HYDROLOGY

K15/D19

TWO PLANS

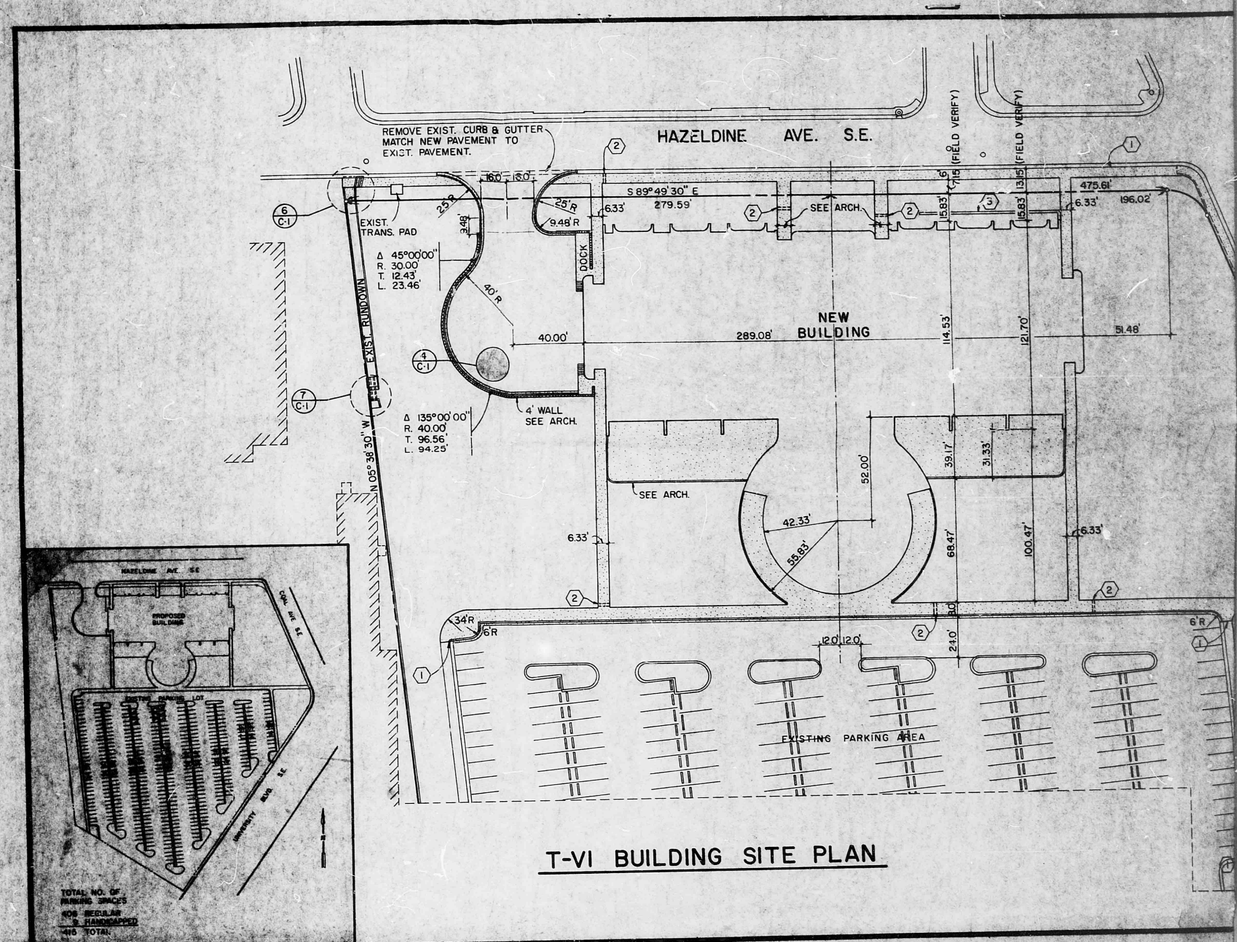
2 PLANS FOR

TUI-PHASE 13 SITE

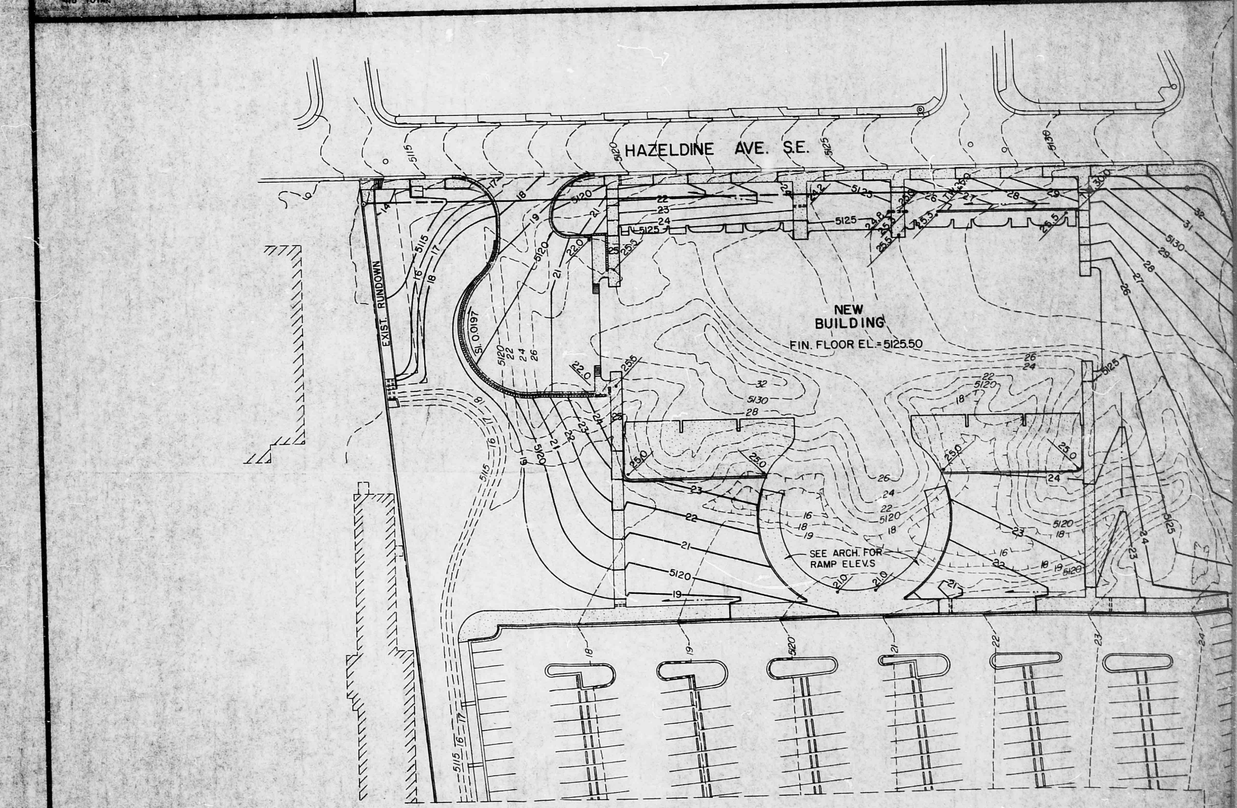
K 15-D19

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT

PLAN SHOT IN TWO SECTIONS

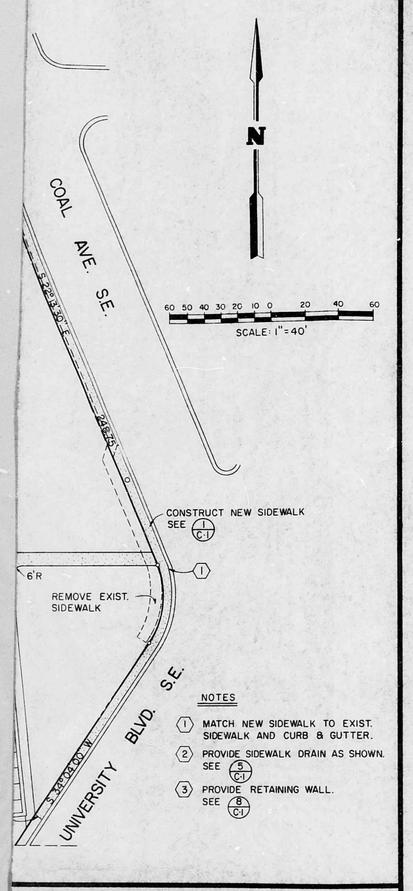


T-VI BUILDING SITE PLAN



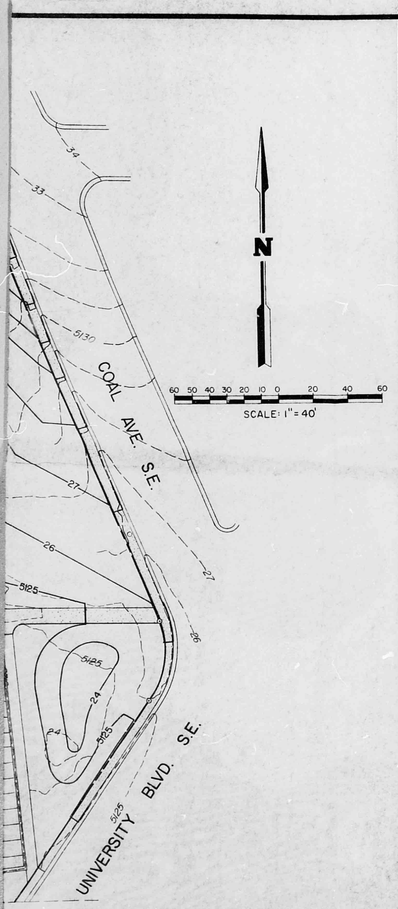
T-VI BUILDING GRADING PLAN

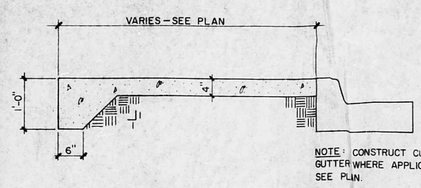
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT



NOTES

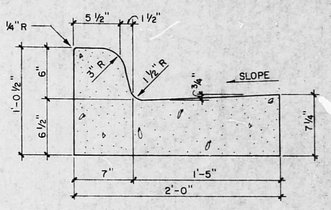
1. MATCH NEW SIDEWALK TO EXIST. SIDEWALK AND CURB & GUTTER.
2. PROVIDE SIDEWALK DRAIN AS SHOWN. SEE 5/C-1
3. PROVIDE RETAINING WALL. SEE 8/C-1



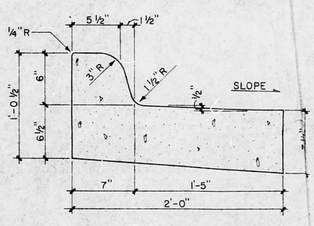


NOTE: CONSTRUCT CURB & GUTTER WHERE APPLICABLE. SEE PLAN.

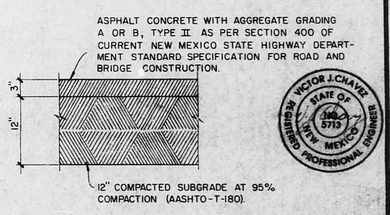
1/C-1 SIDEWALK DETAIL
3/4" = 1'-0"



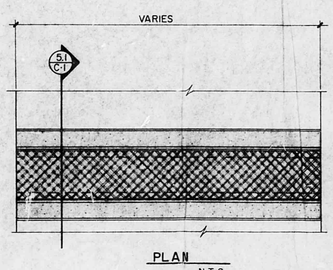
2/C-1 CURB & GUTTER DETAIL
1 1/2" = 1'-0"



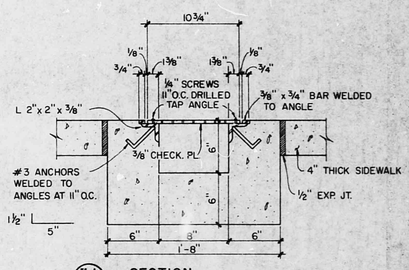
3/C-1 CURB & GUTTER DETAIL
1 1/2" = 1'-0"



4/C-1 TYPICAL PAVING SECTION
1" = 1'-0"

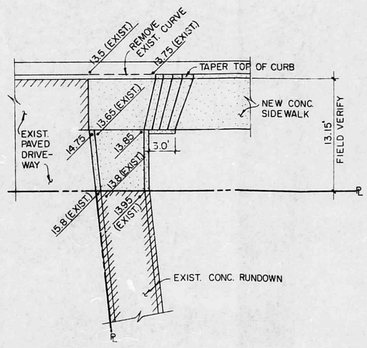


PLAN
N.T.S.

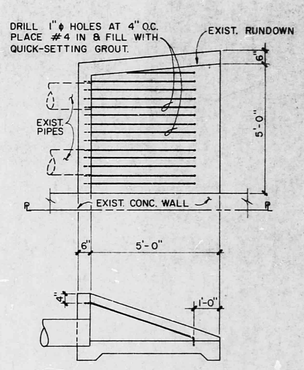


5.1/C-1 SECTION
N.T.S.

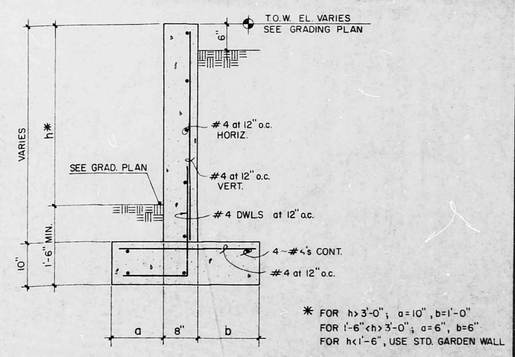
5/C-1 SIDEWALK DRAIN



6/C-1 RUNDOWN AT SIDEWALK
1/8" = 1'-0"



7/C-1 GRATING AT EXIST. RUNDOWN
3/8" = 1'-0"



* FOR h > 3'-0"; a = 10", b = 1'-0"
FOR 1'-6" < h > 3'-0"; a = 6", b = 6"
FOR h < 1'-6", USE STD. GARDEN WALL

8/C-1 RETAINING WALL (SECTION)
3/4" = 1'-0"

LEGEND

- PROPERTY LINE
- MASONRY WALL
- BUILDING (EXIST.)
- BUILDING (NEW)
- CURB & GUTTER (EXIST.) PAVED ROADS & PARKING (EXIST.)
- CURB & GUTTER (NEW) PAVED ROADS & PARKING (NEW)
- SIDEWALK (EXIST.)
- SIDEWALK (NEW)
- CONTOUR (EXIST.) CONTOUR (NEW)
- SPOT ELEVATION (NEW)

K15/D19

W.C. KRUGER & ASSOCIATES
ARCHITECTS-PLANNERS, INC.
SUITE 1100 BANK OF NEW MEXICO BUILDING
ALBUQUERQUE, NEW MEXICO
ZIP CODE 87101
TELEPHONE (505) 842-8663

STATE OF NEW MEXICO — W. C. KRUGER NO. 47 ALBUQUERQUE, NEW MEX. — REGISTERED ARCHITECT

STATE OF NEW MEXICO — W. C. KRUGER & ASSOCIATES INC. NO. 509 ALBUQUERQUE, N. M. — REGISTERED ARCHITECT

VICTOR J. CHAVEZ — STATE OF NEW MEXICO — NO. 5713 — REGISTERED PROFESSIONAL ENGINEER

RECEIVED JAN 20 1983 ENGINEERING

PHASE XIII
BUSINESS OCCUPATIONS BUILDING
ALBUQUERQUE TECHNICAL-VOCATIONAL INSTITUTE
ALBUQUERQUE, NEW MEXICO

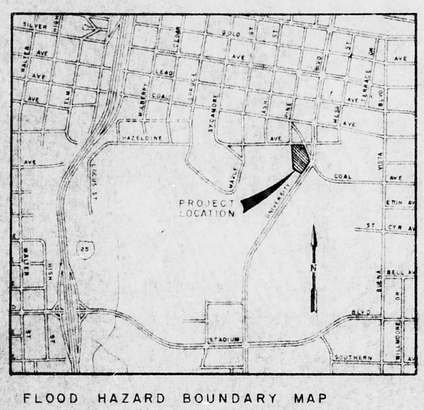
REVISIONS

DATE	11-24-82
DRAWN	YMV
CHECKED	VJC
JOB NUMBER	589

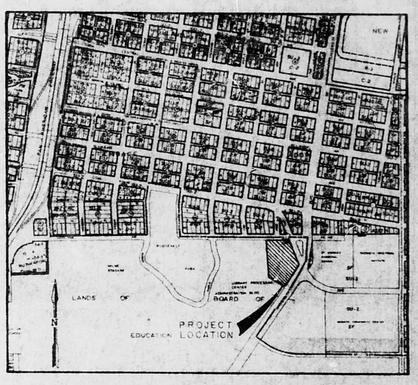
SITE & GRADING PLANS WITH DETAILS

SHEET NUMBER C-1

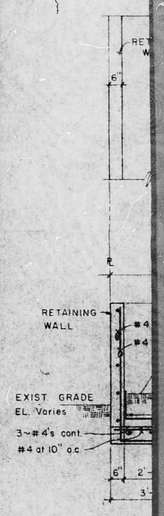
PLAN SHOT IN TWO SECTIONS

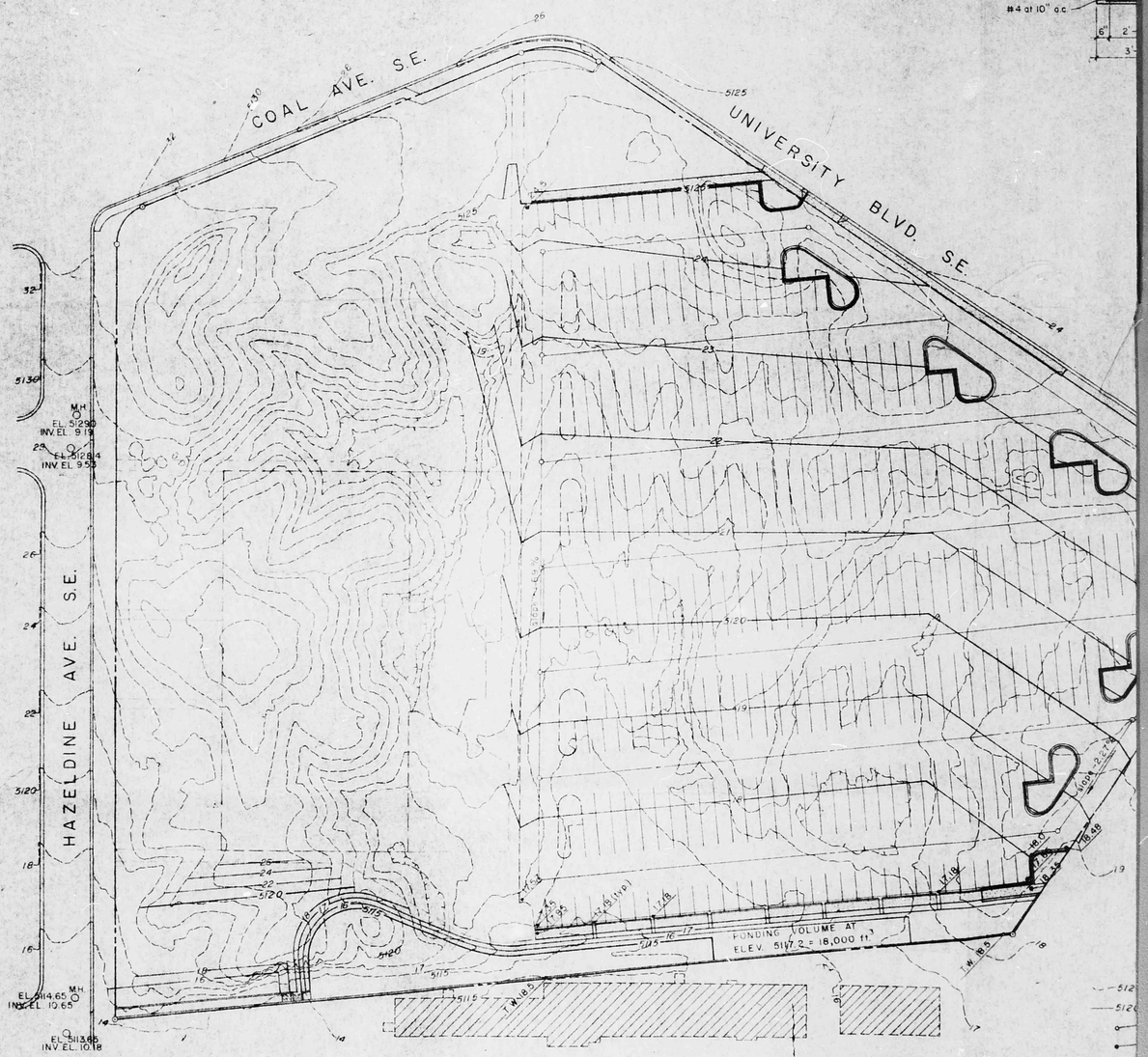


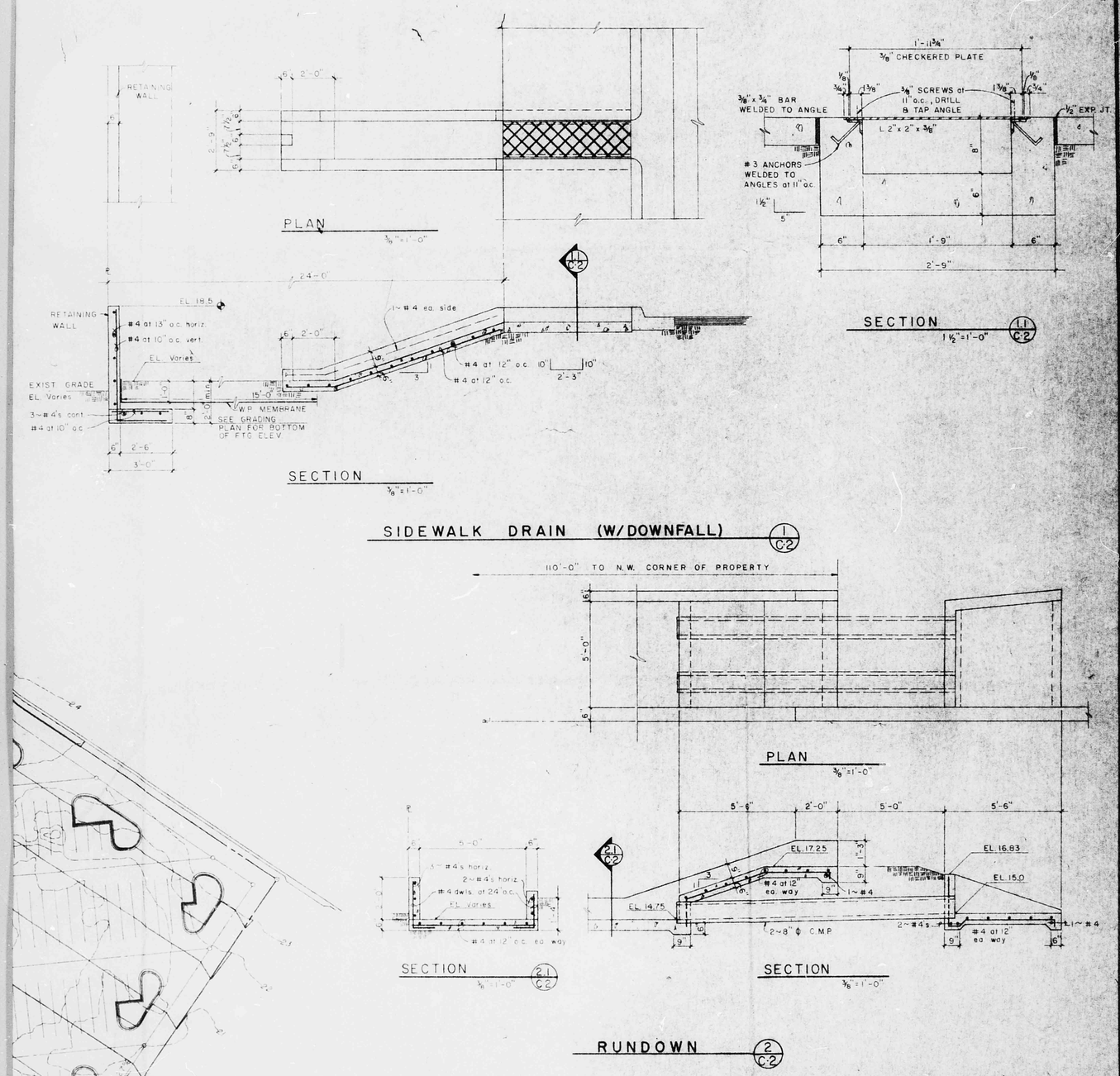
FLOOD HAZARD BOUNDARY MAP

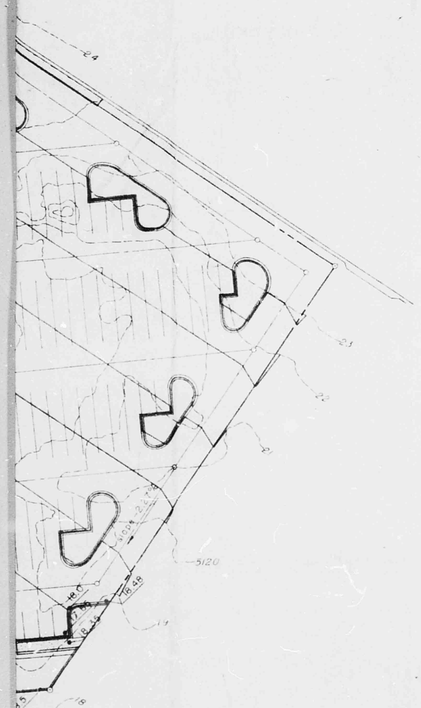


KEY MAP K-15-Z









LEGEND

- EXIST. CONTOUR
- NEW CONTOUR
- EXIST. SPOT ELEV.
- NEW SPOT ELEV.
- PROPERTY LINE
- CURB & GUTTER
- PAVED ROAD & PARKING
- SIDEWALK
- BUILDING (FUTURE DEVELOPMENT)
- BUILDING (EXISTING)
- NEW CONCRETE

DRAINAGE PLAN

The proposed development is located in the southwest quadrant of the intersection of Hazeldine Ave. S.E., Coal Ave. S.E. and University Blvd. S.E. and is not located adjacent to or in a 100-year flood hazard area. Preliminary development of the site will consist of a parking lot with associated drainage facilities. Future development will include an auditorium and associated educational facilities. The site contains approximately 6.98 acres.

The project site is presently undeveloped with a 2% slope from southeast to northwest through the parking area. The northern portion of the site, which has been reserved for the future building construction, is hilly with slopes in excess of 30%.

Off-site flows do not enter the site. Analysis point 3704 on Page 2C-4, Vol. II of the Albuquerque Master Drainage Study indicates that the 100-year peak discharge will not generate surface flows in University Blvd. which is immediately upstream of the project site.

Flows generated on the site presently flow either to Hazeldine Ave. or to the A.P.S. property located immediately to the west. Flow through the A.P.S. property continues to the intersection of Hazeldine and Maple.

Development of the site will provide a temporary detention pond with an uncontrolled outlet discharging flows to Hazeldine Ave. S.E. Ponding volume is based on a fully developed coefficient of runoff of 0.81. It was assumed that when fully developed, approximately 1.35 acres would runoff directly to Hazeldine. The remaining area will be routed through the pond with a peak outlet rate less than the Q_5 runoff rate. Combined flows from the pond and the direct runoff to Hazeldine is less than the existing undeveloped rate of runoff.

The grading plan shows (1) existing contours at 1' intervals for slopes less than 10% and 2' intervals for slopes greater than 10%; (2) proposed grades in the parking and ponding areas indicated by spot elevations and contours; (3) continuity between proposed and existing elevations; (4) permanent and temporary bench marks; and (5) that the site development will not be susceptible to flooding nor increase the threat of flooding to downstream areas.

CALCULATIONS

Area = 6.98 Acres
Impervious Area = 5.55 Acres
Parking Area = 3.60 Acres
Coefficient of Runoff = 0.81
Average Slope = 2.0%
Length = 500'
Tc = 15 min (undev.)
Tc = 8 min (dev.)
i_u = 189/25+15 = 4.72 in/hr
i_d = 189/25+10 = 5.4 in/hr

Q_u = .4(6.98)(4.72) = 13.2 cfs.
Q (Direct to Hazeldine) = 1.35(5.4)(.81) = 5.9
Q_5 = .4(7)(2.8) = 7.84
Pond Outlet
Slope Avail - 0.15, n = 0.015
Q = 3.9 cfs (1-8" diameter pipe)
Total Outlet = 7.8 cfs.
Ponding Volume Required = 16,049 ft^3
Total Flow from Site = 5.9+7.8 = 13.7 cfs.

K15/D19

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W. C. KRUGER
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STATE OF NEW MEXICO
W. C. KRUGER & ASSOCIATES INC.
NO. 598
ALBUQUERQUE, N. M.
REGISTERED ARCHITECT

PARKING LOT FOR
PHASE XIII
MAIN CAMPUS
ALBUQUERQUE TECHNICAL - VOCATIONAL INSTITUTE
ALBUQUERQUE, NEW MEXICO

REVISIONS

DATE	5-7-82
DRAWN	YMV
CHECKED	VJC
JOB NUMBER	589

GRADING PLAN

SHEET NUMBER C-2