W.O. # 53382

7-29-10

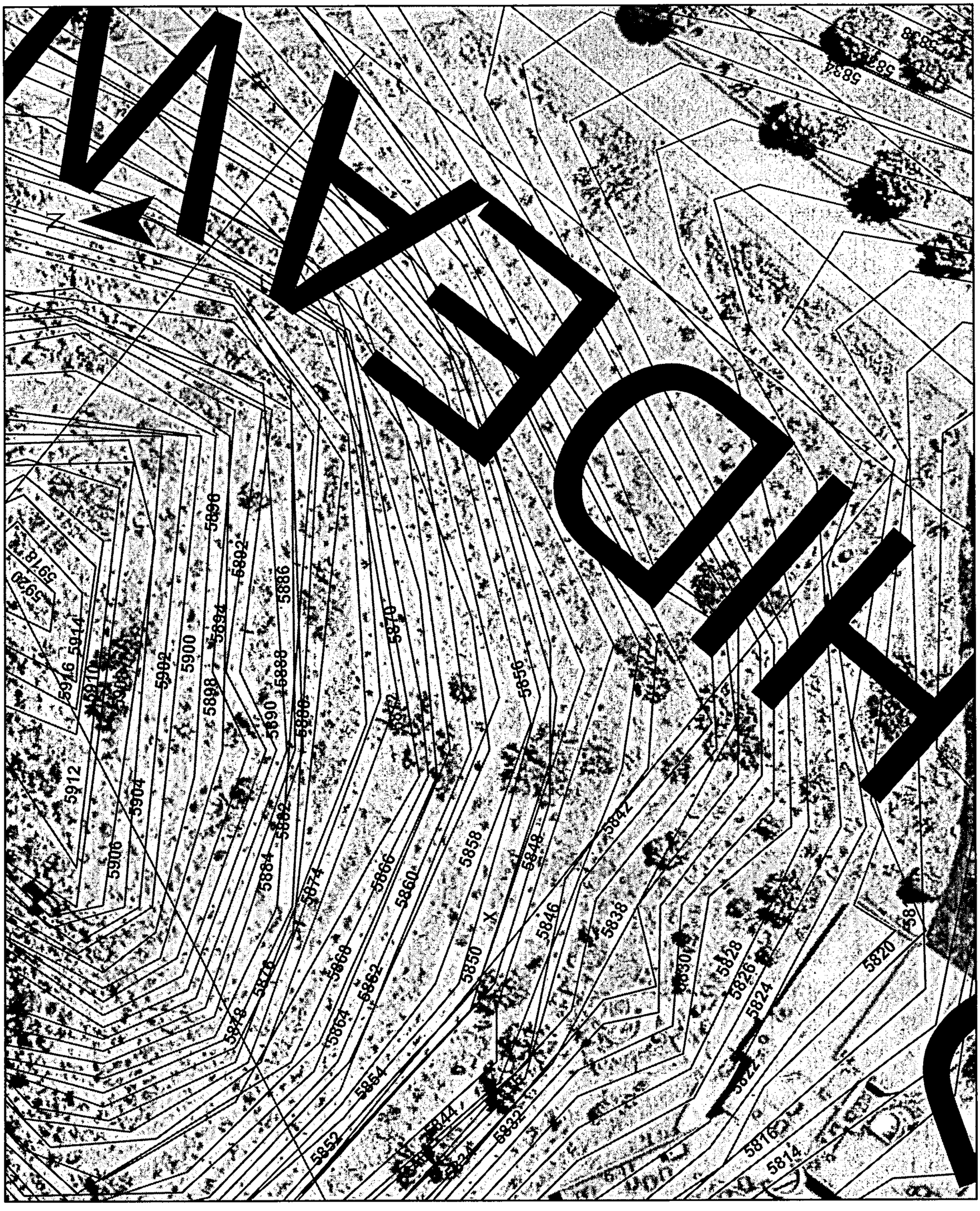
I spoke with the owner concerning development of these lots. He was concerned of the comment "Roof flows on the southern lot should drain down the driveway..."

His concern was that he may not pave the driveway.

I told him the intent was to not have concentrated roof flows exit the property to the south.

So, if he can do something else as long as there are no concentrated roof flows leaving the property to the south.

Curtis A. Clemens 7-29-10


N
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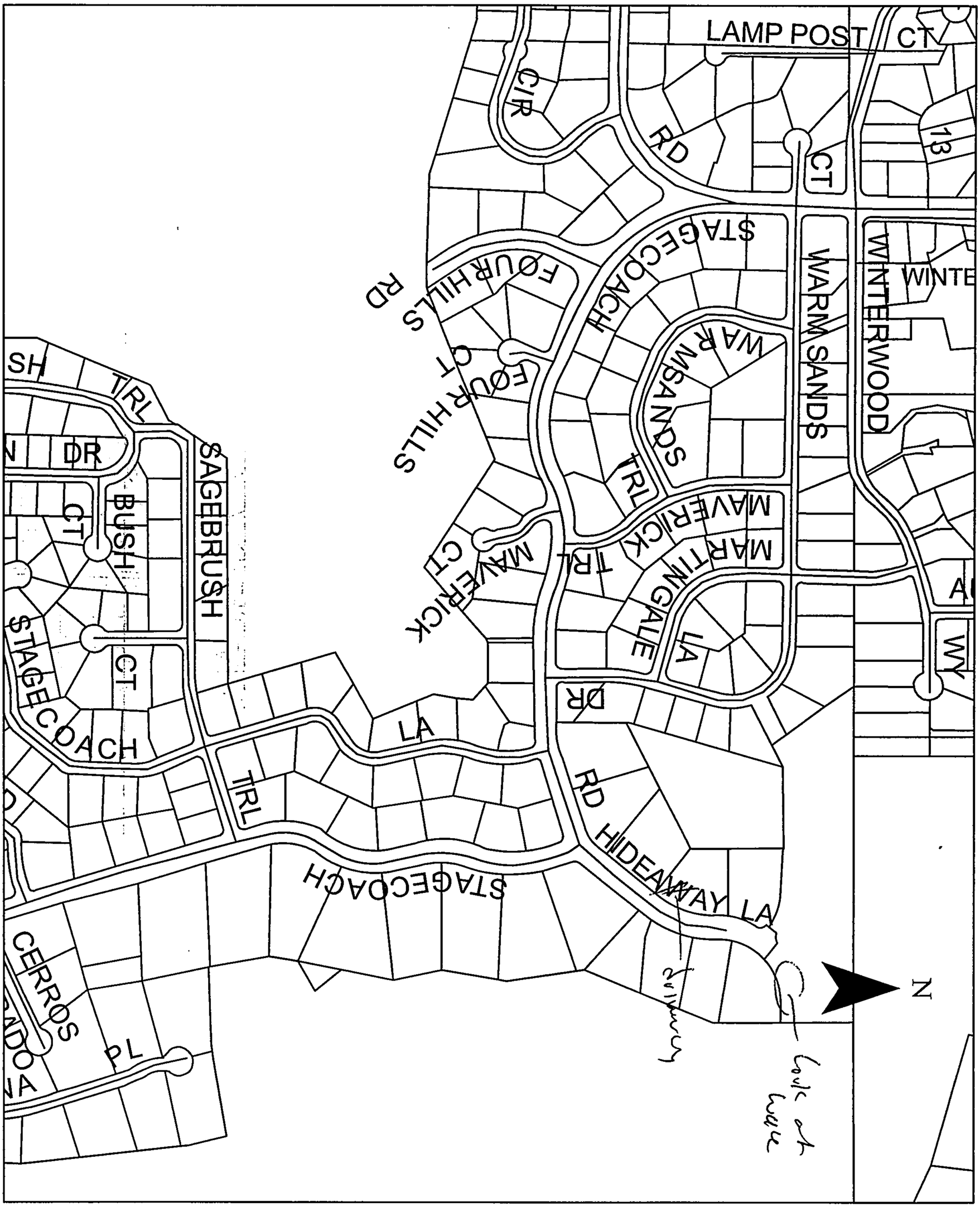

LAMP POST CT
CIR
RD
CT
13
STAGECOACH
FOUR HILLS RD
FOUR HILLS CT
WARM SANDS
WINTERWOOD
WINTE
WARM SANDS
TRL
MAVERICK
MARTINGALE
LA
WY
DR
LA
RD
HIDEAWAY LA
STAGECOACH
TRL
SAGEBRUSH
DR
BUSH
CT
STAGECOACH
CT
LA
TRL
CERROS
PL
N

[redacted]

MARK GOODWIN
& ASSOCIATES
CONSULTING ENGINEERS
dmg

CITY OF ALBUQUERQUE

July 21, 2010

Gregory J. Krenik, P.E.
Mark Goodwin & Associates, PA
P.O. Box 90606
Albuquerque, NM 87199

Re: Lot 9, Blk 4 Four Hills Village 14th Installment Grading and Drainage Plan
Engineer's Stamp date 7-13-10 (M23/D009)

Dear Mr. Krenik,

Based upon the information provided in your submittal received 7-15-10, the above referenced plan is approved for Preliminary Plat action by the DRB.

The plan is not approved for Grading Permit. A Grading and Drainage Plan for Building Permit will be required for each lot. Roof flows on the southern lot should drain down the driveway to Hideaway Lane. Erosion control will be required on both lots.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: file
Brad Bingham

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/05)

D009

PROJECT TITLE: Lot 9, Block 4, Four Hills Village, 14th Installment ZONE MAP/DRG. FILE # M-23
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LOT 9, BLOCK 4, FOUR HILLS VILLAGE, 14th Installment
CITY ADDRESS: _____

ENGINEERING FIRM: Mark Goodwin & Associates, PA
ADDRESS: PO Box 90606
CITY, STATE: Albuquerque, NM
CONTACT: Gregory J. Krenik, PE
PHONE: (505) 828-2200
ZIP CODE: 87199

OWNER: Jack D'Ambrogio
ADDRESS: 1616 Sagebrush Trail SE
CITY, STATE: Albuquerque, NM
CONTACT: Jack D'Ambrogio
PHONE: (505) 797-2769
ZIP CODE: 87123

ARCHITECT: _____
ADDRESS: _____
CITY, STATE: _____
CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: Harris Surveying, Inc.
ADDRESS: 2412 Monroe NE
CITY, STATE: Albuquerque, NM
CONTACT: Tony Harris
PHONE: (505) 898-8056
ZIP CODE: 87110

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____
CONTACT: _____
PHONE: _____
ZIP CODE: _____

TYPE OF SUBMITTAL:
- X DRAINAGE REPORT
- _____ DRAINAGE PLAN 1st SUBMITTAL
- _____ DRAINAGE PLAN RESUBMITTAL
- _____ CONCEPTUAL G & D PLAN
- X GRADING PLAN
- _____ EROSION CONTROL PLAN
- _____ ENGINEER'S CERT (HYDROLOGY)
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT
- _____ ENGINEER/ARCHITECT CERT (TCL)
- _____ ENGINEER/ARCHITECT (DRB SITE PLAN)
- _____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:
- _____ SIA/FINANCIAL GUARANTEE RELEASE
- X PRELIMINARY PLAT APPROVAL
- _____ S. DEV. PLAN FOR SUB'D APPROVAL
- _____ S. DEV. FOR BLDG. PERMIT APPROVAL
- _____ SECTOR PLAN APPROVAL
- X FINAL PLAT APPROVAL
- _____ FOUNDATION PERMIT APPROVAL
- _____ BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY (PERM)
- _____ CERTIFICATE OF OCCUPANCY (TEMP)
- X GRADING PERMIT APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ WORK ORDER APPROVAL
- _____ OTHER (SPECIFY)

Look at

RECEIVED
JUL 15 2010
HYDROLOGY SECTION

$70.00

WAS A PRE-DESIGN CONFERENCE ATTENDED:
- X YES
- _____ NO
- _____ COPY PROVIDED

SUBMITTED BY: Gregory J. Krenik, PE DATE: 7-13-10

Requests for approvals of Site Development Plans ~~and/or~~ Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.

2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.

3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

DRAINAGE REPORT

For

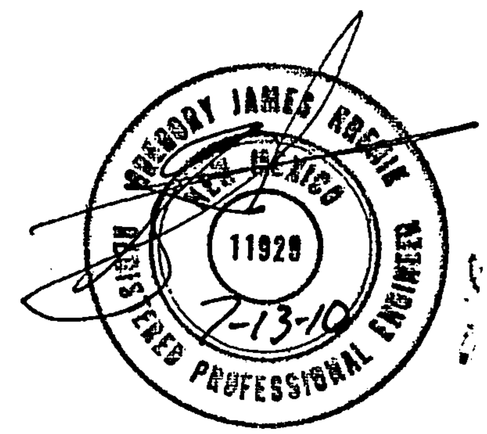
LOT 9, BLOCK 4, FOUR HILLS VILLAGE
14th INSTALLMENT

Prepared By:

Mark Goodwin & Associates, PA
PO Box 90606
Albuquerque, NM 87199
(505) 828-2200

Prepared For:

Jack D'Ambrogio
1616 Sagebrush Trail SE
Albuquerque, NM 87123
(505) 797-2769



July 2010

R-D

LAND

OF

FOUR HILLS

VILLAGE

SP 84 211

SITE

R-D

FOUR HILLS COUNTRY CLUB

SU-1 GOLF COURSE

R-D

R-D

R-D

R-D

A-1

For more current information and more details visit: http://www.cabq.gov/gis

Albuquerque Geographic Information System

Map amended through: 2/4/2010

Note: Grey Shading Represents Area Outside of the City Limits

Zone Atlas Page:

M-23-Z

Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

0 750 1,500 Feet

D. Mark Goodwin & Associates, P.A.
Consulting Engineers
P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 828-2200 FAX 797-9539

PROJECT LOT 9 BLK 4
SUBJECT DRAINAGE CALCS
BY GJK DATE 7-12-10
CHECKED ____ DATE ____
SHEET 1 OF ____

- SITE IS PART OF "FOUR HILLS VILLAGE, 14TH INSTALLMENT"
- SITE DOES NOT LIE IN A 100 YEAR FLOOD ZONE
- NO OFFSITE FLOWS ENTER THIS SITE
- TOTAL AREA OF EXISTING LOT 9 = 1.4171 AC
- NO PONDING IS REQUIRED
- OWNER WILL SPLIT LOT INTO TWO LOTS (9A + 9B)
- EXISTING LAND TREATMENTS ARE 100% 'C'

— DETERMINE RUNOFF FOR LOTS 9A & 9B

AREA OF LOT 9A = 0.8047 AC
AREA OF TYPE 'D' = 0.1723 AC = 21.41%
AREA OF TYPE 'C' = 0.6324 AC = 78.59%

AREA OF LOT 9B = 0.6124 AC
AREA OF TYPE 'D' = 0.1502 AC = 24.53%
AREA OF TYPE 'C' = 0.4622 AC = 75.47%

FROM RHYMO OUTPUT SHEETS 2-5

Q FOR LOT 9A
= 3.0 CFS

Q FOR LOT 9B
= 2.32 CFS

532

- EXISTING CONDITIONS OF LOT 9

FROM RHYMO OUTPUT SHEETS 2-5

Q = 4.81 CFS FOR 100% TYPE 'C'

$Q_D = 532 - 339 = 1.93$ cfs

THIS TRANSLATES TO
3.394256 CFS/AC

- DETERMINE Q OF UNDEVELOPED DRAINAGE BASINS.

DB	AREA (AC)	Q CFS
1	0.4753	1.61
2	0.0987	0.34
3	0.1284	0.44
4	0.0974	0.33
5	0.1122	0.38

- OWNER WILL INSTALL STD C+G ACROSS THE FRONTAGE.

```
START                TIME=0.0
***** HYDROGRAPH FOR LOT 9 BLK 4
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.08 IN RAIN SIX=2.60 IN
                     RAIN DAY=3.30 IN DT=0.03333 HR
***** LOT 9A
COMPUTE NM HYD       ID=1 HYD NO=101.1 AREA=0.001257 SQ MI
                     PER A=0 B=0 C=78.59 D=21.41
                     TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
***** LOT 9B
COMPUTE NM HYD       ID=1 HYD NO=101.1 AREA=0.000957 SQ MI
                     PER A=0 B=0 C=75.47 D=24.53
                     TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
***** EXISTING LOT 9
COMPUTE NM HYD       ID=1 HYD NO=101.1 AREA=0.002214 SQ MI
                     PER A=0 B=0 C=100 D=0
                     TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
FINISH
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```
      AHYMO PROGRAM (AHYMO_97) -                          - Version:  1997.02d
           RUN DATE (MON/DAY/YR) = 07/12/2010
           START TIME (HR:MIN:SEC) = 10:06:43     USER NO.= AHYMO-I-9702dGoodwinM-AH
           INPUT FILE = LOT9BLK4.DAT

     START                 TIME=0.0
     ***** HYDROGRAPH FOR LOT 9 BLK 4
     RAINFALL              TYPE=1 RAIN QUARTER=0.0 IN
                           RAIN ONE=2.08 IN RAIN SIX=2.60 IN
                           RAIN DAY=3.30 IN DT=0.03333 HR

                     COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK
AT 1.40 HR.
                     DT =     .033330 HOURS        END TIME =     5.999400 HOURS
                        .0000   .0036   .0072   .0109   .0147   .0186   .0225
                        .0266   .0307   .0350   .0393   .0438   .0484   .0531
                        .0579   .0629   .0680   .0732   .0787   .0843   .0901
                        .0961   .1023   .1088   .1156   .1226   .1300   .1376
                        .1457   .1542   .1632   .1690   .1751   .1817   .1958
                        .2273   .2759   .3457   .4409   .5660   .7256   .9243
                      1.1668  1.3919  1.4859  1.5653  1.6359  1.7001  1.7592
                      1.8141  1.8654  1.9135  1.9587  2.0014  2.0417  2.0799
                      2.1160  2.1503  2.1829  2.2137  2.2431  2.2507  2.2578
                      2.2646  2.2711  2.2774  2.2835  2.2893  2.2950  2.3004
                      2.3058  2.3109  2.3160  2.3209  2.3256  2.3303  2.3349
                      2.3393  2.3437  2.3480  2.3521  2.3562  2.3603  2.3642
                      2.3681  2.3719  2.3757  2.3794  2.3830  2.3866  2.3901
                      2.3936  2.3970  2.4004  2.4037  2.4070  2.4102  2.4134
                      2.4166  2.4197  2.4228  2.4258  2.4288  2.4318  2.4347
                      2.4376  2.4405  2.4433  2.4461  2.4489  2.4517  2.4544
                      2.4571  2.4598  2.4624  2.4650  2.4676  2.4702  2.4728
                      2.4753  2.4778  2.4803  2.4827  2.4852  2.4876  2.4900
                      2.4924  2.4947  2.4971  2.4994  2.5017  2.5040  2.5063
                      2.5085  2.5108  2.5130  2.5152  2.5174  2.5196  2.5218
                      2.5239  2.5260  2.5281  2.5303  2.5323  2.5344  2.5365
                      2.5385  2.5406  2.5426  2.5446  2.5466  2.5486  2.5506
                      2.5525  2.5545  2.5564  2.5584  2.5603  2.5622  2.5641
                      2.5660  2.5678  2.5697  2.5716  2.5734  2.5752  2.5771
                      2.5789  2.5807  2.5825  2.5843  2.5860  2.5878  2.5896
                      2.5913  2.5931  2.5948  2.5965  2.5983  2.6000

     ***** LOT 9A
     COMPUTE NM HYD        ID=1 HYD NO=101.1 AREA=0.001257 SQ MI
                           PER A=0 B=0 C=78.59 D=21.41
                           TP=0.1333 HR MASS RAINFALL=-1

          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   1.0625    CFS   UNIT VOLUME =    .9881       B =   526.28
P60 = 2.0800
          AREA =      .000269 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES
PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330


          K =   .108236HR    TP =   .133300HR    K/TP RATIO =   .811970     SHAPE
CONSTANT, N =  4.404336
          UNIT PEAK =   2.8257    CFS   UNIT VOLUME =    .9958       B =   381.28
P60 = 2.0800
          AREA =      .000988 SQ MI    IA =    .35000 INCHES    INF =    .83000 INCHES
PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
```

```
.033330

     PRINT HYD           ID=1 CODE=1

                                        PARTIAL HYDROGRAPH   101.10


          RUNOFF VOLUME =     1.49176 INCHES      =         .1000 ACRE-FEET
          PEAK DISCHARGE RATE =       3.00 CFS  AT   1.500 HOURS  BASIN AREA =    .0013
SQ. MI.


     ***** LOT 9B
     COMPUTE NM HYD      ID=1 HYD NO=101.1 AREA=0.000957 SQ MI
                         PER A=0 B=0 C=75.47 D=24.53
                         TP=0.1333 HR MASS RAINFALL=-1

          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   .92681    CFS   UNIT VOLUME =    .9862       B =   526.28
P60 = 2.0800
          AREA =      .000235 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES
PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330


          K =   .108236HR    TP =   .133300HR    K/TP RATIO =   .811970     SHAPE
CONSTANT, N =  4.404336
          UNIT PEAK =   2.0659    CFS   UNIT VOLUME =    .9941       B =   381.28
P60 = 2.0800
          AREA =      .000722 SQ MI    IA =    .35000 INCHES    INF =    .83000 INCHES
PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

     PRINT HYD           ID=1 CODE=1

                                        PARTIAL HYDROGRAPH   101.10


          RUNOFF VOLUME =     1.52581 INCHES      =         .0779 ACRE-FEET
          PEAK DISCHARGE RATE =       2.32 CFS  AT   1.500 HOURS   BASIN AREA =    .0010
SQ. MI.


     ***** EXISTING LOT 9
     COMPUTE NM HYD      ID=1 HYD NO=101.1 AREA=0.002214 SQ MI
                         PER A=0 B=0 C=100 D=0
                         TP=0.1333 HR MASS RAINFALL=-1

          K =   .108236HR    TP =   .133300HR    K/TP RATIO =   .811970     SHAPE
CONSTANT, N =  4.404336
          UNIT PEAK =   6.3328    CFS   UNIT VOLUME =    .9984       B =   381.28
P60 = 2.0800
          AREA =      .002214 SQ MI    IA =    .35000 INCHES    INF =    .83000 INCHES
PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

     PRINT HYD           ID=1 CODE=1
```

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.25808 INCHES = .1486 ACRE-FEET
PEAK DISCHARGE RATE = 4.81 CFS AT 1.500 HOURS BASIN AREA = .0022 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 10:06:43