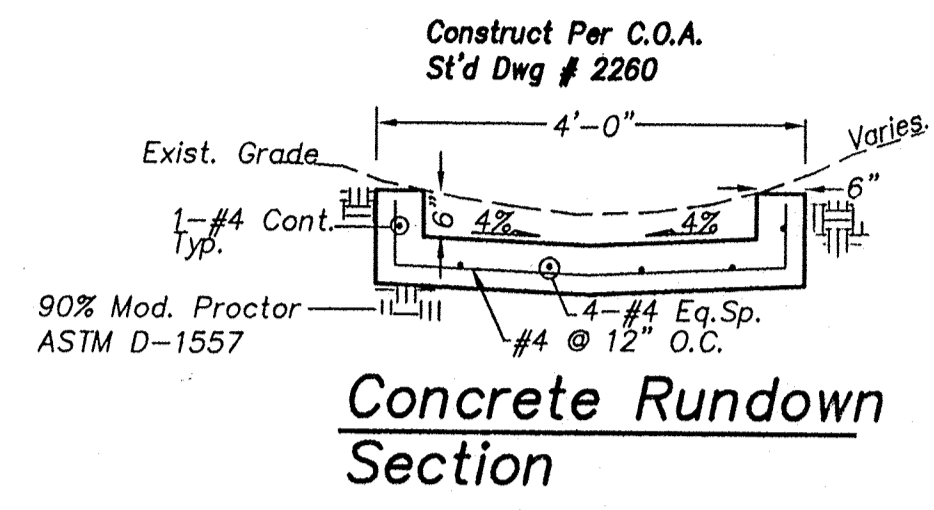


FIRM MAP PANEL # 137 F

SCALE: 1"=500'



Concrete RUNDOWN Section

### GRADING & DRAINAGE PLAN

THE PROPOSED COMMERCIAL WAREHOUSE PROJECT IS LOCATED IN THE NORTH ALBUQ. ACRES AREA OF ALBUQUERQUE ON CORONADO AVE. IMMEDIATELY EAST OF INTERSTATE 25, NORTH OF SAN ANTONIO DR. THE GRADING AND DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR SITE DEVEL.PLAN & BUILDING PERMIT. THE PLAN SHOWS:

- EXISTING CONTOURS, EXISTING BUILDING AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND IMPROVEMENTS.
- PROPOSED IMPROVEMENT: 2625 SF STORAGE SHED BUILDING, CONCRETE APRON / GRAVEL PARKING AREA, NEW GRADE ELEVATIONS, AND LANDSCAPING.
- CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
- QUANTIFICATION OF DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS WHICH CONTRIBUTE TO THE EXISTING FLOWS.

PRESENTLY, THE SITE IS DEVELOPED WITH AN EXISTING BUILDING, AND ASPHALT PARKING AREA IN ADDITION TO GRAVEL SURFACING. THE SITE IS BOUNDED BY DEVELOPED COMMERCIAL ZONED FACILITIES. THE SITE FALLS APPROXIMATELY 3% FROM EAST TO WEST.

CORONADO AVE. IS A MINOR LOCAL STREET WITH 2 LANES, WITH CURB, GUTTER AND ATTACHED SIDEWALKS ALONG THE FRONTAGE. SITE RUNOFF WILL BE ALLOWED TO EITHER DRAIN THROUGH THE SITE, OR PONDED IN DEPRESSED LANDSCAPE AREAS. THE SITE HAS HISTORICALLY DRAINED TO THE NORTHWEST VIA OVERLAND SHEET FLOW.

HISTORICAL DOWNSTREAM OUTFALL LOCATIONS WILL REMAIN UNCHANGED WITH DEVELOPMENT. FREE DISCHARGE OF SITE RUNOFF IS ACCEPTABLE SINCE DOWNSTREAM CAPACITY EXISTS WITH THE MINIMAL INCREASE DUE TO DEVELOPMENT. A PORTION OF SITE RUNOFF IS ROUTED THROUGH PROPOSED LANDSCAPING.

### CALCULATIONS

**DESIGN CRITERIA**  
 HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE, ADOPTED BY THE COUNTY OF BERNALILLO  
 DISCHARGE RATE:  $Q = CPEAK \times AREA$  Peak Discharge Rates For Small Watersheds  
 VOLUMETRIC DISCHARGE:  $VOLUME = E_{weighted} \times AREA$   
 $P100 = 2.60$  Inches, Zone 3 Time of Concentration,  $TC = 10$  Minutes  
 DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

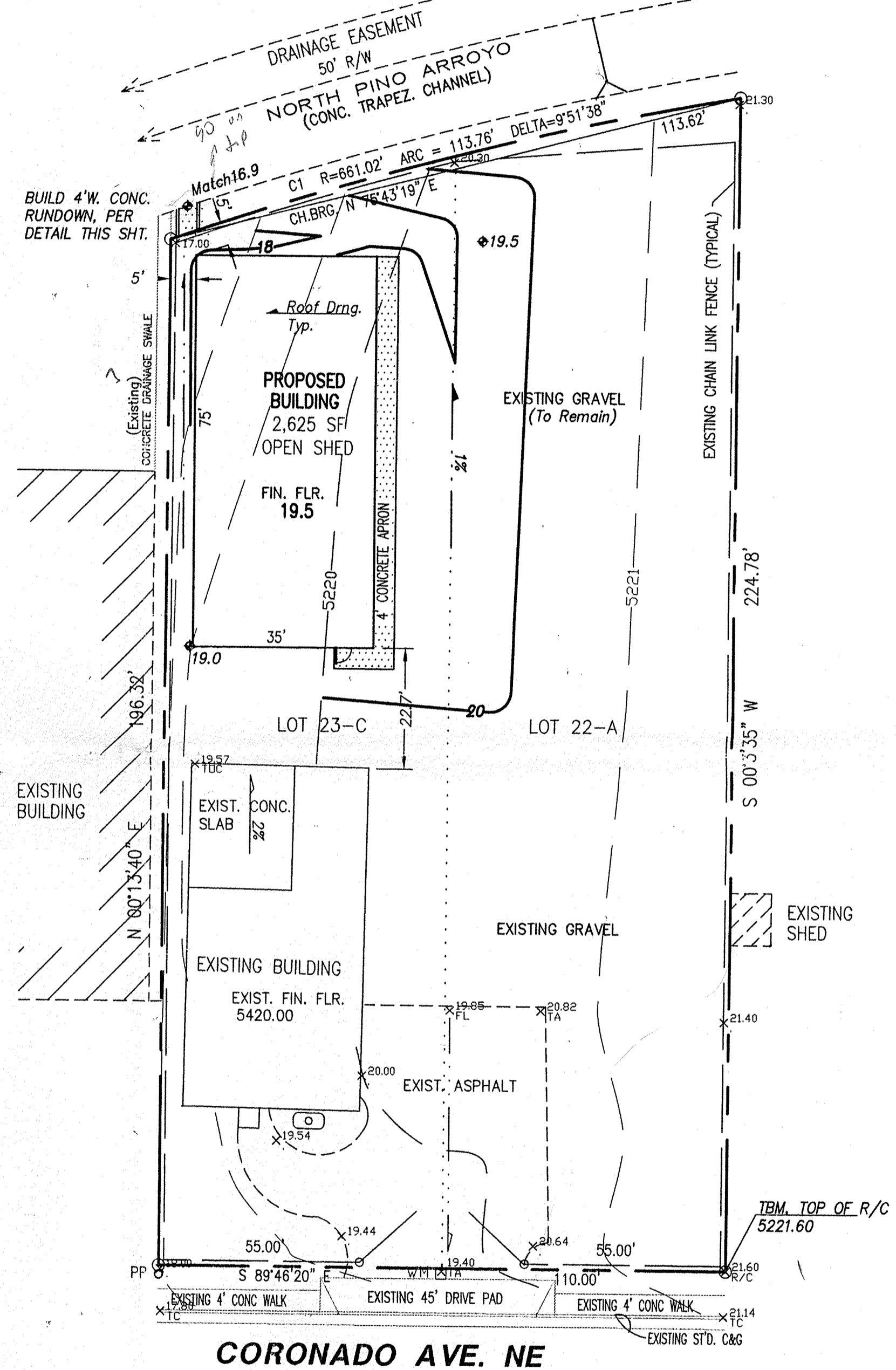
**HISTORIC CONDITIONS** (PRIOR TO DEVELOPMENT OF THE SITE)  
 LOT AREA = 0.53 ACRES, WHERE EXCESS PRECIP. 'A' = 0.66 in. [0.19]  
 PEAK DISCHARGE,  $Q100 = 0.99$  CFS [0.3], WHERE UNIT PEAK DISCHARGE 'A' = 1.87 CFS/AC. [0.58]  
 THEREFORE:  $VOLUME 100 = 1270$  CF [365]

**DEVELOPED CONDITIONS**  
 DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

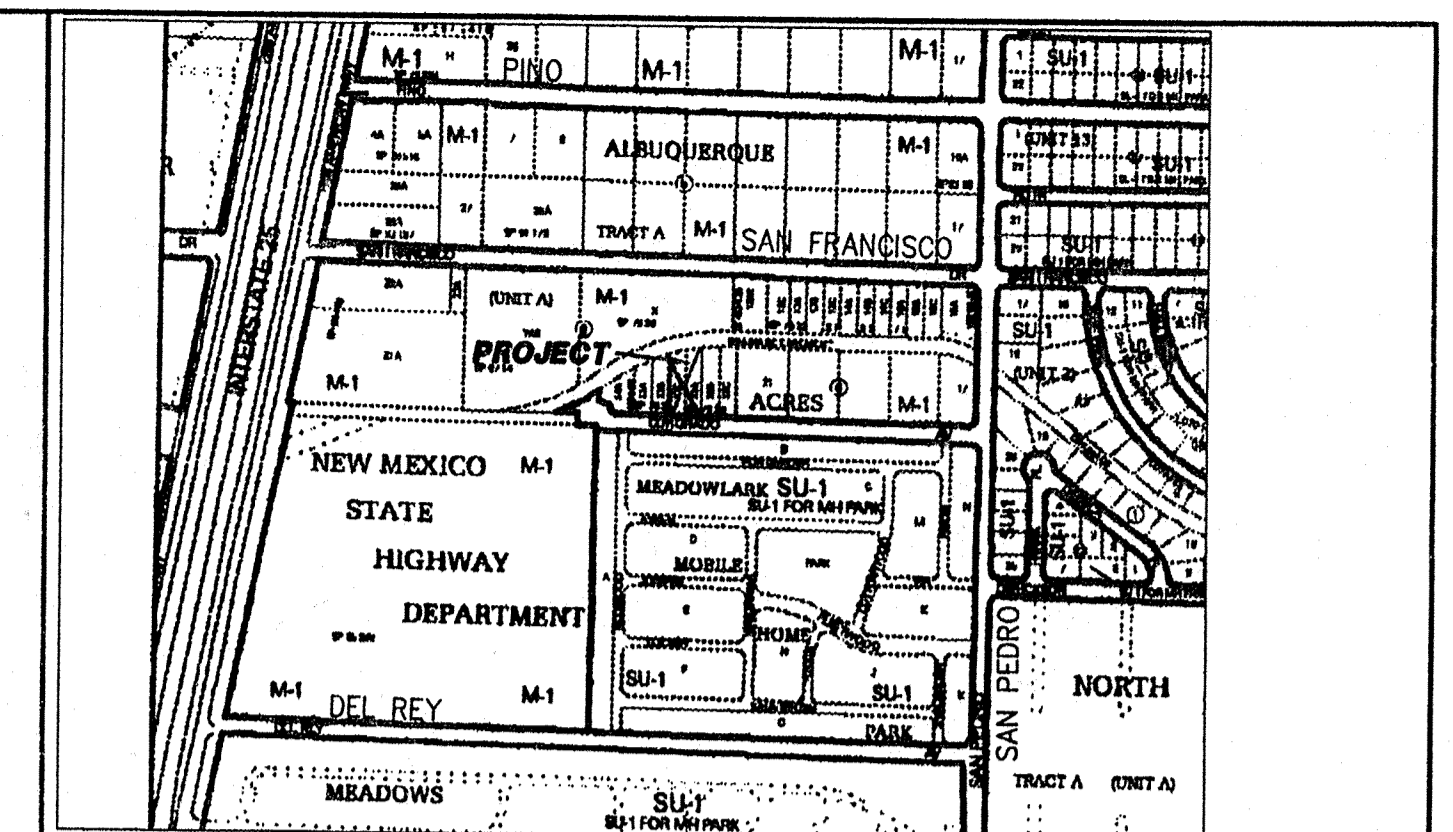
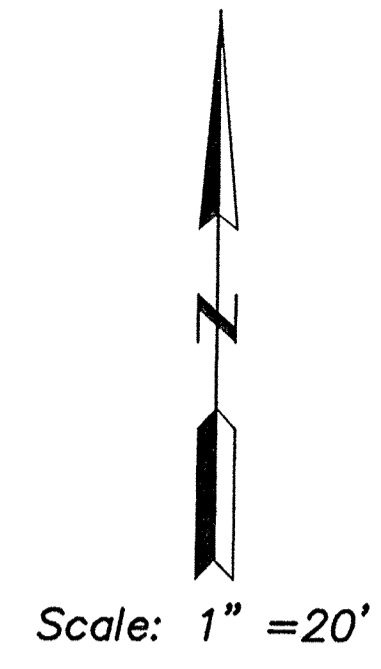
AREA	LAND TREATM'T	$Q_{Peak}$	$E$
UNDEVELOPED	A	1.87[0.58]	0.66[0.19]
LANDSCAPING	B	2.60[1.19]	0.92[0.36]
COMPACTED SOIL & Slopes >	C	3.42[2.00]	1.23[0.62]
ROOF - PAVEMENT	D	5.02[3.39]	2.36[1.50]
	0.53 Ac.		

THEREFORE:  $E_{weighted} = 1.6 \ln[0.85]$  &  
 $Q100 = 2.0$  CFS VOLUME 100 = 3076 CF  
 $Q10 = 1.25$  CFS VOLUME 10 = 1635 CF

**DOWNSTREAM ANALYSIS**  
 THE SITE HISTORICALLY, AND AS DEVELOPED WILL OUTFALL RUN-OFF TO THE NORTHWEST.  
 FREE DISCHARGE IS ACCEPTABLE SINCE THE DOWNSTREAM BASIN HAS CAPACITY - EXISTING CONCRETE-LINED CHANNEL, N. PINO  
 EXISTING PARKING AREA WILL CONTINUE TO DRAIN TO DRIVEPAD/CORONADO AVE.  
 A PORTION OF DEVELOPED RUNOFF WILL BE ROUTED TO AND/OR THROUGH REQUIRED LANDSCAPING.



CORONADO AVE. NE



VICINITY MAP ZONE D-18 Scale: 1" = 550'

### NOTES

- ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION W/ UPDATES.
- AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL. ASPHALT PARKING AREA SHALL DRAIN DIRECTLY TO EXISTING CURB CUT.
- LANDSCAPING IRRIGATION SYSTEM SHALL BE DRIP-TYPE. CONTRACTOR SHALL INSTALL SYSTEM PRIOR TO PLACEMENT OF PAVING.
- CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
- REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
- MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

### LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	- - - 10
NEW SPOT ELEVATION	◆ 24.0
NEW CONTOUR	— 12
NEW SWALE	— · — · —
DRAINAGE DIRECTION, EXISTING	— · — · —
NEW CONCRETE CURB (0.5' HEIGHT)	— — — —
NEW P.C.C., CONCRETE	▨
TOP OF CURB, EXISTING	TBC
FLOWLINE	FL
FACE OF CURB/FACE OF CURB	F-F
EXISTING TOP OF ASPHALT CURB	TAC
EXIST. TOP OF ASPHALT	TA
EXIST. GROUND	G
EXIST. EDGE OF CONCRETE	EC

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

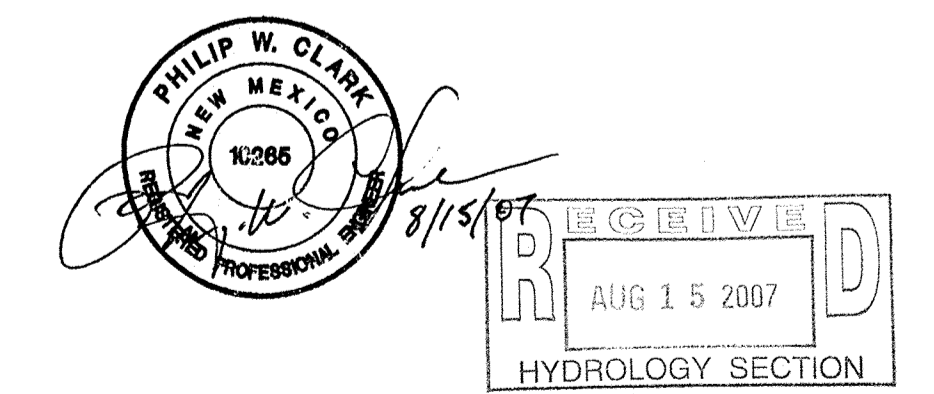
*[Signature]*  
 PHILIP W. CLARK NMPE #10285

### PROJECT DATA

**LEGAL DESCRIPTION (Existing Platting)**  
 LOTS 22-A + 23-C, BLOCK 6, TR. A, UNIT A  
 NORTH ALBUQ. ACRES, Albuquerque, Bernalillo County, New Mexico

**PROJECT BENCHMARK**  
 ACS, NGVD 29 DATUM, TOP OF ALUM CAP AT THE SW BRIDGE ABUTMENT, "18-D18", SAN PEDRO/NORTH PINO CHANNEL...ELEV. 5242.88

**TOPOGRAPHIC DESIGN SURVEY**  
 Compiled by Clark Consulting Engineers from Design Survey Performed BY TERRAMETRICS (PHIL TURNER, PS), 8/07



**Clark Consulting Engineers**  
 19 Ryan Road Edgewood, New Mexico 87015  
 Tel: (505) 281-2444 Fax: (505) 281-2444

DATE	REVISION	LOT 22-A + 23-C, BLOCK 6, TR. A, UNIT A NORTH ALBUQ. ACRES
		INTERWEST SAFETY SUPPLY 5821 CORONADO AVENUE, NE
		<b>Grading &amp; Drainage Plan</b>

DESIGNED BY: PWC DRAWN BY: CCE JOB # INTER...  
 CHECKED BY: PWC DATE: 8/10/07 FILE # G/D

**C1 OF 1**

