

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 26, 1992

Virgil Gil
3809 Atrisco NW - Suite A
Albuquerque, New Mexico 87120

RE: GRADING & DRAINAGE PLAN FOR LOTS 66 - 70A
ESTRELLA BRILLANTE SUBDIVISION (G-11/D36A)
RECEIVED AUGUST 25, 1992 FOR FINAL PLAT APPROVAL
STAMPED & DATED AUGUST 21, 1992

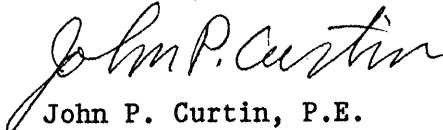
Dear Mr. Gil:

Based on the information included in the submittal referenced above, the Grading & Drainage Plan for this project is approved by City Hydrology for Final Plat. The paper easement dedicating the private drainage easement on Lots 65 & 66 must be executed, recorded, and noted on the Plat before Fred Aguirre will sign the Plat.

A copy of the Grading & Drainage Plan must be included in the set of construction drawings submitted for the building permit.

If I can be of further assistance, you may contact me at 768-2727.

Sincerely,


John P. Curtin, P.E.
PWD/Hydrology

WPHYD+3219;jpc

xc: Alan Martinez

PUBLIC WORKS DEPARTMENT



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 10, 1992

Richard Norton
Post Office Box 2001
Corrales, New Mexico 87048

RE: GRADING & DRAINAGE PLAN FOR LOTS 66 - 70A ESTRELLA
BRILLANTE SUBDIVISION (G-11/D36A) RECEIVED May 29, 1992

Dear Mr. Norton:

Based on the information provided by your resubmittal received May 29, 1992; the Drainage Plan for the above referenced project is approved. The Building Permit for this project can not be released until the Final Plat for Subdivision and Vacation is approved. If you have any questions, you may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
PWD/Hydrology

WPHYD+3219;jpc

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

PROJECT TITLE: ESTRELLA BRILLANTE ZONE ATLAS/DRNG. FILE #: _____

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: LOTS '66, 67A THRU 70A, ESTRELLA BRILLANTE

CITY ADDRESS: ESTRELLA BRILLANTE ST. NW

ENGINEERING FIRM: RICHARD NORTON CONTACT: SAME

ADDRESS: Box 2001 Corrales PHONE: 897-0038

OWNER: VIRGIL GIL CONTACT: SAME

ADDRESS: 3809 AVALON NW PHONE: 269-0944

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: OLIVER TRUJILLO CONTACT: SAME

ADDRESS: 221 AVALON PL NW PHONE: 836-0328

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☒ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

☐ OTHER

PRE-DESIGN MEETING:

☐ YES

☐ NO

☐ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ S. DEV. PLAN FOR SUB'D. APPROVAL

☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL

☐ SECTOR PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☒ BUILDING PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

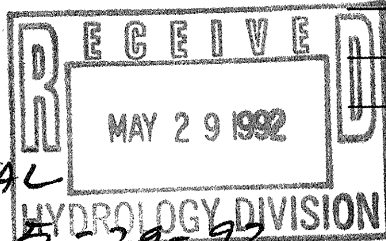
☐ GRADING PERMIT APPROVAL

☐ PAVING PERMIT APPROVAL

☐ S.A.D. DRAINAGE REPORT

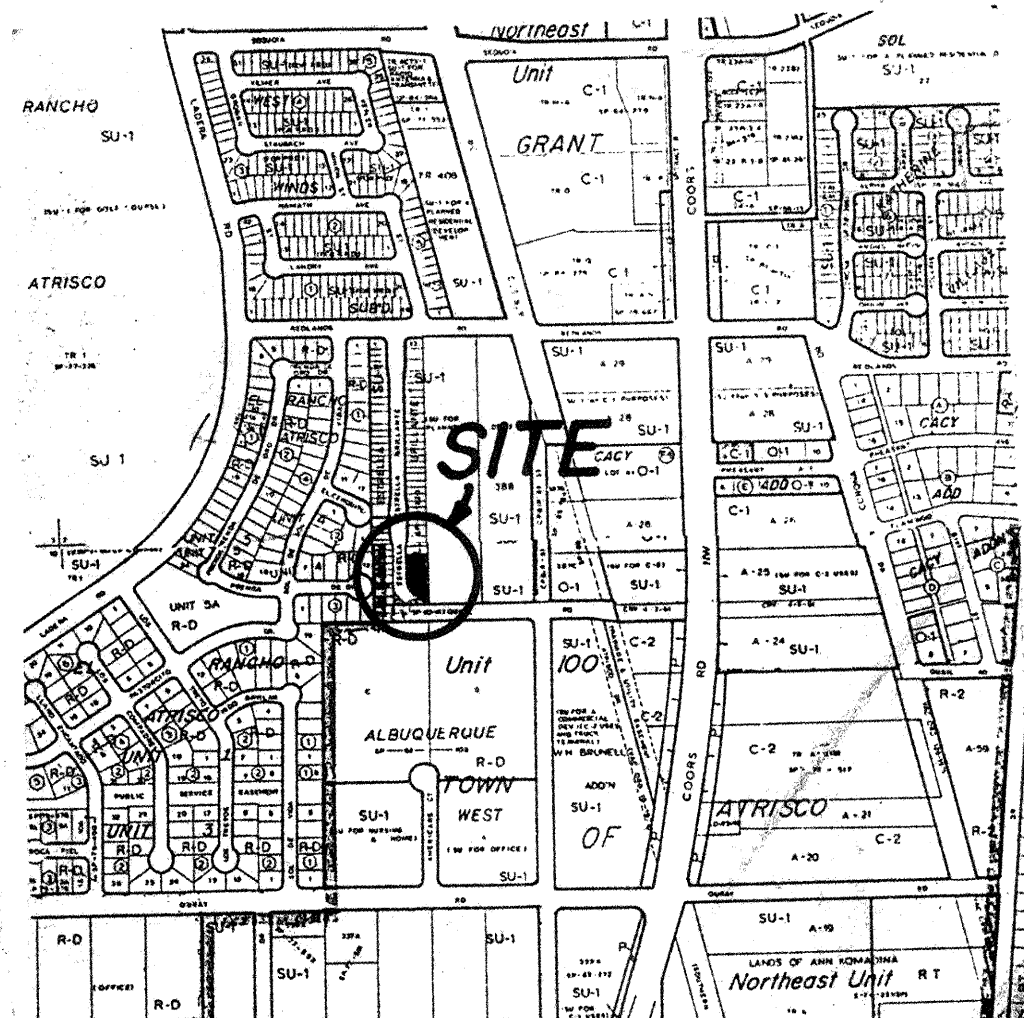
☐ DRAINAGE REQUIREMENTS

☐ OTHER _____ (SPECIFY)

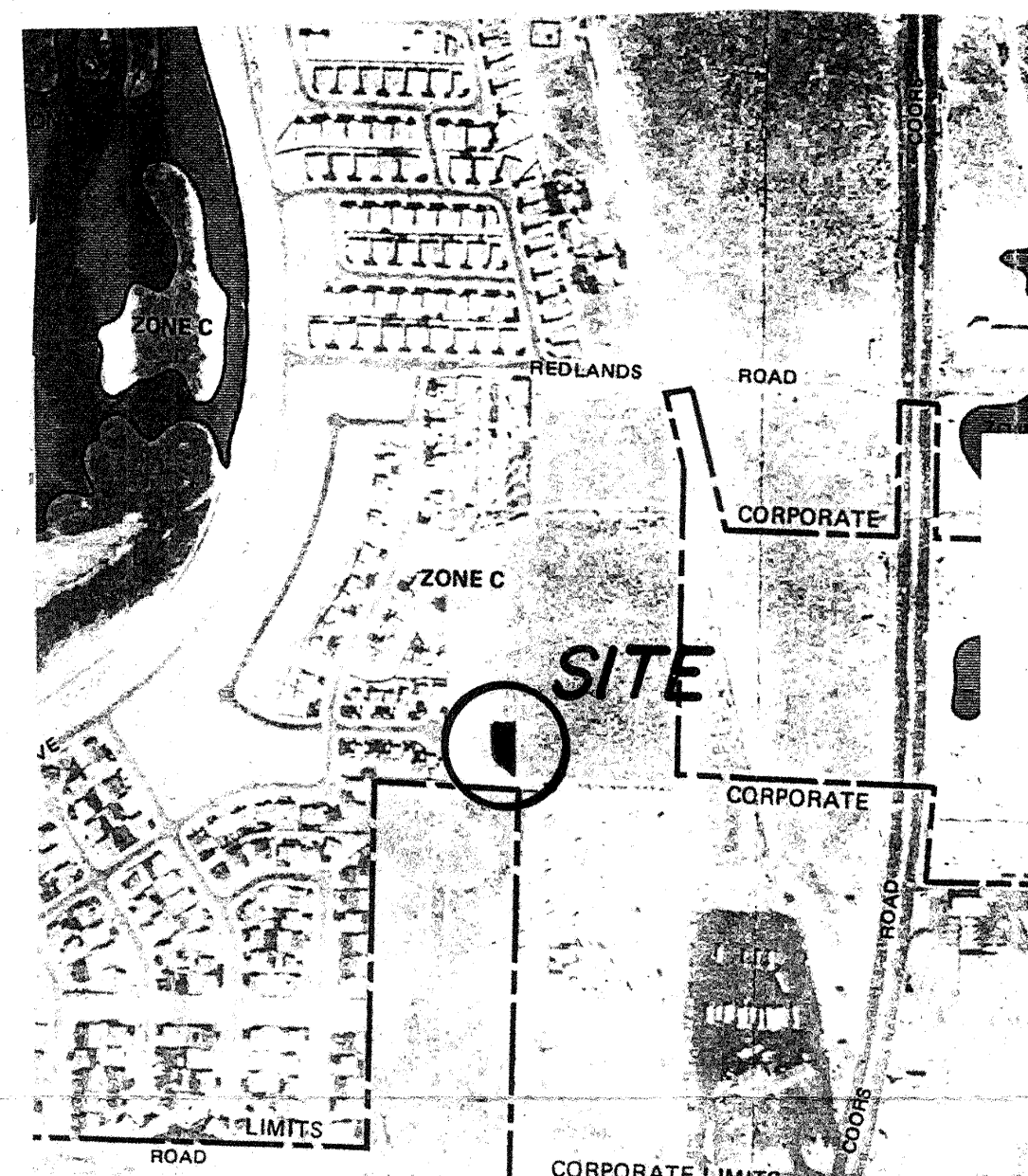
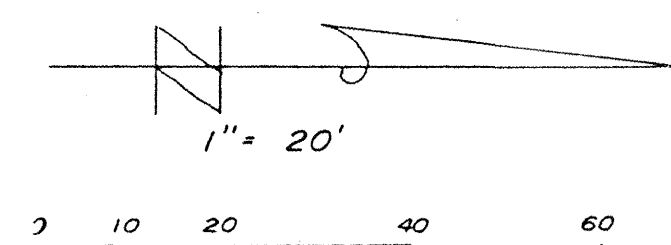


DATE SUBMITTED: _____

BY: OLIVER TRUJILLO



H-11-2



PANEL 2 of 50

DRAINAGE CALCULATIONS (TYPICAL LOT)

LOT SIZE - 80' x 32' = 2560 S.F.
HOUSE - 44' x 22' = 968 S.F. x 0.90 = 861
DRIVE - 20' x 20' = 400 S.F. x 0.95 = 380
LAWN, ETC. - 1236 S.F. x 0.25 = 309
1550

RUNOFF

IMPERVIOUS 1368 x 1 = 1368
PERVIOUS 1236 x .62 = 766

$$C_{\text{avg}} = \frac{1550}{2560} = 0.605$$

ASSUME $T_c \leq 10$ MIN.

$$i = (2.2)(6.84)(10)^{-.51} = 4.65$$

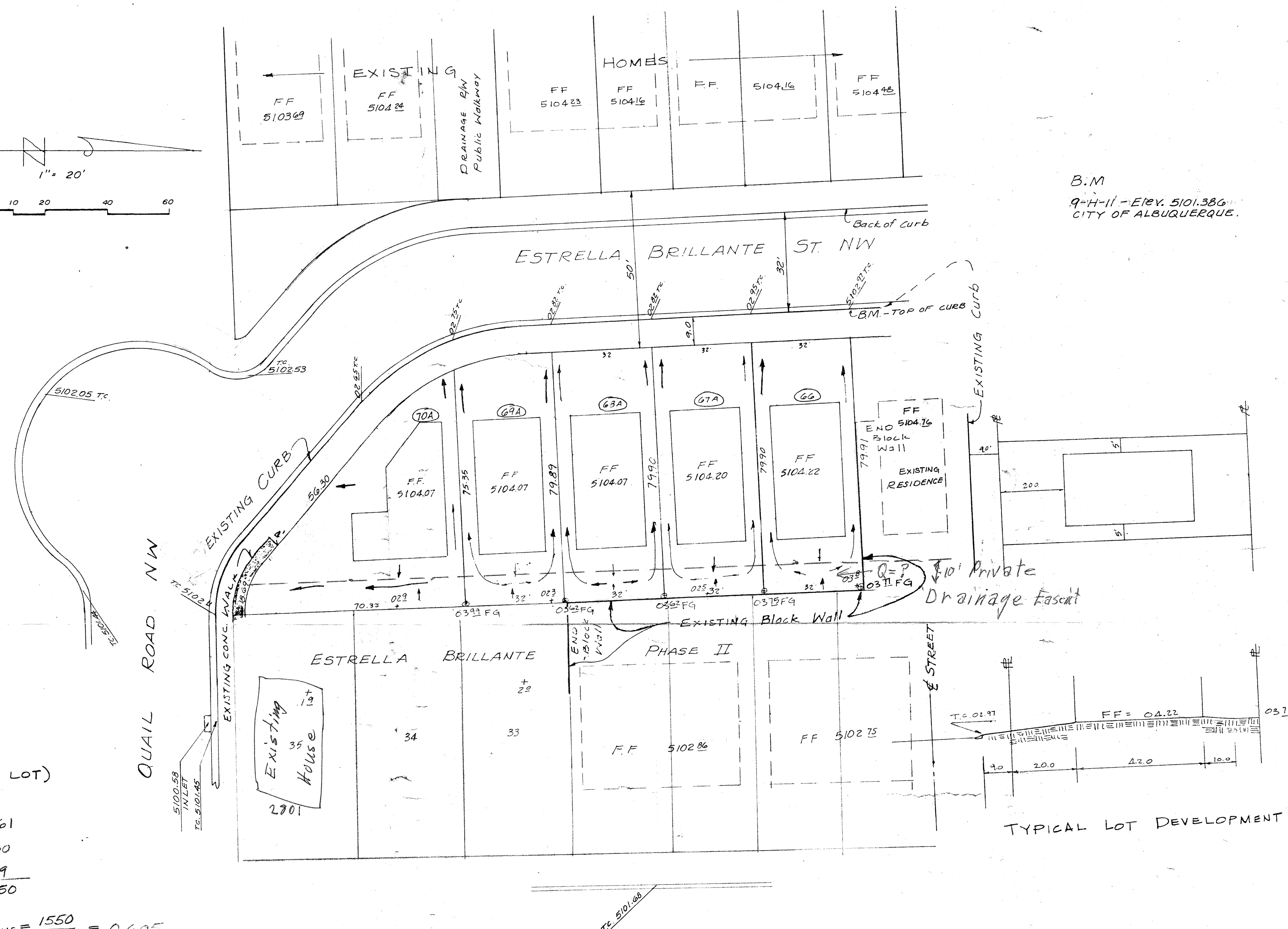
$$Q = .605(4.65) \frac{2560}{13560} = .16 \text{ C.F.S.}$$

| | | | | |
|-----------|--------|-------|------|---------------------------------|
| SUMMARY - | LOT 66 | 2557 | S.F. | $\Sigma Q = .605(4.65)(308) =$ |
| | LOT 67 | 1838 | | $= 0.85 \text{ C.F.S.}$ |
| | LOT 68 | 1838 | | |
| | LOT 69 | 1837 | | |
| | LOT 70 | 1817 | | |
| | LOT 71 | 3537 | | |
| | | 13424 | S.F. | $\rightarrow 0.308 \text{ AC.}$ |

LEGEND

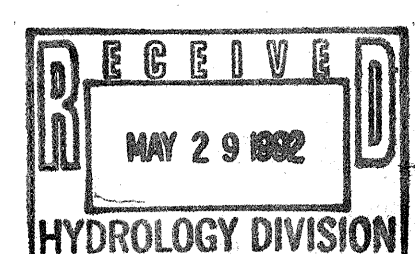
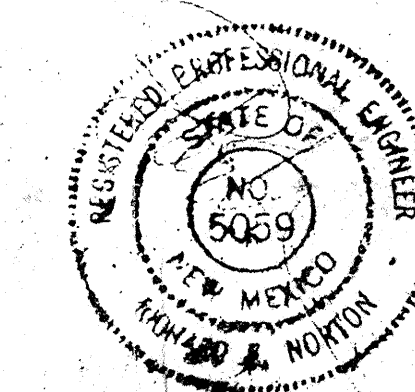
FINISHED FLOOR ELEV. - FF 5104.07
EXISTING ELEV - +02.9
PROPOSED ELEV. - 03.99
SWALE -

NOTE FROM PLAT OF ESTRELLA BRILLANTE:
Lot 72 is dedicated for water, sewer, Drainage, access, and utility easement.
Lots 66-71 are dedicated as a Temporary Drainage Easement until such time as released by the City Engineer.
VACATION REQUEST BY THIS PLAN
The temporary drainage easement (lots 66-71) dedicated by the plat filed August 17, 1983, Book 621, Folio 193 is vacated by the approval and filing of this plat.

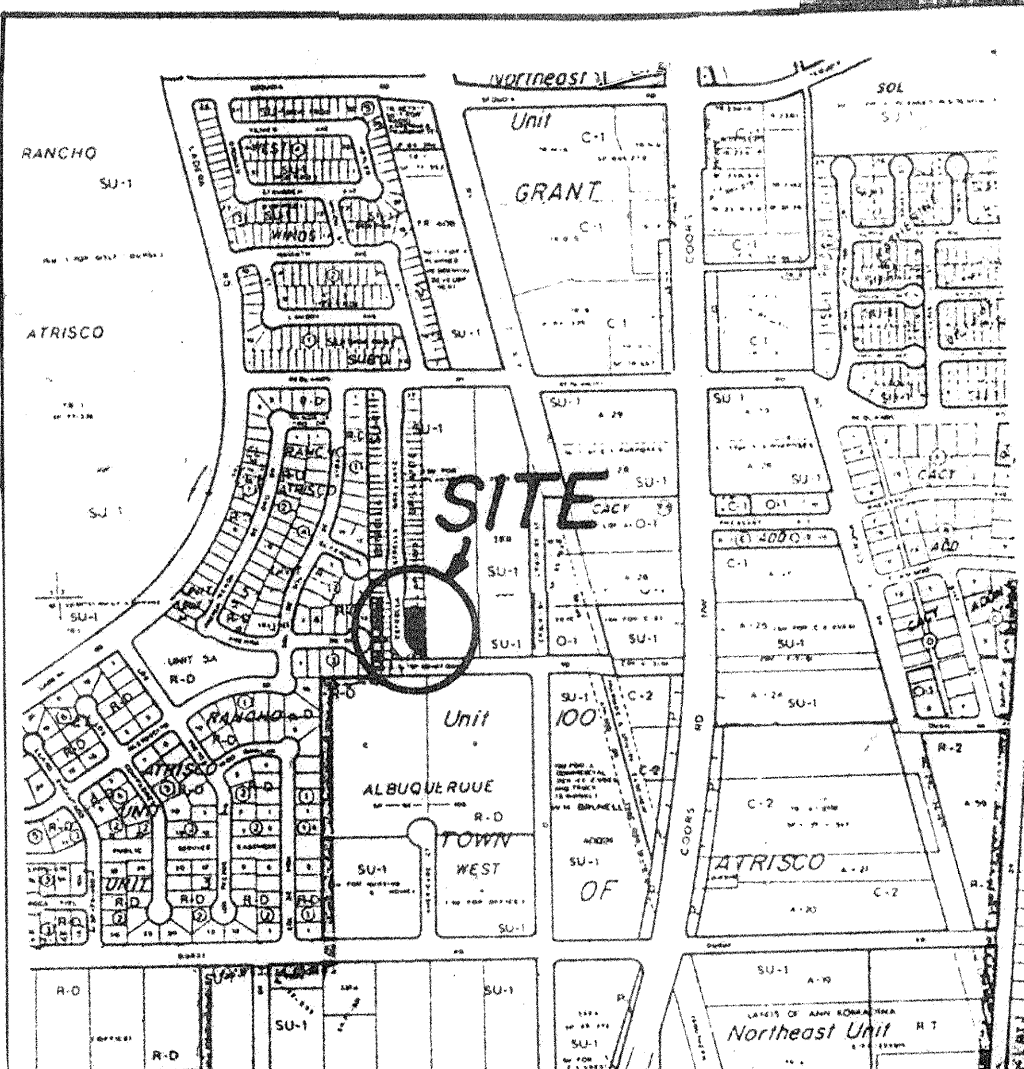


B.M.
9-H-11 - Elev. 5101.386
CITY OF ALBUQUERQUE.

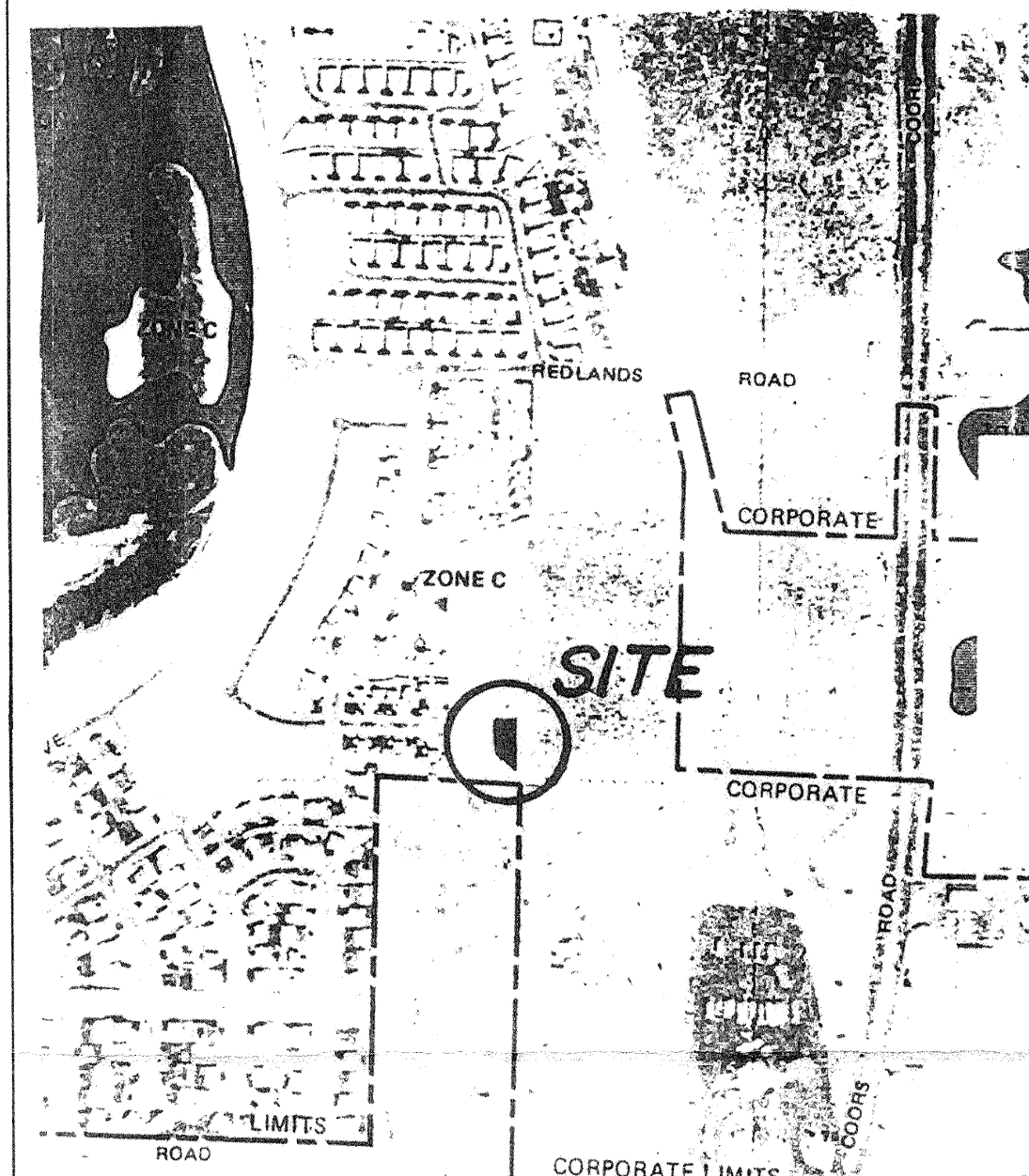
TYPICAL LOT DEVELOPMENT



GRADING AND DRAINAGE PLAN
LOTS 66, 67A, 68A, 69A, AND 70A
ESTRELLA BRILLANTE
ALBUQUERQUE, NEW MEXICO
JAN. 29, 1992
REVISED APR. 17, 1992
REVISED MAY 27, 1992



H-11-Z



PANEL 21 of 50

DRAINAGE CALCULATIONS (TYPICAL LOT)

| | |
|------------|-----------------------------------|
| LOT SIZE | 80' x 32' = 2560 S.F. |
| HOUSE | 44' x 22' = 968 S.F. X 0.90 = 861 |
| DRIVE | 20' x 20' = 400 S.F. X 0.95 = 380 |
| LAWN, ETC. | 1236 S.F. X 0.25 = 309 |
| | 1550 |

RUNOFF

| | | |
|------------|-------------------|----------------------------|
| IMPERVIOUS | 1368 x 1 = 1368 | Caus = 1550 / 2560 = 0.605 |
| PERVIOUS | 1236 x 0.62 = 766 | |

ASSUME $T_c \leq 10$ MIN.

$$i = (2.2)(6.84)(10)^{-0.51} = 4.65$$

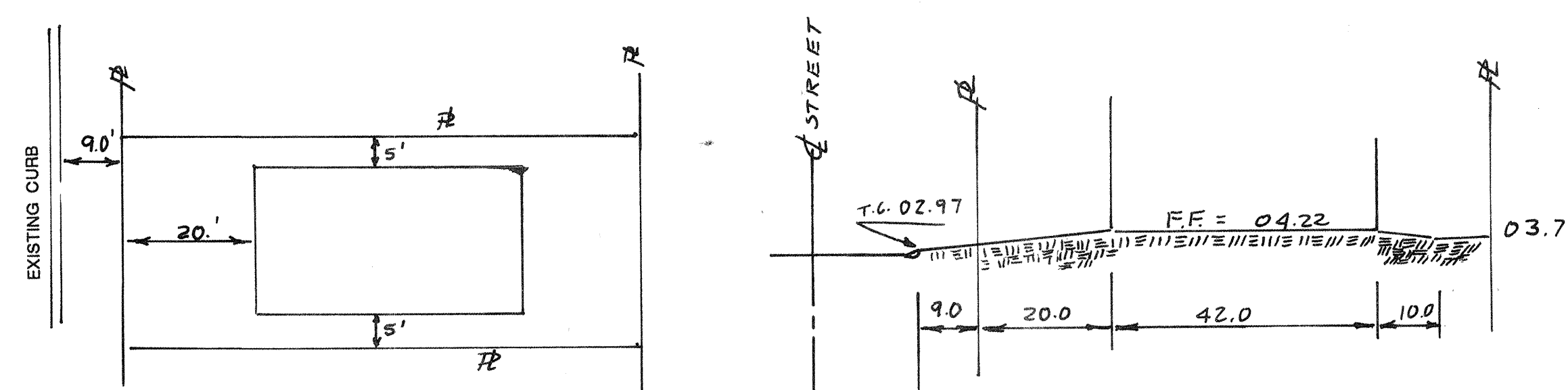
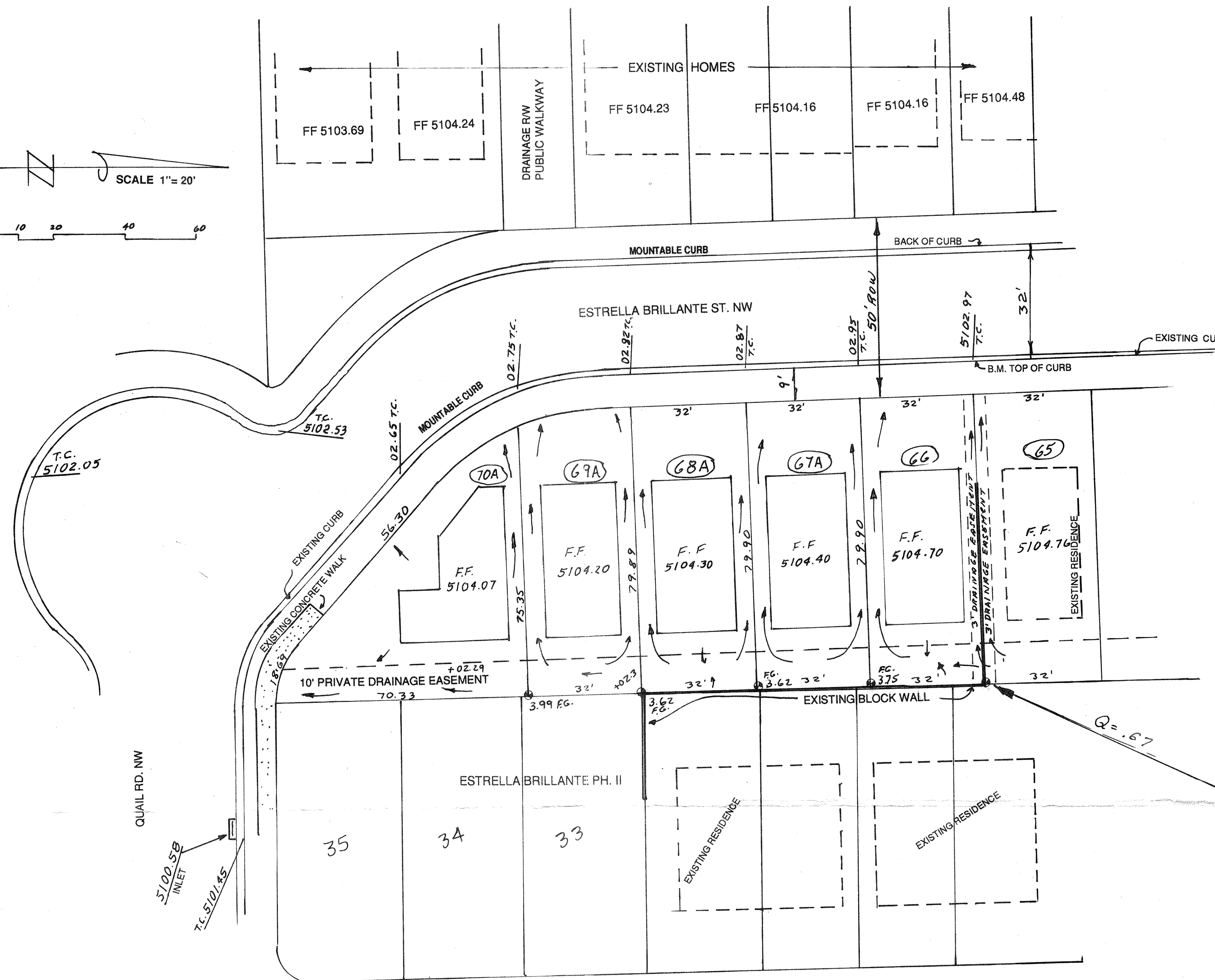
$$Q = .605(4.65) \frac{2560}{43560} = .16 \text{ C.F.S.}$$

| | | |
|----------------|-----------|---------------------------------|
| SUMMARY LOT 66 | 2557 S.F. | $\Sigma Q = .605(4.65)(.308) =$ |
| " 67 | 1838 | |
| " 68 | 1838 | |
| " 69 | 1837 | |
| " 70 | 1817 | |
| " 71 | 3537 | |

$$13424 \text{ S.F.} \rightarrow 0.308 \text{ AC.}$$

SCALE 1" = 20'

0 10 20 40 60



TYPICAL LOT DEVELOPMENT

STA. NM 448 - N3 ELEV. 5099.527
STANDARD N.M.S.H.C. BRASS TABLET SET
FLUSH IN TOP OF CONCRETE POST LOCATED IN
THE SOUTH WEST EDGE OF "WEST MESA BOWL"
BOWLING ALLEY PARKING LOT.

LOTS 66-70A ESTRELLA BRILLANTE SUBDIVISION ALBUQUERQUE, NEW MEXICO GRADING AND DRAINAGE PLAN

JANUARY 29, 1992
REVISED APRIL 17, 1992
REVISED MAY 27, 1992
REVISED JULY 20, 1992

THE TEN FEET PRIVATE DRAINAGE EASEMENT NOW EXISTING ALONG THE EAST SIDE OF LOTS 36 TO 71 HAD BEEN PLACED FOR THE PURPOSE OF HANDLING ANY EXCESS WATER RUNOFF OF THE REAR YARDS. ALL EXISTING HOUSES WERE BUILT WITH THE ROOFS DRAINING TO THE FRONT OF BUILDINGS. THEREFORE ALL RUNOFFS OF IMPERVIOUS AREA ARE DRAINING TO THE STREET.
WE PROPOSE TO PLACE A THREE FEET DRAINAGE EASEMENT ALONG THE SOUTH LOT LINE OF LOT 65 AND ALONG NORTH LOT LINE OF LOT 66 TO DIVERT TO ESTRELLA BRILLANTE NW ANY EXCESS WATER THAT MAY CONCENTRATE AT LOTS 65 AND 66.

NOTE FROM PLAT OF ESTRELLA BRILLANTE:
Lot 72 is dedicated for water, sewer, drainage, access, and utility easement.
Lots 66-71 are dedicated as a Temporary Drainage Easement until such time as released by the City Engineer.

VACATION REQUEST BY THIS PLAN

The temporary drainage easement (lots 66-71) dedicated by the plat filed August 31, 1983, Book C21, Folio 193 is vacated by the approval and filing of this plat.

LEGEND

| | |
|----------------------|--------------|
| FINISHED FLOOR ELEV. | - FF 5204.07 |
| EXISTING ELEV. | - +02.90 |
| PROPOSED ELEV. | - +03.99 |
| SWALE | - |

$$\text{Area: } 830' \text{ Long } \times 17' \text{ Wide} = 14,110' = 0.324 \text{ ACs.}$$

30 units w/o New Lots (Existing) Roofs Drain to the street.
5 New Lots

Rear yards have 6'x12' Conc. pads 50% Lawns
50% S.W. Lands.

$$\text{Total Area} = 14,110'$$

$$\text{Imper. Conc. Pads: } 6 \times 12 \times 20 = 2,160' = 15.3\%$$

$$\begin{aligned} \text{Per. Area} &= 11,950' \\ 50\% \text{ Lawns} &= 5,975' = 42.3\% \\ 50\% \text{ S.W. Lands} &= 5,975' = 42.4\% \\ &100\% \end{aligned}$$

Compute AV.C

$$C = (.153 \times .95) + (.423 \times .4) + (.424 \times .25) = .15 + .17 + .11 = 0.43$$

$$\begin{aligned} \text{rainfall } 100\text{yr } 6\text{hr} &= 2.2 \text{ Plate 22.2 D-1} \\ \text{Intensity Factor} &= 2.2 \text{ Plate 22.2 D-2 } T_c < 10 \text{ min.} \\ C &= 2.2 \times 2.2 = 4.84 \end{aligned}$$

$$Q = C \cdot A = 0.43 \times 4.84 \times .324 \text{ AC.} = 0.67 \text{ C.F.S. } \left(\frac{.022 \text{ cfs/lot}}{.324 \text{ AC.}} \right)$$

$$\begin{aligned} \text{Vol. from INTERIM DRAINAGE DESIGN CRITERIA} \\ \text{Zone I Treatment B (lawns)} &= 42.3\% = 5,975' \\ \text{C (W.L.S.)} &= 42.3\% = 5,975' \\ \text{3,585} &4,900 \\ \text{WT.E} &= (.6 \times 5,975) + (.82 \times 5,975) + (.18 \times 2,160) = 12,524 = 0.89 \\ &14,110 \quad 4,039 \quad 14,110 \end{aligned}$$

$$\text{Vol. } 360 = 0.89 \div 12 \times 14,110 = 1,046 \text{ C.F. } \left(\frac{.022 \text{ cfs/lot}}{.324 \text{ AC.}} \right)$$

$$\begin{aligned} \text{Assume } S &= .005' (.5\%) \\ r &= 2.23 + 2.23 = 4.46 \\ r^2 &= 19.68 \\ V &= 1.486 \times r^2 \times S = 2.4 \text{ Q} = 4.8 \text{ C.F.S.} \end{aligned}$$

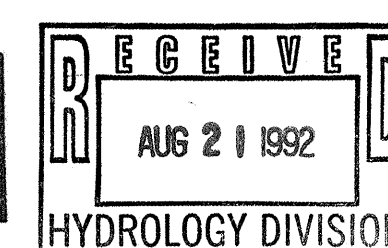
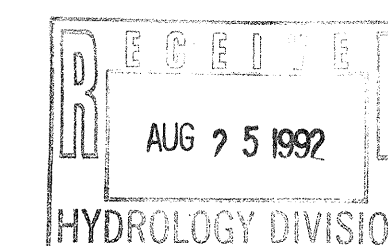
$$\begin{aligned} d &= 0.5' \quad A = 0.5' \\ \text{NP} &= 2.23 \\ r &= .22 \times .37 = .0814 \\ &= 1.486 \times .37 \times .07 = 1.54 \text{ FPS } \quad Q = 0.77 \text{ C.F.S.} \end{aligned}$$

$$2' \times 5' / 2$$

Information sheet
Raul A. Rivera
PE & LS No. 1693 New Mexico
8-21-92
Date



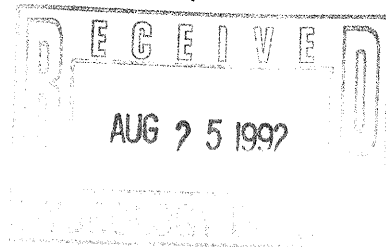
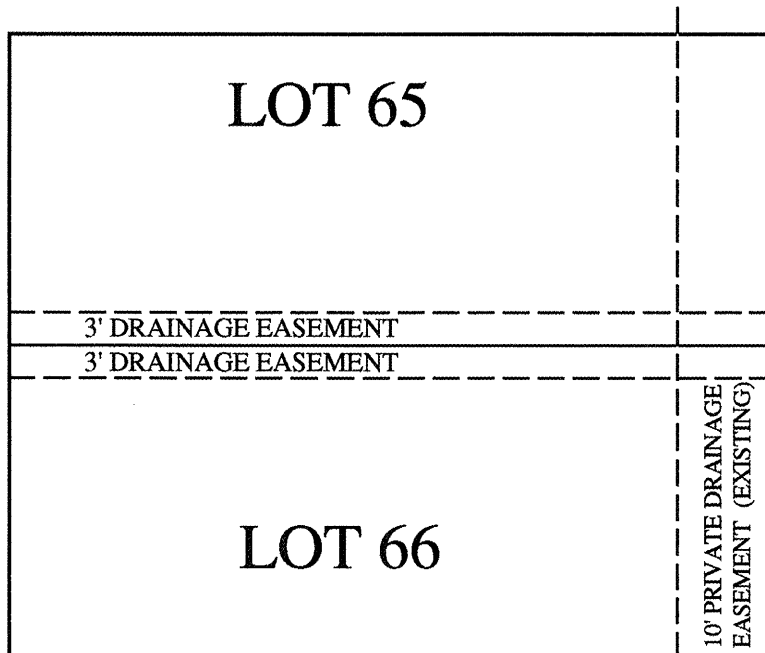
RIVERA ENGINEERING
2624 Valencia Dr. N.E.
Albuquerque, NM 87110
881-3419



PRIVATE DRAINAGE EASEMENT DEDICATION

I, VIRGIL GIL THE OWNER OF LOTS 65 AND 66 OF ESTRELLA BRILLANTE A
SUBDIVISION TO THE CITY OF ALBUQUERQUE, COUNTY OF BERNALILLO
GRANT TO LOTS 37 THRU 64 OF ESTRELLA BRILLANTE THREE FEET PRIVATE DRAINAGE
EASEMENT ALONG THE SOUTH PROPERTY LINE OF LOT 65 AND THREE FEET (3') ALONG THE
NORTH PROPERTY LINE OF LOT 66, THIS EASEMENT SHALL BE BINDING ON THE OWNERS,
AND THEIR RESPECTIVE HEIRS, ASSIGNS AND SUCCESSORS AND ON THE OWNER'S PROP-
ERTY.

ESTRELLA BRILLANTE ST. NW.



MAINTENANCE RESPONSIBILITY: OWNERS IN POSSESSION ARE RESPONSIBLE
TO UPKEEP AND MAINTAIN ALL EASEMENT AREA.

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) SS

VIRGIL GIL

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY
VIRGIL GIL OWNER OF LOTS 65 AND 66 OF ESTRELLA BRILLANTE ON THE
____ DAY OF _____ 1992.

MY COMMISSION EXPIRES

NOTARY PUBLIC

Execute and Record Easement.