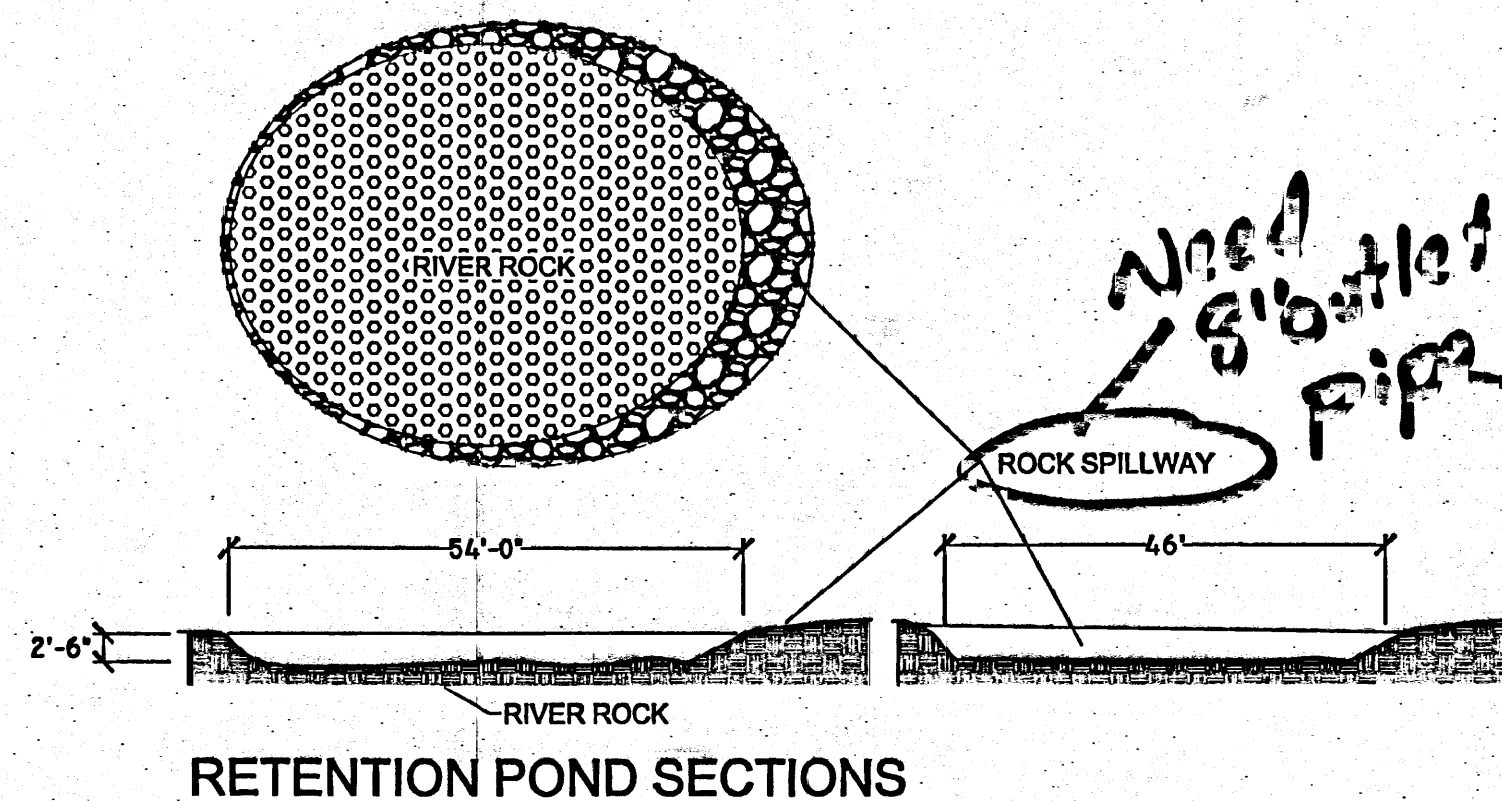


# GRADING PLAN

SCALE: 1"=30'-0"

NOTE:  
FF 00.0' = +5100.00' AMSL

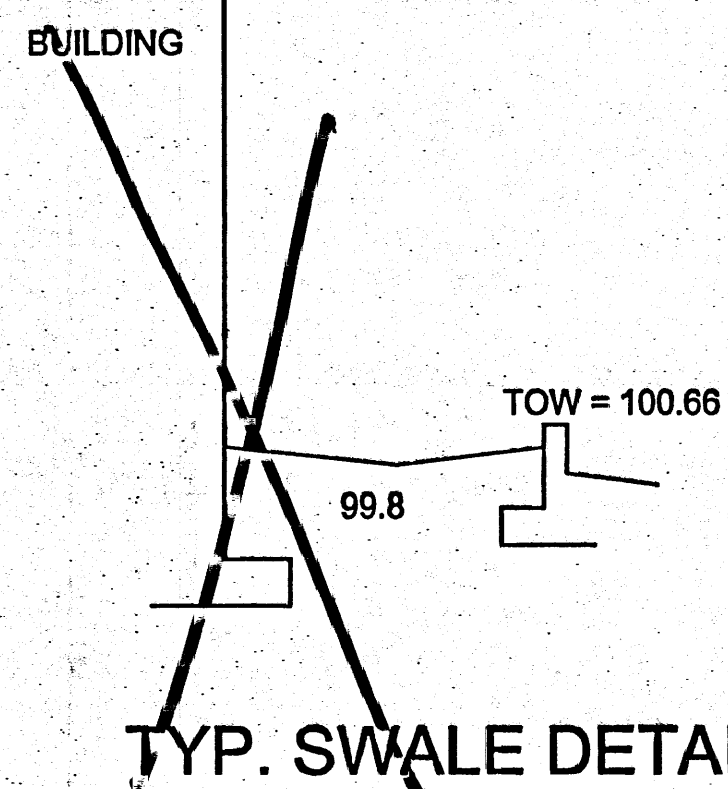


## RETENTION POND SECTIONS

SCALE: 1" = 20'-0"

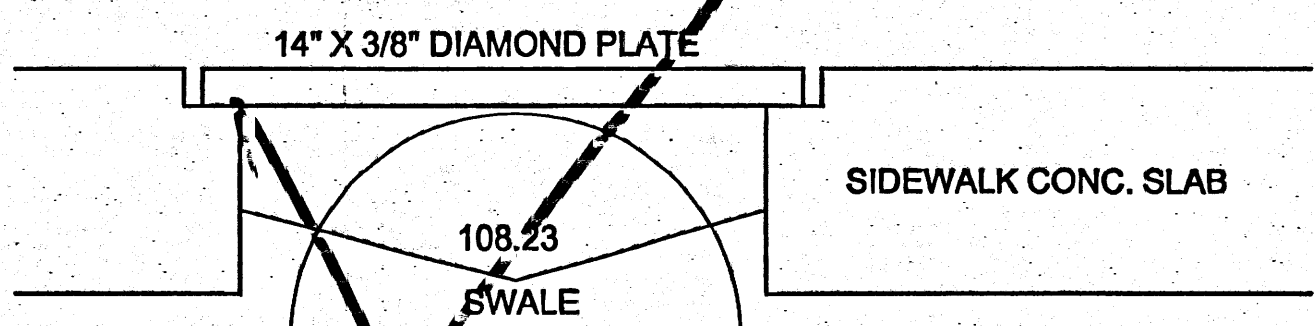
DRAINAGE TO RETENTION POND CALCULATIONS:  
AREA OF STATE OWNED PROPERTY = 8400 SF = 0.21 ACRES  
AREA IN CONSTRUCTION SITE TO DRAIN INTO RETENTION POND = 0.2507 ACRES  
TOTAL AREA INTO RETENTION BASIN = 0.4608 ACRES  
 $E = 0.66 (0) - 0.92 (0) + 1.29 (47) + 5.02 (0) = 0.6049 \text{ IN.}$   
 $V100 - 350 = 0.6049 (46) / 12 = .0232 \text{ AC.-FT./ SEC.}$   
 $X 43560 = 1010 \text{ CU. FT.}$   
VOLUME OF POND:  $(80' \times 95') / 2 (1.5) \times (0.75) = 4275 \text{ CU. FT.} > 1010 \text{ CU. FT.}$

NEED  
HYDRO POND  
CALCS



## TYP. SWALE DETAIL

SCALE: 3/16" = 1'-0"



## SIDEWALK SECTION W/DIAMOND PLATE

SCALE: NTS  
SEE COA DRWG. # 2236

### GENERAL NOTES

- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
- ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THEREOF, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WEETING THE SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.

### GRADING/DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING ATRISCO BUSINESS PARK LOT 1 ARE CONTAINED HEREON:

- VICINITY MAP
- DRAINAGE CALCULATIONS

### ATRISCO BUSINESS PARK, UNIT 1

BUILDING AREA = 0.41 ACRES (18,066SF)  
LANDSCAPE AREA = 0.30 ACRES (13,150SF)  
PARKING/ASPHALT AREA = 1.55 ACRES (67,544SF)  
TOTAL SITE = 2.27 ACRES (98,760SF)

PRECIPITATION: 350 = 2.35 IN.  
100 = 0.75 IN.  
10DA = 3.95 IN.

### EXISTING CONDITIONS:

TREATMENT A 0.06 AC.  
TREATMENT B 0.06 AC.  
TREATMENT C 0.06 AC.  
TREATMENT D 0.06 AC.

### PROPOSED CONDITIONS:

0.06 AC.  
0.31 AC.  
0.06 AC.  
1.96 AC.

### EXCESS PRECIPITATION:

TREATMENT A 0.53 IN.  
TREATMENT B 0.78 IN.  
TREATMENT C 1.13 IN.  
TREATMENT D 2.42 IN.

### PEAK DISCHARGE:

CFS/AC 0.56  
CFS/AC 2.28  
CFS/AC 3.14  
CFS/AC 4.07

### EXISTING EXCESS PRECIPITATION:

WEIGHTED E =  $(0.53 \times 0) + (0.78 \times 1.78) + (1.13 \times 0) + (2.42 \times 1.22) = 1.034 \text{ IN.}$   
 $V100 = 4.04 (0.612) = 8.517 \text{ AC.FT.}$

### EXISTING DISCHARGE:

WEIGHTED E =  $0.61 (0.53) = 0.4 \text{ CFS}$   
 $V100 = 4.04 (0.612) = 0.05 \text{ AC.FT.}$

### PROPOSED PEAK DISCHARGE

$V100 = 0.61 (2.28) + 0 + 4.22 (4.77) = 2.39 \text{ CFS}$

### BENCHMARK:

PROJECT BENCHMARK OF 5100.26 LOCATED ON CURB @ SOUTHWEST CORNER OF PROPERTY

### EROSION CONTROL MEASURES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION, HE/SHE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE TAKEN:  
ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.  
ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
- AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 2.27 ACRES AND IS LOCATED EAST OF AIRPORT ST. THE SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE.

### PROPOSED CONDITIONS

PROJECT TO DRAIN CONTROL FLOW DISCHARGE WEST TO AIRPORT DR. DISCHARGE GOES TO CITY STORM DRAINS AND AMAFCA STORM DRAINS, LOCATED SOUTH OF SUBJECT PROPERTY ON EAST SIDE OF AIRPORT DR.

### NO OFFSITE FLOWS

### NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY
- ALL WORK DETAILED ON THE SE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATION SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

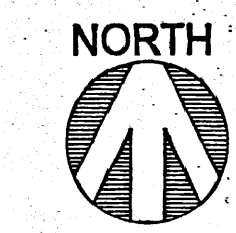
APPROVAL	NAME	DATE
INSPECTOR		

KICC  
DESIGN COLLABORATIVE  
THE ART AND SCIENCE OF MODERN BUILDINGS

HLB  
HAROLD L. BENNETT  
P.E.

JOB TITLE:  
ALB-VAULT  
REVISION:  
FILE NAME  
JOB NO.  
DATE  
SHEET TITLE:  
GRADING PLAN  
DRAWN BY  
RI

C-1



0 5 10 20  
feet  
scale 1"=10'