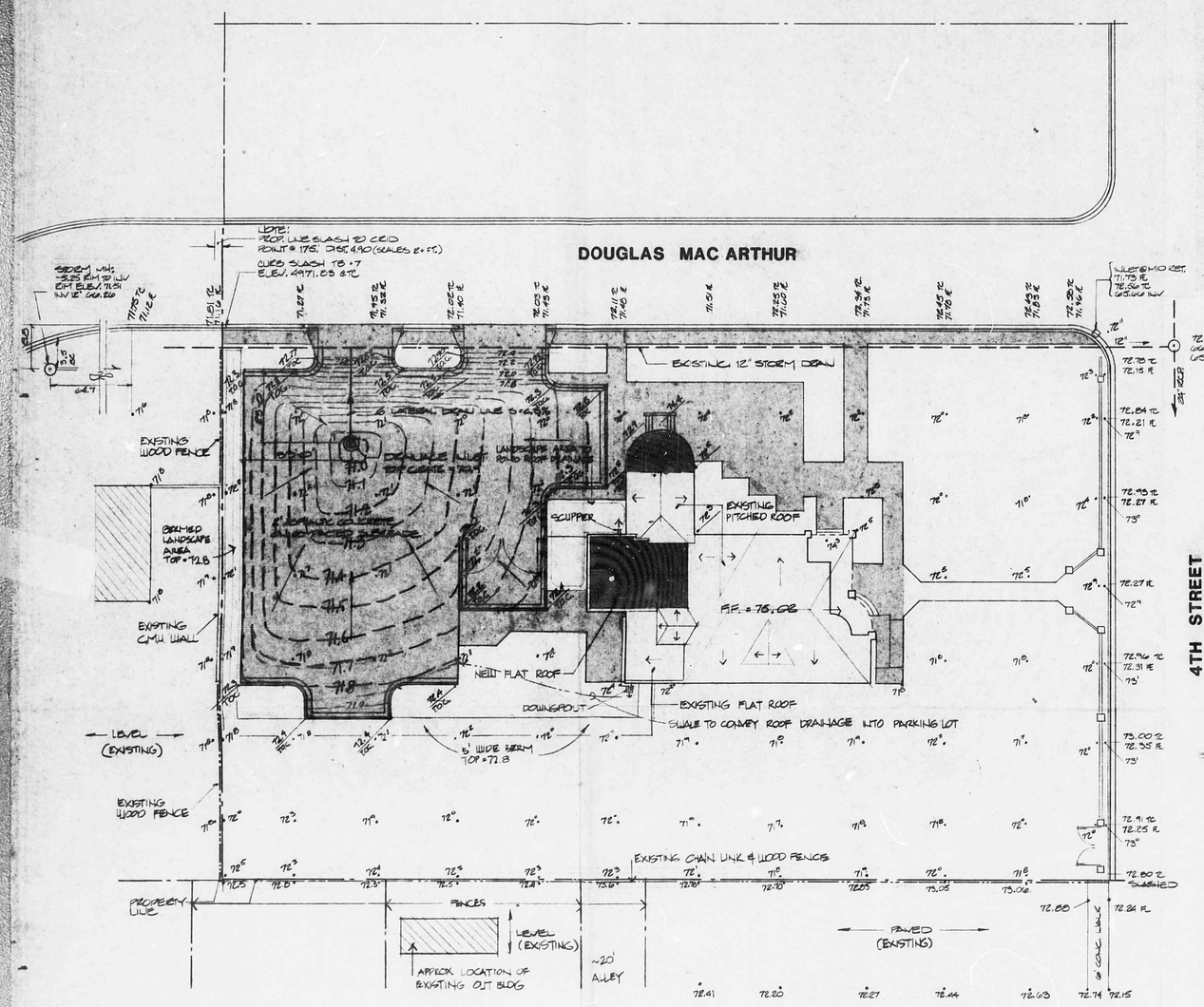
HYDROLOGY F14/D17 POWDRELL'S RESTAURANT

F14 / D17

POWDRELL'S

RESTAURANT

1 PLAN

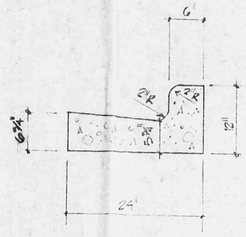


DRAINAGE AND GRADING PLAN

ALL ELEVATIONS BASED ON CITY BM "1-F14" BOLT @ SSE CRT 4TH & DELMAR 4972.714

1"=20'

LOCATION MAP



CURB DETAIL

DRAINAGE INFORMATION

1. Planning History: The site was originally plated under the Douglas MacArthur Subdivision on September 17, 1946. It was zoned C-2 and C-3, the different zones dividing the parcels approximately in half.
2. Flood Hazard: The site is outside the Flood Hazard Boundary as shown on the National Flood Insurance Program Maps.
3. SCS Soil Classification: Gb Soil, Hydrologic Soil Group B.
4. Offsite Drainage: None; adjacent property is approximately level.
5. On-Site Conditions:

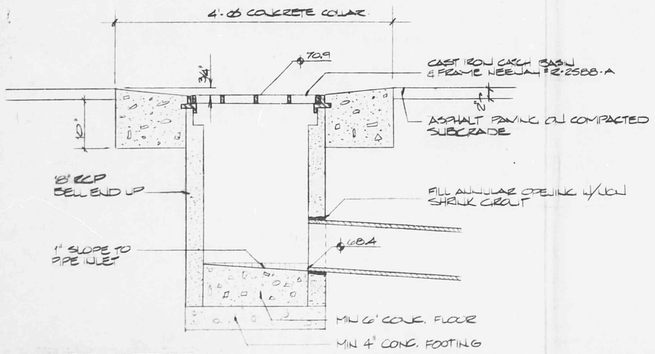
   Area Subject to Runoff is Parking Lot; Area = .22 Acres.
   Q100 = CIA = 0.95 (2.2 x 2.17) .22 = 1.0 cfs
   Q10 = Q100 x .657 = 0.66 cfs
   V100 = CDA = .95 x 2.2/12 x 9580 = 1670 cf
   V10 = V100 x .657 = 1100 cf
   Drainage Inlet Capacity
   $Q = CA\sqrt{2gh}$
   Neenah #R-2588-A Grate, A = 1.1 sf
   $= .6 \times 1.1 \sqrt{2 \times 32.2 \times 0.4}$
   = 3.35 cfs
   Reduce x 50% for clogging
   x .5 = 1.7 cfs, ok
   Lateral Line Capacity: 6" PVC, gravity flow Q = 1.2 cfs
6. Bench Marks

   A. ACS #1-F14, 1/4" bolt near back of curb at SSE curb return of the southeast quadrant of the intersection of Fourth and Delamar NW. Elevation = 4972.714.

   B. On Site Bench Mark: "Scribe Mark" on top of curb on south curb, Douglas MacArthur at extension of west property line. Elev = 4971.83
7. Parking Lot Storage
   Storage Volume above Inlet = 2295 cu. ft.
   Note: Since storage exceeds V100 no runoff from the parking lot will occur.

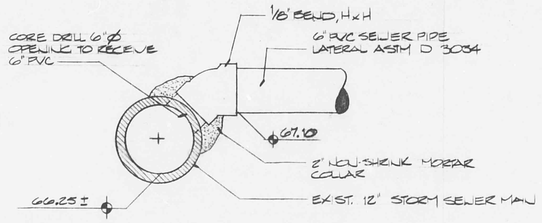
PARKING LOT VOLUME CALC'S

Elev.	Area (SF)	Avg. Area (SF)	Volume (CuFt)	Accum. Volume (Cu.Ft.)
71.0	0			
71.1	210	105	10	10
71.2	660	435	44	54
71.3	1368	1014	101	155
71.4	2268	1818	182	337
71.5	3312	2790	279	616
71.6	4812	4062	406	1022
71.7	6300	5556	556	1578
71.8	8040	7170	717	2295



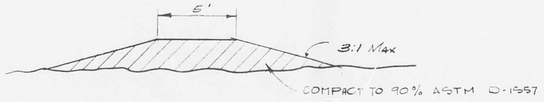
INLET DETAIL

1"=1'-0"



CONNECTION DETAIL

1"=1'-0"



BERM DETAIL

NO SCALE

CITY OF ALBUQUERQUE
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F14 / D17

DEC. 21, 1983
REVISED JAN. 17, 1984
REVISED JAN. 25, 1984
REVISED JAN. 27, 1988

Van H. Gilbert Architect

POWDRELL'S RESTAURANT
5000 4TH STREET N.W. ALBUQUERQUE, N.M.

GRADING & DRAINAGE PLAN

ADD C3