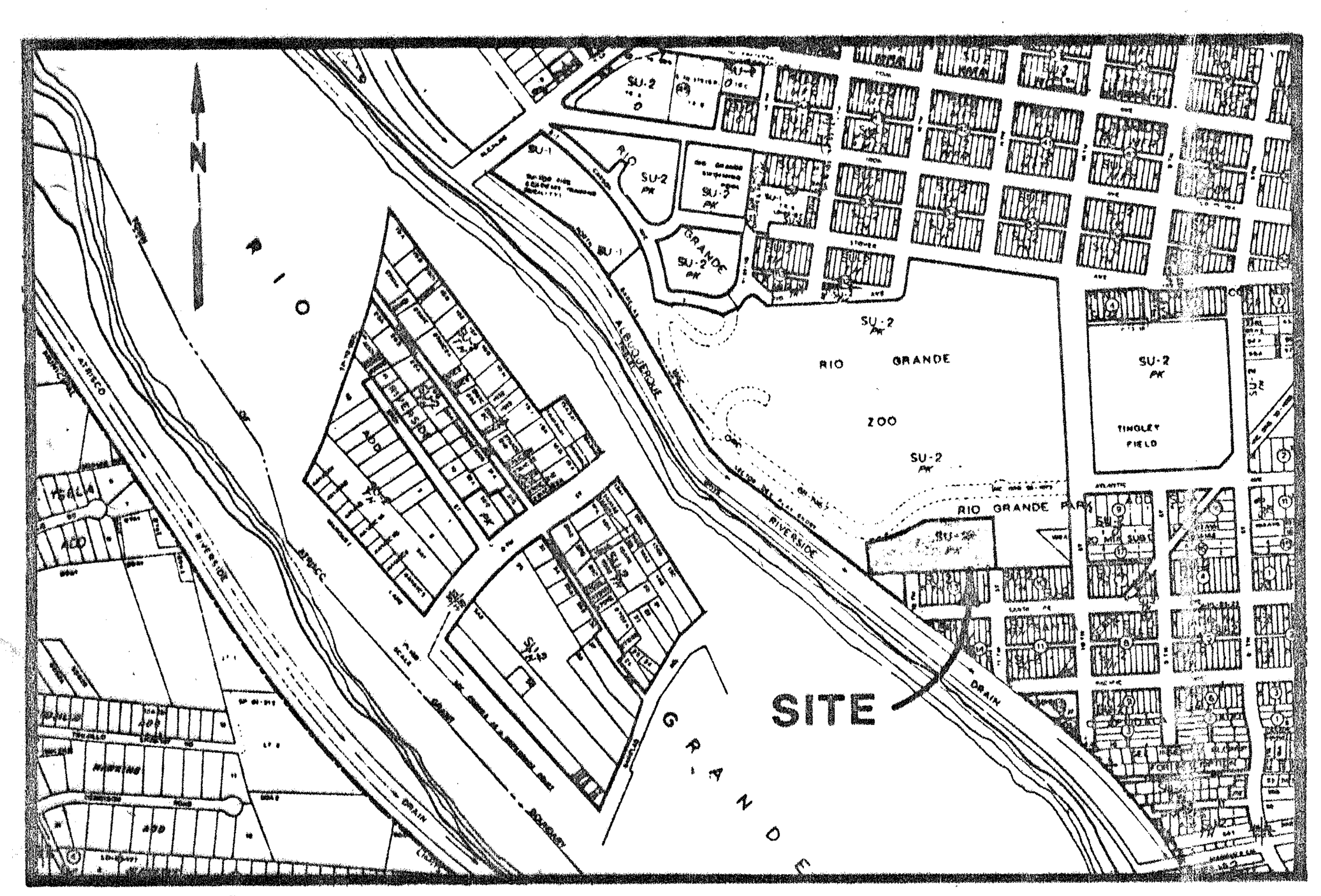

VICINITY MAP
Zone Atlas Map No. K-13

LEGEND

- (HALF-TONED #s @ 45° ∡) — EXISTING SPOT ELEVATIONS
- EXISITNG TREE OR BUSH
- RD — ROOF DRAIN
- FF: 46.2 — FINISH FLOOR ELEVATION
- 46.0 — PROPOSED SPOT ELEVATION
- FLOW DIRECTIONAL ARROW
- DRAINAGE SWALE
- EXISTING INFILTRATION TRENCH FACILITY
- WS — WATER SURFACE
- PAVED WALKWAYS
- LIMIT OF STUDY
- EXISTING BUILDING
- PROPOSED BUILDING

NOTES

1. ALL PROPOSED FINISH FLOOR ELEVATIONS ARE SET AS THE LOWEST PERMISSIBLE ELEVATIONS. FINAL ELEV. MAY BE GREATER THAN INDICATED.
2. SPOT ELEVATIONS ALONG THE PAVED WALKWAY MAY VARY, BUT THE DRAINAGE PATTERN WILL BE MAINTAINED.
3. ALL OPEN EXHIBITS MUST RETAIN THOSE STORM WATERS WHICH FALL WITHIN THEIR LIMITS. THOSE STORM WATERS WOULD BE CONTAMINATED BY THE ANIMALS' WASTE AND MUST BE TREATED THROUGH THE SANITARY SEWER SYSTEM.
4. ALL STORM WATER RUNOFF (EXCLUDING THOSE FALLING INTO THE OPEN EXHIBITS) IS DIRECTED OR SHALL BE DIRECTED TO EITHER THE INTERIOR DRAINAGE INFILTRATION DITCH LOCATED TO THE SOUTH OF THE EXISTING RAIN FOREST EXHIBIT OR TO THE EXISTING SOUTH PERIMETER INFILTRATION TRENCH. THESE FACILITIES HAVE BEEN PREVIOUSLY DESIGNED AND CONSTRUCTED TO CAPTURE THOSE STORM WATERS AND ALLOW THEM TO PERCOLATE INTO THE AQUIFER VIA THE NATURAL SOILS OR BY DRYWELLS.
5. SOILS - THE SITE CONSISTS OF BRAZITO (BS) SOILS HAVING A UNIFIED SOIL CLASSIFICATION OF SOIL GROUP 'A'. THE TOP FOOT OF SILTY CLAY HAS BEEN REMOVED FROM THOSE INFILTRATION TRENCH FACILITIES AND THE REMAINING SAND HAS A PERMEABILITY RATE OF 6.0 - 20.0 INCHES/HOUR.

DRAINAGE

1. TOTAL AREA OF STUDY = 3.25 AC. = 141,600 S.F.
   AREA OF OPEN EXH. = 13,600 S.F.
   AREA TO RUNOFF = 2.94 AC. 128,000 S.F.
2. EXISTING DRAINAGE DITCH SOUTH OF RAIN FOREST
   STORAGE VOLUME CAPACITY = 2,000 CU.FT.
   POND SURFACE AREA = 2,400 SQ.FT.
   ASSUME 12" PERCOLATION/HR = 2,400 CU.FT/HR
   FIRST HOUR ULTIMATE CAPACITY = 4,400 CU.FT.
   AREA CONTRIBUTING TO POND = 17,000 S.F.
   DEPTH OF RAINFALL FOR THE FIRST HOUR (85%X0.183) = 0.156 FT.
   C-VALUE = 0.85
   RUNOFF VOLUME = 2,251 CU.FT. < 4,400 CU.FT. --- O.K.
3. EXISTING SO. PERIMETER INFILTRATION TRENCH
   STORAGE VOLUME CAPACITY = 6,600 CU.FT.
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   ASSUME 12" PERC./HOUR = 4,200 CU.FT./HR
   FIRST HOUR ULTIMATE CAPACITY = 10,800 CU.FT.
   AREA CONTRIBUTING TO FACILITY = 111,000 SQ.FT.
   DEPTH OF RAINFALL (1ST HOUR) = 0.156 FT.
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STATE OF NEW MEXICO — DALE L. CRAWFORD — NO. 357 — REGISTERED ARCHITECT

FRED C. ARFMAN — NEW MEXICO — 7322 — REGISTERED PROFESSIONAL ENGINEER — 3-27-85

RECEIVED DEC 12 1989 HYDROLOGY SECTION

Date
Designed
Checked

Isaacson & Arfman, P.A.
CONSULTING ENGINEERING ASSOCIATES
Albuquerque, New Mexico

SOUTH AREA DRAINAGE PLAN

CITY OF ALBUQUERQUE
RIO GRANDE ZOOLOGICAL PARK

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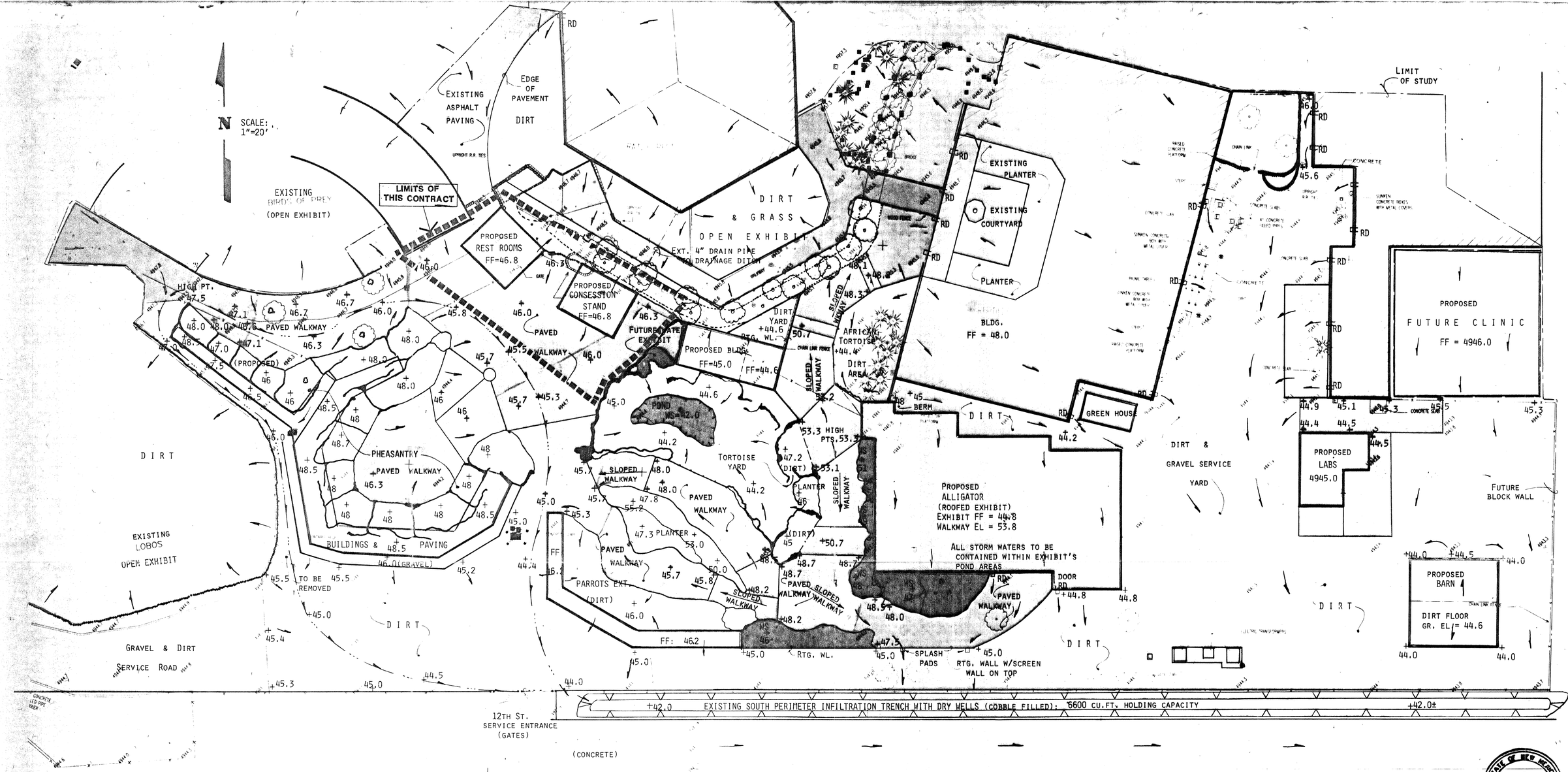

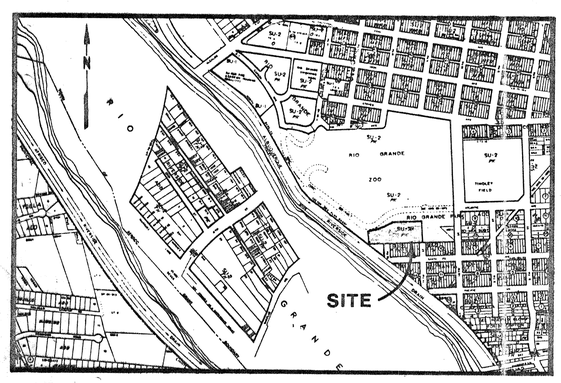

VICINITY MAP

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SOUTH AREA DRAINAGE PLAN

CITY OF ALBUQUERQUE
RIO GRANDE ZOOLOGICAL PARK

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