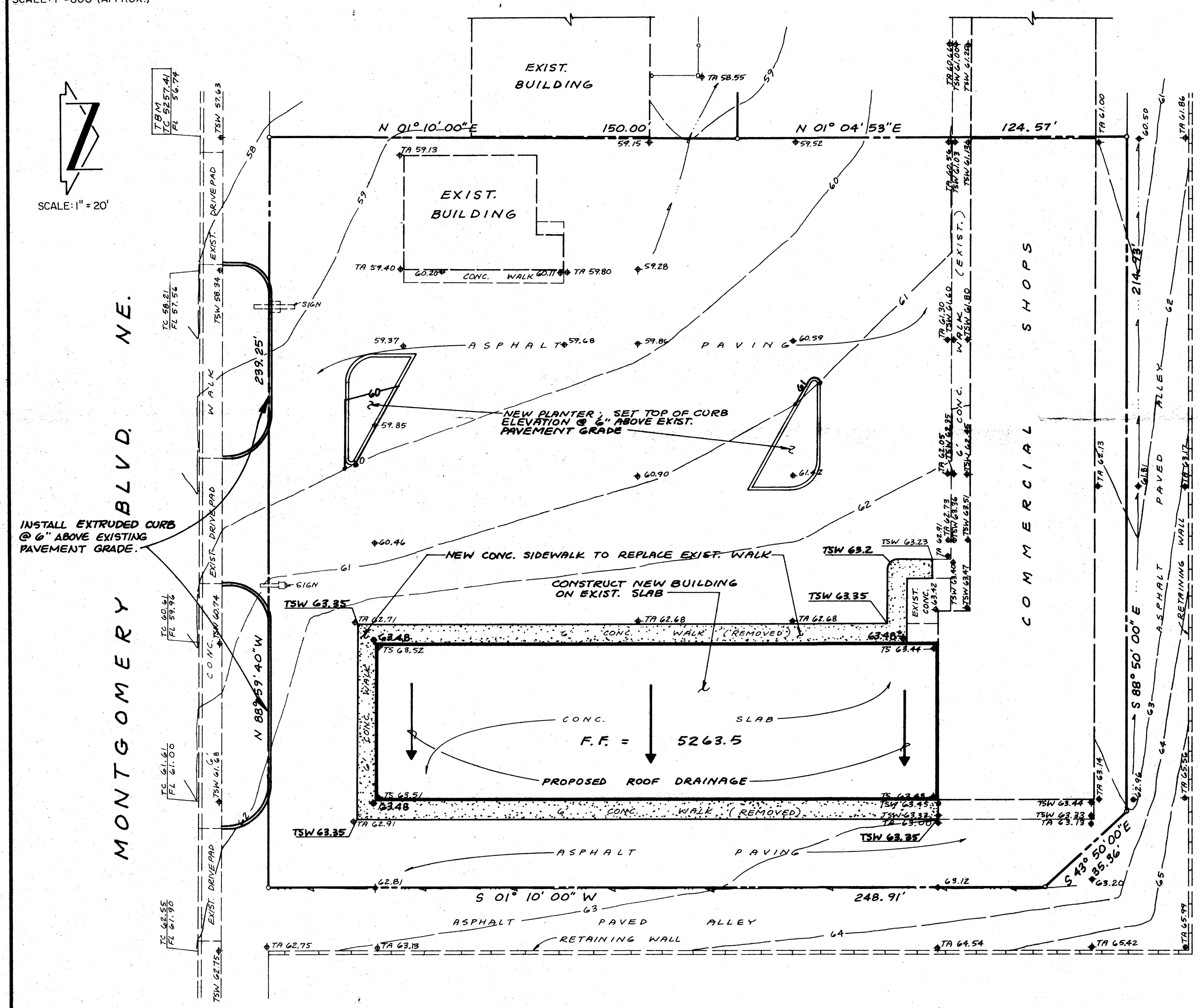
THE EASTERLY PORTION OF LOT C, IN BLOCK 7 OF BOYD'S ADDITION, CITY OF ALBUQUERQUE.

T.B.M.

CURB SCRIBE AT SOUTHWEST CORNER OF SITE
ELEVATION = 5257.41 FEET (M.S.L.D.)

LEGEND

✦	EXIST. SPOT ELEVATION
—60—	EXIST. CONTOUR
TC	TOP OF CURB
FL	FLOWLINE
TA	TOP OF ASPHALT
TS	TOP OF SLAB
TSW	TOP OF SIDEWALK
——→	EXIST. FLOWLINE
✦	PROPOSED SPOT ELEVATION
—60—	PROPOSED CONTOUR
(stippled)	PROPOSED CONCRETE



DRAINAGE PLAN

The following items concerning the Pedmont Plaza Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located at the northeast corner of the intersection of Montgomery Boulevard N.E. and San Pedro Boulevard N.E. At present, the site is developed. A recent fire demolished the building which was situated on the existing concrete slab along the east property line of the site. It is the intent of this plan to reconstruct that building and to provide two landscape planters within the parking lot.

As shown by Panel 17 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps for the City of Albuquerque, New Mexico dated October 14, 1983, this site does not lie within a designated flood hazard zone. Further review of the mapping does not indicate any immediate downstream flooding concerns. The site currently free discharges its runoff to Montgomery Boulevard N.E., from which point the runoff continues to flow in a westerly direction. The proposed development will not alter the existing drainage pattern.

The Grading Plan shows 1) existing grades indicated by spot elevations and contours at 1'0" intervals, 2) proposed grades indicated by spot elevations, 3) the limit and character of the existing improvements, 4) the limit and character of the proposed improvements, and 5) continuity between existing and proposed grades. At present, the site drains in a southwesterly direction toward Montgomery Boulevard N.E. Montgomery Boulevard N.E. drains to the west away from the site. A paved public alley lies along both the north and east sides of the site. The existing alley has a paved invert which conveys runoff around and away from the site. At present, the site consists of asphalt paving, a small restaurant building and commercial shops configured in a "L" shape. The easterly leg of the "L" once supported an existing building which was demolished by fire. It is the intent of this plan to reconstruct a building on the existing slab. This will not create any additional impervious area. In fact, two landscape planters are

proposed for the parking lot area which will slightly reduce the runoff generated by this site. Due to the fact that this is an existing site which will undergo reconstruction, the fact that the existing drainage pattern will not be altered, and the recognition that the site does not lie within, nor appears to contribute to an existing flood hazard zone, the free discharge of runoff from this site is still appropriate.

The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used to calculate the peak rate of discharge, while the SCS Method has been used to calculate the volume of runoff generated. Both Methods have been used in accordance with the Development Process Manual, Volume II, combined with the Mayor's Emergency Rule dated January 14, 1986. As shown by these calculations, the proposed improvements will not increase the runoff generated by this site.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate 21: EmB - Embudo gravelly fine sandy loam
Hydrologic Soil Group: B
Pervious CN = 61 (DPM Plate 22.2 C-2 - Open Space, Good condition)

Time of Concentration/Time to Peak

$T_C = 0.0078\ L^{0.77}/S^{0.385}$ (Kirpich Equation)

$T_P = T_C = 10$ min.

Point Rainfall

$P_6 = 2.25$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: Q = CiA

where C varies
$i = P_6\ (6.84)\ T_C^{-0.51} = 4.76$ in/hr
$P_6 = 2.25$ in (DPM Plate 22.2D-1)
$T_C = 10$ min (minimum)
A = area, acres

SCS Method

Volume: V = 3630(DRO) A

Where DRO = Direct runoff in inches
A = area, acres

Existing Condition

A_{total} = 65,500 sf = 1.5 Ac
Roof area = 19,650 sf (0.30)
Paved area = 45,850 sf (0.70)
C = 0.94 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.94(4.76)(1.5) = 6.7 cfs
% impervious = 100%
Composite CN = 98 (DPM Plate 22.2 C-3)
DRO = 2.05 in (DPM Plate 22.2 C-4)
V_{100} = 3630 (DRO)A = 11,160 cf

Developed Condition

A_{total} = 65,500 sf 1.5 Ac
Roof area = 19,650 sf (0.30)
Paved area = 45,200 sf (0.69)
Landscaped area = 650 sf (0.01)
C = 0.93 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.93(4.76)(1.5) = 6.6 cfs
% impervious = 99 %
Composite CN = 98 (DPM Plate 22.2 C-3)
DRO = 2.05 in (DPM Plate 22.2 C-4)
V_{100} = 3630 (DRO)A = 11,160 cf

Comparison

ΔQ_{100} = 6.7 - 6.6 = 0.1 cfs (decrease)
ΔV_{100} = 11,160 - 11,160 = 0 cf (no change)

Construction Notes:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System, 260-1990, for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning safety and health.
4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. the engineer has undertaken no field verification of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
6. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures:

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 berms at the property lines and wetting the soil to keep it from blowing.
2. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
3. The contractor shall secure "topsoil disturbance permit" Prior to beginning construction.

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER
JGM 07-21-92

RECEIVED
JUL 21 1992
HYDROLOGY DIVISION

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS & SURVEYORS (505)345-4250

GRADING & DRAINAGE PLAN

PEDMONT PLAZA

DESIGNED BY JGM
DRAWN BY CEN
APPROVED BY JGM

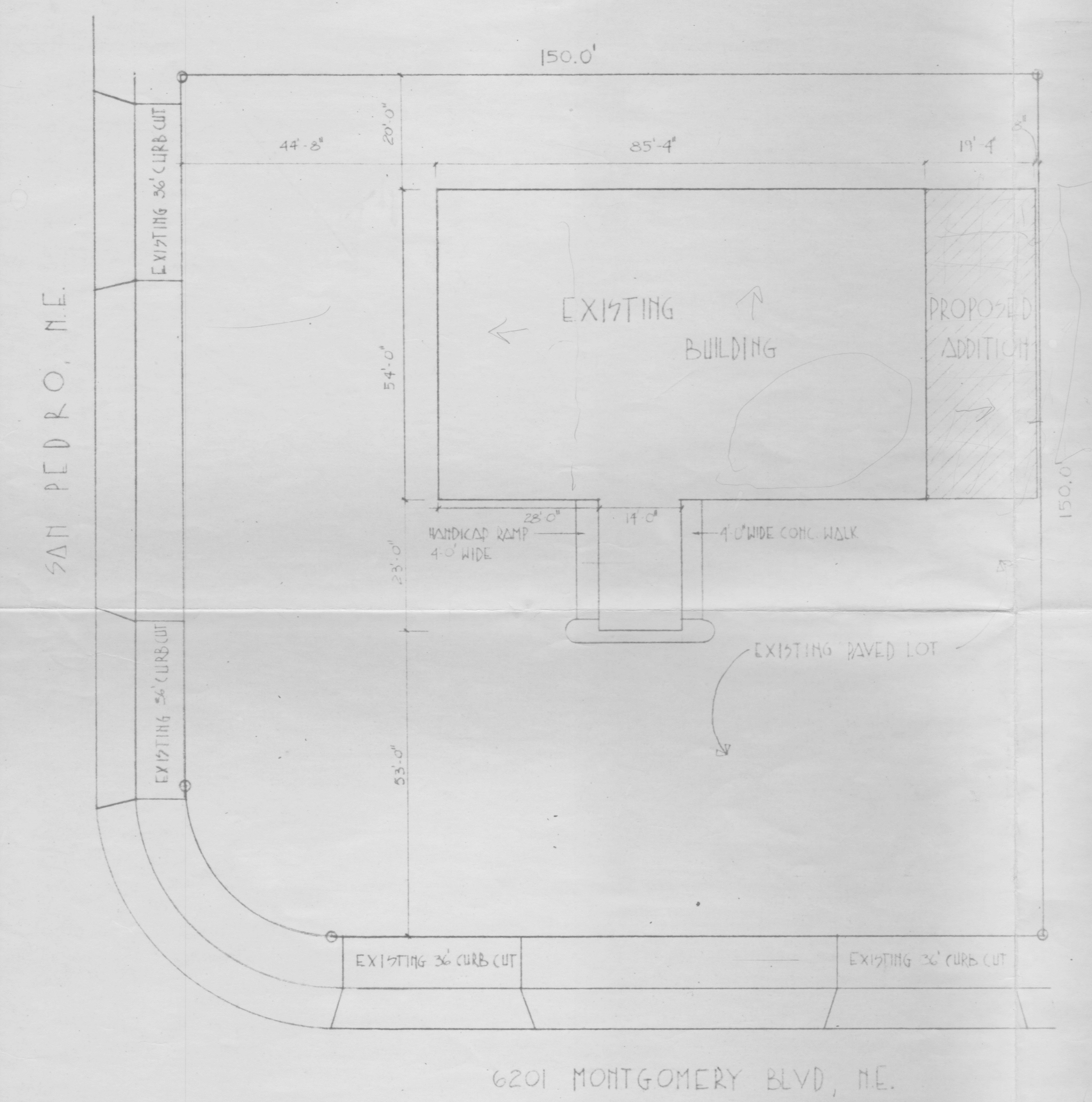
NO.	DATE	BY	REVISIONS

JOB NO. 920512
DATE 07-92
SHEET 1 OF 1

< 50%
~~show~~ addition show site plan
submit form to show existing conds.
show ff. elevs w/ msl.

LEGAL DESCRIPTION

LOT C
BOYD'S ADDITION
ALBUQUERQUE, NEW MEXICO



PLOT PLAN

SCALE: 1"= 20'.

RECEIVED
MAY 07 1985
HYDROLOGY SECTION

Made Etheridge

ADDITION FOR

PLOT PLAN

DESIGNER: MICHAEL CARUSO

DATE:

SCALE: GIVEN

SHEET 1