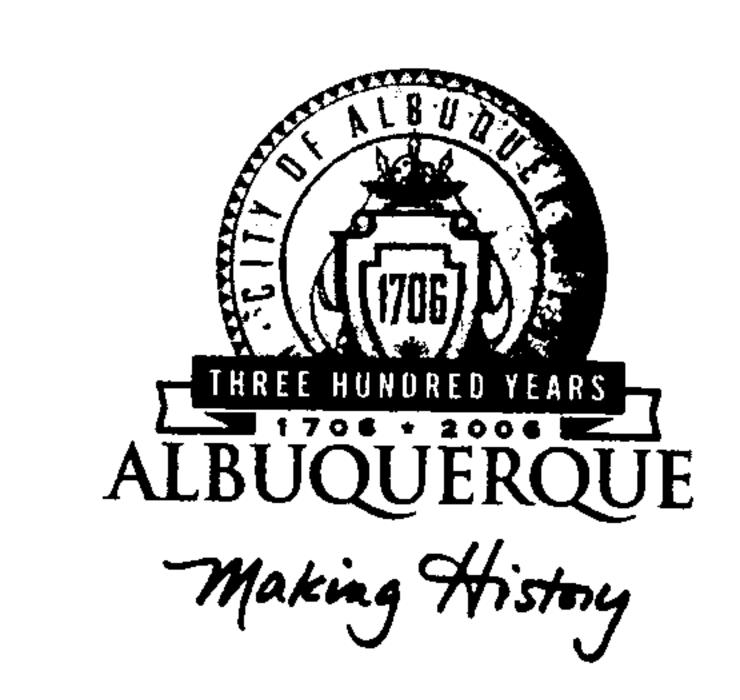
CITY OF ALBUQUERQUE



Planning Department Transportation Development Services Section

February 8, 2005

Gordon Hall, Registered Architect 18 Trails Road East Placitas, NM 87043-9409

Re:

Certification Submittal for Final Building Certificate of Occupancy for Gonzales Bus.(Lot 4, Volcano Business Park, phase I), [G-10 / D29H]

3020 Todos Santos St. NW

Architect's Stamp Dated 02/06/05

Dear Mr. Hall:

P.O. Box 1293

The TCL / Letter of Certification submitted on February 4, 2005 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Albuquerque

Sincerely,

New Mexico 87103

Nilo E. Salgado-Fernandez, P.E.

Senior Traffic Engineer

Development and Building Services

www.cabq.gov Planning Department

C:

Engineer— Hydrology file CO Clerk

Albuquerque - Making History 1706-2006

DRAINAGE AND TRANSPORTATION INF	FORMATION SHEET
PROJECT TITLE: GOUZALEZ BUS FACIALE DRR#: EPC#: WORL	ZONE MAD. (5-10/10291-
DRB#: EPC#: WORI	KORDER#:
LEGAL DESCRIPTION: Lot 4 Volavo B	151055 PACK
LEGAL DESCRIPTION: Lot 4 Voltago Barros CITY ADDRESS: 3020 70005 SAUTOS	5 L.W.
ENGINEERING FIRM:	_ CONTACT:
ADDRESS:	_ PHONE:
CITY, STATE:	_ ZIP CODE:
OWNER: JO GONZA lez	CONTACT: -JO
ADDRESS:	_ CONTACT:O _ PHONE:353955
CITY, STATE:	ZIP CODE:
ARCHITECT: GOOD HALL	_ CONTACT:
ADDRESS: 18 TRAILS (>D. EAST	
CITY, STATE:	_ ZIP CODE:
SURVEYOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR: CONTRACTOR:	CONTACT: CLAS
ADDRESS: 25 Survey LANCE	_ PHONE: <u>249-7373</u>
CITY, STATE: SIANCEY	ZIP CODE:
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WAS A PRE-DESIGN CONFERENCE ATTENDED:	[[FEB 0 4 2005]]]
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COPY PROVIDED	
	TON
DATE SUBMITTED:	BY:

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 defines 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.

Gordon Hall Architect

18 Trails Road East 450-4707 ghall@tvi.edu

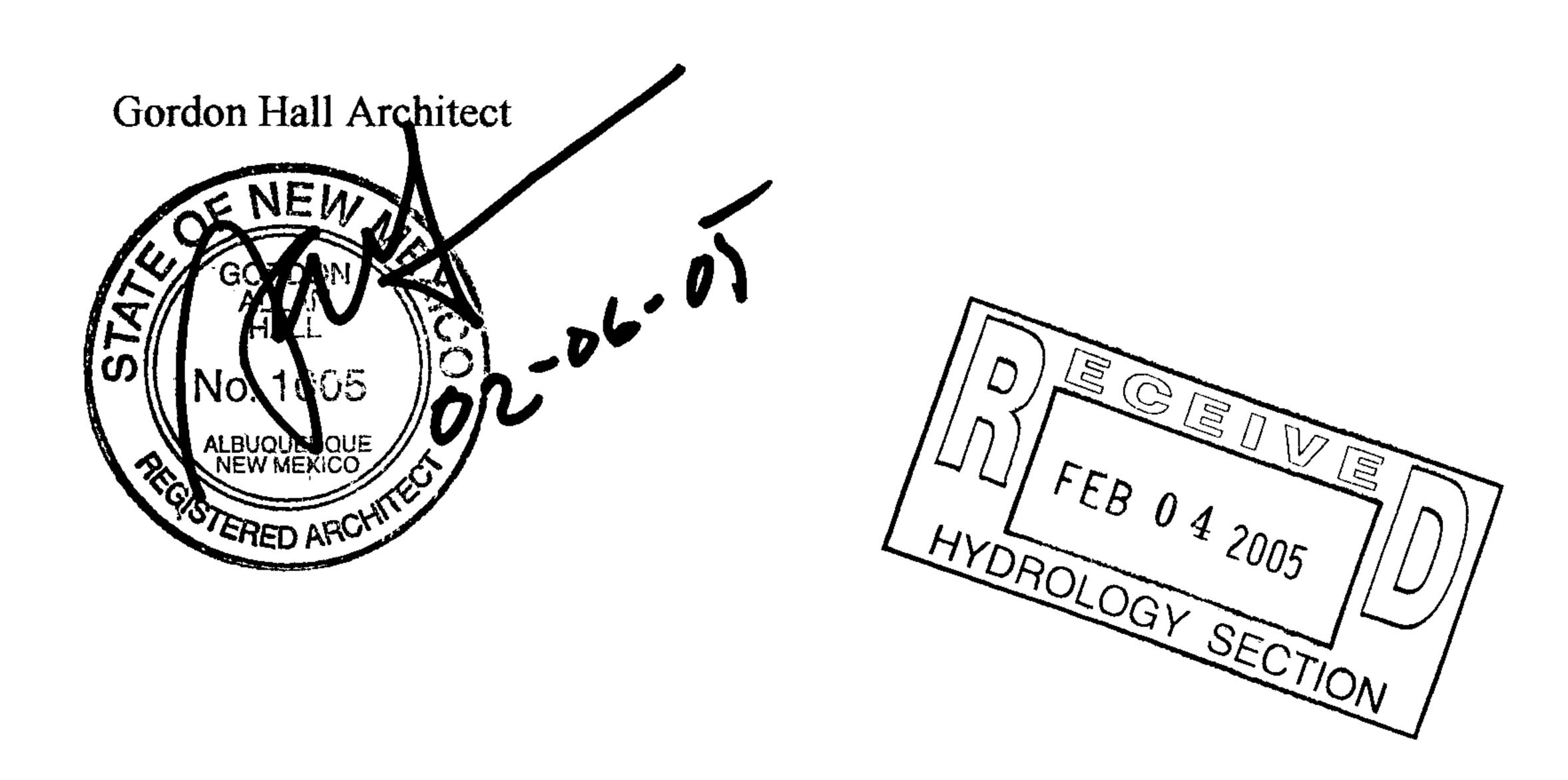
February 5, 2005

Re: Certification Submittal for Final Building Certificate of Occupancy for Gonzales Bus Main. (Lot 4 volcano Business Park Phase 1) G-10/D29H 3020 Todos Santos St. NW City of Albuquerque

From: Gordon Hall Architect

To: Nilo E. Salgado – Fernandez PE Senior Traffic Engineer Department of Building Services Planning Department

As per your request, I am submitting this letter stating that this project is in substantial compliance for Final Certificate of Occupancy and that all transportation department rules and regulations were followed as related to the above-mentioned facility and the approved DRB site plan. Please find attached a copy of the approved TCL (DRB Site Plan) that is in the approved plan set for building permit. This latest edition with any and all redlined comments are initialed and dated by me as Architect of Record. Also attached is the fully completed Drainage Information Sheet by others.



CITY OF ALBUQUERQUE



Planning Department Transportation Development Services Section

January 31, 2005

Gordon Hall, Registered Architect Gordon Hall Architect 18 Trails Road East Placitas, NM 87043-9409

Re:

Certification Submittal for Final Building Certificate of Occupancy for

Gonzales Bus. Maint. (Lot 4, Volcano Business Park, phase i),

G-10 / D29H]

3020 Todos Santos St. NW

Architect's Stamp Dated 01/26/05

Dear Mr. Hall:

P.O. Box 1293

The TCL / Letter of Certification submitted on January 21, 2005 is not sufficient for acceptance by this office for final Certificate of Occupancy (C.O.).

Albuquerque

The approved TCL (or DRB Site Plan) needs to be submitted with the letter of certification (The words 'substantial compliance' needs to be part of your verbiage for certification) for Final C.O. and needs to be the <u>exact</u> copy of the approved TCL in the plan set approved for building permit. This will be the latest edition, which may have redlined comments, initialed and dated by the designer-of-record.

New Mexico 87103

www.cabq.gov

Resubmit <u>acceptable</u> package along with fully completed Drainage Information Sheet to front counter personnel for log in and evaluation by Transportation.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.

Senior Traffic Engineer

Development and Building Services

Planning Department

C:

Engineer
Hydrology file
CO Clerk

Gordon Hall Architect

18 Trails Road East
450-4707
ghall@tvi.edu
PLacitas, MM

January 26, 2005

TO: Arlene Porpillo Dept of Transportation

City of Albuquerque

From: Gordon Hall Architect

Re: Joe Sanchez Bus Maintenance Facility

As per your request, I am submitting this letter stating that all transportation department rules and regulations were followed as related to the above-mentioned facility.

Gordon Hall Architect

GORDON ALLAN NO. WOOD AMBUQUERQUE AMBUQUERQUE NEW MEXICO

relations of worked and property of the plan-

spoke uf Gordon Hall

aud fax form

letter for C.O

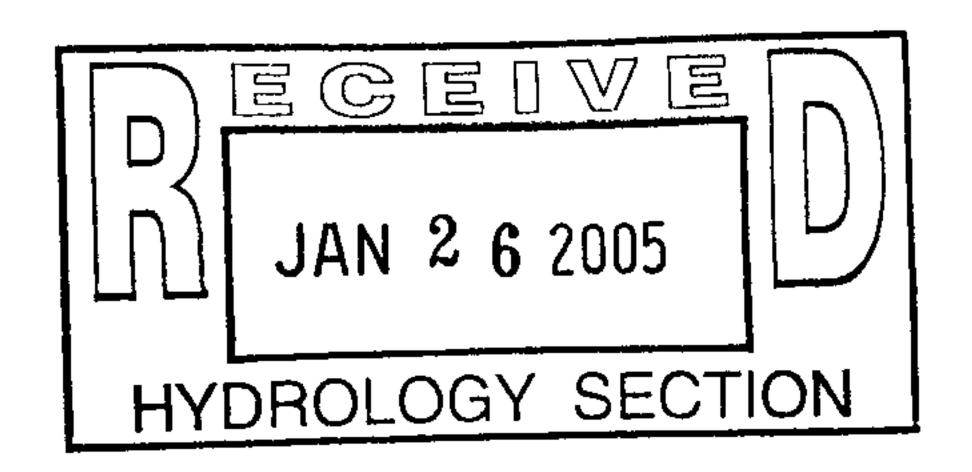
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us an attached,

approved Sate Plan

1/26/25



DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

	ONE MAP/DRG. FILE #:
	OINTOINT.
LEGAL DESCRIPTION: CITY ADDRESS: 30 20 TODOS GALITOC	
CITY ADDRESS: 3020 TODOS SANTOS	
ENGINEERING FIRM:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
OWNER: JOE GONZAUES	CONTACT: SAME
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
ARCHITECT: GORDON HALL	
MICHITEOT.	CONTACT: SAME
	PHONE: TO A CONTROL OF A CONTRO
CITY, STATE:PLACITAS	ZIP CODE: 25/045-9409
SURVEYOR:	CONTACT:
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ADDRESS:CITY, STATE:	PHONE:
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DATE SUBMITTED:	26-08-HYDROLOGY SECTION
Requests for approvals of Site Development Plans and/or Subdivisions submittal. The particular nature place of submittal may be required based on the following levels of submittal may be required based on the following levels of submittal may be required based on the following and Drainage Plans: Required for building permits, grading permits.	evelopment defines the degree of drainage detail. on the following: oval of Site Development Plans greater than five
 Drainage Plans: Required for building permits, grading permits 	its, paving permits and site plans less than five
acres. 3. Drainage Report : Required for subdivisions containing more	than ten (10) lots or constituting five (5) acres or

more.

Gordon Hall Architect

18 Trails Road East 450-4707 ghall@tvi.edu

January 26, 2005

TO: Arlene Porpillo Dept of Transportation

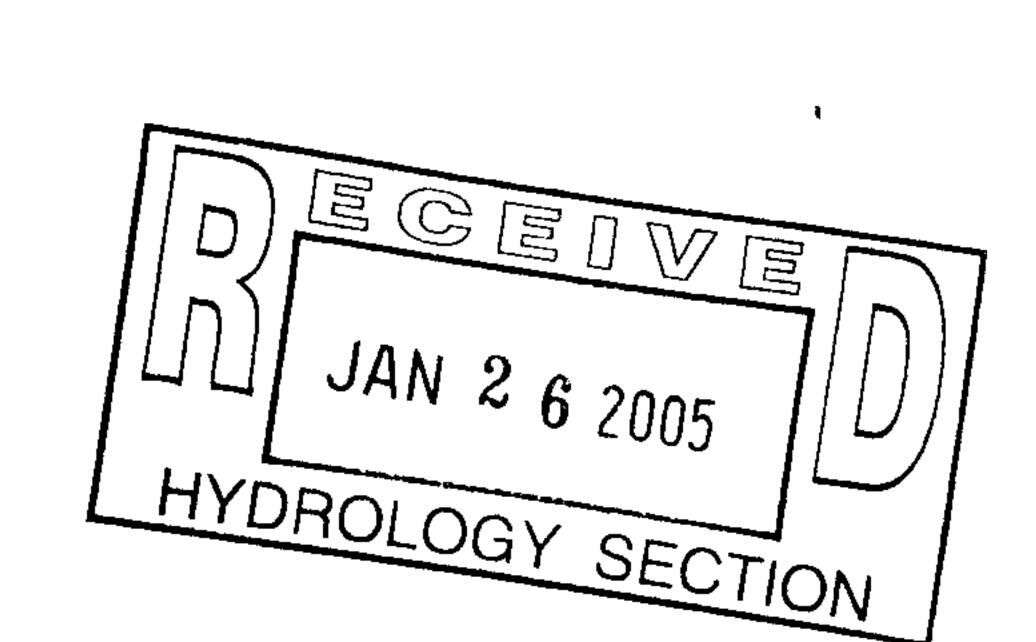
City of Albuquerque

From: Gordon Hall Architect

Re: Joe Sanchez Bus Maintenance Facility

As per your request, I am submitting this letter stating that all transportation department rules and regulations were followed as related to the above-mentioned facility.

Gordon Hall Architect



CITY OF ALBUQUERQUE



February 4, 2005

Mr. Eufracio Sabay, P.E. C/O - 8624 Casa Verde Ave. NW Albuquerque, NM 87120

Re: GONZALES BUSINESS MAINTENANCE

3020 Todos Santos St. NW

Approval of Permanent Certificate of Occupancy (C.O.)

Engineer's Stamp dated 06/08/2004 (G-10/D029H)

Certification dated 02/04/2005

Dear Mr. Sabay,

P.O. Box 1293

Based upon the information provided in your submittal received 02/04/2005, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3982.

New Mexico 87103

www.cabq.gov

Sincerely,

Arlene V. Portillo

Plan Checker, Planning Dept. - Hydrology

Development and Building Services

C:

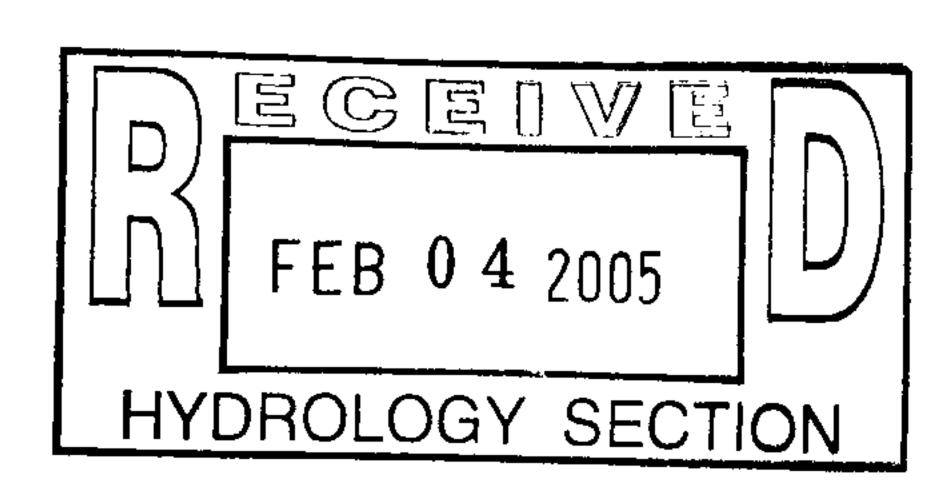
Phyllis Villanueva
Bernie Montoya
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GONZALES BUS FA	CILITY PC#: N/A	ZONE MAP/DRG. FILE # G10-D29H WORK ORDER#:
LEGAL DESCRIPTION: LOT 4 VOLCANO E CITY ADDRESS: 3020 TODOS SANTOS N.		
ENGINEERING FIRM: BJM DEVELOPMEN ADDRESS: 8624 CASA VERDE AV CITY, STATE: Albuquerque, No	VE. N.W.	CONTACT: BERNIE J. MONTOYA PHONE: 250-7719 ZIP CODE: 87120
OWNER: JOE GONZALES ADDRESS: 3020 TODOS SANTOS CITY, STATE: Albuquerque, New		CONTACT: JOE PHONE:235-3955 ZIP CODE:
ARCHITECT: GORDON HALL/ DAVIDI SAN ADDRESS: CITY, STATE:STANLEY, NEW MEX		CONTACT:DAVID PHONE:883-1600 ZIP CODE:
SURVEYOR: N/A ADDRESS: CITY, STATE:		CONTACT: PHONE: ZIP CODE:
CONTRACTOR: CORVIN ENTERPRISES, IN ADDRESS: 25 SURREY LANE	NC.	CONTACT:CHRIS PHONE:249-7373
CITY, STATE:STANLEY, NEW MEX	XICO	ZIP CODE:87056
TYPE OF SUBMITTAL: DRAINAGE REPORT DRAINAGE PLAN CONCEPTUAL GRADING & DRAIN GRADING PLAN EROSION CONTROL PLAN X ENGINEER'S CERTIFICATION PAVING PLAN TCL RESUBMITTAL WAS A PRE-DESIGN CONFERENCE ATTE YES VERBAL WITH KRISTAL MET NO COPY PROVIDED	NAGE PLAN ENDED:	SIA / FINANCIAL GUARANTEE RELEASE 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 APPROVALBUILDING PERMIT APPROVAL
DATE SUBMITTED: 2/4/2005	BY:	BERNIE J. MONTOYA C.E.
Requests for approvals of Site Developr	ment Plans and/or Sub	division Plats shall be accompanied by a drainage submittal.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of 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:

- 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.





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

June 15, 2004

Eufracio Sabay, PE BJM Development 8624 Casa Verde Ave NW Albuquerque, NM 87120

RE: Lot 4, Volcano Business Park Grading and Drainage Plan Engineer Stamp dated 6-8-04 (G10/D29H)

Dear Mr. Sabay:

Based on the information provided in your submittal received 6-9-04, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. If you have any questions regarding this permit please feel free to call the DMD Storm Drainage Design section at 768-3654 (Charles Caruso) or 768-3645 (Bryan Wolfe).

If you have any questions, please contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE

Principal Engineer, Planning Dept. Development and Building Services

C: Charles Caruso, DMD Storm Drainage Design File

DRAINAGE INFORMATION SHEET

ZONE MAP/DRG. FILE # G10-D29H

BUS MAINTENANCE FACILITY

PROJECT TITLE: NARVAEZ-LAV DRB #:	VOFFICES PC#: N/A	ZONE MAP/DRG. FILE # G10-D29H WORK ORDER#:
LEGAL DESCRIPTION: A PORTION CITY ADDRESS: 3020 TODOS SANT		A, JOHN MOOORE REALTY CO. THIRD ADDN.
ENGINEERING FIRM: BJM DEVELO ADDRESS: 8624 CASA VER	RDE AVE. N.W.	CONTACT: BERNIE J. MONTOYA PHONE: 250-7719
CITY, STATE: Albuquer	que, New Mexico	ZIP CODE: 87120
OWNER: ADDRESS:		CONTACT: PHONE:
CITY, STATE: Albuquer	que, New Mexico	ZIP CODE:
ARCHITECT:		CONTACT:
ADDRESS:		PHONE:
CITY, STATE:		ZIP CODE:
SURVEYOR: N/A		CONTACT:
ADDRESS:		PHONE:
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CONTRACTOR: N/A		CONTACT:
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DATE SUBMITTED: 6/9/	2004 BY:	Sun Montga
Requests for approvals of Site De	evelopment Plans and/or Su	bdivision Plats shall be accompanied by a drainage subm
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ittal. The particular nature, location and scope of 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:

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

May 28, 2004

Eufracio Sabay, PE BJM Development Consultants 8624 Casa Verde Ave NW Albuquerque, NM 87120

Re: Lot 4, Volcano Business Park Grading and Drainage Plan Engineer Stamp 4-7-04 (G10/D29H)

Dear Mr. Sabay,

Based upon information provided in your submittal dated 4-9-04, the above referenced plan cannot be approved for Building Permit until the following comments are addressed.

- Please better define the limits of pavement, gravel and landscaping per the DRB approved Site Development Plan.
- There are keynotes but no description of what they indicate.
- What are the slope and treatment of the channel side slopes? How will your runoff get to the channel without headcutting along the north property line?

If you have any questions, you can contact me at 924-3986.

Sincerely, Bradf J. Blue

Bradley L. Bingham, PE

Principal Engineer, Planning Dept.

Development and Building Services

C: file



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

May 28, 2004

Eufracio Sabay, PE BJM Development Consultants 8624 Casa Verde Ave NW Albuquerque, NM 87120

Re: Lot 4, Volcano Business Park Grading and Drainage Plan Engineer Stamp 4-7-04 (G10/D29H)

Dear Mr. Sabay,

Based upon information provided in your submittal dated 4-9-04, the above referenced plan cannot be approved for Building Permit until the following comments are addressed.

- Please better define the limits of pavement, gravel and landscaping per the DRB approved Site Development Plan.
- There are keynotes but no description of what they indicate.
- What are the slope and treatment of the channel side slopes? How will your runoff get to the channel without headcutting along the north property line?

If you have any questions, you can contact me at 924-3986.

Sincerely, Bradf J. Blue

Bradley L. Bingham, PE

Principal Engineer, Planning Dept.

Development and Building Services

C: file

DRAINAGE INFORMATION SHEET

PROJECT TITLE: AUTO DRB #:	9 MECHANIC SHOP FOR JOE GONZA PC#: N/A		ZONE MAP/DRG. FILE # G10/D029 H WORK ORDER#:
	OT 4 VOLCANO BUSINESS PARK PHASE 1 DOS SANTOS STREET N.W.		
ADDRESS: 8624	I DEVELOPMENT CONSULTANT CASA VERDE AVE. N.W. Albuquerque, New Mexico		CONTACT: BERNIE J. MONTOYA PHONE:250-7719 ZIP CODE:87120
OWNER: JOE GONZALES ADDRESS: CITY, STATE:	Albuquerque, New Mexico		CONTACT: PHONE: ZIP CODE:
ARCHITECT_ULTRA DE	SIGNS INC.		CONTACT: DAVID SANTISTEVAN
	SAN MATEO BLVD. N.E. BUQUERQUE, N.M.		PHONE:883-1600 ZIP CODE:87110
SURVEYOR: ADDRESS: CITY, STATE:	N/A		CONTACT: PHONE: ZIP CODE:
CONTRACTOR: ADDRESS: CITY, STATE:	N/A		CONTACT: PHONE: ZIP CODE:
TYPE OF SUBMITTAL: DRAINAGE REPORTURE OF CONCEPTUAL GRADING PLAN GRADING PLAN EROSION CONTE ENGINEER'S CERT CLOMR/LOMR OTHER WAS A PRE-DESIGN CONTE YES NO COPY PROVIDED	RADING & DRAINAGE PLAN ROL PLAN RTIFICATION NFERENCE ATTENDED:	X	CPE OF APPROVAL SOUGHT: SIA / FINANCIAL GUARANTEE RELEASE 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 WORK ORDER APPROVAL OTHER (SPECIFY)
DATE SUBMITTED:	AVO 9 BY:		Samo Montoga
The particular nature, lo	of Site Development Plans and or Subdiv	pment	Plats shall be accompanied by a drainage submittal. define the degree of drainage detail. One or moreing:

- Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five
 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

November 19, 2003

Mr. Carlos A. Montoya, PE City of Albuquerque, Hydrology Dept. P.O. Box 1293 Albuquerque, NM 87103

Re: Allrite Roofing Systems, 3040 Painted Rock Dr. NW, Grading and Drainage Plan (G10/D29G)

Dear Mr. Montoya:

Thank you for your review of the above referenced job and update to the Volcano Business Park Master Drainage Plan. The comments from your letter dated November 13, 2003 are addressed sequentially below.

- Appendix C contains the Manning's Equation calculations for the "Maximum Flow in Rock Swale." This section is for a trapezoidal channel with a 3' bottom width and 2:1 sides. The maximum developed flow in this rock swale occurs at the northeast corner of Tract 5A2-A1-3, At this point the combined free discharge from Tract 5A2-A1-2, Tract 5A2-A1-3, and Tract 5A2-A-4 generates a runoff of 9.67-cfs (see "100-Year Hydrologic Calculations Proposed anditions"). This runoff will have a flow depth of 0.77' in the rock swale. This rock swale assitions into a 10' wide (1' deep) concrete channel at 2.95%. Since the flow is contained am a 3' trapezoidal rock swale at 1.60%, it will easily be contained in the steeper 10' wide of the channel.
- 2. Thent labels have been added to the Grading and Drainage Sheet.
 - care private easements. Therefore, the individual property owners are responsible for the tenance.
 - 100-Year Hydrologic Calculations" provide a quantitative analysis for each tract of land.

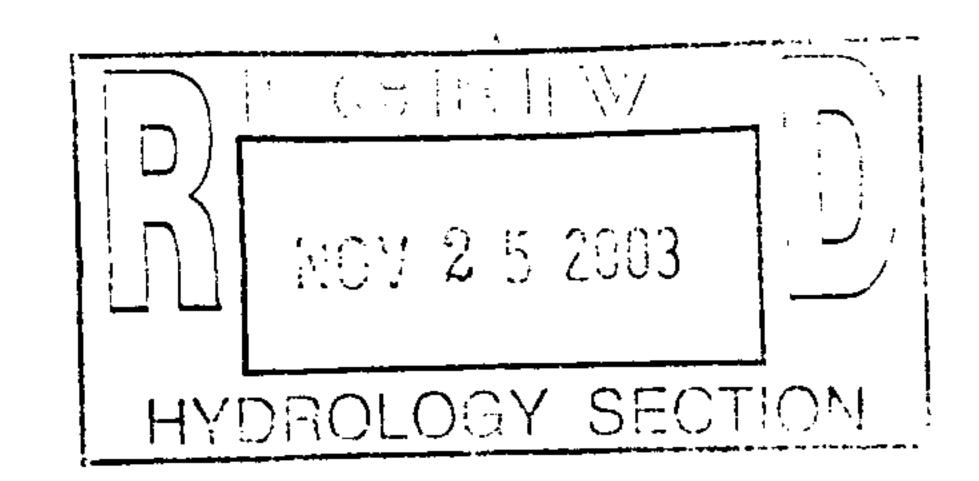
 Fully Developed Conditions" section of the report (Revised Master Drainage Study for mo Business Park Phases I and II, Albuquerque, NM and Site Specific Drainage for Tract 11-3) page 4, identifies all the undeveloped lots (Tracts 5A2-A1-2 through 5A2-A1-4, Lot 11-01s 3 through 6). All of these sites are allowed free discharge.
 - angle channel section has been designed for all of the swales for ease of construction. As cribed above (Comment 1), the swales have been designed to carry the combined developed if from all three tracts of land.
- plete your review of this revised master drainage plan and grading plan for Tract 5A2-A1-3.

 No glad to assist you further in this review if you have additional comments.

ENERGY READ & ASSOCIATES, Inc.

The third

Larry D. Read, P.E.



EXISTING DRAINAGE CONDITIONS

Volcano Business Park has been partially developed under two different Master Drainage Plans. The first one was prepared by Easterling and Associates in 1985. This study Identified 112.7-acres west of Unser Boulevard which would be diverted to the north by Unser Boulevard and therefore, not allowed to enter the site. This area has since been developed and diverted to the Ouray Road Storm Drain according to this Master Plan. This study also identified 68.7 acres east of Unser Boulevard that would drain to a 42" rep storm drain starting near the northeast corner of Volcano Business Park. This 68.7-acres was divided up into areas that had different allowable discharge rates depending on the type of development anticipated. A significant portion of the Volcano Business park even required onsite retention of the 100-year storm event. The overall criterion was an allowable discharge of 120-cfs to the 42" storm drain. This included 40 acres of offsite area west of the Volcano Business Park with an allowable discharge through the business park of 87.90-cfs. This runoff was split between two rundowns across Tract 5A2-A1-1.

Then. in i Brasher and Lorenz, Inc. revised the Easterling and Associates Master Plan along with the develof the GE Modular site (Tract 5A2-A1-1 also identified as Tract 5A1B). At this time, discharge of 87.90-cfs was anticipated to enter the business park but the allowable the same 13-cfs per acre was established for the park itself. This eliminated the retention pond dischare requires order to meet current drainage standards but continued to meet the 42" storm drain Tract 5A2-A1-1 was divided and drained into two detention ponds according to capacin Draint 110/29F. In accordance with this discharge rate of 0.43-cfs per acre, Tract 5A2-A1-5 (Drain. (110/29), Lot 2 (Drainage File G10/29E), Lot 7-A1 Drainage File G10/29D), Lot 11 (Drainae 110/29C), and Lot 12-A (Drainage File G10/29B) have been developed with detention ponds.

The West sage Subdivision, prepared by Mark Goodwin and Associates, PA (Drainage File H9/D16) was appreved in January 2003 as a development within the 40-acre offsite basin. This subdivision proposed descring all the offsite area to the Ouray Road Storm Drain. This frees up the 87.9-cfs discharge to ane 42" storm drain. Appendix A contains the West Ridge Subdivision Drainage Basin Map and AHYMO 100-Year Summary Output.

Due to discrepancies in the lot areas from the multiple reports and replats, the sum of the individual lot areas and the West Ridge Development do not match the original Easterling and Associates Master Plan. Therefore, we used lot areas as listed on the Bernalillo County arcIMS system, individual lot surveys, and the basin areas defined by the West Ridge Subdivision Report to establish the areas listed in the 100-YEAR HYDROLOGIC CALCULATIONS TABLE. We have included an "Unidentified Basin" of 2.5860-acres in the Hydrologic Calculations table to account for the discrepancies in area. This basin was analyzed as 90% impervious to reflect either commercial development or roads in order to account for the maximum discharge to the 42" storm drain.

The sum of the discharge from the Volcano Business Park with individual lot detention ponds would be 43.90-cfs plus the offsite allowable discharge of 87.90-cfs for a total of 131.80-cfs. This would exceed the 42.70 cfs. Compacing of 120 cfs. However, when the 12.24 cfs.

In July 2003, Brasher and Lorenz, Inc. submitted a new study (Drainage File G10/D29F) for the GE Modular Site. This included a 4.29-acre addition to the GE Modular Site. This additional area is "Basin 34" (3.1616-acres) of the West Ridge Subdivision The West Ridge Subdivision report anticipated that this area will drain to the Ouray road Storm Drain: However, the 2003 Brasher and Lorenz, Inc. Report continues to drain this area through the Volcano Business Park property. Therefore, we have created a "Duplicate Area" basin to account for this runoff going to either system when the property is actually developed. The 2003 revised submittal takes into account the diversion of offsite runoff due to the West Ridge Subdivision improvements. The letter in Appendix B states that previously required ponds and storm drains are no longer needed, but, also states that a portion of the site drains to the existing ponds. Therefore, we have split Tract 5A2-A1-1 into three (basins). The north one (4.50-acres) drains to an existing detention pond at the north end of the site according to the 1997 report. Similarly, a 2.50-acre portion drains to the south detention pond and drains according to the 1997 study. The remaining 4.34acres was analyzed for ponding under "Existing Allowable Conditions" and free discharge for "Proposed Conditions." This letter states that the net result due to the offsite diversion and development of the additional 4.29-acres decreases the demands on the 42" storm drain by approximately 37.2-cfs. Since we have a limited understanding of how the GE Modular site has changed between the 1997 study and the 2003 study, we are considering this 37.2-cfs decrease as one option for this master plan amendment and our calculations as the other criteria.

FULL VELOPED CONDITIONS

Due to 11 Ridge Subdivision diversion, the demand on the 42" storm drain has been decreased by 87.90-0 100-YEAR HYDROLOGIC CALCULATIONS TABLE takes into account the lots within \ Business Park that have already been developed with detention ponds and the The undeveloped lots (Tracts 5A2-A1-2 through 5A2-A1-4, Lot 1, and Lots 3 through undevel to have free discharge at 90% impervious. When these parcels are developed and 6) will (added E ... ing discharge from the other lots and the free discharge from the 4.34-acre portion of the total discharge to the 42" storm drain is only 96.60-cfs. This is below the allowable Tract 5 % dischar. i-cfs.

As a security the allowable discharge from the eight (8) undeveloped lots is 3.68-cfs according to the wilk as area is 36.12-cfs. This is a net increase of 32.44-cfs, which is less than the Brasher and Lorenz, as area is 36.12-cfs. This is a net increase of 32.44-cfs, which is less than the Brasher and Lorenz, as area is 36.12-cfs. Therefore, it is evident that the remaining to the can be developed with free discharge without exceeding the 120-cfs storm drain capacity.

TRACT 5-12-A1-3 DEVELOPED CONDITIONS

Tract 5A2-A1-3 will be developed at this time according to this revised master plan. There is an existing 7' private drainage easement along the east edge of the property that will be maintained to accept the 3.22-cfs runoff from Tract 5A2-A1-4. The site will be graded to drain to the northeast corner of the site where it will drain into the existing 10' concrete channel which ties to the 42" storm drain.

Painted Rock Drive intercepts all the runoff from the west. Runoff from Tract 5A2-A1-2 will be directed to the i0' rundown at the northeast corner of this site. Therefore, the only offsite runoff will be

from Tracts 5A2-A1-2 and 5A2-A1-4 which will drain along the north and east edges of this property. Street capacity calculations and channel calculations for the combined runoff from these three (3) lots is included in Appendix C.

 P_{10DAY} (in.) =

3.67

			LAND TRE	ATMENT		WEIGHTED	\		
BASIN	AREA	Α	В	C	D	E .	V (6-hr)	V (6-hr)	Q
#	(acre)	(%)	(%)	(%)	(%)	(in)	(acre-ft)	(cu-ft)	(cfs)
				ALLOWABLE					,
A2-A1-1 (NORTH)	4.5000					DR. PER DRAII			1.95 1.08
A2-A1-1 (SOUTH)	2.5000	PONDED	PONDED AND DISCHRGED TO TODAS SANTOS ST. PER DRAINAGE PLAN G10/29F						
5A2-A1-1 (FREE)	4.3400		PONDED AND DISCHRGED AT A RATE OF 0.43CFS/ACRE						
5A2-A1-2	1.0178	<u></u>				ATE OF 0.43CF			0.44
- 5A2-A1-3 -	0.5099	<u></u>				ATE OF 0.43CF			0.22
5A2-A1-4	0.7624	<u> </u>				ATE OF 0.43CF			0.33
5A2-A1-5	1.2721	PONDE				S ST. PER DRA		1 G 10:20	0.55
LOT 1	1.2952	<u> </u>				ATE OF 0.43CF			0.56
, LOT 2	0.9909	PONDE			• •	AIN PER DRAII		<u> 310 . </u>	1.41
LOT 3	1.0319		· · · · · · · · · · · · · · · · · · ·			ATE OF 0.43C			0.44
LOT 4	0.9900		PONDED	AND DISCHE	GED AT A R	ATE OF 0.43CI	FS/ACRE		0.43
LOT 5	1.1849		PONDED	AND DISCHE	GED AT A R	ATE OF 0.43CI	FS/ACRE		0.51
LOT 6	1.7675		PONDED	AND DISCHE	RGED AT A R	ATE OF 0.43C	FS/ACRE	- 1-4-1	0.76
LOT 7-A1	1.3784				· · · · · · · · · · · · · · · · · · ·	ST. PER DRA			5.70
LOT 11	1.0411					ST. PER DRA	' "		2.48
LOT 12-A	3.4213	PONDED	AND DISCH	RGED TO TO	DAS SANTOS	ST. PER DRA	INAGE PLAN	: 	4.90
PAINTED ROCK	0.7731	0.00	0.00	10.00	90.00	1.87	0.12		3.26
TODOS SANTOS	1.4463	0.00	0.00	10.00	90.00	1.87	0.23	-	6.10
UNIDENTIFIED	2.5860	0.00	0.00	10.00	90.00	1.87	0.40	·- · · ·	10.9
SUBTOTAL	32.8088							Degradadirektor, d.1 % Mendelman dilak	43.90
								b	· :
DUPLICATE AREA	-3.1616	0.00	0.00	10.00	90.00	1.87	-0.49		-13.3
WEST RIDGE	39.0528	CHANN	IEL DRAINAG	E THROUGH	5A2-A1-1 VI	A NORTH AND	SOUTH CHA		37.90
TOTAL	68.7000						, <u> </u>		118.4
	<u></u>		PRC	POSED CON	DITIONS				
5A2-A1-1 (NORTH)	4.5000	PONDE	D AND DISCH	IRGED TO PA	INTD ROCK	DR. PER DRA	NAGE PLAN		1.95
5A2-A1-1 (SOUTH)	2.5000					S ST. PER DRA			1.08
5A2-A1-1 (FREE)	4.3400					PER DRAINA			22.1
5A2-A1-2	1.0178	0.00	0.00	10.00	90.00	1.87	0.16		4.30
5A2-A1-3	0.5099	0.00	0.00	10.00	90.00	1.87	80.0		2.15
5A2-A1-4	0.7624	0.00	0.00	10.00	90.00	1.87	. 0.12	1	3.22
5A2-A1-5	1.2721		D AND DISCH	IRGED TO TO	DAS SANTO	S ST. PER DR	AINAGE PLA		0.55
LOT 1	1.2952	0.00	0.00	10.00	90.00	1.87	0.20	-> \ \	5.47
LOT 2	0.9909		D AND DISCH	HRGED TO 42	" STORM DF	RAIN PER DRA	NAGE PLAN	G10 24E	1.41
LOT 3	1.0319	0.00	0.00	10.00	90.00	1.87	0.16	7,012	4.35
LOT 4	0.9900	0.00	0.00	10.00	90.00	1.87	~0.15	6.727	4.18
LOT 5	1.1849	0.00	0.00	10.00	90.00	1.87	0.18	8.052	5.00
LOT 6	1.7675	0.00	0.00	10.00	90.00	1.87	0.28	12.011	7.46
LOT 7-A1	1.3784		<u> </u>	RGED TO TO	DAS SANTO	S ST. PER DRA	AINAGE PLAN	I G10/29D	5.70
LOT 11	1.0411					S ST. PER DRA			2.48
LOT 12-A	, 3.4213					S ST. PER DRA			4.90
	0.7731	0.00	0.00	10.00	90.00	1.87	0.12	5.253	3.26
PAINTED ROCK	1.4463	0.00	0.00	10.00	90.00	1.87	0.23	9,828	6.10
TODOS SANTOS	2.5860	0.00	0.00	10.00	90.00	1.87	0.40	17.573	10.9
UNIDENTIFIED	32.8088	0.00	J. J.	<u> </u>			2.08	90819.71	96.6
SUBTOTAL	32.0000		<u></u>	<u> </u>		<u> </u>			
DIEDLIOATE ADEA'S	2 4646	0.00	0.00	10.00	90.00	1.87	-0.49	-21,484	13.3
DUPLICATE AREA			<u> </u>	HRGED TO O			_	<u> </u>	0.00
WEST RIDGE	39.0528	PONDE	TO MIND DISC	TINGED TO C		TIAL DI AMIA			
TOTAL	₹68.7000				<u> </u>	1	<u> </u>	1	
		0.44	0.67	0.99	1.97	E _i (in)			
EXCESS PRE	<u> </u>	0.44	0.67	2.87	4.37	Q _{Pi} (cfs)	-		
PEAK DISCHA	AKGL	1.29	2.03	4.01	4.57	Gri (CIS)		ZONE =	1
		\	0/ C) + /F \/0/	D \				P_{6-HR} (in.) =	2.20
VEIGHTED E (in) = (_70U) ▼ (ED)(%	יטו				Р _{24-НР} (in.) =	
V _{6-HR} (acre-ft) = (WEI	GHTED E)(AF	₹ EΑ)/12						P 24-HR (III.) -	

VEIGHTED E (III) = (EA)($\sqrt{20}A$) + (EB)($\sqrt{20}B$) + (EC)($\sqrt{20}B$)

V_{6-HR} (acre-ft) = (WEIGHTED E)(AREA)/12

V_{10DAY} (acre-ft) = V_{6-HR} + (A_D)(P_{10DAY} - P_{6-HR})/12

Q (cfs) = (Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)

