CITY OF ALBUQUERQUE



September 28, 2016

Richard J. Berry, Mayor

David B. Thompson, P.E. Thompson Engineering Consultants, Inc. P.O. Box 65760 Albuquerque, NM, 87193

RE: La Vista Subdivision - Lot 9C Grading and Drainage Plan Engineer's Stamp Date 8-1-2016 (File: C19D042B)

Dear Mr. Thompson:

Based upon the information received on 9-19-2016, the above-referenced Grading and Drainage Plan is approved for Building Permit.

PO Box 1293 Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy release, Engineer Certification per the

DPM checklist will be required.

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

Sincerely,

New Mexico 87103

Albuquerque

www.cabq.gov Abiel Carrillo, P.E.

Principal Engineer, Planning Dept. Development Review Services

Orig: Drainage file

DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

LEGAL DESCRIPTION: LOTS 9C, LA VISTA AT DESERT RIDGE SUBDIVISION CITY ADDRESS: ENGINEERING FIRM: Thompson Engineering Consultants, Inc. ADDRESS: P.O. Box 65760 CITY, STATE: Albuquerque, NM CONTACT: David Thompson PHONE: 271-2199 CITY, STATE: Albuquerque, NM CONTACT: Esmail Haidari ADDRESS: 12008 Gazelle Place NE CITY, STATE: Albuquerque, NM ARCHITECT: ADDRESS: CITY, STATE: CONTACT: ADDRESS: CITY, STATE: ADDRESS: CITY, STATE: CONTACT: BHONE: CITY, STATE: CONTACT: CONTACT: SURVEYOR: Cartesian Surveys, Inc. ADDRESS: P.O. Box 44414 PHONE: 896-3050 CITY, STATE: Rio Rancho, NM CONTRACTOR: CONTACT: CONTACT: SUP CODE: 87174 CONTRACTOR:	PROJECT TITLE: <u>LA VISTA SUBDIVISION</u> DRB #: <u>1008589</u> _ EPC #:	ZONE MAP/DRG. FILE #: C-19/D042 BWORK ORDER#:
ADDRESS: P.O. Box 65760 CITY, STATE: Albuquerque, NM ZIP CODE: 87193 OWNER: Esmail Haidari ADDRESS: 12008 Gazelle Place NE PHONE: 480-2533 CITY, STATE: Albuquerque, NM ZIP CODE: 87111 ARCHITECT: ADDRESS: CITY, STATE: ADDRESS: CITY, STATE: ADDRESS: CITY, STATE: CONTACT: PHONE: ZIP CODE: SURVEYOR: Cartesian Surveys, Inc. ADDRESS: P.O. Box 44414 CITY, STATE: Rio Rancho, NM ZIP CODE: 87174		
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CONTRACTOR: CONTACT:	ADDRESS: P.O. Box 44414	PHONE: 896-3050
ADDRESS: PHONE: ZIP CODE:		PHONE:
CHECK TYPE OF SUBMITTAL: DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL, REQUIRES TCL or equal XX DRAINAGE PLAN RESUBMITTAL CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN) OTHER CHECK TYPE OF APPROVAL SOUGHT: SIA/FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D. APPROVAL S. DEV PLAN FOR BLDG. PERMIT APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) GRADING PERMIT APPROVAL OTHER WORK ORDER APPROVAL OTHER (SPECIFY)	DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL, REQUIRES TCL or examination of the state of the st	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 XX BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIEV)
WAS A PRE-DESIGN CONFERENCE ATTENDED: YES XX NO COPY PROVIDED DATE SUBMITTED: September 19, 2016 BY: AMD DEVELOPMENT SECTION LAND DEVELOPMENT SECTION LAND DEVELOPMENT SECTION LAND DEVELOPMENT SECTION LAND DEVELOPMENT SECTION	YES XX NO COPY PROVIDED	IPMENT SECTION DEVELOPMENT SECTION

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 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 acres
- 2. Drainage Plans: Required for building permits, grading permits, paving permits, and site plans less than five (5)
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 9C, LA VISTA AT DESERT RIDGE SUBDIVISION

SITE AREA: 0.24 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOT IS LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

DEVELOPED DRAINAGE CONDITIONS:

THERE IS ONE OFF-SITE BASINS DRAINING ONTO LOT 9C. THE OFF-SITE BASIN IS DIRECTLY EAST OF LOT 9C. RUNOFF FROM THE OFF-SITE BASIN WILL BE COLLECTED IN A SWALE ALONG THE LOT 9C EAST PROPERTY LINE AND WILL BE DIVERTED TO EAGLE ROCK AVENUE THROUGH THE DRIVEWAY FOR LOT 9C. THE PEAK FLOW OF 2.54 CFS WILL BE DISCHARGED TO EAGLE ROCK AVENUE THROUGH THE DRIVEWAY AND WILL EVENTUALLY DRAIN TO THE NORTH LA CUEVA CHANNEL.

RUNOFF FROM THE ON-SITE BASIN, WHICH INCLUDES ALL OF LOT 9C, WILL DRAIN TO A RETENTION POND ALONG THE WESTERN RETAINING WALL ADJACENT TO THE AMAFCA CHANNEL. RUNOFF FROM THE PROPOSED HOUSE WILL BE COLLECTED IN SWALES TO THE NORTH AND EAST, WHICH WILL DRAIN TO THE RETENTION POND. THE RETENTION POND WILL HOLD THE 100-YEAR, 10-DAY VOLUME OF 2,079 CUBIC FEET. THE RETENTION POND WILL HAVE A MAXIMUM DEPTH OF 1.5 FEET.

100-YEAR HYDROLOGIC CALCULATIONS

LAND TREATMENT WEIGHTED						100-YEAR PRECIPITATION						
BASIN	AREA	Α (2()	В	C	D	E	V (6-hr)	V (6-hr)	, , ,	V(10-day)	Q	
#	(acre)	(%)	(%)	(%)	(%)	(in)	(acre-ft)	(cu-ft)	(acre-ft)	(cu-ft)	(cfs)	
EXISTING CONDITIONS												
OFF-SITE	1.3602	100.00	0.00	0.00	0.00	0.66	0.07	3,259	0.07	3,259	2.54	
ON-SITE	0.2436	100.00	0.00	0.00	0.00	0.66	0.01	584	0.01	584	0.46	
TOTAL RUNOFF	1.60						0.09	3,842	0.09	3,842	3.00	
PROPOSED CONDITIONS												
ON-SITE	0.2436	0.00	48.30	14.90	36.80	1.51	0.03	1,331	0.05	2,079	0.88	
TOTAL RUNOFF	0.24						0.03	1,331	0.05	2,079	0.88	
EXCESS PRECIP.		0.66	0.92	1.29	2.36	Ei (in)						
PEAK DISCHARGE		1.87	2.6	3.45	5.02	Q _{Pi} (cfs)						
					ZONE = 3							
WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$					P_{6-HR} (in.) = 2.60							
V _{6-HR} (acre-ft) = (WEIGHTED E)(AREA)/12					P_{24-HR} (in.) = 3.10							
V _{10DAY} (acre-ft) = V _{6-HR} + (A _D)(P _{10DAY} - P _{6-HR})/12						P_{10DAY} (in.) = 4.90						
$Q (cfs) = (Q_{PA})(A_A) + (Q_{PA})(A_A)(A_A) + (Q_{PA})(A_A)(A_A) + (Q_{PA})(A_A)(A_A) + (Q_{PA})(A_A)(A_A) + (Q_{PA})(A_A)(A_A) + (Q_{PA})($	(AB) + (C	(Pc)(Ac) +	$(Q_{PD})(A_{D})$									

