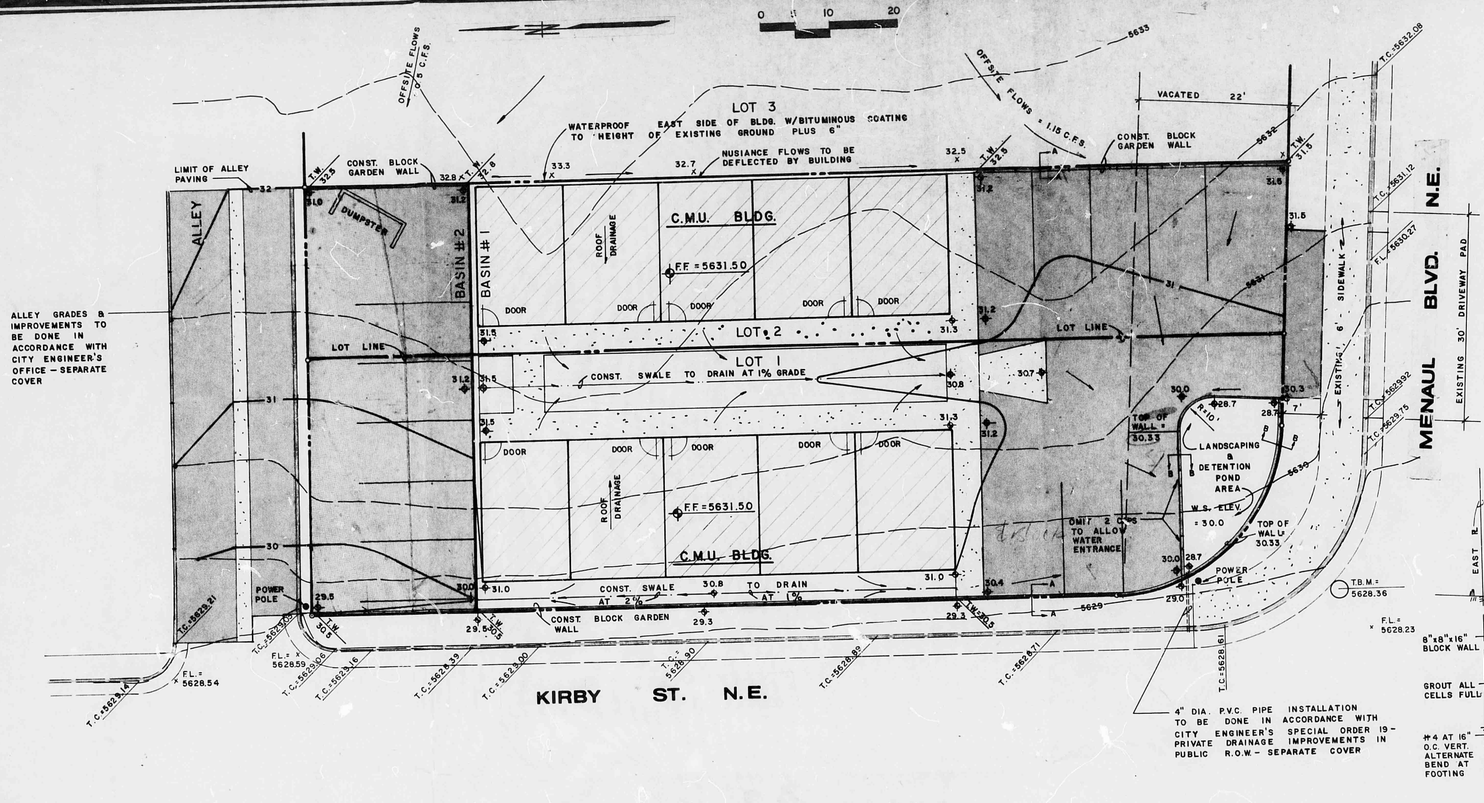
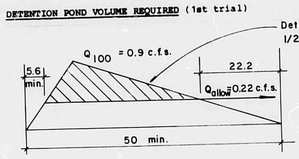


be routed through a landscaped pond area and discharge through a 4" dia. pipe to Menaul. Basin 2 shall free-discharge to the alley.

3. Quantities
Basin No. 1 (7,372 s.ft)
0% pervious: C = 0.95
I = (2.15)(2.6) = 5.7 inches/hr.
Q_{100} = CIA = (0.95)(5.7)(7372/43560) = 0.9 c.f.s.
Q_{10} = 0.657Q_{100} = 0.657(0.9) = 0.6 c.f.s.
V_{100} = 1/2 (.9)(50)(60) = 1350 c.ft.
Q allowed = Ca 2gh w/h = 1.5 ft.
= (.6)(0.087) 64.4(1.5) = 0.5 c.f.s.

DETENTION POND VOLUME REQUIRED (1st trial)



DETENTION POND VOLUME PROVIDED

Area = 274 s.ft.

$\frac{266}{274}$ = 0.97 ft. deep say 1.0 ft.
Try h = 1.3'

Q = .6(.087) 64.4(1.3) = 0.48 c.f.s.
Detention Pond Volume Required = $1/2[50 - \frac{.48}{.9/10} - \frac{.48}{.9/40}]$ [.9 - .48](60) = 294

$\frac{294}{274}$ = 1.07 ft. try h = 1.2 ft.

Q = .6(.087) 64.4(1.2) = 0.46 c.f.s.
Detention Pond Volume Required = $1/2[50 - \frac{.46}{.9/10} - \frac{.46}{.9/40}]$ [.9 - .46](60) = 323

h = $\frac{323}{274}$ = $\frac{1.2 \text{ o.k.}}{}$ Q allow = 0.46 c.f.s. @ h = 1.2'

4. Basin No. 2 (1550 sq. ft.)

0% pervious; therefore C = 0.95
I = (2.15)(2.6) = 5.7 inches/hr.
Q_{100} = 0.95 (5.7)(1550/43560) = 0.19 c.f.s.

Total Developed Discharge = Basin 1 + Basin 2 = 0.46 + 0.19 = 0.65 c.f.s.
Approximately equal to the undeveloped 0.5 c.f.s. discharge.

LEGAL DESCRIPTION

Lots numbered One (1) and Two (2) in block Three (3) of the Enchanted Mesa Subdivision; together with the Northerly 22 feet of Menaul Boulevard vacated by City Ordinance No. 2615 (B.49-P.548).

OFFSITE FLOWS

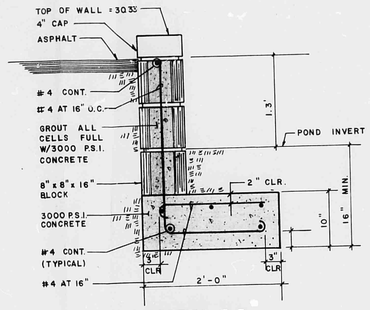
The offsite flows are generated by the undeveloped lots east of this site and are bound by Algodones Street, the alley and Menaul Road. The basin is comprised of two basins, the south offsite basin and the north offsite basin. The north basin is 10,500 sq. ft. (0.241 acres). The soil type is B, and is 100% pervious; therefore C = 0.40. The total 100 year flow rate, based upon I = 5.7 inches/hr. is: Q = CIA = (.4)(5.7)(.241) = 0.5 c.f.s. The south basin is 22,050 sq. ft. (0.506 acres). The soil type is B and is 100% pervious; therefore C = 0.40. The total 100 year flow rate is: Q = CIA = (.4)(5.7)(.506) = 1.15 c.f.s.

UNDEVELOPED DRAINAGE CHARACTERISTICS - Onsite

1. Soil Type: Embudo Series, gravelly fine sandy loam, Group B soil.
2. Quantities
100% pervious: C = 0.4
I = (2.15)(2.6) = 5.7 inches/hr.
Q_{100} = CIA = (0.4)(5.7)(8922/43560) = 0.5 c.f.s.
Q_{10} = 0.657Q_{100} = 0.3 c.f.s.
V_{100} = 1/2 (.5)(50 min.)(60 sec/min) = 750 c.ft.

DEVELOPED DRAINAGE CHARACTERISTICS - Onsite

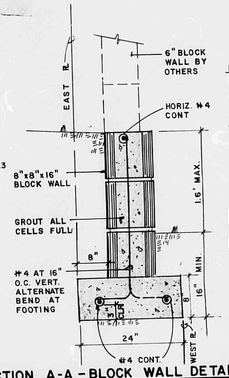
1. OFFSITE FLOWS: The flows will be deflected as shown to the alley or to Menaul. This is a temporary situation until sites are developed and developed flows will be controlled discharge to Menaul or alley.
2. ONSITE FLOWS: The site shall be split into two basins. Basin 1 comprises of the roof areas and the Menaul parking lot. These flows will



SECTION B-B
DETENTION WALL DETAIL
SCALE: 1" = 1.0'

BENCH MARK: CITY OF ALBUQUERQUE BENCH MARK 2-H21A BRASS CAP AT SOUTH MEDIAN NOSE OF MENAUL & JUAN TABO. ELEVATION = 5603.08

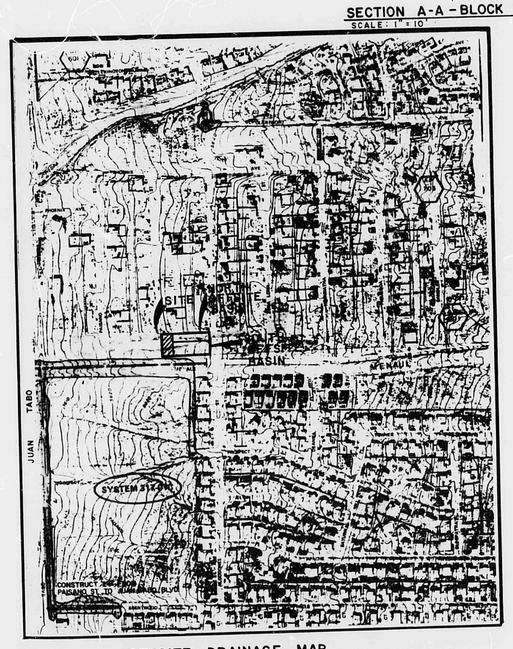
T.B.M.: TOP OF ℄ MOUNTAIN BELL MANHOLE AT N.E. CORNER OF KIRBY ST. & MENAUL BLVD. ELEVATION = 5628.23



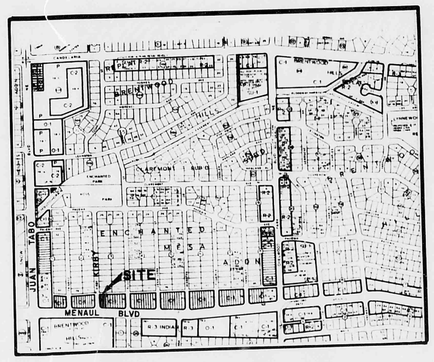
SECTION A-A – BLOCK WALL DETAIL
SCALE: 1" = 1.0'

LEGEND

- ASPHALT PAVING
- LANDSCAPED AREA
- PROPERTY LINE
- EXISTING CURB & GUTTER W/SIDEWALK
- 12.7 EXISTING SPOT ELEVATION
- 12 EXISTING CONTOUR
- 12.7 PROPOSED SPOT ELEVATION
- 12 PROPOSED FINISHED CONTOUR
- SURFACE FLOW DIRECTION
- BUILDING STRUCTURE



OFFSITE DRAINAGE MAP



VICINITY MAP (Zone Atlas # H-22)

Received 7/27/83

H22/D33

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SANDIA PARK OFFICE – P.O. BOX 142 SANDIA PARK, N. MEX., 87047 281-1991

Revisions	Date
	7-83
	7-83
	7-83

Designed A.H.W.
Drawn C.L.W.
Checked C.L.W.

GRADING/DRAINAGE PLAN FOR BOB SHEPHERD MENAUL & KIRBY N.E.

CHRISTOPHER L. ELIAS 6653 REGISTERED PROFESSIONAL ENGINEER

SHEET 1 OF 1