DRAINAGE REPORT

FOR

BARON'S RUN SUBDIVISION

Albuquerque, New Mexico

Prepared For:

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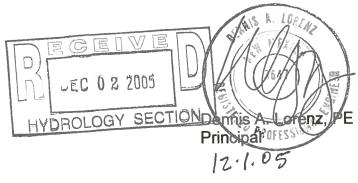
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PURPOSE AND SCOPE

Pursuant to City of Albuquerque Development Process Manual, this Drainage Report is presented to outline the drainage management criteria for controlling developed runoff generated by the project site, and to identify the storm drainage infrastructure recommended to protect the site from off-site runoff. A residential development is proposed on the existing 4.0-acre project site. Access, landscaping, grading, drainage and utility improvements will be provided to support the development. This Drainage Report is presented to support a Preliminary Plat request, including Infrastructure List and Grading Plan approval by the Development Review Board.

SITE DESCRIPTION

Presently the project site is undeveloped. The site is located on Barstow Street NE between Glendale Avenue and Florence Avenue NE, in Albuquerque, New Mexico (see Figure 1). The site slopes from east to west at approximately 5 percent. The site is sparsely vegetated with native plant species. Recent construction activity adjacent to the site has disturbed the natural vegetation and topography. The site is located in the far NE Heights of Albuquerque, within the la Cueva Sector plan area that is zoned RD/3DU/Acre. Intermixed with this zoning unit are existing single family residences constructed on the 1.0-acre North Albuquerque Acres lots.

Glendale Avenue and Florence Avenue are partially improved across the property frontage. Street, water sewer and storm sewer improvements exist across the property frontages.

EXISTING DRAINAGE CONDITIONS

The site is impacted by an 18.6-acre partially developed off-site basin (see Figure 3). Basin "A" enters the site from the east then divides, flowing to Florence and Glendale. The project site presently drains west, and then divides north and south, draining to Florence and Glendale respectively. The On-site Drainage Map – Existing Conditions (see Figure 5), illustrates the on-site drainage basins that impact the project site.

All on-site and off-site drainage flows are managed by existing public storm drainage improvements. On-site Basins S-A and S-C drain to Florence Avenue then west approximately 1000 feet to a recently constructed public storm drain. The Florence Avenue storm drainage improvements were designed anticipating developed runoff from these Basins. On-site Basin S-B drains south to Glendale Avenue. Runoff is intercepted by the recently constructed 78-inch storm drain constructed to convey developed runoff from the El Camino Arroyo and located development.

As shown by the attached FIRM Panel (Figure 2), the project site is impacted by a mapped Floodplain resulting from the El Camino Arroyo. A LOMR request to FEMA to relocate the floodplain to the 78-inch storm drain is pending.

DRAINAGE MASTERPLAN

The current Drainage Masterplan for the site is the "Final Drainage Masterplan for North Albuquerque Acres", prepared by Resource Technology, Inc for the City of Albuquerque. Improvements recommended by the Study include a 78-inch storm drain in Glendale Avenue, designed to convey the El Camino Arroyo flows from the existing temporary pond located at Barstow and Glendale, west to the La Cueva Arroyo Channel. The Plan also recommends construction of a 54-inch storm drain in Barstow from Florence to Glendale. The 78-inch storm drain and temporary pond were constructed in conjunction with Quivera Estates.

PROPOSED CONDITIONS

As shown by the Plan, the project consists of the development of the property into a 12 lot residential subdivision. Paving, water, sanitary sewer, and drainage improvements will be constructed as necessary to support the project. The Plan shows the elevations and details required to properly grade and construct the recommended improvements. The direction of the drainage flows are given by flow arrows.

The Grading and drainage Plan (see Sheet 1 located in back pocket) recommends construction of curb and gutter and one-half width paving improvements along Glendale Avenue, Florence Avenue and Barstow Street NE.

The Off-site Drainage Map – Developed Conditions (see Figure 4), illustrates the off-site drainage basins that impact the project site. Each off-site basin is described as follows:

- 1. Basin "A" will be will be intercepted by a 36-inch storm drain as recommended by the Masterplan.
- 2. Basin "B", a 2.2-acre basin along Barstow will be intercepted by storm inlets and a 42-inch storm drain that will connect to the existing 78-inch sitem drain in Glendale Ave NE.

The On-site Drainage Map – Developed Conditions (see Figure 6), illustrates the on-site drainage basins that impact the project site. Each on-site basin is described as follows:

- 1. Basin S-A will drain north within Lexie Lane then through a concrete drainage channel to Florence Avenue.
- 2. Basin S-B is a single lot that will drain south to Glendale Ave.
- 3. Basin S-C is a single lot that will drain north to Florence Ave.

TEMPORARY EROSION CONTROL

As required by the City of Albuquerque and the Environmental Protection Agency a detailed Storm Water Pollution Prevent Plan (SWPPP) will be prepared to outline criteria for the management of storm water flows and the discharge of potential

pollutants, both during the construction phase and long term life of the project. The SWPPP will be completed and available for inspection prior to construction commencement.

BARON'S RUN PROJECT HYDROLOGY SUMMARY AHYMO

			LAND TRE	ATMENTS					
BASIN	AREA	Aa	Ab	Ac	Ad	Ew	VOL 100/6	Q 100/6	
	acres	%	%	%	%	inches	ac-feet	cfs	
EXISTING C	ONDITIONS					<u> </u>			
SITE	4.00	100	0	0	0	0.66	0.218	7.5	
OITE	4.00	100				0.00	0.2.10		
S-A	1.22	100	0	0	0	0.66	0.067	2.3	
					-,				
S-B	0.44	100	0	0 0		0.66	0.024	0.8	
S-C	2.34	100	0	0	0	0.66	0.128	4.4	
3-0	2.34	100	1 -		-	0.00	0.120	7.7	
Α	18.57	57 72 10		10 8		0.90	1.387	43.0	
				ļ					
DEVELOPE	CONDITIC	NS	1				+		
DLVELOI LI	Joonbine	110							
SITE *	4.00	20	20	34	26	1.45	0.482	13.4	
S-A *	3.34	20	20	34	26	1.45	0.403	11.2	
S-B *	0.32	20	20	34	26	1.45	0.039	1.1	
9-B	0.32	20	20	34	20	1.45	0.039	-1.1	
S-C*	0.34	20	20	34	26	1.45	0.041	1.2	
A*	19.40	20	20	34	26	1.45	2.338	64.8	
						4.45	0.000	7.4	
B*	2.21	20	20	34	26	1.45	0.266	7.4	
				-					
	1								
* LOW DEN	ISITY RESID	DENTIAL F	PER NAA MI	OP FIG 2A					

RUN DATE (MON/DAY/YR) =12/01/2005 HSER NO = AHYMO-T-9702-01000H35-AH - VERSION: 1997.02d AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -

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	TIME TO PEAK	(HOURS)			1.533	1.533	1.533	1.533	1.500	1.500	1.500	1.500	1.500	1.500	1.500	
	RUNOFF	(INCHES)			.65514	.65514	.65514	.65514	.89596	1.44603	1.44603	1.44610	1.44610	1.44602	1.44603	
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	PEAK DISCHARGE	(CES)			7.49	2.29	.83	4.39	43.03	13.37	11,17	1.09	1.15	64.76	7.40	
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		COMMAND	START	RAINFALL TYPE=	COMPUTE NM HYD	COMPUTE NM HYD	COMPUTE NM HYD		COMPUTE NM HYD	COMPUTE NM HYD	COMPUTE NM HYD	MM	MM			FINISH