

FIRM MAP PANEL 112 SCALE: 1"=500'

GRADING & DRAINAGE PLAN

SITE DATA: EXISTING BUILDING PAD 'E' IS CURRENTLY A GRAVEL/DIRT AREA GIRT BY CURB AND GUTTER WITHIN AN ESTABLISHED SHOPPING CENTER, HOMESTEAD HILLS. ZONED C-2, ADJACENT PROPERTY IS ALL DEVELOPED. TAYLOR RANCH DRIVE ALONG THE EAST FRONTAGE IS PAVED, WITH CURB/GUTTER AND SIDEWALK. IN ADDITION TO THE PROPOSED CONVENIENCE STORE, ADDITIONAL PEDESTRIAN CIRCULATION DEVICES, AND STRIPING IMPROVEMENTS WILL BE MADE CONNECTING TO THE STORE AND ADJACENT ESTABLISHMENTS.

EXISTING DRAINAGE CONDITIONS: HISTORIC RUN-OFF HAS ESSENTIALLY SHEET FLOWED ACROSS THE SITE. THE INITIAL PHASE OF THE CENTER WAS DEVELOPED IN 1990, AND ESTABLISHED THE OUTFALL TO HOMESTEAD CIRCLE VIA SWALES WITHIN THE PARKING LOT AISLES. REFERENCE COA DRAINAGE FILE D-11/D9 ON FILE WITH CITY HYDROLOGY, DATED 11/11/89 FOR DRAINAGE ANALYSIS WHICH PERMITS THE FREE DISCHARGE OF ALL SITE RUNOFF.

NOTE: NO OFF-SITE DRAINAGE IMPACTS THE SITE.

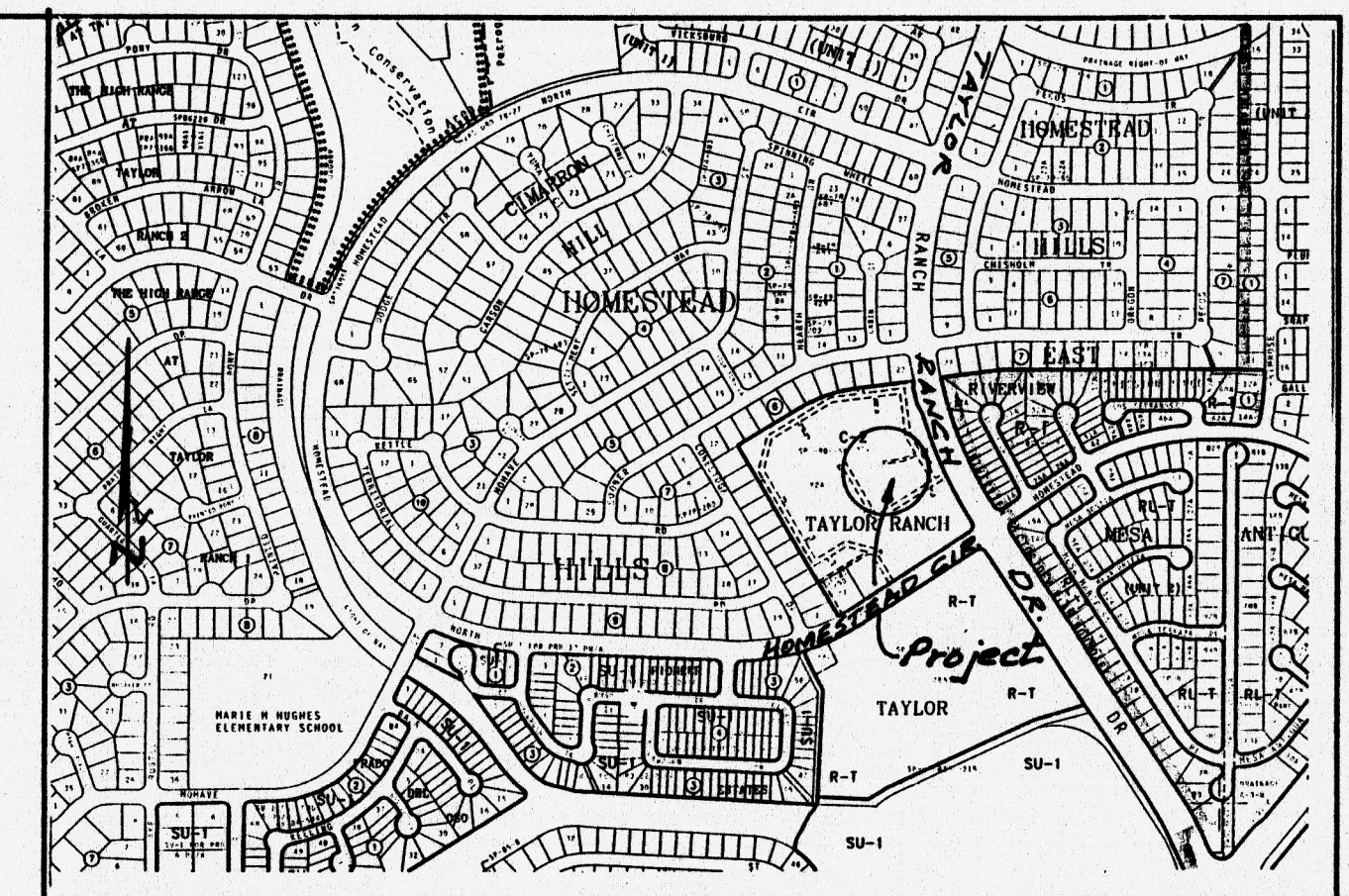
PROPOSED IMPROVEMENTS: CONSIST OF A 2843 S.F., SINGLE STORY COMMERCIAL BUILDING, ASPHALT PAVING, SIDEWALK, CURB, AND NATIVE VEGETATION LANDSCAPING AREAS. THE STORE WILL ALSO PROVIDE SELF-FUELING.

PROPOSED DRAINAGE CONDITIONS: DISCHARGE OF RUN-OFF THROUGH THE PROPOSED DRIVEPADS TO THE EXISTING SWALES LOCATED IN DRIVING AISLES WITH DIRECT SHOPPING CENTER OUTFALL TO HOMESTEAD CIRCLE NW.

LEGEND

EXIST. SPOT ELEV.	+92.5
EXIST. CONTOUR	08
NEW SPOT ELEV.	10.10
NEW CONCRETE	
TOP OF CURB	TC, tc
FLOW LINE	FL, fl
EXIST. LIGHT POLE	LP
SWALE	
DRAINAGE FLOW	

SCALE: 1"=20'



VICINITY MAP ZONE D-11

SCALE: 1"=750'

NOTES:

All Work Within the PROJECT AREA Constructed In Accordance With the City of Albuquerque Standard Specs. For Public Works Construction, Latest Edition.

- ALL ASPHALT PAVING SHALL CONSIST OF 2" TYPE B ASPHALT CONCRETE SURFACE COURSE OVER 6" HIGHWAY BASE COURSE, TYPE II, ON SCARIFIED COMPACTED SUBGRADE, 6" DEPTH.
- ALL WORK PERFORMED ON THIS PROJECT PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES/LEASES DURING CONSTRUCTION.
- ALL UTILITIES AND UTILITY SERVICE LINES INSTALLED PRIOR TO THE CONSTRUCTION OF PAVING.
- CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE EXISTING DRIVING AISLES DURING CONSTRUCTION.
- ENGINEER'S CERTIFICATION REQUIRED PRIOR TO RELEASE OF CERTIFICATE OF OCCUPANCY.

CALCULATIONS

City Hydrology, Ref. File #D-11/D

I. DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL (DPM), REVISED JANUARY 1993 FOR THE CITY OF ALBUQUERQUE AND ADOPTED BY THE COUNTY OF BERNALILLO.
DISCHARGE RATE: $Q = Q_{peak} \times AREA$. PEAK DISCHARGE RATES FOR SMALL WATERSHEDS
VOLUMETRIC DISCHARGE: $VOLUME = E_{weighted} \times AREA$
SOIL TYPE: 'B', ETC. EMBUDO SERIES, A GRAVELLY FINE SANDY LOAM AS CLASSIFIED BY THE SCS SOIL SURVEY
PT00 = 2.20 INCHES, ZONE 1
DESIGN STORM: 100-year/6-hour, 10-year/6-hour WHERE [] = 10 year VALUES

II. EXISTING CONDITIONS

Inclusive of Gravel/Dirt Building D Pad Site
STUDY AREA = 0.4 ACRES, WHERE EXCESS PRECIPITATION 'C' = 1.13 IN. [0.52]
PEAK DISCHARGE, Q100 = 1.50 CFS [0.9 CFS], WHERE UNIT PEAK DISCHARGE 'C' = 3.1 CFS/AC [1.7]
THEREFORE: VOLUME100 = 2251 C.F. [1176 C.F.]

III. DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE & WEIGHTED EXCESS PRECIPITATION

AREA	LAND TREATMENT	UNIT PEAK DISCHARGE	'E'
UNDEVELOPED, 12%	A	1.29[0.24]	0.4[0.08]
LANDSCAPING, 0.05 AC.	B	2.03[0.76]	0.67[0.22]
GRAVEL & COMPACTED SOIL, 0.00 AC.	C	2.87[1.49]	0.99[0.44]
ROOF/PAVEMENT, 88%	D	4.40[2.90]	1.97[1.24]
0.40 ACRES			

Eweighted = 1.81 IN. [0.99]
Q100 = 1.64 CUBIC FEET PER SECOND (CFS) Q10 = 1.05 CFS; VOL100 = 2628 CUBIC FEET (CF), VOL10 = 1437 C.F.

THEREFORE APPROX. DISCHARGE PER ACRE = 1.64 CFS/0.4 AC. = 4.1 CFS/AC.

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.

PHILIP W. CLARK, P.E. #10265

PROJECT INFORMATION

LEGAL DESCRIPTION: TRACT Y-2 TAYLOR RANCH SUBDIVISION CITY OF ALBUQUERQUE, NEW MEXICO BERNALILLO COUNTY

PROPERTY ADDRESS: TAYLOR RANCH DRIVE, NW ALBUQUERQUE, NM 87120

PROJECT BENCHMARK: TOP OF CURB, A CHISELED SQUARE, LOCATED AT THE WNW CURB RETURN OF TAYLOR RANCH ROAD/HOMESTEAD CIRCLE NW (SOUTH), ASC 1-D11, ELEVATION 5116.47 MSL

TOPOGRAPHIC SURVEY: PERFORMED BY CLARK CONSULTING ENGINEERS FOR BUILDING PAD E, AND COMPILED FROM AS-BUILT SURVEY (10/11/96) IN MAY 1999.

Clark Consulting Engineers
19 Ryan Road Edgewood, New Mexico 87015
(505) 281-2444 FAX (505) 281-2444

DATE	REVISION	7-11 GROUND LEASE, HOMESTEAD HILLS SHOPPING CENTER (Store # 57726) SOUTHWEST CONVENIENCE STORES, LLC
4/25/99	1	Initial Survey
12/30/99	2	As-Built
4/7/00	3	As-Built
DESIGNED BY: PVC	DRAWN BY: CDE	JOB No: 7-11-HMST
CHECKED BY: PVC	DATE: 5/18/99	FILE No: G/D
SHEET No.		1 of 1

Grading & Drainage Plan