HYDROLOGY

F21/D37J

ONE PLAN

I PLAN FOR

MAZZIO'S PIZZA

F 21 — D 37 J

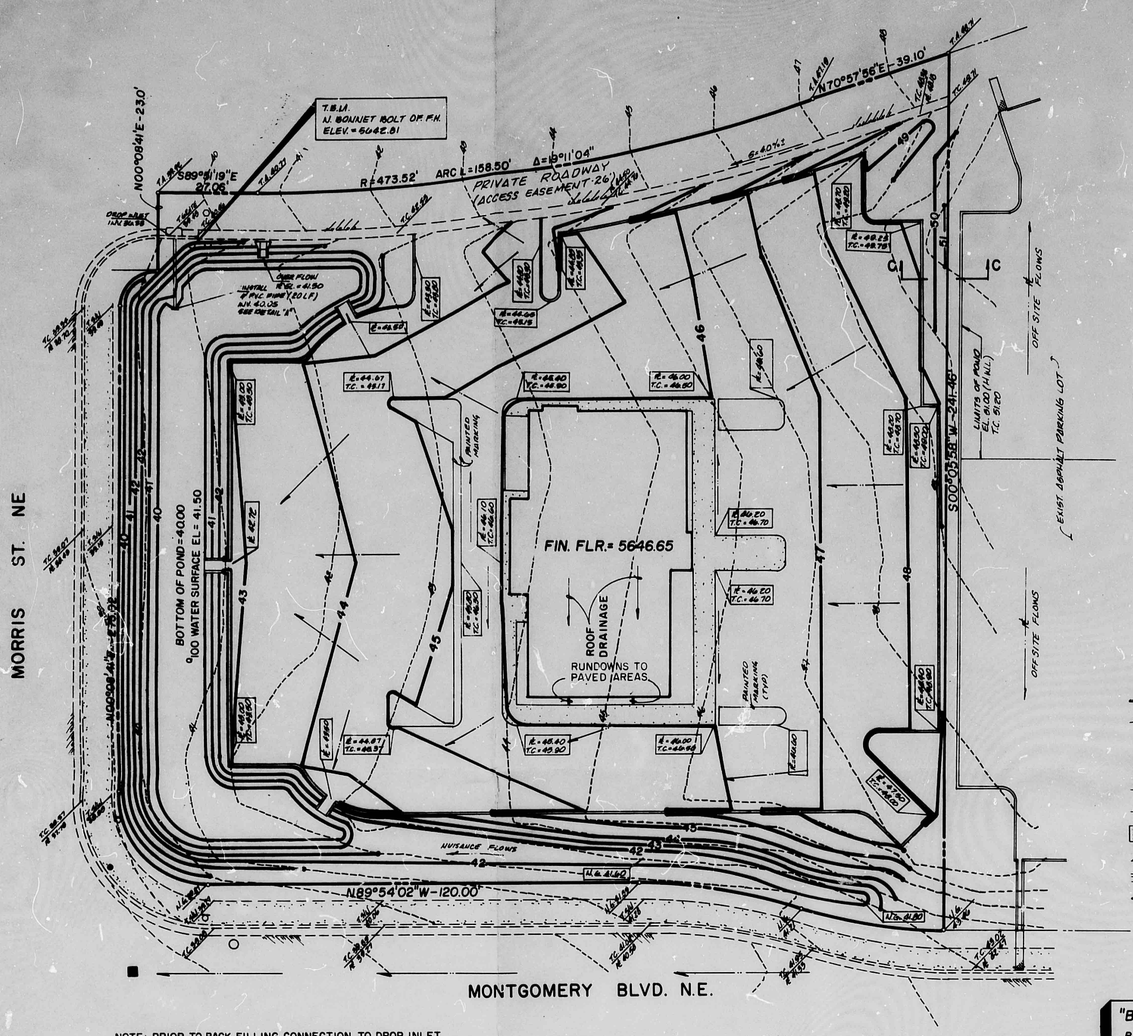
GRADING & DRAINAGE PLAN

FOR

MAZZIO'S PIZZA
LOT 9
MONTGOMERY BUSINESS PARK

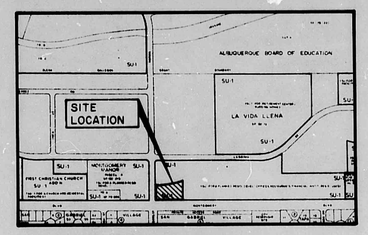
CITY MAP NO. F-21

ALBUQUERQUE, NEW MEXICO



SCALE: 1"=20'

NOTE: PRIOR TO BACK FILLING CONNECTION TO DROP INLET CONTRACTOR SHALL NOTIFY CITY OF ALBUQ. HYDROLOGY SECTION INSPECTOR FOR INSPECTION OF CONNECTION



LOCATION MAP NO. F-21

FLOODWAY MAP NO. 18

LEGEND

—41—	FINISHED CONTOUR
- - -41- - -	EXISTING CONTOUR
F.41.23 TC 4173	FINISHED SPOT ELEV.
T.S. 41.54	EXIST. SPOT ELEV.
	FLOW LINE
	EXIST. PAVEMENT
	CONCRETE
	EXIST. BUILDING
	EXIST. CURB & GUTTER
	PROPERTY LINE
T.C.	TOP OF CURB
T.A.	TOP OF ASPHALT

"BENCH MARK"
B.M. F21-11
60 PENNEY NAIL IN POWER POLE # NE-74
ELEV.=5669.856

EXISTING CONDITIONS

UNIMPROVED LAND WITH HYDROLOGICAL SOILS "B", FROM S.C.S. BERNALILLO COUNTY, PLATE 31.

TOTAL AREA IN ACRES = 1.0655

C = 0.34 FROM PLATE 22.2 C-1

SIX HOUR RAINFALL VOLUME-100 YEAR FREQUENCY = 2.5" FROM PLATE 22.2 D-2

I = 5.28 FROM PLATE 22.2 D-2

Q = (C) X (I) X (A)
Q = 0.34 X 5.28 X 1.0655
Q = 1.91 C.F.S.

DEVELOPED CONDITIONS

PERCENT IMPERVIOUS = 85%

C = 0.86 FROM PLATE 22.2 C-1

I = 5.28 FROM PLATE 22.2 D-1

A = 1.0655 ACRES

Q = (C) X (I) X (A)
Q = 0.86 X 5.28 X 1.0655
Q = 4.34 C.F.S.

TITAL VOLUME OF RUNOFF

C = 92(85% IMPERVIOUS) FROM PLATE 22.2 C-2

DIRECT RUNOFF = 1.7"

$V = \frac{Q}{12} \times AREA$

V = 6,575.2 C.F.

$T = \frac{2 \times V}{Qp}$

T = 50.50 MINUTES

REQUIRED DETENTION VOLUME

$V = \frac{(10 \times 60)3.84}{2} + \frac{(50.50-10)60 \times 3.84}{2} =$

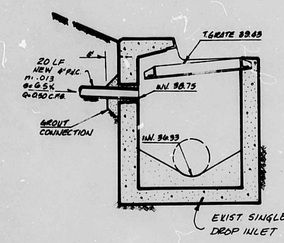
V = 5,817.6 C.F.

POND VOLUME

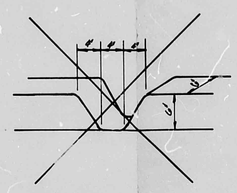
V = 6,510 C.F. (PLANIMITERED)

NOTES:

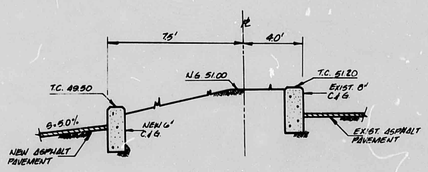
1. CONTRACTOR SHALL PLAN HIS OPERATION TO MINIMIZE EROSION DURING THE CONSTRUCTION PHASE INCLUDING SEDIMENT ERODED FROM SITE.
2. THE ENGINEER WILL SUBMIT TO THE CITY OF ALBUQUERQUE, HYDROLOGY DEPT, A STATEMENT OF PROJECT COMPLETION WITH REFERENCE TO GENERAL COMPLIANCE WITH INFORMATION AND CRITERIA SET FORTH HEREIN.



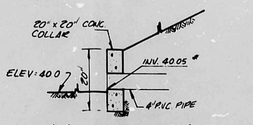
DETAIL "A"



DETAIL "B"

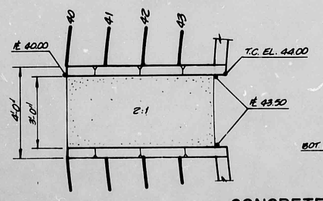


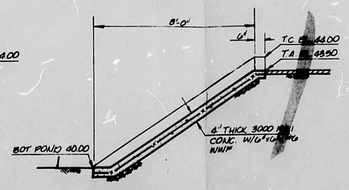
SECTION C-C



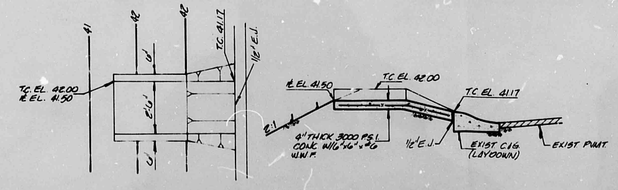
* (SET 0.05 ABOVE BOTTOM OF POND TO CONTAIN NUISANCE FLOWS)

DETAIL AT PIPE INLET

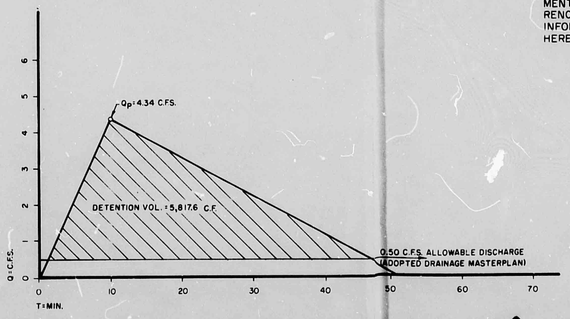




CONCRETE RUNDOWN DETAIL



CONCRETE OVERFLOW DETAIL



HYDROGRAPH FOR SITE

SANTIAGO ROMERO, JR. REGISTERED PROFESSIONAL ENGINEER

RESUBMITTAL: Santiago Romero Jr. 10/29/85
Santiago Romero Jr. 11/13/85

RECEIVED NOV 20 1985 HYDROLOGY SECTION

F21/D37 J

S R Jr. and Assoc. Inc.
ENGINEERING • SURVEYING
SANTIAGO ROMERO, JR. and ASSOC., Inc.
La Charmisa Compound
3828 12th St. N.W. Suite 1
Albuquerque, New Mexico 87107
ph. (505) 345-2733