HYDROLOGY

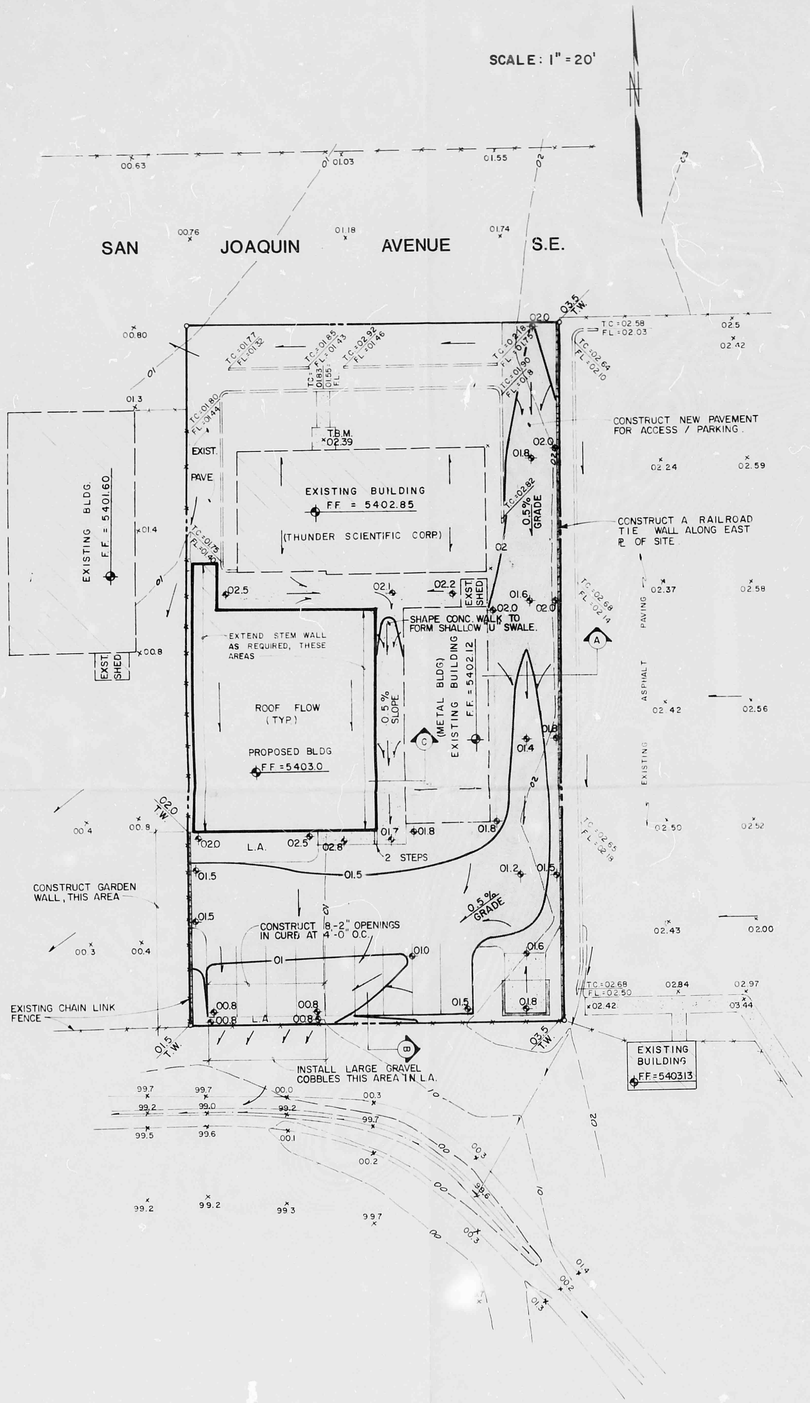
L19/D27

ONE PLAN

1 PLAN FOR

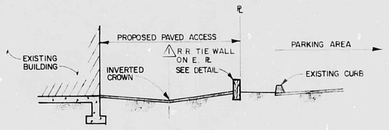
THUNDER SCIENTIFIC CORP.

L19-D27

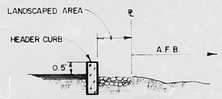


LEGEND

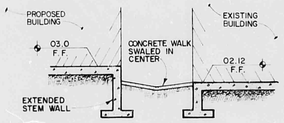
- ASPHALT PAVING (NEW)
- L.A. LANDSCAPED AREA
- PROPERTY LINE
- EXISTING CURB & GUTTER W/SIDEWALK
- 12.7 EXISTING SPOT ELEVATION
- 12 EXISTING CONTOUR
- 12.7 PROPOSED SPOT ELEVATION
- 12 PROPOSED FINISHED CONTOUR
- SURFACE FLOW DIRECTION
- BUILDING STRUCTURE



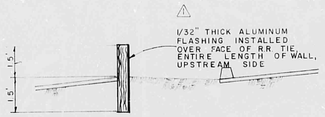
SECTION (A)



SECTION (B)

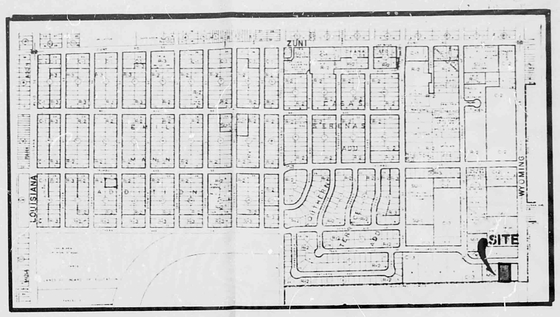


SECTION (C)

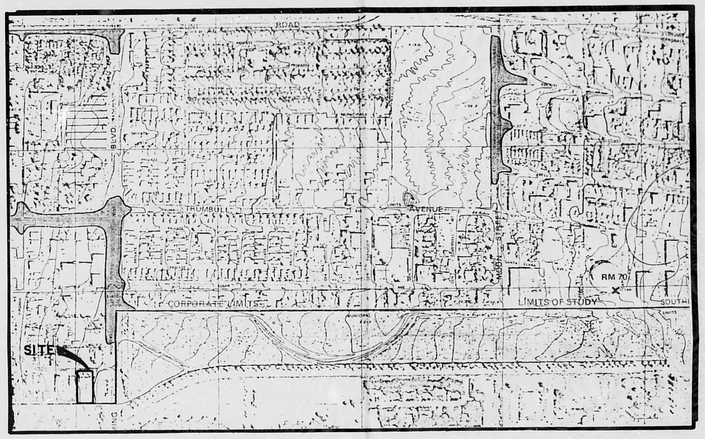


WALL AT SECTION (A)

CHANGED 7-9-84
WALL ALONG EAST ℄ CHANGED FROM BLOCK TO R.R. TIES W/ ALUM. FLASHING



VICINITY MAP L 19



FLOOD HAZARD BOUNDARY MAP

NOTES:

1) Legal: Lot 1 of Plat of Lands of Roger McKee.

2) Surveyor: Ron Forstbauer Survey Company, June 11, 1984.

3) B.M.: Located at corner of Wyoming and Susan, 8-L-20, elevation = 5402.39.

4) T.B.M.: Top of Front Porch of Thunder Scientific Building, elevation = 5402.39.

5) Soil: SCS Map #31, Soil Type EmB, Hydrologic Soil group "B".

6) Flood Hazard: Site is not located in a flood zone (Panel 36 of FBFM - 1" = 500' scale).

7) Offsite Flows: Site is boardered by San Joaquin Street on north (Paved, no curb and gutter), a paved parking lot to the east, and a park area on Kirkland AFB to the south.

   a) San Joaquin was constructed with a water block at Wyoming, so the runoff coming down the street is generated within San Joaquin. The owner has stated that because the street was constructed with no curb and gutter and is too high in relation to their building, he has experienced problems with drainage along the front of his property. In response to this problem, he constructed a concrete curb around the front and sides of the building, which has helped the problem. No further construction is planned for this area at this time.

   b) The paved parking lot to the east of the site used to drain directly onto their site and cause flooding against the structures before making it's path to the south and west. In response to this flooding, the AFB constructed an asphalt curb along the western limits of the parking lot with a slight swale in the asphalt at the south-west corner, in hopes of diverting these flows to a graded swale located on their park area to the south of the site. This did not entirely solve the problem in that there is so little grade to the asphalt that the runoff would pond behind the curb and go over the top onto the site. The site owner then installed a gravel berm on his property adjacent to the curb and has stated that the combination of the curb and berm has been deflecting flows to the south as intended by the AFB. The offsite area draining to the site is 3.6 Ac. with a Q100 = (2.15)(2.4)(0.34)(3.6) = 6 cfs.

8) Design Criteria: In a predesign meeting, the City will accept the free discharge of runoff from the site to the south, if it is acceptable to the AFB.
   a) Undeveloped Q100 = (2.15)(2.4)(0.52)(0.39 Ac.) = 1 cfs.
   b) Developed Q100 = (2.15)(2.4)(0.92)(0.39 Ac.) = 2 cfs
   (Referenced DPM, Vol 2-Plates 22.2 C-1,D-2)

The discharge from the site will be dissipated over the part of the landscaped area along the south side of site in order to reduce it's velocity and erosion as it leaves the asphalt. The offsite flow from the asphalt parking lot will continue to be diverted to the south with the addition of a R.R. Tie garden wall which will be constructed along the sites east property line, this wall will replace the gravel berm.

APPROVED FOR DRAINAGE
7/26/84
SIGNATURE
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED

RECEIVED
JUL 17 1984
HYDROLOGY SECTION

L19/D27

C.T.S. INC.
ENGINEERING
1100 ALVARADO N.E. SUITE A
ALBUQUERQUE, NEW MEXICO 87110
(505) 266-3444

REVISIONS | DATE

DESIGNED
DRAWN
CHECKED

DRAINAGE / GRADING PLAN
THUNDER SCIENTIFIC CORP.

SHEET 1 OF 1