LOCATION & DESCRIPTION

LOT 1-B, BLOCK B OF THE ALBUQUERQUE WEST SUBDIVISION IS SITUATED SOUTH OF PARADISE HILLS BLVD. ON DAVENPORT ST. NW. THE AREA IS PREDOMINANTLY ZONED FOR SPECIAL/COMMERCIAL USE AND IS UNDEVELOPED, EXCEPT FOR THE NEW WESTSIDE ELEMENTARY SCHOOL NOW UNDER CONSTRUCTION.

DRAINAGE CHARACTERISTICS

(EXISTING): THE 0.5939-ACRE PARCEL IS BORDERED BY THE PARTIALLY DEVELOPED RIGHT-OF-WAY OF DAVENPORT ST. TO THE WEST. THE REMAINDER OF THE SURROUNDING PROPERTIES HAVE BEEN MASS GRADED AS PART OF THE RIVERVIEW MASS GRADING BUT IS NOT DEVELOPED. THIS SITE DOES NOT ACCEPT ANY OFFSITE STORM WATERS BUT FUTURE ALLOWANCE WILL BE MADE. PRESENTLY, ALL UNDEVELOPED STORM WATERS SHEET FLOW TO THE EAST AND ARE INTERCEPTED BY THE DESILTATION/DETENTION PONDS AT THE SOUTHERLY TERMINUS OF THE EAGLE RANCH STORM DRAIN.

HYDROLOGY

(EXISTING): THE SITE IS WITHIN THE BOUNDARIES OF PRECIPITATION ZONE NO. 1 (WEST OF RIO GRANDE BLVD.); AS SUCH THE P_{360} (6 HR.-100 YR. STORM) HAS A DEPTH OF 2.2 INCHES.

THE TOTAL ONSITE DRAINAGE AREA IS 0.594 ACRES OF VACANT GRASS LAND, HAVING A CORRESPONDING LAND TREATMENT B CLASSIFICATION.

PEAK DISCHARGE (USING A 10-MINUTE TIME OF CONCENTRATION), CFS/AC. 100 YR., ZONE 3 (TABLE 9) = 1.40 CFS/AC.

DETERMINE TOTAL Q_P = $Q_{PA} A_A$
= (1.91) (0.594)
= 1.13 CFS

VOLUME = EA
= (0.48)(0.594)(43560)
= 12,420 CU. FT.

PROPOSED IMPROVEMENTS

THE SITE SHALL BE IMPROVED TO ALLOW FOR THE FOLLOWING:

1. SITE SHALL ACCEPT PARTIAL FLOWS FROM REMNANT OF LOT 1 (LOT 1-A) ADJACENT TO THE NORTH.
2. ALL FUTURE OFFSITE AND ONSITE DEVELOPED FLOWS SHALL BE ROUTED TO THE SITE'S SOUTHEASTERLY CORNER AND DETAINED BY AN ONSITE POND. OUTFALL SHALL BE LIMITED TO 76% OF THE DEVELOPED PEAK.
3. INITIAL POND OUTFALL SHALL BE WITHIN THE LIMITS OF THE 20' DRAINAGE EASEMENT AT THE SOUTHEAST CORNER OF THE SITE.
4. DOWNSTREAM CONTAINMENT OF DISCHARGED STORM WATER FLOWS SHALL NOT BE A CONCERN DUE TO A LETTER OF ACCEPTANCE FROM THE DOWNSTREAM PROPERTY OWNER.

HYDROLOGY

(PROPOSED): THE PROPOSED SITE IMPROVEMENTS CONSIST OF A SINGLE BUILDING, ASPHALTIC PARKING AND ACCESS SURFACES AND LANDSCAPING. THE ANALYSIS FOR DETERMINING THE MAXIMUM PEAK DISCHARGE IS BASED ON LAND TREATMENTS.

LAND TREATMENT	AC.	SQ. FT.
B	0.164	7,128
D	0.43	18,742

TOTAL Q_P = $Q_{PB}A_B + Q_{PD}A_D$
= (1.91)(0.164) + (4.37)(0.43)
= 0.313 + 1.879 = 2.19 CFS

ALLOWABLE DISCHARGE = (0.76)(2.19) = 1.67 CFS

VOLUME OF RUNOFF

WEIGHTED E = $\frac{(0.61)(0.164) + (1.93)(0.43)}{0.594}$

= 1.56 INCHES

VOLUME = $\frac{1.56}{12} \times 0.594$ = 0.77 AC. FT.

= 3,376 CU.FT.

POND VOLUME IS DETERMINED BY SOLVING FOR THE DIFFERENCE IN THE HYDROGRAPH FOR SMALL WATERSHED (DPM SECTION 22.2, A.8) BETWEEN THE ALLOWABLE DISCHARGE RATE AND THE PEAK RATE.

t_b = $\frac{(121)(1.56)(0.594)}{2.19} - \frac{(15)(0.43)}{0.594}$

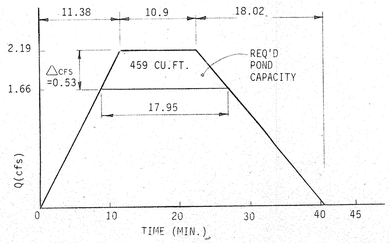
= 51.2 - 10.8 = 40.3 MIN.

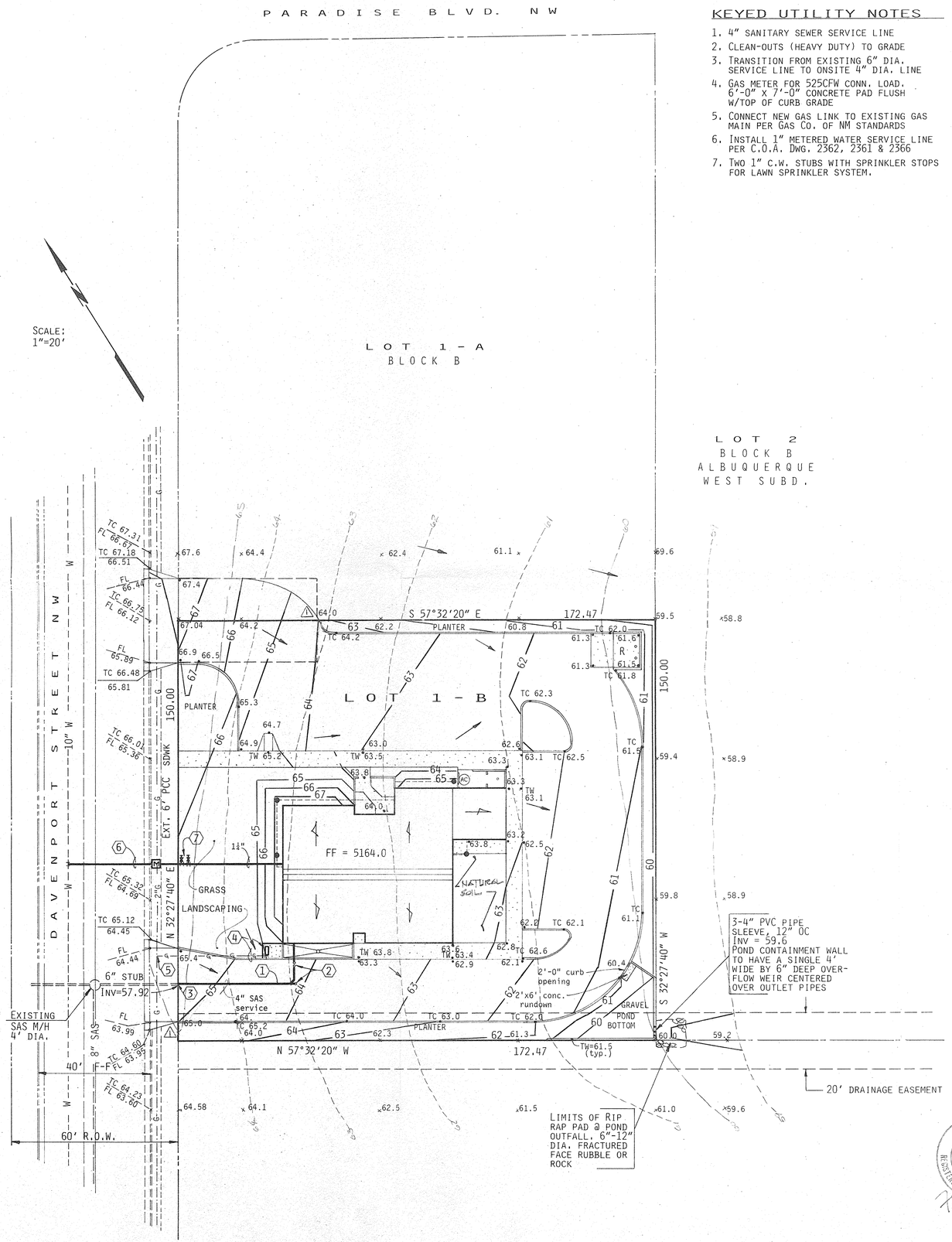
t_p = $(0.7)(10) + 8 - \frac{(5)(0.43)}{0.594}$

= 11.38 MIN.

t_{pc} = $(15)\frac{0.43}{0.594}$

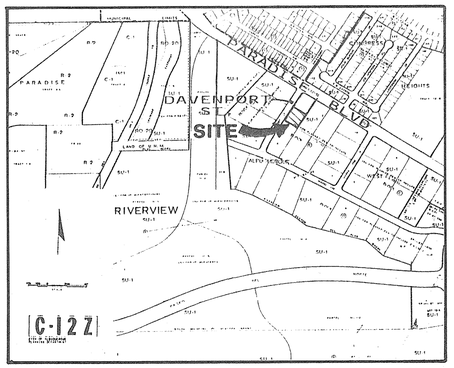
= 10.9 MIN.





KEYED UTILITY NOTES

1. 4" SANITARY SEWER SERVICE LINE
2. CLEAN-OUTS (HEAVY DUTY) TO GRADE
3. TRANSITION FROM EXISTING 6" DIA. SERVICE LINE TO ONSITE 4" DIA. LINE
4. GAS METER FOR 525CFW CONN. LOAD. 6'-0" x 7'-0" CONCRETE PAD FLUSH W/TOP OF CURB GRADE
5. CONNECT NEW GAS LINK TO EXISTING GAS MAIN PER GAS CO. OF NM STANDARDS
6. INSTALL 1" METERED WATER SERVICE LINE PER C.O.A. DWG. 2362, 2361 & 2366
7. TWO 1" C.W. STUBS WITH SPRINKLER STOPS FOR LAWN SPRINKLER SYSTEM.



VICINITY MAP 1"=750'±

GENERAL NOTES

LEGAL DESCRIPTION: LOT 1-B BEING THE SOUTHERLY 150.00 FEET OF LOT 1, BLOCK B OF THE ALBUQUERQUE WEST SUBDIVISION, FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JANUARY 3, 1985, VOLUME C 26, FOLIO 18.

ENGINEER: ISAACSON & ARFMAN, P.A.
128 MONROE STREET NE
ALBUQUERQUE, N.M. 87108
ATTN: FRED C. ARFMAN
(505) 268-8828

SURVEYOR: WILLIAM P. PETTIT
NMRLS NO. 3243
DATE OF SURVEY: SEPT. 6, 1991

BENCHMARK: ACS B.M. NO. "2-C12", 1 3/4" ALUM. DISK SET ON TOP OF CURB @ WNW RETURN OF PARADISE BLVD. AND DAVENPORT STREET NW.
ELEVATION: 5175.79

TBM: RAILROAD SPIKE IN POWER POLE APPROX. 1 BLOCK EAST OF GOLF COURSE RD. ON SOUTH R.O.W. LINE OF PARADISE BLVD.
ELEVATION: 5199.82

ZONING: SU-1 FOR C-3 USES

AREA: 0.5939 ACRES (25,870 SQ.FT.)

FLOOD HAZARD: NO PART OF THIS LOT NOR THE ADJACENT RIGHT-OF-WAY OF DAVENPORT ST. ARE SUBJECT TO A FLOOD HAZARD AREA AS DETERMINED BY PANEL NO. 350002-0008 OF THE OCTOBER 14, 1983 EDITION OF THE F.E.M.A. MAPS.

APR 2 1992
HYDROLOGY DIVISION

no.	date	revision
△	10/30/91	D.R.B. COMMENTS

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The Pet Doctor
Davenport Street, N.W.
Albuquerque, NM

Utility, Grading & Drainage Plan

job no. 91021
drn. by IGA
ckd. by F.A.
issued 2/30/92
sheet C-2 2 of 22

STATE OF NEW MEXICO
DALE R. DEKKER 1052
REGISTERED ARCHITECT

FRED C. ARFMAN
NEW MEXICO
7322
REGISTERED PROFESSIONAL ENGINEER

10/30/91
4/2/92