HYDROLOGY

L22/D3C

CANADA VILLAGE

TRACT 2B

L22

1 PLAN

D3C

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

HYDROLOGY SECTION PROJ. NO. L-22 DATE: 1/11/84

PLANNING DIVISION NO. _____

CONFERENCE RECAP

SUBJECT: Tract 2B of Canada First

WHO	REPRESENTING
ATTENDANCE: Dave Alonzo	
Billy Goolsby	

FINDINGS: ① Drainage plan per DPM
② Pumping is an acceptable solution However, it is recommended to investigate possible discharge to Public alley and downstream drainage easement. Alternative 2 to discharge at undeveloped controlled rate across adjacent property in the historical flow path with concurrence of owner.
③ Check about alley grades

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy A. Goolsby SIGNED: [illegible]
TITLE: CE/Hydrology TITLE: CE
DATE: 1/11/84 DATE: 1/11/84

INFORMATION SHEET

PROJECT TITLE CANADA VILLAGE TRACT 2-B ON WESTERN SKIES DR. TYPE OF SUBMITTAL DRAINAGE

ZONE ATLAS PAGE NO. L-22 CITY ADDRESS 100 Block Western Skies Drive

LEGAL DESCRIPTION Tract 2-B, Canada First

ENGINEERING FIRM DMJM/Adam,Hamlyn,Anderson CONTACT Jean J. Bordenave

ADDRESS 4055 Montgomery Blvd. NE PHONE 881-1808

OWNER _____ CONTACT _____

ADDRESS _____ PHONE _____

ARCHITECT Bill Buckley & Associates CONTACT Bill Buckley

ADDRESS 740 San Mateo NE, Suite B PHONE 255-9196

SURVEYOR DMJM/Adam, Hamlyn,Anderson CONTACT Jean J. Bordenave

ADDRESS 4055 Montgomery Blvd. NE PHONE 881-1808

CONTRACTOR _____ CONTACT _____

ADDRESS _____ PHONE _____

PRE-DESIGN MEETING:

___ YES
___ NO
X COPY OF CONFERENCE RECAP SHEET PROVIDED

PLEASE CHECK TYPE OF APPROVAL EXPECTED WITH THIS SUBMITTAL:

___ SKETCH PLAT APPROVAL
___ PRELIMINARY PLAT APPROVAL
___ SITE DEVELOPMENT PLAN APPROVAL
___ FINAL PLAT APPROVAL
X BUILDING PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY APPROVAL
___ ROUGH GRADING PERMIT APPROVAL
___ GRADING/PAVING PERMIT APPROVAL
X OTHER Drainage & Grading (SPECIFY)

RECEIVED MAR 01 1984 HYDROLOGY SECTION

DATE SUBMITTED: 3/1/84

BY: Jean J Bordenave

DMJM / AHA ALBUQUERQUE	PROJECT: CAÑADA VILLAGE TRACT 2-B ON WESTERN SKIES DRIVE DRAINAGE CALCS.	PROJECT NO. 04620-04-01	BY: D.A.	DATE: 2-2-84	PAGE 1 of 1
SUBJECT					

ONSITE DRAINAGE

Total Drainage Area Contributing = 12,121 SF = 0.27826 Ac.

Finding Composite "C" Factor:

Description	Area	Factor	A×F
Roof/Bldg.	3600	0.95	3420
Conc. SW & Apron	2215	1.00	2215
Asphalt Pvmt.	5196	0.95	4936
Landscaping	1110	0.25	278
	12121 SF		10849 SF

Composite "C" = $\frac{10849}{12121} = 0.895$; 6 hr. rainfall = 2.45"
t_c = 10 mins ; I = 5.18

$Q_{100} = CIA = 0.895 \times 5.18 \times \frac{12121}{43560} = \underline{1.29 \text{ cfs.}}$

OFFSITE DRAINAGE

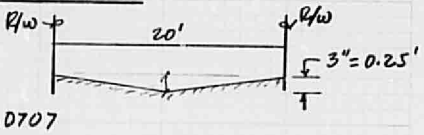
Runoff coming from the apartment complex south of the project site is contributing to the alley plus the area of the alley fronting our proposed improvement. Assuming a composite "C" of 0.65 for the above and total offsite drainage are contributing = 18600 SF, then:

Q_{100} (offsite) = $CIA = 0.65 \times 5.18 \times 18600/43560 = 1.44$ cfs.

total Q_{100} contributing to alley = $Q_{OFFSITE} + Q_{ONSITE} = 1.44 + 1.29 = 2.73$ cfs.

CHECKING FOR CAPACITY OF ALLEY SECTION

Using d = 0.25' ; w = 20'
Area = 20 × .25/2 = 2.5 □' ; WP = 20'
$R^{2/3}$ = .249983 ; n = .017 for asphalt
$S^{1/2} = (.005)^{1/2} = .0707$



$Q_{cap} = AV = 2.5 \times 1.486/.017 \times .249983 \times .0707$
$= 3.86 \text{ cfs} > 2.73 \text{ cfs}$ ok

actual d = 0.20', then v = 1.33 fps

Runoff from the alley will outlet into an existing 30' wide sewer and drainage easement at the north end of the alley, then proceed northerly and out to Central Blvd.

FILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

March 20, 1984

Mr. Jake Bordenave
DMJM/Adam, Hamlyn, Anderson
4055 Montgomery Boulevard NE Suite A
Albuquerque, NM 87109

REF: GRADING AND DRAINAGE PLAN FOR CANADA VILLAGE TRACT 2-B ON WESTERN SKIES DRIVE (L22-D3C) RECEIVED MARCH 1, 1984

Dear Jake:

I have reviewed the above referenced submittal and forward the following comments:

1. I concur that the alley and the downstream easement are designated drainageways. However, analysis all the way to the outfall at Central needs to be provided to justify that it will work and that adverse impacts will not occur.

2. Approved alley grades are required as per the DPM.

3. Is the easement downstream paved or of sufficient condition that the runoff will pass through without leaving the easement prior to discharge to Central or cause erosion problems?

Should you have any questions or comments, please contact me at 766-7644.

Yours truly,

Billy J. Goolsby, P.E.

Billy J. Goolsby
City/County Flood Plain Admin.

BJG:mrk

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

HYDROLOGY SECTION PROJ. NO. L-22 DATE: 1/11/84

PLANNING DIVISION NO. _____

CONFERENCE RECAP

SUBJECT: Tract 2B of Cañada First

WHO	REPRESENTING
ATTENDANCE: Dave Alonzo	
Billy Goolsby	

FINDINGS: ① Drainage plan per DPM
② Pumping is an acceptable solution However, it is recommended to investigate possible discharge to Public alley and downstream drainage easement. Alternative 2 to discharge at undeveloped controlled rate across adjacent property in the historical flow path with concurrence of Owner.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy G. Goolsby SIGNED: [illegible]
TITLE: CE/Hydrology TITLE: CE
DATE: 1/11/84 DATE: 1/11/84

DRAINAGE INFORMATION SHEET

PROJECT TITLE: CANADA VILLAGE TRACT 2-B on Western Skies Drive ZONE ATLAS/DRNG. FILE #: L-22/D3C

LEGAL DESCRIPTION: TRACT 2-B, CANADA FIRST

CITY ADDRESS: 100 Block, Western Skies Drive

ENGINEERING FIRM: DMJM/Adam, Hamlyn, Anderson CONTACT: Jake Bordenave

ADDRESS: 5700 Harper Drive NE, Suite 280 PHONE: 822-7955

OWNER: Tony Trujillo CONTACT: Tony Trujillo

ADDRESS: 10010 Indian School Rd. PHONE: 293-5453

ARCHITECT: Bill Buckley & Associates CONTACT: Bill Buckley

ADDRESS: 3625 Central Avenue NE PHONE: 255-9196

SURVEYOR: DMJM/Adam, Hamlyn, Anderson CONTACT: Jake Bordenave

ADDRESS: 5700 Harper Drive NE, Suite 280 PHONE: 822-7955

CONTRACTOR: CONTACT:

ADDRESS: PHONE:

PRE-DESIGN MEETING:

X YES DRB NO.

NO EPC NO.

COPY OF CONFERENCE RECAP SHEET PROVIDED PROJ. NO. 2083

TYPE OF SUBMITTAL:

DRAINAGE REPORT
X DRAINAGE PLAN
CONCEPTUAL GRADING & DRAINAGE PLAN
GRADING PLAN
EROSION CONTROL PLAN
ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

SKETCH PLAT APPROVAL
PRELIMINARY PLAT APPROVAL
SITE DEVELOPMENT PLAN APPROVAL
FINAL PLAT APPROVAL
X BUILDING PERMIT APPROVAL
FOUNDATION PERMIT APPROVAL
CERTIFICATE OF OCCUPANCY APPROVAL
ROUGH GRADING PERMIT APPROVAL
GRADING/PAVING PERMIT APPROVAL
OTHER (SPECIFY)

RECEIVED JAN 09 1985 HYDROLOGY SECTION

DATE SUBMITTED: 12/8/85

BY: Jean P Bordenave

DMJM/Adam, Hamlyn, Anderson

January 7, 1985

Mr. Billy J. Goolsby
City/County/Flood Plain Administration
123 Central Avenue NW
Albuquerque, NM 87102

Ref: Comments on the Grading and Drainage Plan for Canada Village, Tract 2-B on Western Skies Drive (L22-D3C) dated March 20, 1984.

DMJM JOB#4620-04-01, DMJM File #AT835446

Dear Billy,

I have reviewed your above mentioned comments and have addressed each of them below.

Regarding Comment #1, I have provided, in the attached sheets, the analysis of the drainage-way to the outfall at Central Avenue.

Regarding Comment #2, alley grades were submitted on 1/4/85, Project #2083, and we are now awaiting approval.

Regarding Comment #3, the easement downstream is paved to the outfall at Central Avenue.

Should you have any questions, please contact me at 822-7955.

Sincerely,

Jean J. Bordenave, P.E.

JJB/ccl
Attachments

RECEIVED
JAN 09 1985
HYDROLOGY SECTION

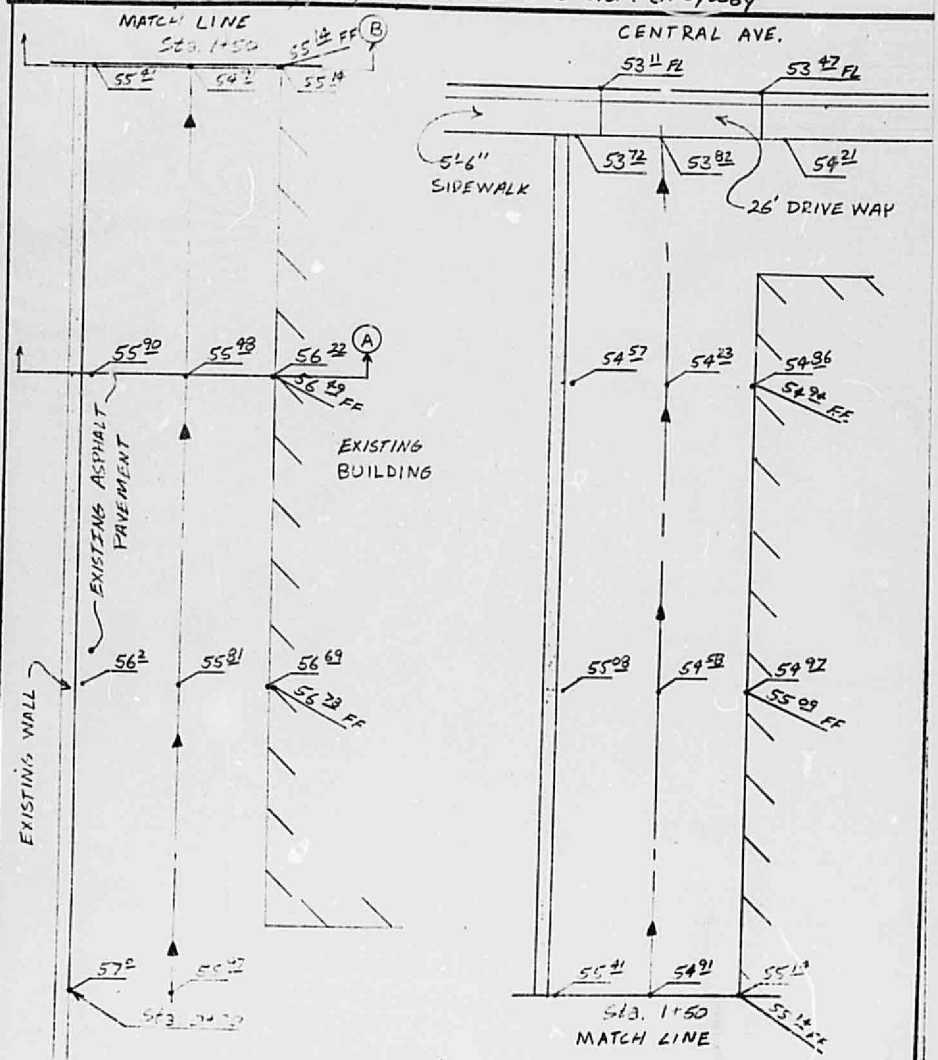
A Division of
Daniel, Mann, Johnson, & Mendenhall

Suite 230
5700 Harper Drive, N.E.
Albuquerque, New Mexico 87109
Telephone: 505/822-7955

Planning
Engineering
Systems
Economics

DMJM / AHA ALBUQUERQUE	PROJECT: Cañada Village Tract 2-B	PROJECT NO. 04620-04-01	BY: MK	DATE: 1/4/85	PAGE 1/2

SUBJECT: Drainageway to Central Ave from alleyway

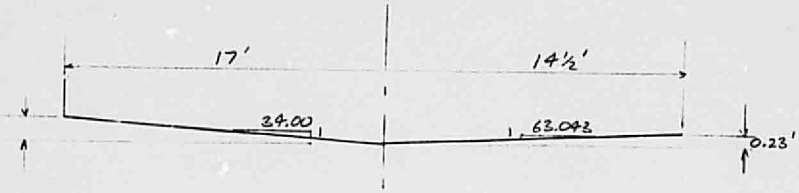


DMJM / AHA ALBUQUERQUE	PROJECT Cabezon Village Tract 2-B	PROJECT NO. 04420-04-01		PAGE 2/2
SUBJECT		BY: NK	DATE: 1/4/85	

Section A

$Q = 2.73$ cfs
$n = .013$
$S = .0070$
$S_{LT} = 40.476$ ft
$S_{RT} = 19.595$ ft
$d = 0.21$ ft $d_c = 0.22$ ft
$V = 2.11$ fps $V_c = 1.88$ fps

Section B



$Q = 2.72$ cfs
$n = .013$
$S = .0070$
$S_{LT} = 34.00$
$S_{RT} = 63.043$
$d = 0.17$ ft $d_c = 0.18$ ft
$V = 1.87$ fps $V_c = 1.71$ fps

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

Use This Plan Mar. 1 1984
For Inspection
If any questions ask Billy G.

January 22, 1985

Mr. Jake Bordenave
DMJM/Adam, Hamlyn, Anderson
5700 Harper Drive NE, Suite 280
Albuquerque, NM 87109

REF: DRAINAGE PLAN FOR CANADA VILLAGE TRACT 2-B ON WESTERN SKIES DRIVE (L22-D3C)
RECEIVED JANUARY 9, 1985

Dear Jake:

The above referenced plan, received January 9, 1985 is approved.

Please attach a copy of this approved plan to the construction set prior to Hydrology sign-off.

If I can be of further assistance, please feel free to call me at 766-7644.

Sincerely yours,

Billy J. Goolsby

Billy J. Goolsby, PE
Civil Engineer/Hydrology

BJG:mrk