

VICINITY MAP
ZONE ATLAS PAGE B-10-Z

DRAINAGE MANAGEMENT PLAN

SITE LOCATION AND BACKGROUND

THE PROPOSED PROJECT IS THE NEXT PHASE OF THE VENTANA RANCH PARK. THE PARK IS LOCATED NORTH OF THE NORTHEAST CORNER OF UNIVERSE BLVD AND PARADISE BLVD, NORTH OF THE EXISTING WALGREENS. THIS PHASE (EAST OF THE EXISTING PARK) INCLUDES ADDITIONAL RECREATION FIELDS, A PARKING LOT, TENNIS COURTS, AND RELATED AMENITIES. THE ADDITIONAL PARK AREA IS APPROXIMATELY 7 ACRES. THE EXISTING LEGAL DESCRIPTION OF THE SITE IS VENTANA RANCH, TRACTS F-1, F-2, AND F-3. DRAINAGE ANALYSIS ADHERES TO THE APPROVED DRAINAGE PLAN FROM THE EXISTING PARK (B10D003) AND WAS PERFORMED PER SECTION 22.2 - HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL VOLUME 2, DESIGN CRITERIA. THE DESIGN STORM USED IN THE ANALYSIS WAS THE 100 YEAR, 6-HOUR STORM EVENT.

PORTIONS OF THE SITE ARE WITHIN THE FLOODPOOL OF AMAFCA'S LAS VENTANAS DAM. THE FILL FOR THE SITE WAS CONTEMPLATED WHEN THE DAM WAS DESIGNED AND WAS APPROVED BY THE OFFICE OF THE STATE ENGINEER IN THE ORIGINAL DAM DESIGN. A SUBSEQUENT SUBMITTAL REQUEST APPROVAL OF THIS SPECIFIC PHASE HAS BEEN SUBMITTED TO OSE FOR REVIEW AND APPROVAL.

THE CALCULATIONS PRESENTED ON THIS SHEET INCLUDE THE EXISTING PARK AND THE NEW PHASE OF THE PARK AND ARE FOR THE FULL BUILD-OUT OF THE SITE. HOWEVER, THE LAND TREATMENTS PRESENTED REFLECT THE CURRENT CONDITIONS OF THE PARK AS WELL AS THE NEW PHASE OF THE PARK.

EXISTING CONDITIONS

THE EXISTING SITE CONDITIONS OF THE NEW PHASE OF THE PARK CONSISTS OF SANDY SOIL, BASALT, AND SPARSE DESERT VEGETATION. THE SITE SLOPES TOWARDS THE EAST AT AN AVERAGE SLOPE OF APPROXIMATELY 1%.

PROPOSED CONDITIONS

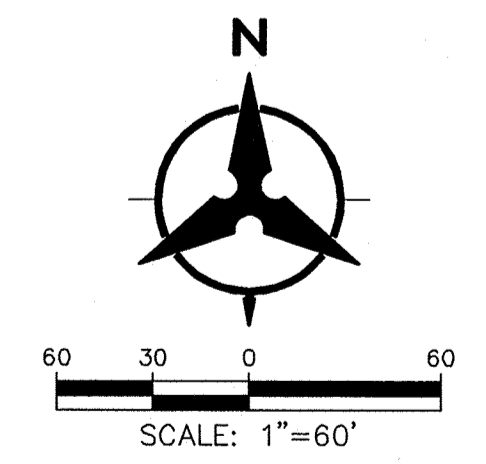
THE DRAINAGE FROM THE EXISTING AND THE PROPOSED BASINS SURFACE FLOW ACROSS THE SITE AND ULTIMATELY OUTFALL INTO THE VENTANA DAM POOL (MAXIMUM WATER SURFACE ELEVATION = 5403.60'). THE DRAINAGE FROM BASIN A (APPROXIMATELY 27.6 CFS) WILL DISCHARGE TO THE ARROYO LEADING TO THE DAM POOL. BASIN B (APPROXIMATELY 28.0 CFS) IS FULLY DEVELOPED AND WILL NOT CHANGE WITH THE PROPOSED PROJECT, DISCHARGES TO A CONCRETE RUNDOWN IN THE SOUTHEAST CORNER OF THE PARKING LOT. THE 12' WIDE CONCRETE RUNDOWN WAS DESIGNED WITH A PRIOR APPROVED DRAINAGE MANAGEMENT PLAN FOR THE PARK (B13D003) AND THE CHANGE IS FLOW IN NEGLIGIBLE FROM THE ORIGINAL DESIGN.

THE HISTORIC 100-YEAR FLOODPLAIN ZONE DEPTH FOR THE DAM POOL WAS DETERMINED TO HAVE A WATERSURFACE ELEVATION OF 5403.6 FEET AS PREVIOUSLY MENTIONED. AS SHOWN ON THE PLAN, THIS FLOODPLAIN ELEVATION WILL COVER APPROXIMATELY HALF THE NEW PHASE BELOW THE FLOODPLAIN ELEVATION. HOWEVER, THE ADMINISTRATION BUILDING'S FLOOR ELEVATION ON THE WEST SIDE OF THE NEW PHASE OF THE PARK IS 5404.6, ONE FOOT ABOVE THE FLOODPLAIN ELEVATION.

CONCLUSION

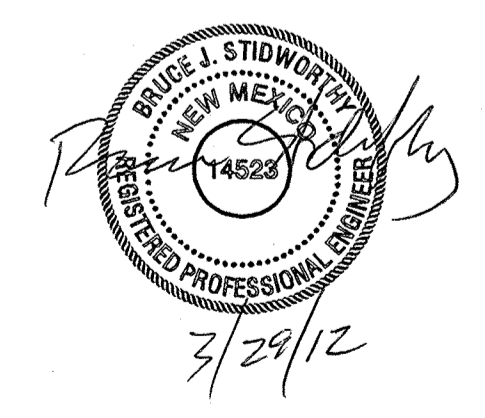
THE PROPOSED CONDITIONS PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 81 CFS, AS SHOWN IN THE "PROPOSED CONDITIONS BASIN DATA TABLE" ON THIS SHEET. THE DRAINAGE MANAGEMENT PLAN DEMONSTRATES THE PROPOSED DRAINAGE CONCEPTS. THE IMPLEMENTATION OF THESE CONCEPTS WOULD RESULT IN THE SAFE PASSAGE OF THE 100 YEAR STORM EVENT. THE SLOPES OF THE FIELDS DO NOT EXCEED THE LIMITS PROVIDED BY THE CITY MUNICIPAL DEPARTMENT AND THE ADMINISTRATION BUILDING IS OUT OF THE 100-YEAR FLOODPLAIN ZONE (5403.6 FEET).

VENTANA RANCH COMMUNITY PARK - RECREATION FIELDS									
Proposed Conditions Basin Data Table									
This table is based on the DPM Section 22.2, Zone:1									
BASIN ID	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				100 Year Storm Event		
			A	B	C	D	Q(100) (cfs/ac.)	Q(100) (cfs)	V(100)860 (CF)
A	458364.20	10.52	0.0%	65.0%	15.0%	20.0%	2.62	27.61	37357
B	328708.36	7.55	0.0%	10.0%	20.0%	70.0%	3.84	28.95	45033
C	295144.91	6.78	0.0%	20.0%	20.0%	60.0%	3.60	24.41	37237
Total	1082217.47	24.84	0.0%	36.0%	17.9%	46.1%		80.96	119627



LEGEND

- DRAINAGE BASIN BOUNDARY
- - - 100 YEAR FLOODPLAIN ELEVATION
- BASIN A
- Qout=1.0 cfs
- BASIN ID
- BASIN PEAK FLOWRATE
- DIRECTION OF FLOW






VENTANA RANCH COMMUNITY PARK

OWNER
CITY OF ALBUQUERQUE

PROJECT TEAM
PLANNING/LANDSCAPE ARCHITECTURE
CONSENSUS PLANNING
ENGINEERING
BOHANNAN HUSTON

MASTER DEVELOPMENT PLAN
DRAINAGE MANAGEMENT PLAN



SHEET 5 OF 5
MARCH, 2012

KEYED NOTES

1. NEW 2" SANITARY SEWER FORCE MAIN.
2. NEW SANITARY SEWER GRINDER PUMP STATION.
3. EXISTING IRRIGATION METER VAULT.
4. EXISTING DOMESTIC WATER METER.
5. EXISTING DOMESTIC WATER LINE.
6. NEW DOMESTIC WATER SERVICE TO BUILDING.
7. EXISTING 2" SANITARY SEWER FORCE MAIN.

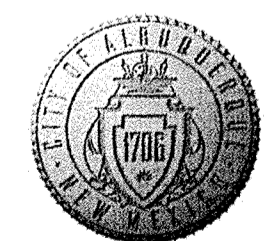
ENLARGED EXIST UTILITY PLAN
1"=20'

SEE ENLARGED
EXIST UTILITY PLAN
THIS SHEET

NOTE: ~ 100 YR; 24 HR
WATER SURFACE=5403.60

RECEIVED
MAR 23 2012
HYDROLOGY
SECTION

BRUCE J. STODOLNY
NEW MEXICO
14526
REGISTERED PROFESSIONAL ENGINEER
3/29/12

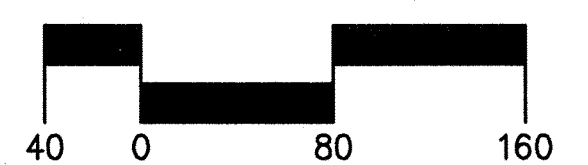


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GRADING & UTILITY PLAN



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