HYDROLOGY

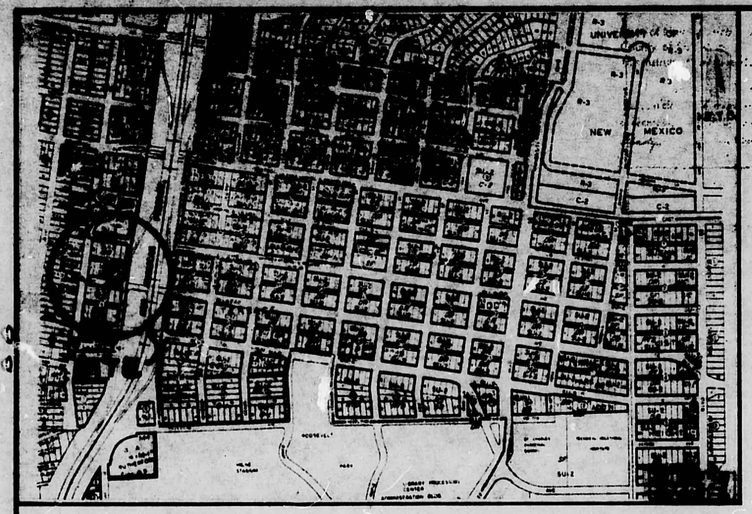
K15/D41
2 PLANS

X15/D41

2. PLANS

TALOS LOG # 03-24-2400

08738307



State of New Mexico }
County of Bernalillo } SS
This instrument was filed for record on
APR 14 1987
At 3:45 o'clock P.M. Recorded in Vol. 633
of records of said County Folio 73
Clerk & Recorder
Deputy Clerk

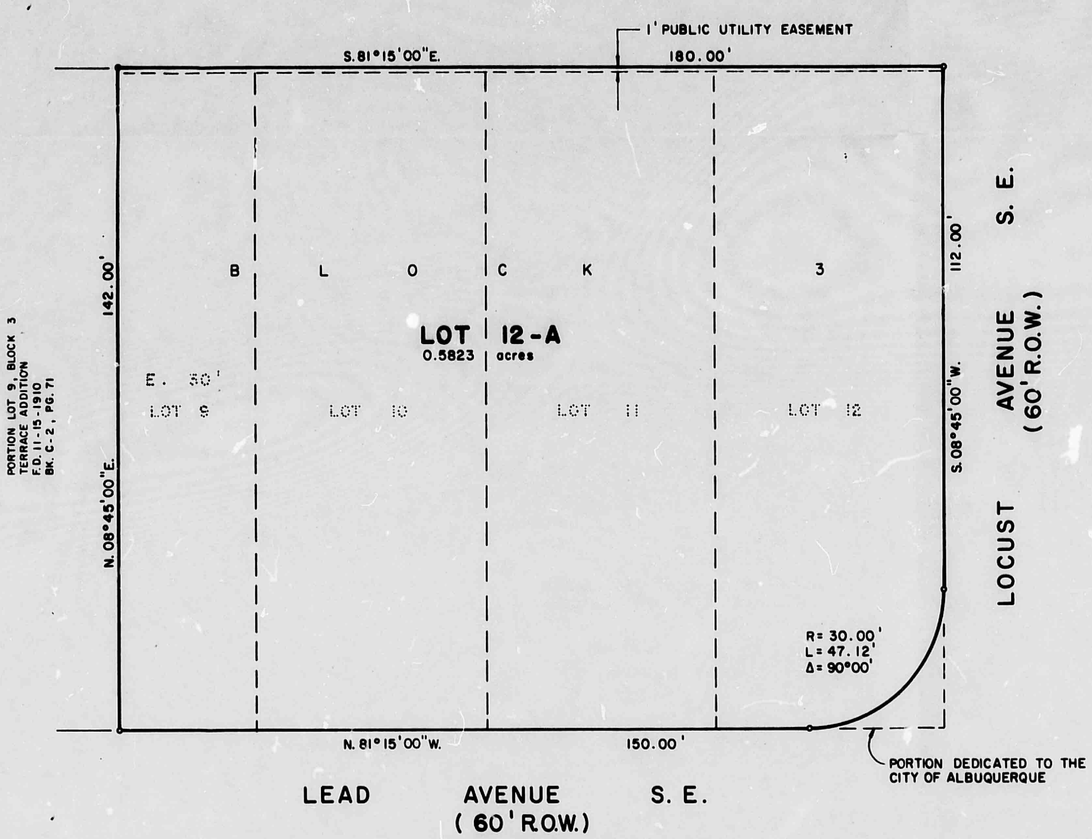
1" = 20'

N

10 5 0 10 20 30

NOTES:

1) Basis of bearings: Parcel A, Block 74, TERRACE ADDITION, filed March 8, 1978, in Book C, page 25.
2) No field work performed.
3) Plat shows all easements of record.
4) Easterly thirty feet (30') of Lot 9 created by Warranty Deed filed June 2, 1969 Vol. D 861, Folio 665 Doc. no. 37987



DISCLOSURE STATEMENT: The purpose of this replat is to eliminate lot lines and to create Lot 12-A.

PLAT OF
LOT 12-A
TERRACE ADDITION

BEING A REPLAT OF EASTERLY 30' LOT 9, ALL OF LOTS 10, 11, & 12, BLOCK 3
WITHIN SECTION 21, T.10 N., R.3 E.
CITY OF ALBUQUERQUE, NEW MEXICO
MARCH 1987

LEGAL DESCRIPTION AND FREE CONSENT

The undersigned owner(s) of the land hereon shown do hereby consent to the Replat of the land hereon shown:

The Easterly thirty feet (E.30') of Lot numbered Nine (9), All of Lots numbered Ten (10), Eleven (11), and Twelve (12), all in Block numbered Three (3), TERRACE ADDITION to the City of Albuquerque, Bernalillo County, New Mexico, as the same are shown and designated on the map of said Addition, filed with the Probate Clerk and Ex-Officio Recorder of Bernalillo County, New Mexico on May 20, 1905, as amended and refiled November 15, 1910, in Map Book C2, folio 71.

and is with the free consent and in accordance with the desires of the undersigned owner(s) and proprietor(s) thereof, and hereby dedicates additional right-of-way as shown hereon.

Don W. Grady — 3/12/87
Owner(s) DON W. GRADY — Date

ACKNOWLEDGEMENT

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

OFFICIAL SEAL
DANIEL M. GRANEY
NOTARY PUBLIC STATE OF NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires

The foregoing instrument was acknowledged before me this 12th day of MARCH, 1987.
BY: DON W. GRADY
My Commission Expires: 8-8-87
Daniel M. Graney
Notary Public

CITY/COUNTY APPROVALS:

Property Management	N/A	Date
City Surveyor		Date 028567
City Water Resources	Jon E. Evergreen	Date 4-7-87
City Engineer	N/A	Date
A.M.A.F.C.A.	N/A	Date
Traffic Engineer	N/A	Date
Parks and Recreation	N/A	Date
City Planning Director	for Jack Cloud	S.P.No. SP-87-132 Date 4-9-87

SURVEYOR'S CERTIFICATION

I, Franklin E. Wilson, a registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision and meets the minimum requirements of monumentation and surveys of the City of Albuquerque Subdivision Ordinance, and that it is true and correct to the best of my knowledge and belief.

Franklin E. Wilson — 3/12/87
Franklin E. Wilson, N.M.P.L.S. No. 6446 — Date
SOUTHWEST SURVEYING COMPANY 333 Lomas N.E., Albuquerque, N.M. 87102
(505) 247-4444

OFFICIAL SEAL
DANIEL M. GRANEY
NOTARY PUBLIC STATE OF NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires

ACKNOWLEDGEMENT

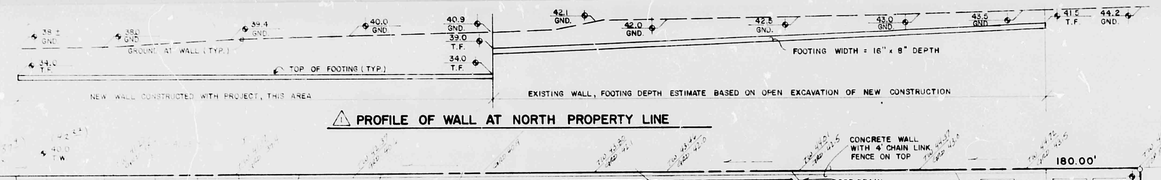
STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 12th day of MARCH, 1987, by Franklin E. Wilson.
My Commission Expires: 8-8-87
Daniel M. Graney
Notary Public

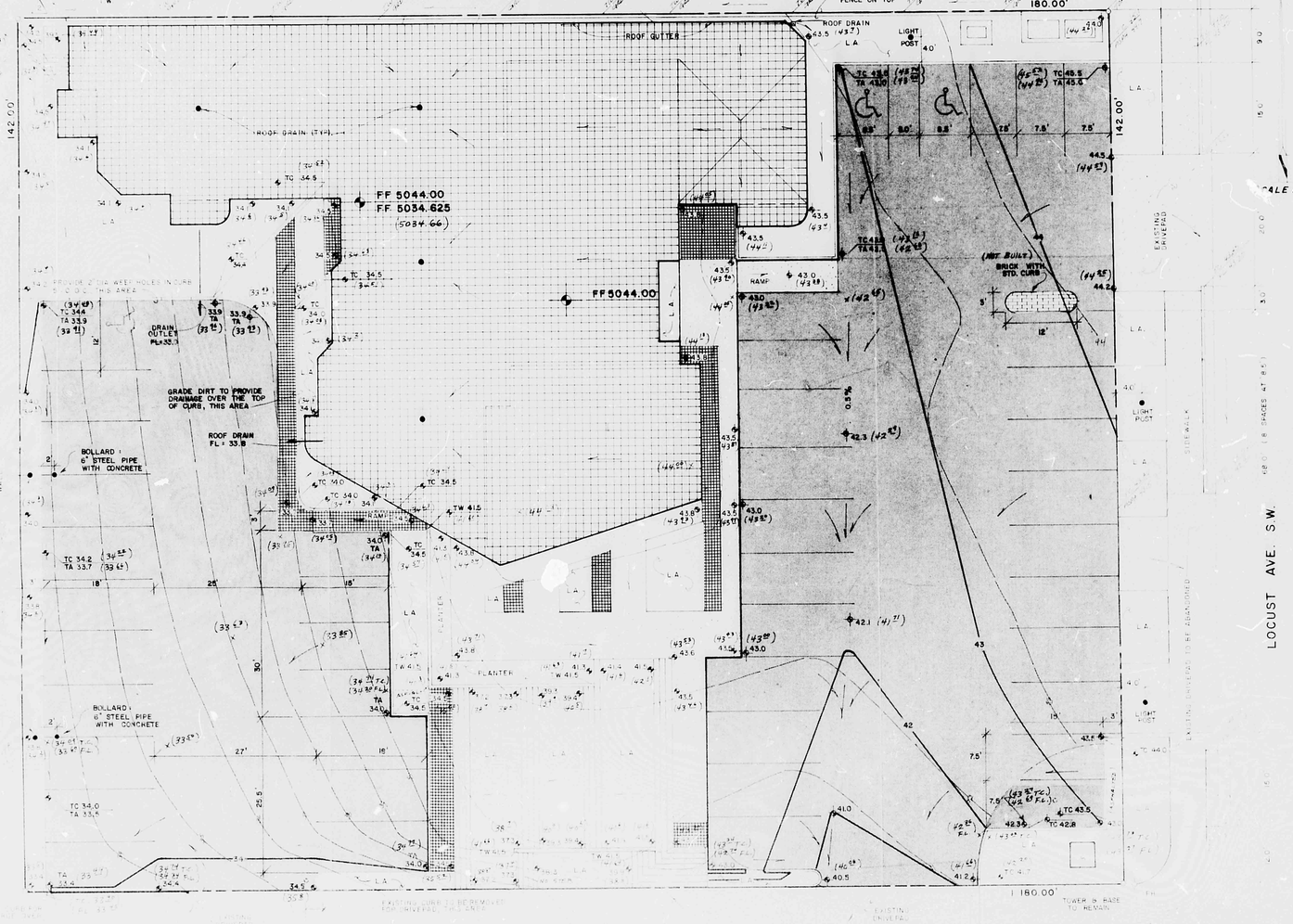
RECEIVED
APR 12 1987
HYDROLOGY SECTION

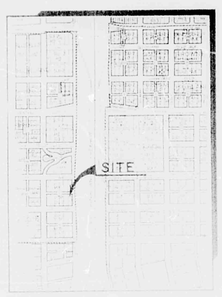
DRB 87-193

VERT. 1" = 10'

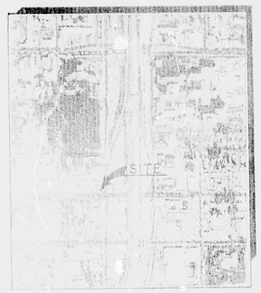


⚠ PROFILE OF WALL AT NORTH PROPERTY LINE



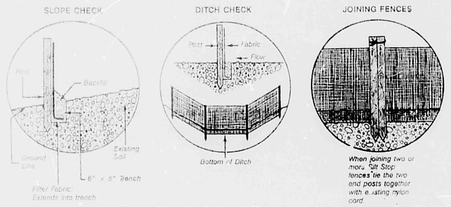


VICINITY MAP K-15-Z



FLOOD HAZARD MAP

LEAD AVE. S.W.



SILT FENCE DETAIL

NTS

LEGEND

- NEW CONCRETE
- NEW ASPHALT
- NEW CURBING
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SURFACE FLOW DIRECTION
- PROPOSED SURFACE FLOW DIRECTION
- WATER METER
- VALVE
- POWER POLE
- TELEPHONE BOX
- TRW TOP of RETAINING WALL
- TC TOP of CURB
- FL FLOW LINE
- TBM TEMPORARY BENCH MARK
- TOP of CHIMNEY

SCOPE:

A medical-office building is being planned at the northwest corner of Lead Avenue SW and Locust Avenue SW. The proposed building will utilize an existing service-station building into the final structure. The overall site drops 10' to the west, with the original building occupying the high side. The new addition to the building will use the grades to form a two-story structure on the west side of the site. The existing improvements on the east side (driveways, planters, pavement base) will remain in place as much as possible to minimize construction costs. The east parking area will be resurfaced matching some of the existing grades, with the west portion of the site requiring new pavement. The final drainage flow patterns will either discharge to Locust Avenue or to Lead Avenue, following the present flow patterns for the site.

The intent of this plan is to show:

a) Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.

b) The extent of proposed site improvements, including buildings, walks and pavement.

c) The time rate/volume of rainfall runoff arising from the site, and methods of handling these flows to meet City requirements for drainage management.

d) The relationships of onsite improvements with existing neighboring features to insure an orderly transition between proposed and surrounding grades.

GENERAL NOTES:

LEGAL: Lots No's. 10, 11 and 12, Block 1 of the Barron Addition, Albuquerque, New Mexico.

SURVEYORS: Southwest Surveying Inc., Albuquerque, New Mexico, August 12, 1985.

B.M.: N.G.S.C. 1-25-22, Elevation 5,067.43.

T.B.M.: Top of Below at northeast property corner, Elevation 5,044.15.

FLOOD HAZARD: Site is not located in a flood hazard zone (see map below).

OFF-SITE DRAINAGE: Site is not affected by offsite drainage due to street or site improvements on all sides.

SEDIMENT CONTROL: Contractor will be responsible for providing sediment control during the construction period. One option would be the use of a fabric silt fence erected across the low points of the site (see below).

CALCULATIONS: Calculations are based on the City of Albuquerque, "Drainage Manual" for the Albuquerque, New Mexico area, using the Rational Method to compute flow rates and proposed runoff rates.

RATIONAL METHOD: Q = CIA

Area of site: 25,960 sq.ft. = 0.60 Ac.

Run-off Coefficients:

Existing Sites	Developed Sites
Undeveloped Area = 11,960 ft²	Roof Area = 8,020 ft²
Landscaped Area = 1,200 ft²	Landscaped Area = 3,460 ft²
Paved Area = 13,000 ft²	Paved Area = 14,480 ft²
$C_u = \frac{(11,960)(.20) + (1,200)(.35) + (13,000)(.90)}{25,960}$ = 0.57	$C_d = \frac{(8,020)(.90) + (3,460)(.35) + (14,480)(.90)}{25,960}$ = 0.77
$C_{10} = \frac{(11,960)(.40) + (1,200)(.45) + (13,000)(.90)}{25,960}$ = 0.61	$C_{10} = \frac{(8,020)(.90) + (3,460)(.45) + (14,480)(.90)}{25,960}$ = 0.78
$C_{100} = \frac{(11,960)(.60) + (1,200)(.65) + (13,000)(.90)}{25,960}$ = 0.66	$C_{100} = \frac{(8,020)(.90) + (3,460)(.65) + (14,480)(.90)}{25,960}$ = 0.81
Composite C's = 0.60	Composite C's = 0.80

Rainfall - Intensities:

$I_{10} = 2.5 - 0.25 \log(10) = 2.25$ in/hr

$I_{100} = 4.3 - 0.43 \log(100) = 4.30$ in/hr

where $P_1 = 2.5$ in. and $P_{360} = 2.75$ in. per hour

t_c = 10 minutes (minimum t.)

Existing Conditions	Developed Conditions
$Q_{10} = (0.60)(2.25)(0.60)$ = 0.81 cfs	$Q_{10} = (0.78)(2.25)(0.60)$ = 1.05 cfs
$Q_{100} = (0.66)(4.30)(0.60)$ = 1.71 cfs	$Q_{100} = (0.81)(4.30)(0.60)$ = 2.09 cfs

Total increase for a developed site condition = 0.38 cfs.

SUMMARY:

The site drainage patterns, present and proposed, flow to Lead Avenue, which, in turn, drains to the storm sewer at Broadway (SW Interceptor) and Lead (Main Line). Broadway drains to the Bernalillo Interceptor. Most flows at Lead and Broadway indicate Q100 = 174 cfs. t = 10 minutes. The storm drainage system receiving these flows consists of a 72" diameter storm sewer with a capacity of 300 cfs. The time of concentration for flows to arrive at Lead from the site and reach the storm sewer.

$t_c = \frac{(L)(60)}{(V)(60)} + 10$ minutes

This indicates that flows from the site will enter the storm sewer shortly after its peak capacity. Incremental increase in the storm sewer system, due to the site, is negligible when compared to the system capacity. No overlap flow from the most effected lead to Broadway (SW Interceptor) are intercepted by Lead.

Therefore, downstream capacity of the receiving street and storm sewer is available to handle the flows contributed by the site and SW Interceptor.

The proposed site plan should be allowed due to the following:

a) The site drainage patterns, present and future drainage systems and capacity.

b) The site is not in an area of unmitigated flows that has already been included in the Master Drainage Study.

REVISIONS DATE

DESIGNED
DRAWN
CHECKED

WEISS HINES ENGINEERING INC.
11100 ALVARADO N.E. SUITE B
ALBUQUERQUE, NEW MEXICO 87110
(505) 268 3444

DRAINAGE/GRADING PLAN
MEDICAL OFFICES
LEAD & LOCUST S.E.

ENGINEERING

SHEET OF