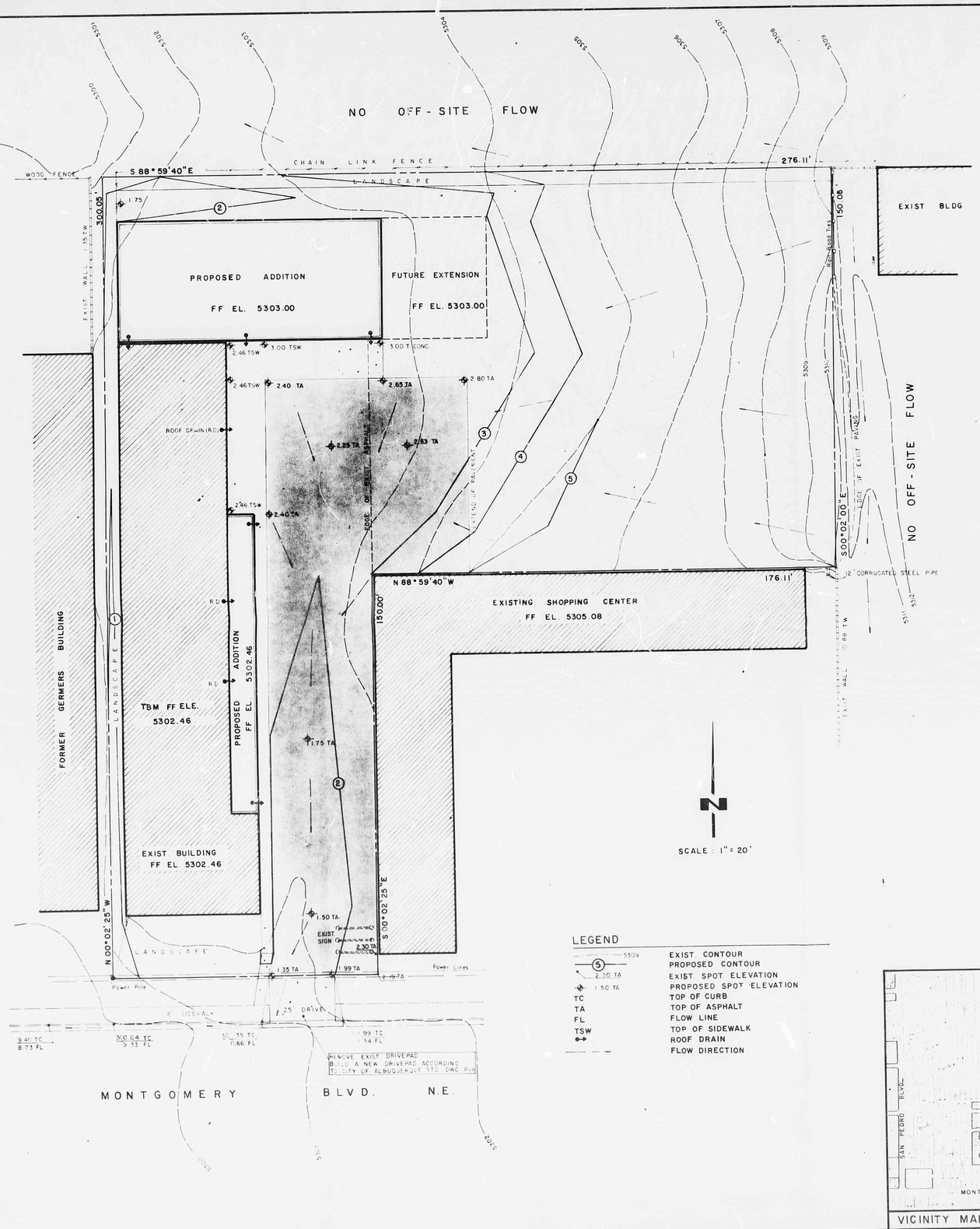
HYDROLOGY

F18/D47
ONE PLAN

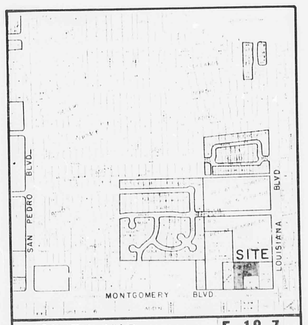
F18/D47

1 Plan




## LEGEND

| | |
|---|---|
| 5309 | EXIST CONTOUR |
| (5) | PROPOSED CONTOUR |
| 2.30 TA | EXIST SPOT ELEVATION |
| 1.50 TA | PROPOSED SPOT ELEVATION |
| TC | TOP OF CURB |
| TA | TOP OF ASPHALT |
| FL | FLOW LINE |
| TSW | TOP OF SIDEWALK |
| | ROOF DRAIN |
| | FLOW DIRECTION |




VICINITY MAP F-18-Z

# DRAINAGE AND GRADING PLAN

FOR

# MOTORSPORT

TRACT 2-A MUNICIPAL ADDITION NO. 1

ALBUQUERQUE, NEW MEXICO

MARCH 1987

## DATA

| | |
|---|---|
| AREA | 1.295 ac. 56,410 SF |
| SLOPE | 2.90 % E TO W |
| SOIL GROUP | B |
| TIME OF CONCENTRATION | Tc = 10 MINUTES (MIN.) |
| RAINFALL ( PL 22.2 D-1 DPM) | 2.3 " |
| INTENSITY | $I = 6.84(R)T_c^{-0.51} = 4.86$ IN/HR |

## EXISTING CONDITION

C - FACTOR

| TYPE OF SURFACE | "C" | AREA (SF) | C x A |
|---|---|---|---|
| BUILDING | 0.90 | 9375 | 8438 |
| ASPHALT & CONCRETE | 0.95 | 16304 | 15489 |
| LANDSCAPE | 0.25 | 2208 | 552 |
| NATURAL GROUND | 0.40 | 28523 | 11411 |
| | | 56410 | 35890 |

C = 0.64

$Q_{100}$ = CIA = (0.64)(4.86)(1.295) = 4.03 cfs

$Q_{10}$ = 0.657 $Q_{100}$ = 2.65 cfs

EXISTING RUNOFF DISCHARGES INTO MONTGOMERY BLVD. THROUGH DRIVEWAY AT SOUTH OF PROPERTY.

## PROPOSED SITE RUN-OFF

C - FACTOR

| TYPE OF SURFACE | "C" | AREA (SF) | C x A |
|---|---|---|---|
| BUILDING | 0.90 | 17057 | 15351 |
| ASPHALT & CONCRETE | 0.95 | 15992 | 15192 |
| LANDSCAPE | 0.25 | 4031 | 1008 |
| NATURAL GROUND | 0.40 | 15330 | 7732 |
| | | 56410 | 39283 |

C = 0.70

$Q_{100}$ = CIA = (0.70)(4.86)(1.295) = 4.41 cfs

$Q_{10}$ = 0.657 Q = 2.89 cfs

## DISPOSAL

DISCHARGE DIRECTLY TO MONTGOMERY BLVD. VIA DRIVEWAY. RUNOFF WILL TRAVEL WEST 930 FEET ON MONTGOMERY BLVD. TO A DROP INLET INTO A 24" RCP STORM DRAIN SYSTEM. THE SITE IS AN INFILL PROJECT AND IS NOT LOCATED WITHIN A DEFINED 100-YEAR FLOOD ZONE. INCREASE IN RUNOFF DUE THIS DEVELOPMENT WILL BE 0.38 cfs AND ALSO SITE LIES AT TOP OF ITS WATERSHED, THEREFORE THE IMPACT WILL BE MINIMAL.

## LEGAL DESCRIPTION

TRACT 2-A MUNICIPAL ADDITION NO. 1

## BENCHMARK INFORMATION

A STANDARD ACS BRASS TABLET STAMPED "M-3A", SET IN THE TOP OF CONCRETE POST LOCATED ON THE MEDIAN AT THE INTERSECTION OF MONTGOMERY BLVD. AND LOUISIANA BLVD.

EL. 5308.998

## EROSION CONTROL STATEMENT

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC R/W OR INTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING BERM AT THE PROPERTY LINE AND WETTING THE SOIL TO KEEP IT FROM BLOWING.

MARCH 6, 1987

RECEIVED
MAR 06 1987
HYDROLOGY SECTION

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