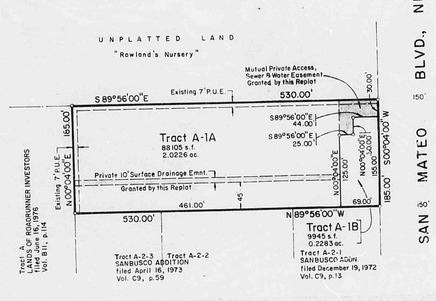
HYDROLOGY F17/D60 2 PLANS

F17/D60

2 Plans

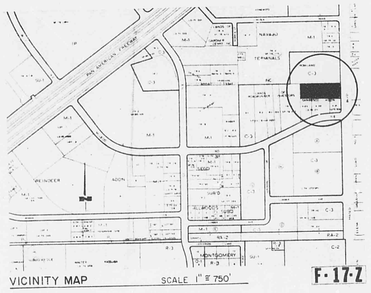
D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D

TAX NO. 07-03-744



NOTES

1. No field work performed plat compiled from existing records.
2. This plat was prepared for the purpose of dividing Tract A-1, SANBUSCO ADDITION into two lots.
3. Bearing based on the Replat of Tract "A", SANBUSCO ADDITION, filed October 1, 1971 in Vol. B6, page 17.
4. The Mutual Private Access, Sewer and Water Easement as shown on hereon is intended for the exclusive use and mutual benefit of the owners of Tracts A-1A and A-1B granted by this Replat. Maintenance of this easement shall be the joint responsibility of the owners of both lots or their assigns.

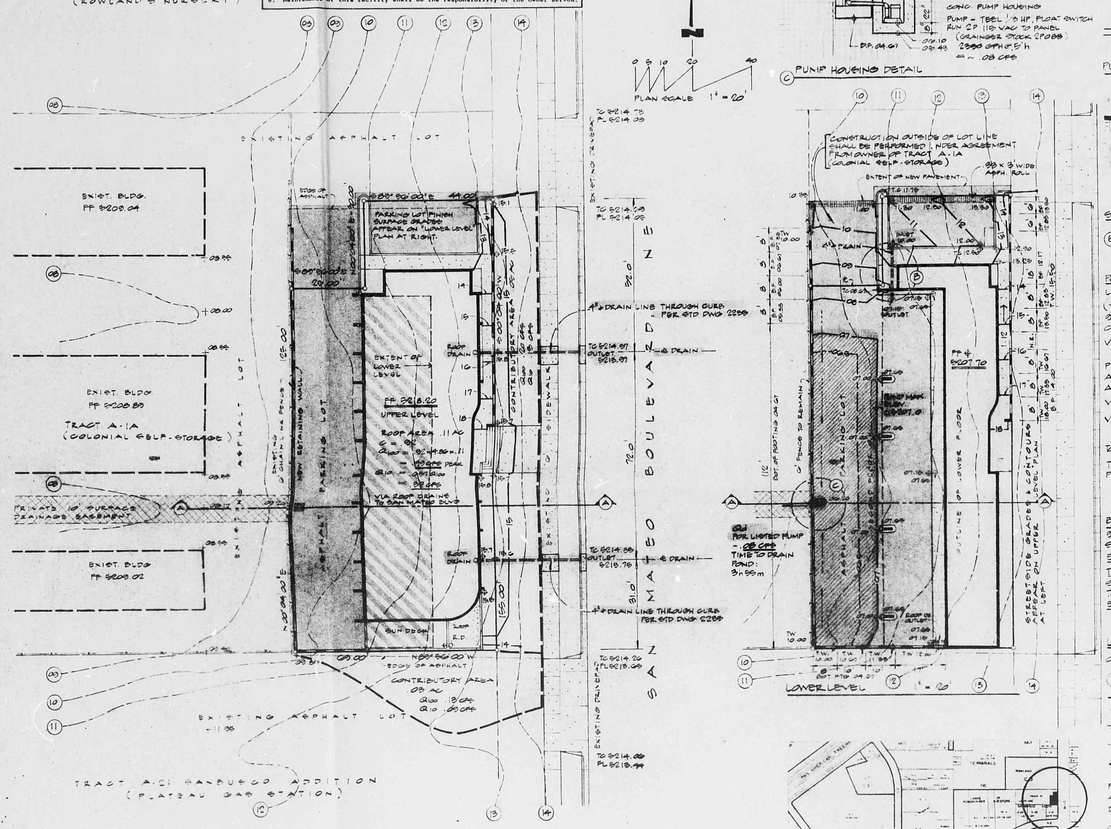

SAN MATEO BLVD. NE
TERRACE
NEBRASKA
C-1
M-1
C-3
C-2
SC
SU-2
SU-1
SU-2
SU-1
C-3
M-1
C-2
M-1
C-2
M-1
C-2

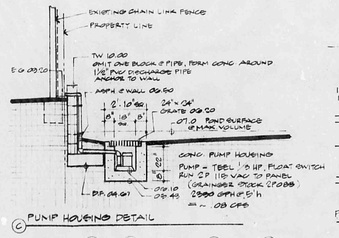
APPROVALS	NAME	DATE
HYDROLOGY/DESIGN		
INSPECTOR/DESIGN		
CONST / ACPT.		

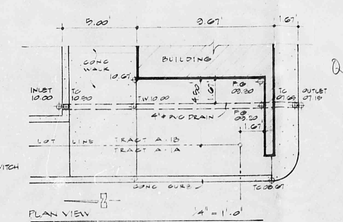
5111 SAN MATEO BOULEVARD, NE

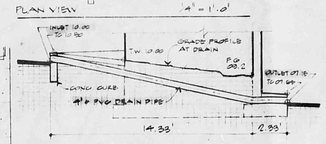
NOTICE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with "Standard Specifications for Public Works Construction 1986."
3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to ARTERIAL street use.
6. Maintenance of this facility shall be the responsibility of the owner served.









Q100 = 1.903 CFS
S = 2.86 / 70.67 = 17.1%
Q100 = 0.79 CFS OK

DRAIN PIPE DETAIL

POND VOLUME

LOT AREA .28 ACRS (- ROOF AREA .11 AC)
(+ APPROX PAVEMENT, .07 AC) = .14 AC (+ 6100 SQFT)
80% IMPERVIOUS
C = (.90 x .72 + .00 x .40) = .87
V = .87 x 2.8 x 6100 / 12 = 1018 CUFT

PROVIDED VOLUME
A1 (AT 8.5 CONTOUR) = 1906.00 FT.
A2 (AT 7.0 CONTOUR) = 2364.00 FT.
V1 INLET TO 8.5 = (1906 x 3) / 3 = 1906 CUFT
V2 (AT 7.0 AC) = 3 x (1906 + 2364 + √(1906 x 2364)) / 3 = 2173 CU FT.
TOTAL VOLUME 7.0 ELEVATION = 1130 CU FT
TIME TO DRAIN POND @ 2800 GPH (.08 CFS) - PER PUMP PERFORMANCE DATA - 3h.55m

BENCH MARK

B.M. #18 A 3/4" ALUM CAP SET FLUSH W/ TOP OF CURB AT SE CORNER OF SAN MATEO BLVD AND SAN MATEO LANE, NE
ELEV 5209.66
TEM
"+" CHISELED IN CONC PAD OF "PLATEAU" SIGN AT SOUTHEAST CORNER OF ADJACENT PROPERTY TO SOUTH
ELEV 5218.55

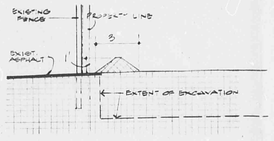
LEGEND

CONTOUR INTERVAL ONE-FOOT (1.0')
10 — EXISTING CONTOUR
10 — PROPOSED CONTOUR
+10.0 EXISTING SPOT ELEVATION
+10.0 PROPOSED SPOT ELEVATION
— — — FLOW LINE
— — — DIVISION OF CONTRIBUTORY AREAS

PROPOSED SPOT ELEVATIONS AND CONTOURS AS SHOWN ARE TO FINISHED SURFACES. CONTRACTOR SHALL DETERMINE APPROPRIATE SUBGRADES.

CONTRACTOR IS RESPONSIBLE FOR THE ABATEMENT OF SEDIMENT FROM SITE AND ADJACENT PRIVATE PROPERTY.

GRADE A 1' HIGH & 3' WIDE BERM ALONG WEST PROPERTY LINE UNTIL LOWER LEVEL EXCAVATION IS BEGUN.



BERM DETAIL 1/4" = 1'-0"

DATA

AREA OF SITE	12,248 SQ FT. (.28 ACRS)
SLOPE	8.5% EAST-TO-WEST
TIME OF CONCENTRATION	10 MINUTES
100-YEAR RAINFALL	2.3 INCHES
INTENSITY (2.3 x 2.08 x 10⁻⁴)	= 4.80 IN/HR

EXISTING ON-SITE CONDITIONS

SITE IS VACANT LAND. SURFACE IS HARD PACKED SOIL AND SHOWS NO SIGNS OF EROSION. AREA HAS BEEN SUBJECTED TO VEHICULAR TRAVEL BETWEEN BOTH ADJACENT COMMERCIAL NEIGHBORS. EXISTING VEGETATION IS LIMITED TO EIGHT YUCCAS ALONG THE WEST BOUNDARY, ONE TREE AND A TEN FOOT WIDE STRIP OF GRASSES AND LIGHT GROUND COVER. REMAINDER OF SITE IS BARE.

ENTIRE SITE DRAINS TO WEST, CONVEYANCE IS VIA PAVED SURFACES THROUGH COLONIAL SELF STORAGE AND BACK-N-SAVE LOTS TO NIGHT ROAD ABOUT 1000 FEET TO WEST

AREA	.28 AC.
IMPERVIOUS COVERAGE	80%
C-FACTOR (.80 x .72 + .20 x .40)	= .82
Q100 = .82 x 4.80 IN/HR x .28 AC	= .79 CFS. PEAK
Q10 = .67 Q100	= .60 CFS

UPSTREAM CONTRIBUTORY AREAS

THE SITE LIES BELOW THE LEVEL OF SAN MATEO BOULEVARD AND IS SUBJECT TO RUNOFF GENERATED WEST OF SIDEWALK. PLATEAU FILLING STATION LOT ALSO IS A MINOR CONTRIBUTOR.

FROM EAST:

AREA	.09 AC
C	.82
Q100 = .82 x 4.80 IN/HR x .09 AC	= .30 CFS. PEAK
Q10 = .67 Q100	= .19 CFS

FROM SOUTH

AREA	.09 AC
C	.82
Q100 = .82 x 4.80 IN/HR x .09 AC	= .30 CFS. PEAK
Q10 = .67 Q100	= .20 CFS

AREAS ARE DELINEATED ON PLAN

PROPOSED DEVELOPMENT

2 LEVEL OFFICE BUILDING AND PARKING AREA TO BE BUILT. NOTE THAT PARKING AREA EXTENDS UNDER MAIN FLOOR OF BUILDING. BOTH FLOOR ELEVATIONS ARE NOTED.

IMPERVIOUS COVERAGE	80%
C = (.80 x .72) + (.20 x .40)	= .66
Q100 = .66 x 4.80 IN/HR x .28	= .80 CFS. PEAK TOTAL DEVELOPED DISCHARGE
Q10 = .67 Q100	= .54 CFS

DISCUSSION

TWO ROUTINGS WILL BE USED.
LOT RUNOFF WILL BE DIRECTED VIA 4" BURIED PIPES TO RELEASE POINTS THROUGH CURB INTO SAN MATEO BOULEVARD. CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH STANDARD DRAWING 2236, "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986", DRAIN LINE THROUGH CURB.

2 REMAINDER OF SITE GENERATED RUNOFF AND ACCEPTED ON SITE FLOWS WILL BE COLLECTED IN LOWER PARKING AREA AND BE PUMPED INTO PRIVATE 10' SURFACE DRAINAGE EASEMENT GRANTED BY COLONIAL SELF STORAGE ON PLAT.

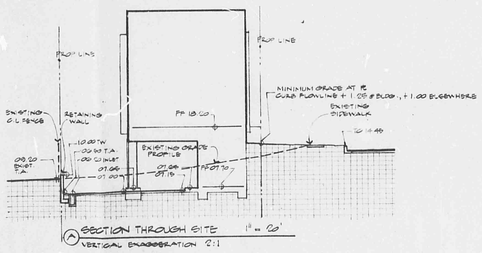
DISCHARGE TO SAN MATEO IS COLLECTED BY STORM DRAIN SYSTEM

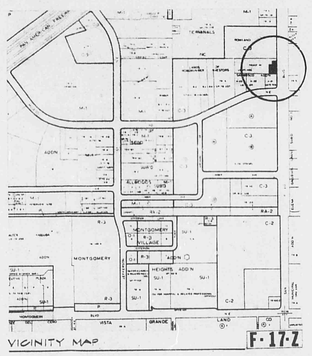
SURFACE DRAINAGE EASEMENT OVERLAYS EXISTING FLOWLINE BETWEEN EXISTING ADJACENT BUILDINGS

COMPUTATIONS & AREA DELINEATIONS APPEAR ON PLAN VIEWS.

DESCRIPTION OF PROPERTY

TRACT A-1B
SANDUSKO ADDITION
ALBUQUERQUE, NEW MEXICO
5111 SAN MATEO BOULEVARD, NE
SOL-SAN PARTNERSHIP OFFICE BUILDING





APPROVED FOR DRAINAGE
7 OCT 86
DATE
G S Reeder CE/HYD
SIGNATURE TITLE
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED

SEPTEMBER, 1987

RECEIVED SEP 25 1987 HYDROLOGY SECTION

RICHARD V. HALL REGISTERED PROFESSIONAL ENGINEER 7918
9-25-87

HALL ENGINEERING COMPANY INC.
ENGINEERING • SURVEYING • PLANNING • CONSTRUCTION
6840 2ND ST., N.W., SUITE 306 • ALBUQUERQUE, NEW MEXICO 87107
PHONE: (505) 345-1084

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