PUBLIC WORKS/HYDROLOGY

L12/D5

BENCHMARK(S): ACS BRASS CAP "9-L12" SET FLUSH WITH THE PAVEMENT, LOCATED AT THE INTERSECTION OF BRIDGE BLVD. AND ATRISCO DR. SW.
ELEVATION = 4941.43

TEMPORARY BENCHMARK: NORTH BONNET BOLT ON FIRE HYDRANT LOCATED ON THE WEST SIDE OF GOFF RD JUST NORTH OF LUNDY LANE SW.
ELEVATION = 4942.68

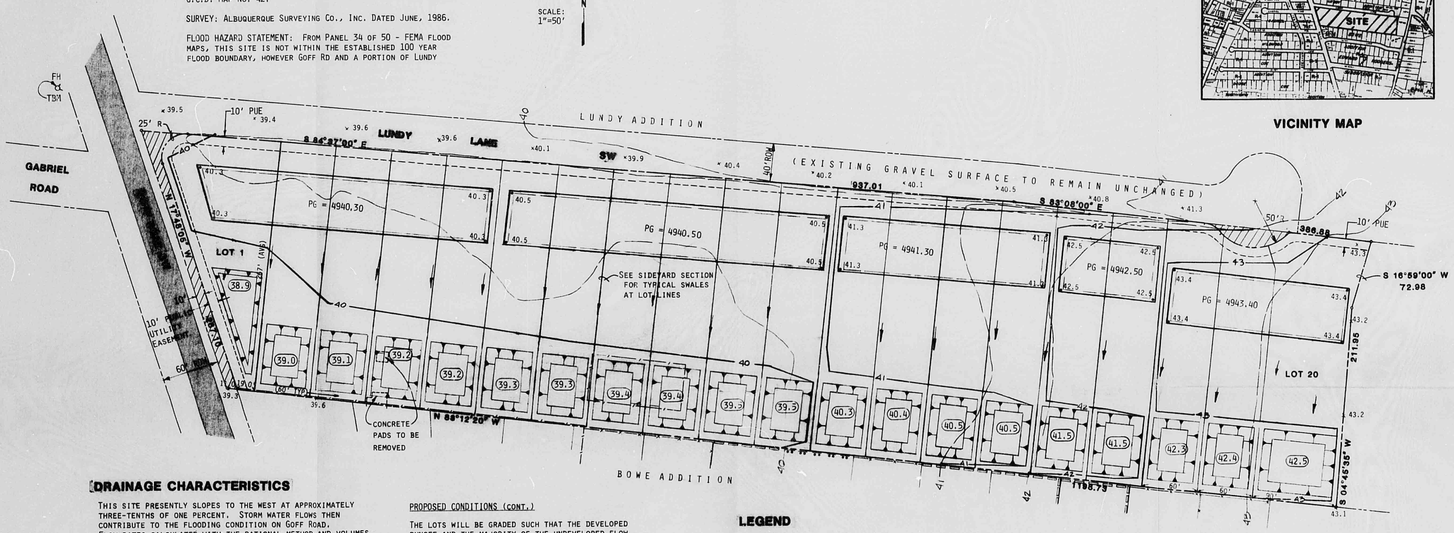
LEGAL DESCRIPTION: LOTS 1 THROUGH 20 OF TRACT 197B, M.R. G.C.D. MAP No. 42.

SURVEY: ALBUQUERQUE SURVEYING CO., INC. DATED JUNE, 1986.

FLOOD HAZARD STATEMENT: FROM PANEL 34 OF 50 - FEMA FLOOD MAPS, THIS SITE IS NOT WITHIN THE ESTABLISHED 100 YEAR FLOOD BOUNDARY, HOWEVER GOFF RD AND A PORTION OF LUNDY LANE ADJACENT TO THE SITE ARE INUNDATED BY THE 100 YR STORM.

SOILS: FROM THE SCS SOIL SURVEY OF BERNALILLO COUNTY, THESE VINTON - BRAZITO SANDY LOAM SOILS ARE CLASSIFIED AS HYDROLOGIC GROUP 'B' SOILS.

SCALE: 1"=50'



VICINITY MAP

## DRAINAGE CHARACTERISTICS

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A = 7.90 ACRES L = 1150 FT
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TIME OF CONCENTRATION = 0.2 HR.
P = 2.25" (DPM PLATE 22.2 D-1)
Q = 0.15

Q = CIA c = 0.30
I = (2.25)(2.11)=4.75"/HR

$Q_{100}$=(0.30)(4.75)(7.9)=11.3CFS
$Q_{10}$= (11.3)(0.657) = 7.4 CFS

V = (Q)(A)(1/12)
= (0.15)(7.9)(0.083) = 0.10 AC.FT.
= 4350 CU.FT.

PROPOSED DEVELOPMENT WILL CONSIST OF 20 RESIDENTIAL LOTS. ASSUMING AN AVERAGE 3,000 SQ.FT. IMPERVIOUS AREA (FOR ROOF, DRIVE, SIDEWALK, PATIO, ETC.) THE DEVELOPED RUNOFF WILL BE AS FOLLOWS:

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6606/16020 = 0.41 = 'C'

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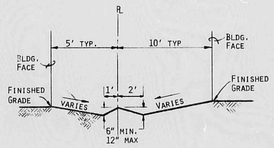


SIDEYARD SWALES-TYPICAL SECTION

No Scale

## LEGEND

- PROPOSED CONTOUR
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- x 43.2 EXISTING SPOT ELEVATION
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RECEIVED NOV 04 1986 HYDROLOGY SECTION

REGISTERED PROFESSIONAL ENGINEER ROBERT C. ARFMAN NEW MEXICO 9232

9-4-86
rev.: 10-6-86
11-4-86 AK

Date
Designed
Checked

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

GRADING & DRAINAGE PLAN

LECIA'S ORCHARD SUBDIVISION
BERNALILLO COUNTY, NEW MEXICO

Sheet 1 of 1

RE 27 DATE 3-29-02 OP EOP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the Public Works Department and was created in the normal course of business.

The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS1A5-1977)

DIRECTOR

NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
07/22/02

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
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PLANS/PLATS ON FILE

FILE DESC: L12/D5

# PLANS/PLATS 2

E 30 D 24 C 20 B 16 A 12

CITY OF ALBUQERQUE C D F

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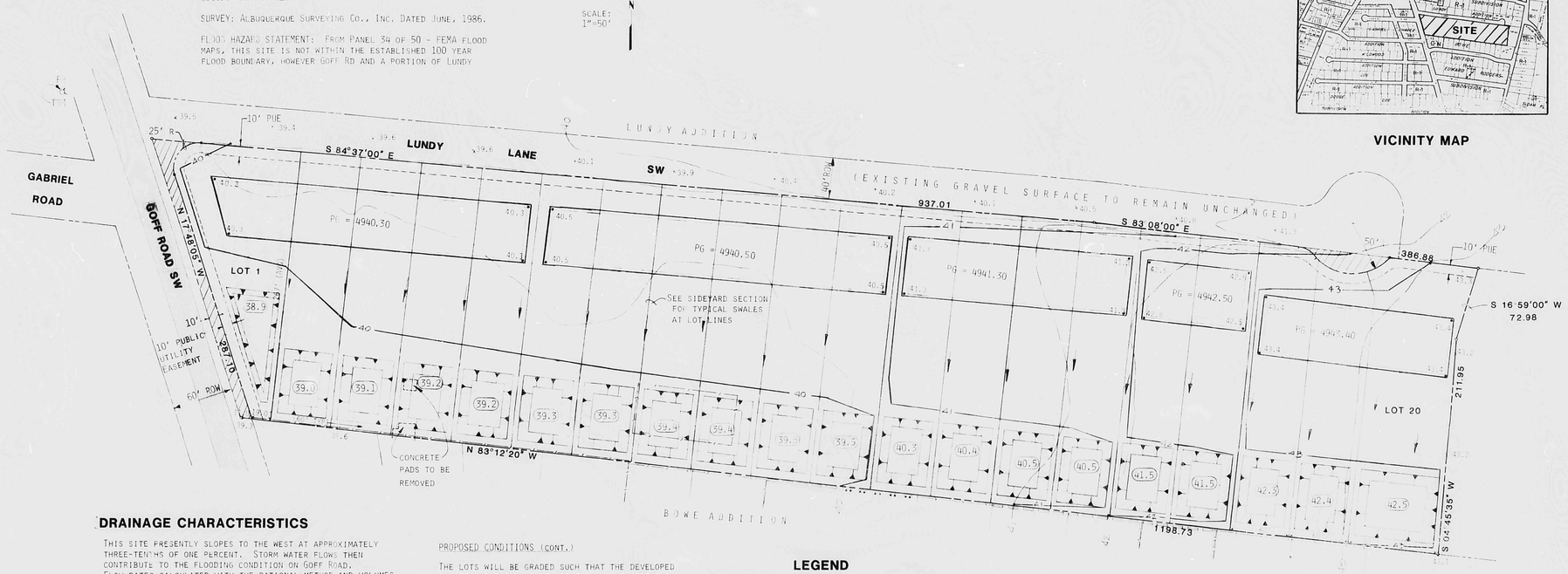


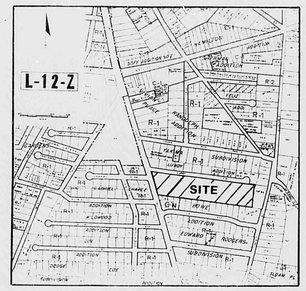


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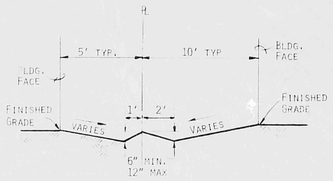


SIDEYARD SWALES-TYPICAL SECTION

NO SCALE

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9-9-86
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REV.:

Date
Designed
Checked

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

# GRADING & DRAINAGE PLAN

## LECIA'S ORCHARD SUBDIVISION
## BERNALILLO COUNTY, NEW MEXICO

Sheet 1 of 1

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
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R# 27 DATE 3-24-92 OP EDP

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DIRECTOR

Roberta Duran
NOTARY PUBLIC

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Roberta Duran
NOTARY PUBLIC
07/07/92

D24 C20 B16 A12

CITY OF ALBUQUERQUE

C D

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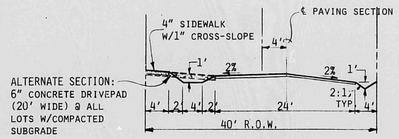


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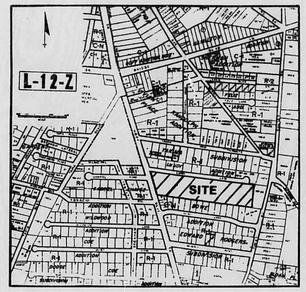
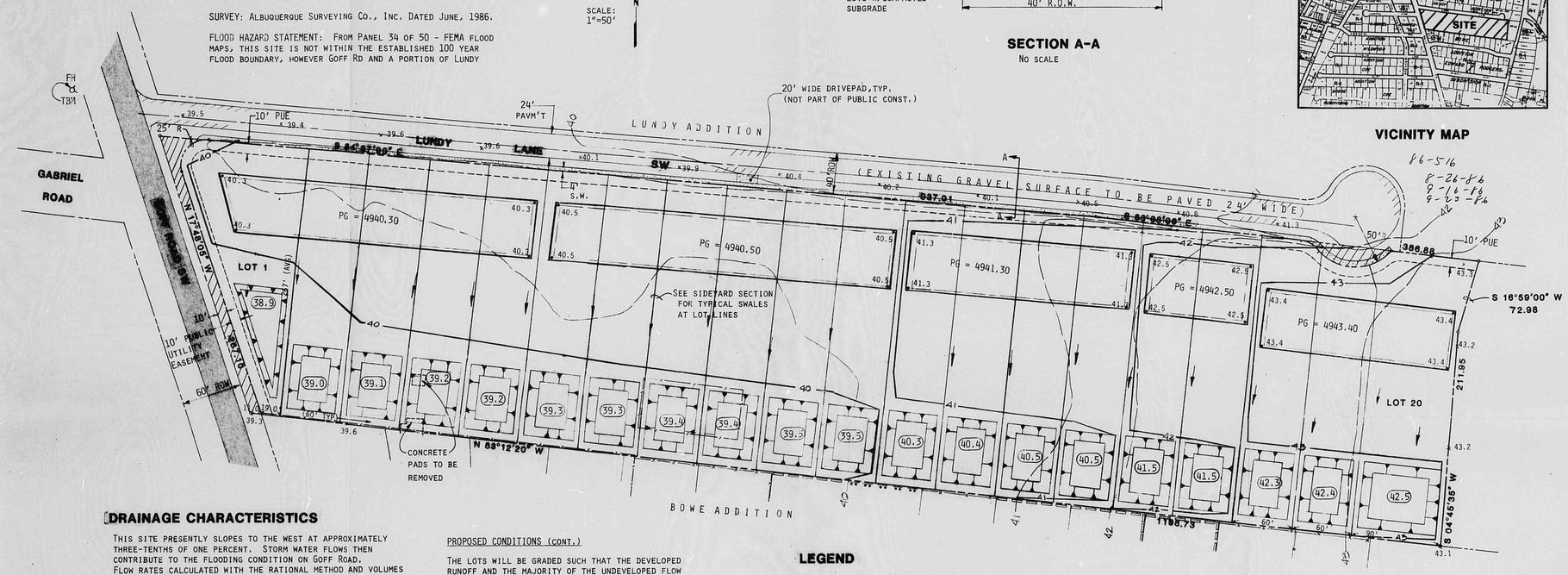



**VICINITY MAP**

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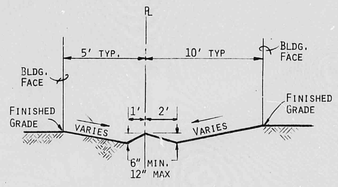


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## PUBLIC STORM WATERS (LUNDY LANE)

ADDITIONAL RUNOFF GENERATED BY THE PAVING OF LUNDY LANE IS TO BE CONTAINED BY SHALLOW RETENTION PONDS WITHIN THE ROAD RIGHT-OF-WAY. STORM WATER VOLUME PER FOOT OF ROAD WILL BE:

FROM PLATE 22.2, C-3:

CN = 79 & 75% IMPERVIOUS  COMPOSITE CN = 93
FROM 22.2, C-4 & P=2.25"  Q=1.5"

V= (1.5)(40' WIDTH)(1/12) = 5 CU.FT. PER FT. OF ROAD

STORAGE PROVIDED
NORTH: V = (4)(1)(0.5)(1) = 2 CF/FT OF ROAD
SOUTH: V = (6)(1)(1)(40/60)* = 4 CF/FT OF ROAD
*(40/60 FACTOR ACCOUNTS FOR VOLUME LOSS FOR DRIVEPAD)
TOTAL = 6 CF/FT OF ROAD

RECEIVED DEC 09 1986 HYDROLOGY SECTION

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11/4/86 REVISION: FLOW RATES RECALCULATED USING RATIONAL METHOD.

12/8/86 REVISION: PAVING SECTION & R.O.W. STORM WATER CALCULATIONS ADDED.

FRED C. ARFMAN NEW MEXICO 7327 REGISTERED PROFESSIONAL ENGINEER
9-4-86
REV.: 10-6-86
11-4-86
12-8-86

Date
Designed
Checked

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

# GRADING & DRAINAGE PLAN

## LECIA'S ORCHARD SUBDIVISION
BERNALILLO COUNTY, NEW MEXICO

Sheet 1 of 1

PLAN PRINT TWICE ONCE ON LIGHT ONCE ON DARK

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STATE OF NEW MEXICO
My Commission Expires 07/02/02

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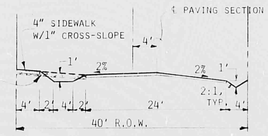


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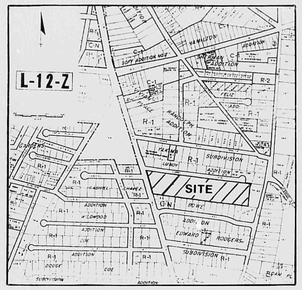


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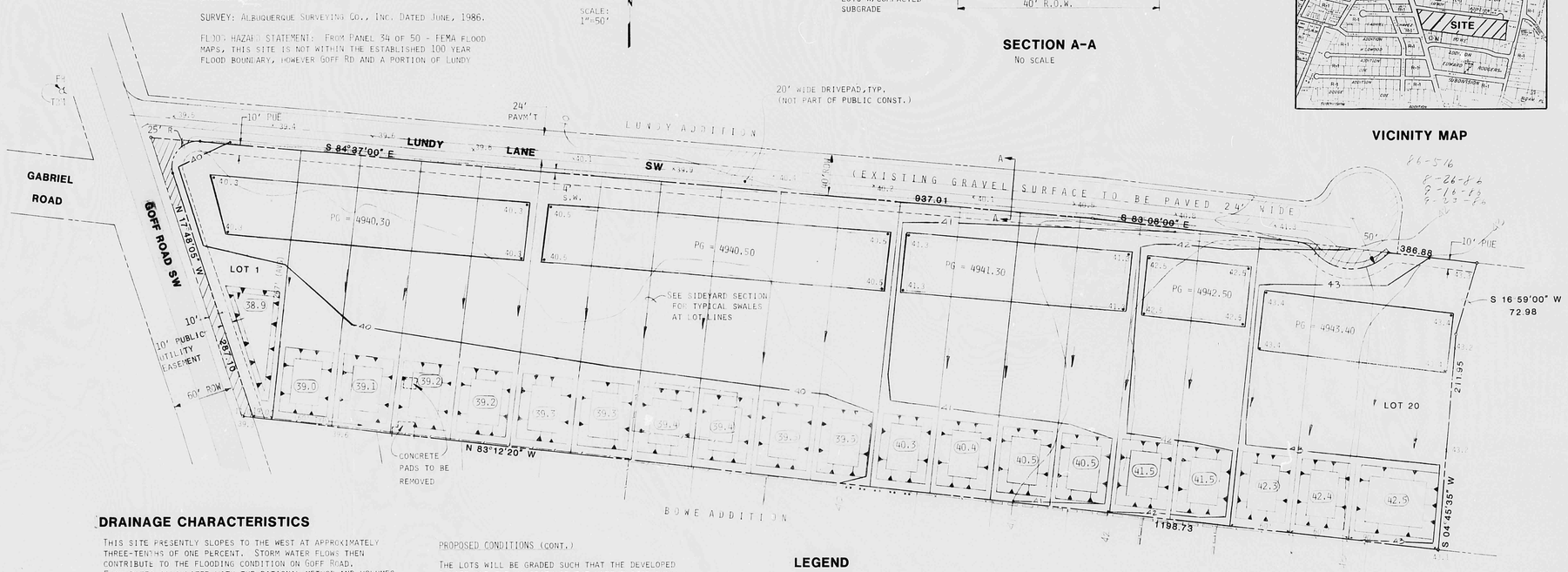


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= (0.15)(7.9)(0.083) = 0.10 AC.FT.
= 4550 CU.FT.

PROPOSED DEVELOPMENT WILL CONSIST OF 20 RESIDENTIAL LOTS. ASSUMING AN AVERAGE 3,000 SQ.FT. IMPERVIOUS AREA (FOR ROOF, DRIVE, SIDEWALK, PATIO, ETC.) THE DEVELOPED RUNOFF WILL BE AS FOLLOWS:

PROPOSED CONDITIONS

A = 7.90 ACRES  L = 250 FT
RUNOFF CURVE NO. (CN) = 72 (RESIDENTIAL - 1/3 AC. LOTS)
TIME OF CONCENTRATION = 0.1 HR
P = 2.25" (DPM PLATE 22.2 D-1)
Q = 0.40

C: 3000 SQ FT @ 0.90 = 2700
13020 SQ FT @ 0.30 = 3906
6606/16020 = 0.41 = 'C'

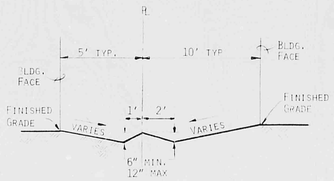
$Q_{100}$=(0.41)(4.75)(7.90)  V = (0.40)(7.90 (0.083) = 0.26 AC.FT.
= 15.4 CFS  = 11,325 CU.FT.
$Q_{10}$ =(15.4)(0.657)=10.1 CFS

PROPOSED CONDITIONS (CONT.)

THE LOTS WILL BE GRADED SUCH THAT THE DEVELOPED RUNOFF AND THE MAJORITY OF THE UNDEVELOPED FLOW WILL BE ROUTED SOUTH. SHALLOW RETENTION PONDS WILL BE FORMED TO STORE THIS VOLUME, THUS PREVENTING THE EXISTING STORM WATER CONTRIBUTIONS TO THE PUBLIC RIGHT-OF-WAY IN GOFF ROAD.

## NOTES

1. CONTINUOUS MULTI-LOT PADS TO BE ESTABLISHED BEFORE DRAINAGE SWALES (ADJACENT TO LOT LINES) ARE FORMED DURING FINISH GRADING OPERATIONS.
2. CLEAN SUITABLE MATERIAL FROM POND EXCAVATIONS TO BE USED FOR BUILDING PADS.




**SIDEYARD SWALES-TYPICAL SECTION**
NO SCALE

## LEGEND

- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PAD OUTLINE
- PAD GRADE ELEVATION
- POND SIDE SLOPES 20:1 TYPICAL FOR 0.5' DEEP POND
- DRAINAGE SWALE
- EXISTING PAVEMENT
- BLOCK WALL
- BOARD FENCE
- CHAINLINK FENCE
- ADDITIONAL R.O.W. TO BE DEDICATED TO BERNALILLO COUNTY
- POND BOTTOM ELEVATION

## PUBLIC STORM WATERS (LUNDY LANE)

ADDITIONAL RUNOFF GENERATED BY THE PAVING OF LUNDY LANE IS TO BE CONTAINED BY SHALLOW RETENTION PONDS WITHIN THE ROAD RIGHT-OF-WAY. STORM WATER VOLUME PER FOOT OF ROAD WILL BE:

FROM PLATE 22.2, C-3:
CN = 79 & 75% IMPERVIOUS  COMPOSITE CN = 93
FROM 22.2, C-4 & P=2.25"  Q=1.5"

V= (1.5)(40' WIDTH)(1/12) = 5 CU.FT. PER FT. OF ROAD

STORAGE PROVIDED
NORTH: V = (4)(1)(0.5)(1) = 2 CF/FT OF ROAD
SOUTH: V = (6)(1)(1)(4)/60)* = 4 CF/FT OF ROAD
*(40/60 FACTOR ACCOUNTS FOR VOLUME LOSS FOR DRIVEPAD)
TOTAL = 6 CF/FT OF ROAD

10/6/86 REVISION: INDIVIDUAL PONDS CREATED AND RUNOFF QUANTITIES RECALCULATED USING SCS PEAK DISCHARGE RATE METHOD.

11/4/86 REVISION: FLOW RATES RECALCULATED USING RATIONAL METHOD.

12/8/86 REVISION: PAVING SECTION & R.O.W. STORM WATER CALCULATIONS ADDED.

RECEIVED DEC 09 1986 HYDROLOGY SECTION

9-3-86
10-6-86 JK
11-4-86 JK
12-8-86 JK

Date
Designed
Checked

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

# GRADING & DRAINAGE PLAN

## LECIA'S ORCHARD SUBDIVISION
BERNALILLO COUNTY, NEW MEXICO

Sheet 1 of 1

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

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DIRECTOR

NOTARY PUBLIC

OFFICIAL SEAL
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STATE OF NEW MEXICO
07/07/02

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