

**LEGEND**

- + SPOT ELEVATION  
 — EXISTING FLOWLINE  
 — NEW FLOWLINE  
 — ASPHALT  
 — EXISTING  
 — FENCE  
 TC TOP OF CURB  
 TA TOP OF ASPHALT  
 FL FLOWLINE  
 ← SHEETFLOW

**LEGAL DESCRIPTION**

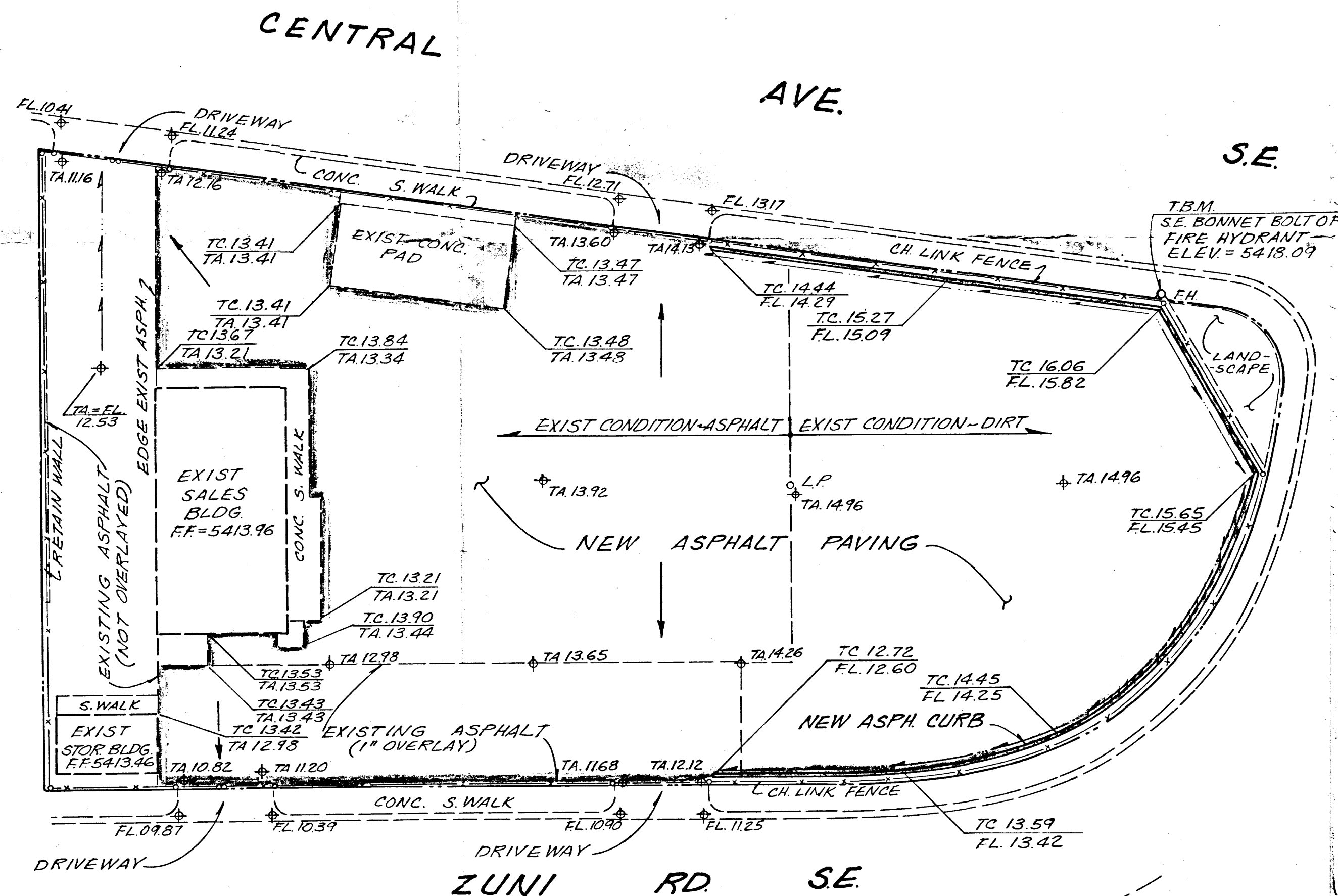
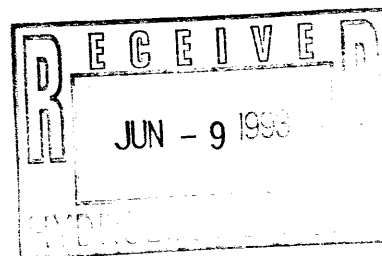
TRACT 14, WAGGAMAN  
DENISON ADDITION

**T.B.M.:**

S.E. BONNET BOLT OF FIRE HYDRANT  
LOCATED @ SW CORNER OF ZUNI RD S.E.  
# CENTRAL AVE S.E., ELEVATION = 5418.09

**BENCHMARK:**

STATION IS A STANDARD ACS BRASS DISK  
SET IN THE CURB AND STAMPED "6-K20(R)  
1974 ACS", STATION IS 53.0' W. OF & ON WYOMING  
BLVD. # 447'S. OF & ON CENTRAL AVE.  
ELEVATION = 5390.73

**DRAINAGE PLAN**

The following items concerning the Rich Mazda Used Cars Drainage Plan are contained hereon:

1. Vicinity Map
2. As-constructed Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located at the southwest corner of the intersection of East Central Avenue and Zuni Road S.E. At present, the site is developed as a used car sales lot. The purpose of this plan is to demonstrate the as-constructed drainage conditions associated with the repaving of the lot.

As shown by Panel 30 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps for the City of Albuquerque dated October 14, 1983, this site does not lie within a designated flood hazard zone. The site does, however, appear to discharge to a downstream flooding condition as identified by the above referenced map. From review of the map, the flooding appears to begin at the intersection of East Central Avenue and Wyoming Boulevard S.E. That flooding has reportedly been eliminated through the construction of the Fairgrounds Stormwater Relief System, thereby allowing the free discharge of runoff from this site.

The Grading Plan shows 1) as-constructed grades, 2) the limit and character of existing improvements, 3) the limit and character of new paving improvements, 4) existing drainage patterns, and 5) continuity between existing and proposed grades. As shown by this plan, the site has been repaved with positive drainage to both East Central Avenue and Zuni Road S.E. From the review of the plan and the surrounding conditions, the re-development of this existing site within an infill area will not have an adverse impact on downstream conditions.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and smaller basins as set forth in the revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated August 1991 has been used for the purpose of determining the peak rates of discharge and volumes of runoff generated. As shown by these calculations, a minor increase in runoff is anticipated due to the proposed modifications to this existing site.

**CALCULATIONS****Site Characteristics**

1. Precipitation Zone 3
2.  $P_{6,100} = P_{360} = 2.60$
3. Total Area ( $A_T$ ) 25,725 sf = 0.59 Ac
4. Existing Land Treatment

Treatment	Area (sf/ac)	%
C	8,712/0.20	33
D	17,013/0.39	67

**5. Developed Land Treatment**

Treatment	Area (sf/ac)	%
B	440/0.01	02
D	25,285/0.58	98

**Existing Condition****1. Volume**

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_w = [(1.29)(0.20) + (2.36)(0.39)] / 0.59 = 1.17$$

$$V_{100} = (E_w / 12) A_T$$

$$V_{100} = (1.17 / 12)(0.59) = 0.060 \text{ Ac. Ft.} = 2,610 \text{ cf}$$

**2. Peak Discharge**

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (3.45)(0.20) + (5.02)(0.39) = 2.65 \text{ cfs}$$

**Developed Condition****1. Volume**

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_w = [(0.92)(0.01) + (2.36)(0.58)] / 0.59 = 2.33 \text{ cfs}$$

$$V_{100} = (E_w / 12) A_T$$

$$V_{100} = (2.33 / 12)(0.59) = 0.115 \text{ Ac. Ft.} = 5,010 \text{ cf}$$

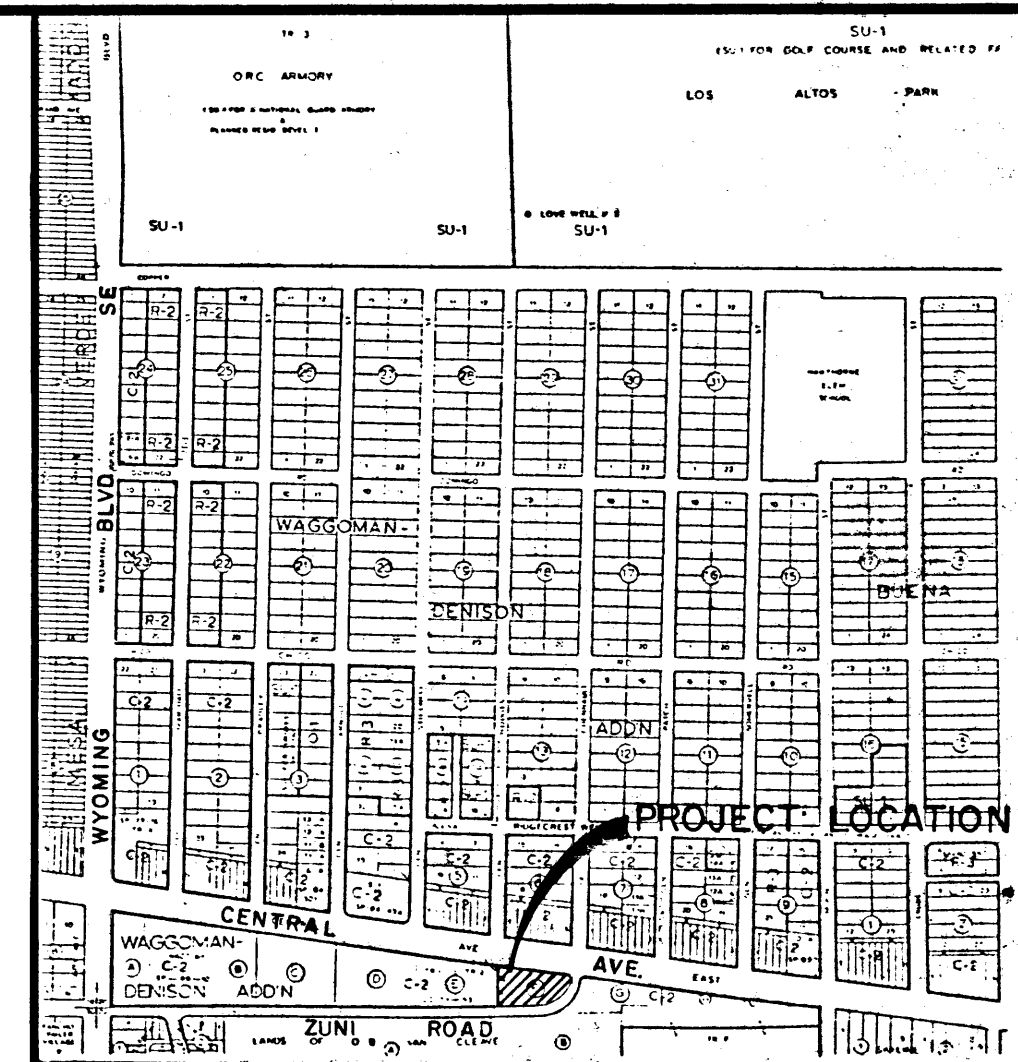
**2. Peak Discharge**

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.60)(0.01) + (5.02)(0.58) = 2.9 \text{ cfs}$$

**Comparison**

1.  $\Delta V_{100} = 5,010 - 2,610 = 2,400 \text{ cf (increase)}$
2.  $\Delta Q_{100} = 2.9 - 2.3 = 0.6 \text{ cfs (increase)}$

**VICINITY MAP**

SCALE: 1" = 800' (APPROX.)

L-20



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"AS CONSTRUCTED"  
GRADING AND DRAINAGE PLAN  
RICH/MAZDA USED CARS

DESIGNED BY	TEW	NO.	DATE	BY	REVISIONS	JOB NO.
DRAWN BY	TEW					930471
APPROVED BY	JGM					DATE 05/93
						SHEET 1 OF 1

