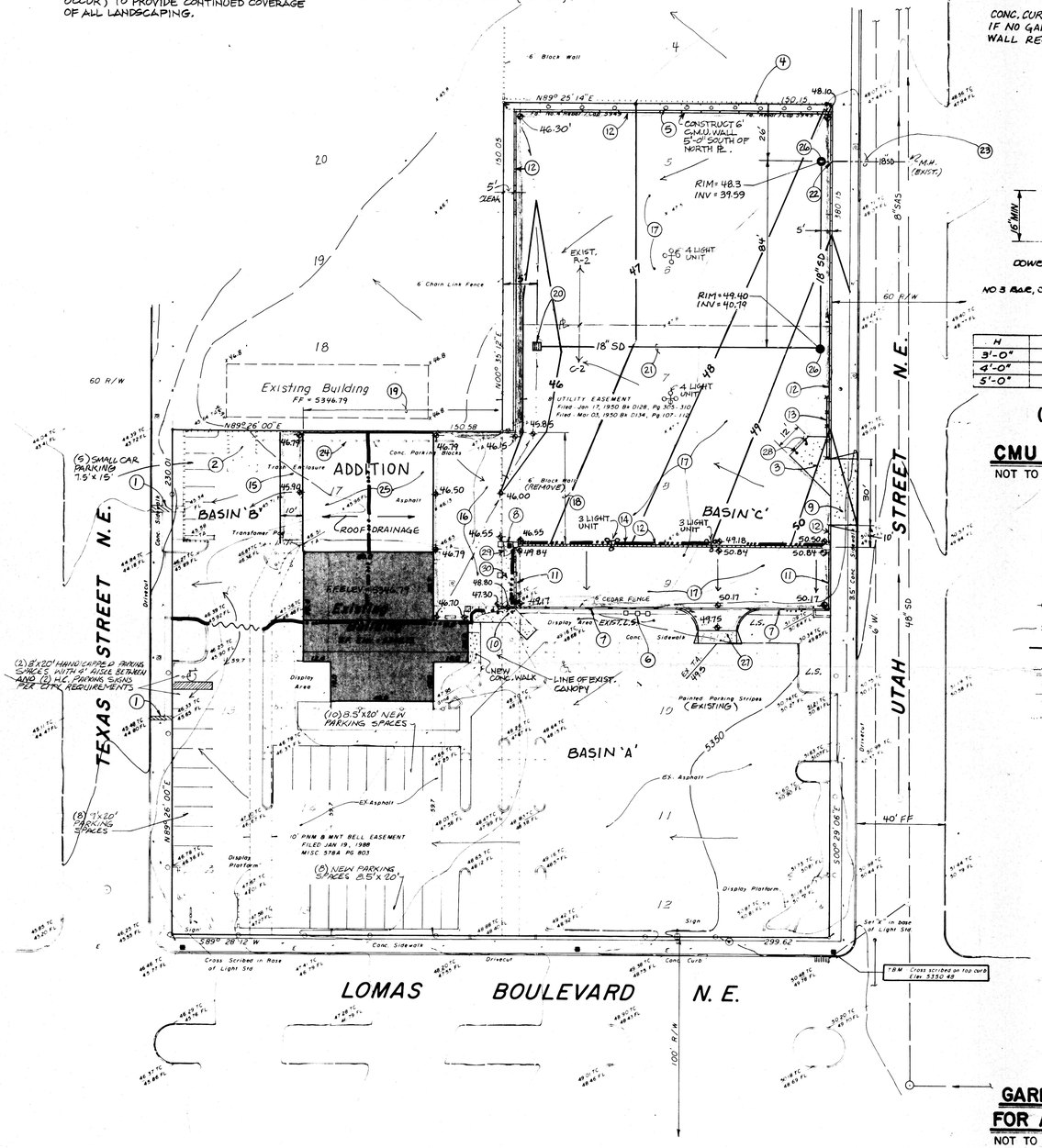
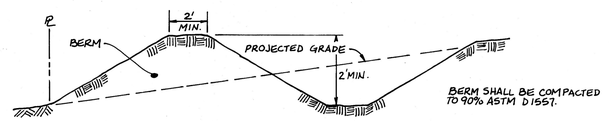
GENERAL NOTE

MODIFY EXISTING IRRIGATION SYSTEM (AS REQUIRED WHERE NEW PAVING OR STRUCTURES OCCUR) TO PROVIDE CONTINUED COVERAGE OF ALL LANDSCAPING.



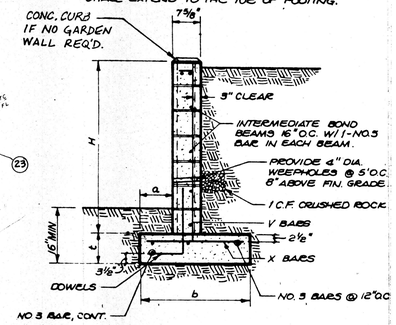
Scale 1"=30'



TEMPORARY EROSION CONTROL BERM

NTS.

NOTE: DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO V-BARS AND SHALL PROJECT A MIN. OF 30 BAR DIA. INTO BLOCK CORES & SHALL EXTEND TO THE TOE OF FOOTING.



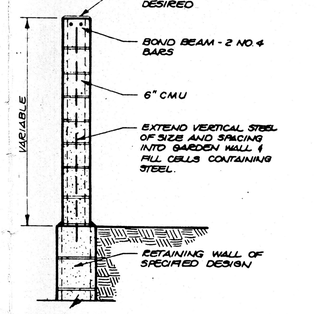
H	a	b	t	V BARS	X BARS
3'-0"	8"	2'-4"	10"	No.4 @ 32"	No.4 @ 27"
4'-0"	10"	2'-9"	10"	"	"
5'-0"	14"	3'-8"	10"	No.4 @ 16"	No.4 @ 30"

(FOR ALL RETAINAGE OF 1'-6" OR MORE) CMU RETAINING WALL DETAIL

NOT TO SCALE

LEGEND

(2)	Keyed note
	Proposed asphalt pavement
	Proposed concrete
5467	Existing spot elevation
50.70	Proposed spot elevation
5350	Existing contour
50	Proposed contour
	Existing concrete curb
	Direction of flow
	Drainage swale



GARDEN WALL EXTENSION FOR ALL RETAINING WALLS

NOT TO SCALE

LEGAL DESCRIPTION

Lots 5 thru 11 and all except the south 20 feet of lot 12, the northerly 30 feet of lot thirteen, and all of lots 14 thru 17, in block 23 of the East End Addition (C1-55).

PROJECT BENCHMARK

ACS brass disc 1.5 in. in diameter set in drilled hole in top of curb stamped '4-119, 1975, ACS'. Station is located 43.3 feet west of the centerline of Wyoming blvd. and 51.8 feet north of the centerline of Lomas Blvd. Elevation = 5362.15 Feet MSLD

TEMPORARY BENCHMARK

Cross scribed on top of curb at the west northwest return of Lomas Blvd. and Utah St. Elevation = 5350.48 Feet

GRADING AND DRAINAGE PLAN

The Grading and Drainage Plan shown hereon identifies the improvements required to manage developed stormwater runoff from the project site, and demonstrates a grading scheme that complements the site improvements and interfaces well with adjacent properties. The purpose of this plan is to establish onsite drainage criteria and provide detail for construction of the required improvements.

As shown by the vicinity map, the site is located on Lomas Blvd. N.E., between Utah St. and Texas St. The site is presently partially developed as an automobile dealership. The developed portion of the site drains westerly via surface improvements to Texas St. where downstream public drainage improvements intercept runoff. The area designated for expansion is presently undeveloped and drains in a sheet flow pattern to the west. No offsite flows enter the site.

As shown by plate 30 of 50 of the FIRM for Albuquerque, New Mexico, this site does not lie within a designated flood hazard zone.

The proposed improvements include paving, drainage, and landscaping for the expansion to the Ken John's Suzuki site. The expansion consists of an addition to the existing building, and the paving of a parking lot to be used for storage of inventory. The existing developed portion of the site will continue to drain in it's present manner, utilizing existing improvements. The proposed expansion will drain to an area drain located in the parking lot which will connect to an existing 48 inch storm sewer located in Utah St. As shown by the calculations, the proposed drop inlet and pipe will provide adequate capacity to drain the onsite runoff.

The contractor will be required to implement temporary erosion control improvements during the construction phase of the project. The plan shall consist of a ditch-dike system placed at the project boundaries in order to limit the release of sediment from the site. The contractor will be required to maintain the temporary erosion control facilities until all paving and drainage improvements are in place.

The calculations which appear hereon analyze the 10 year and 100 year, 6 hour design storms falling within the project site for both existing and developed conditions. The SCS method of estimating runoff is used as outlined in the City of Albuquerque "Development Process Manual", Volume II, Chapter 22.

CALCULATIONS

I. CRITERIA

Rainfall: P100 = 2.38 in.
P10 = 1.56 in.

Time of Concentration: Tc = 0.007B(L^0.77)/S^0.385 (min.)

where L = length (ft.)
S = slope (ft./ft.)

Soil: Madurez Wink Assoc. (MWA)
Hydrologic soil group "B"

SCS curve number: CN per DPM, Vol. II, plates 22.2 C2 & C3

Runoff: Q = 45.4AR/Tc (c.f.s.)

where A = basin area (ac.)
R = direct runoff (in.)
Tc = time of conc.(min)

Volume: 3630AR (c.f.)

where A = basin area (ac.)
R = direct runoff (in.)

II. RUNOFF

BASIN	AREA	Tc	%IMP	CN	R10	R100	Q10	Q100	V10	V100
A	1.00	10	95	96	1.1	1.9	5.0	8.6	3993	6897
B	0.12	10	95	96	1.1	1.9	0.6	1.0	479	828
C	0.90	10	100	98	1.4	2.2	5.7	9.0	4574	7187
Exist. C	0.90	10	13	74	0.2	0.6	0.8	2.5	653	1960

III. DROP INLET CAPACITY

Check capacity of COA single type 'D' inlet

Use Weir equation to check entrance condition:

Q = 3.33LH^3/2

Where: Q = flowrate (cfs)
L = perimeter (ft)
H = depth (ft)

Q100 = 9.0 cfs
L(COA 'D' inlet) = 10.64 ft

H = [Q/3.33L]^2/3 = 0.40 ft (available)

apply clogging factor = 0.6

H = 0.56 ft (available)

IV. PIPE CAPACITY

Check capacity of 18 inch RCP storm sewer

Use Manning's equation:

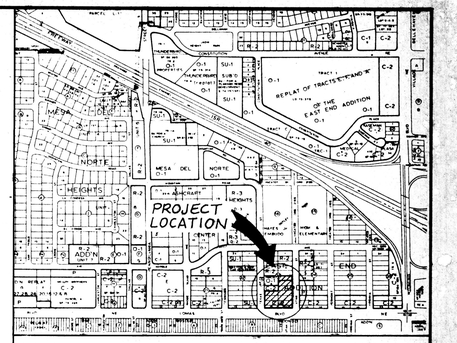
Q = 1.49A(R^2/3)S^1/2)/n

Where: Q = flowrate (cfs)
A = pipe area (sf)
R = hydr radius (ft)
S = slope (ft/ft)
n = roughness coef.

Q100 = 9.0 cfs

Q pipe = [1.49(1.76)(0.37^2/3)(0.01^1/2)/0.013

= 12.6 cfs > Q100



VICINITY MAP J-19 1" = 800'

KEYED NOTES

1. Existing sidewalk culvert.
2. Existing refuse pad to be removed.
3. Construct concrete refuse pad. See architects plan for details.
4. Existing cedar fence with CMU pilasters.
5. Existing landscaping improvements.
6. Existing irrigation valves to remain.
7. Existing 6" concrete header curb to be removed.
8. Existing PNM power pole to be relocated.
9. Remove approx. 42 L.F. existing curb & gutter and sidewalk. Construct 30 ft drivepad per C.O.A. Std Drwg no. 2425.
10. Construct 6 ft wide concrete sidewalk. Coordinate with owner for exact location.
11. Construct new 6" header curb per C.O.A. Std Drwg no. 2415.
12. Construct 6 ft CMU wall, REFER DETAILS G & 7/A-2.
13. Install 30 ft rolling gate. Gate to be provided by owner.
14. Construct concrete retaining wall per detail this sheet. Cap with CMU wall OR CONC. CURB AS INDICATED.
15. Provide asphalt transition from new addition to existing pavement.
16. Remove and replace existing asphalt pavement to grades shown.
17. Asphaltic pavement.
18. Remove and dispose approx. 50 L.F. existing CMU wall.
19. Remove and replace existing CMU wall as necessary to construct addition and paving improvements.
20. Construct single type 'D' inlet per C.O.A. Std Drwg no. 2206. Top of grate = 5345.65, inv = 5342.65.
21. Construct 218 L.F. 18" RCP @ S = 0.0144.
22. Connect 18" RCP to stub (provided by others) at property line. Inv = 5339.52.
23. 18" stub provided by others.(C.O.A. Project No.3594).
24. Existing concrete parking blocks to be removed.
25. Existing asphalt pavement to be removed for construction of addition.
26. Construct type 'E' manhole per C.O.A. Std Drwg 2102.
27. Construct 18 ft. concrete drivepad per C.O.A. Std Drwg 2425.
28. TWO (2) 4" DIAMETER STEEL BOLLARDS PER CITY REFUSE REQ'S.
29. STEEL GATE, 6'-0" HIGH.
30. RAMP (CONCRETE).

GENERAL NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
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 SPOT ELEVATIONS SHOWN HEREON ARE TOP OF PAVEMENT, UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM ENVIRONMENTAL HEALTH PRIOR TO PER-FORMING ANY EARTHWORK OPERATIONS.

RECEIVED
MAR 03 1989
HYDROLOGY SECTION

eh
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ALBUQUERQUE, NEW MEXICO 87102
PHONE: (505) 242-1909

△1 11-15-88 REVISED TO REMOVE CURB FRIM FRONT OF DISPLAY AREA.
△2 11-21-88 REVISED TO ADD 5' LANDSCAPE STRIP AT WEST WALL
△3 3-3-89 ADDED PARKING SPACES AT FRONT, EAST.

EHA JOB No. 11255

job title		
ADDITION TO KEN JOHNS SUZUKI		
PROJECT MANAGER ISAAC BENTON, JR.	job no 8833	date 10/20/88
sheet title GRADING & DRAINAGE PLAN		by DAL.

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sheet C1 of 3