

FIRM MAP PANEL # 358 D

# GRADING & DRAINAGE PLAN

THE PROPOSED RESTAURANT DRIVE-UP FACILITY PROJECT IS LOCATED IN THE NORTHEAST AREA OF ALBUQUERQUE ON CENTRAL AVENUE 2 BLOCKS WEST OF EUBANK AVENUE. 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 BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND

2. PROPOSED IMPROVEMENT: 2200 SF RESTAURANT BUILDING, ASPHALT, DRIVE/PARKING, CONCRETE FLAT WORK, NEW GRADE ELEVATIONS, REFUSE LOCATION, AND LANDSCAPING. & Lot Line Adjustment 3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.

4. QUANTIFICATION OF DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS WHICH CONTRIBUTE TO THE

PRESENTLY, THE SITE IS A VACATED FORMER FAST-FOOD RESTAURANT WITHOUT VEGETATION. THE SITE IS BOUNDED BY DEVELOPED COMMERCIALLY ZONED FACILITIES. THE SITE FALLS APPROXIMATELY 1% FROM SOUTHEAST TO NORTHWEST.

CONCHAS ST. IS A LOCAL STREET WITH 2 LANES, WITH CURB, GUTTER AND ATTACHED SIDEWALKS. 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 AND VIA THE EXISTING DRIVES.

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

# CALCULATIONS

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=QPEAK x AREA.. "Peak Discharge Rates For Small Watersheds" VOLUMETRIC DISCHARGE: VOLUME = EWeighted x 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

## EXISTING CONDITIONS

LOT AREA = 0.60 ACRES, WHERE EXCESS PRECIP. 'D' =2.36 In. [1.5], PEAK DISCHARGE, Q100 = 3 CFS [2], WHERE UNIT PEAK DISCHARGE 'D' = 5.02 CFS/AC. [3.4] THEREFORE: VOLUME 100 = 5140 CF [3267]

## DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

LAND TREATM'T Q Peak **UNDEVELOPED** 1.87[0.58] LANDSCAPING -0.92 0.36 COMPACTED SOIL & Slopes >.. 0.08 Ac. ROOF - PAVEMENT THEREFORE: E<sub>Weiahted</sub> = 2.00 In.[1.21] & Q100 = 2.7 CFS**VOLUME 100 = 4356 CF** 

### Q10 = 1.7 CFSDOWNSTREAM ANALYSIS

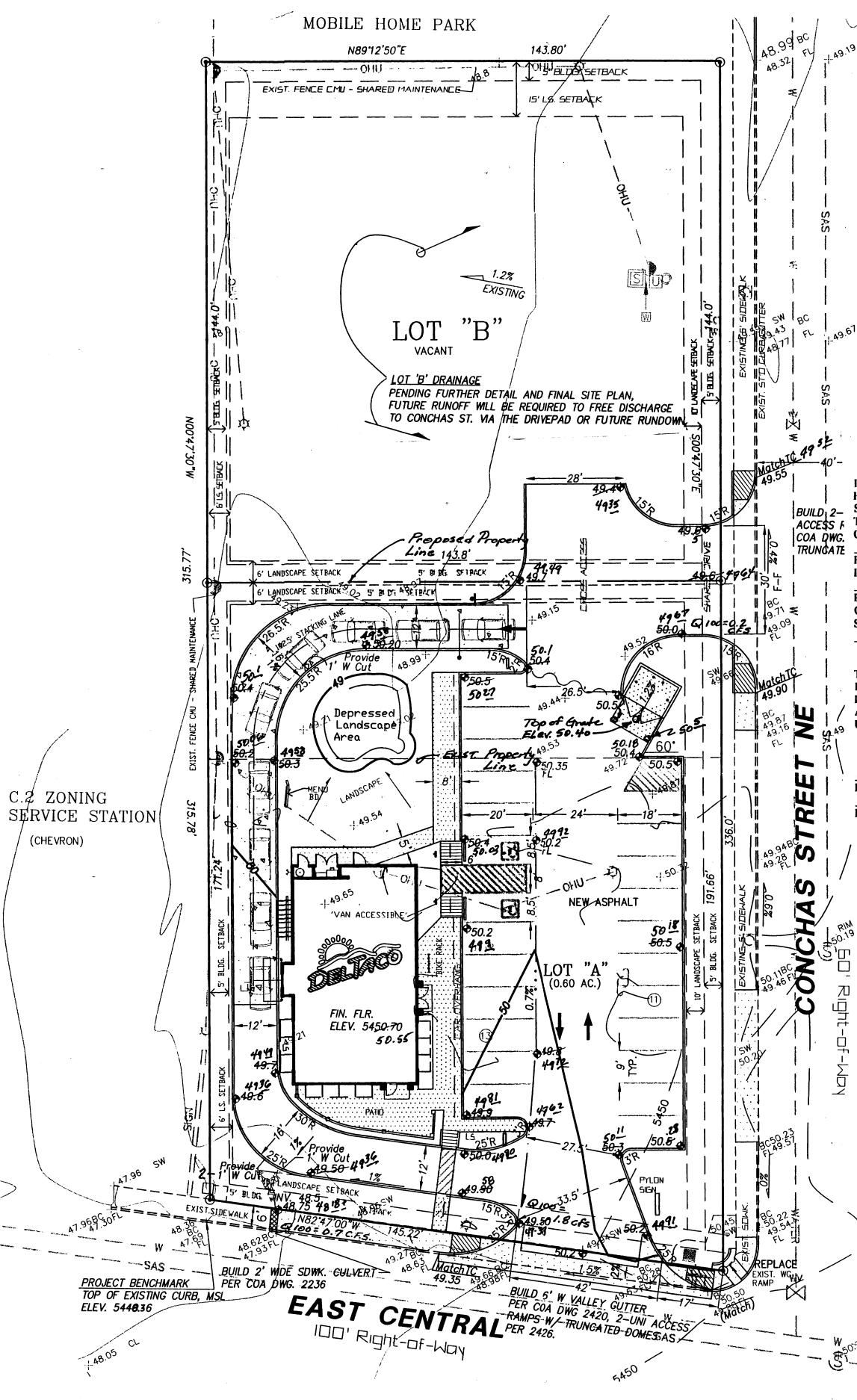
THE SITE HISTORICALLY, AND AS DEVELOPED WILL OUTFALL RUN-OFF TO DRIVECUTS

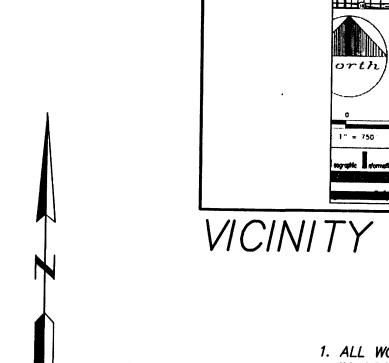
VOLUME 10 = 2614 CF

ON BOTH CENTRAL AVE. AND CONCHAS ST.

FREE DISCHARGE IS ACCEPTABLE SINCE THE DOWNSTREAM BASIN HAS CAPACITY. THE PROJECT TIME TO PEAK IS MUCH LESS THAN OVERALL BASIN TIME TO PEAK & INCREASE DUE TO DEVELOPMENT IS MINIMAL. (ACTUAL DECREASE FROM THE EXISTING. (.3±CFS)

A PORTION OF DEVELOPED RUNOFF WILL BE ROUTED TO AND/OR THROUGH REQUIRED LANDSCAPING.





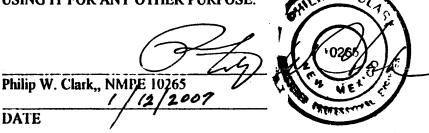
Scale: 1'' = 20'

DRAINAGE CERTIFICATION

I, Philip W. Clark, NMPE 10265, OF Clark Consulting Engineers, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF ACCESS & THE APPROVED PLAN DATED 8/22/06 THE RECORD INFORMATION EDITED ONTO THE COA DWG. ORIGINAL DESIGN DOCUMENT HAS TRUNGATE SW Surveys, Ltd. NMPS

> 1/8/07 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA 6. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT SUBMITTED IN SUPPORT Final Certif. of Occupancy

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT USING IT FOR ANY OTHER PURPOSE



## NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED. EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE ST'D. SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION, AND AMENDMENT #1.

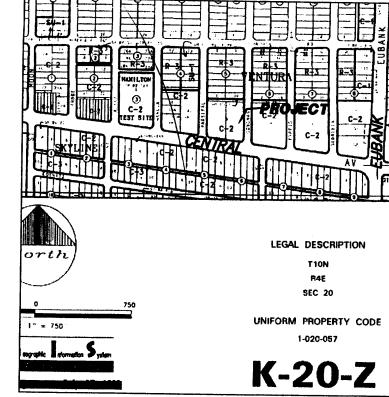
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT THE LINE LOCATING SERVICE, NM ONE CALL 260-1990, FOR LOCATION OF EXISTING UTILITIES. 4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE

5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE. 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HR. BASIS.

CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

APPROVAL NAME



# VICINITY MAP

1. 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.

Scale: 1" = 750'

2. 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

3. 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. 4. ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE

VEGETATION AND/OR GRAVEL. ASPHALT PARKING AREA SHALL DRAIN DIRECTLY TO NEW DRIVEWAYS. . LANDSCAPING IRRIGATION SYSTEM SHALL BE DRIP-TYPE. CONTRACTOR

SHALL INSTALL SYSTEM PRIOR TO PLACEMENT OF PAVING (SEE SHEET C-1).

ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION FOR 7. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.

8. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

9. Contractor Shall ensure Positive Drainage To Poly Drain in Apron of Refuse Enclosure, SEE Sheet C3, Site Utility Plan. | FGFND

EXIST. SPOT ELEVATION EXIST. CONTOUR \_\_\_\_10 \_\_\_ NEW SPOT ELEVATION **4** 24.0 NEW CONTOUR NEW SWALE DRAINAGE DIRECTION, EXISTING NEW CONCRETE CURB (0.5' HEIGHT) NEW P.C.C., CONCRETE TOP OF CURB, EXISTING FLOWLINE EXISTING POWER POLE

I, PHILIP W. CLARK, PROFESSIONAL ENGINEER, REGISTERED IN ACCORDANCE WITH THE LAWS IN THE STATE OF NEW MEXICO, GRADING AND DRAINAGE YEREBY CERTIFY THAT THE ROADWAY. GRADING AND STATE OF NEW MEXICO, GRADING AND DRAINAGE OF NEW MEXICO, GRADING AND D ACCORDANCE WITH THE LAWS IN THE STATE OF NEW MEXICO, DL.
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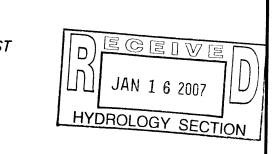
PROJECT DA

LEGAL DESCRIPTION (Existing Platting)

LOT(S) A & B, BLOCK 5, BUENA VENTURA ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

<u>PROJECT BENCHMARK</u> TOP OF EXISTING CURB AT THE PROJECTION OF PROJECT SOUTHWEST PROPERTY CORNER, MSL ELEVATION = 5448.36 (TIED FROM ACS 16-K20, LOCATED @ THE NNE CURB RETURN OF CENTRAL AND PARSIFAL ST.)

TOPOGRAPHIC DESIGN SURVEY COMPILED BY CLARK CONSULTING ENGINEERS FROM DESIGN SURVEY PERFORMED IN MAY 2006 by SOUTHWEST SURVEYS LLC



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



