

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA: 0.7277 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

DEVELOPED DRAINAGE CONDITIONS:

THERE IS ONE OFF-SITE BASINS DRAINING ONTO LOT 17. OFF-SITE BASIN A IS LOCATED NORTH OF LOT 17. RUNOFF FROM OFF-SITE BASIN B WILL DRAIN TO THE POND PROVIDED JUST NORTH OF THE LOT 17, 377.50 CFS. THE PEAK FLOW OF 0.71 CFS WILL BE CONVEYED TO THE POND.

RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE PAVED DRIVEWAY. THE ROOF OF THE BUILDINGS WILL DRAIN TO THE WEST AND EAST. EACH LOT WILL HAVE A PONDING AREA FOR THE FIRST FLUSH. AFTER SENDING THE WATER INTO THE PONDS, THEN THE FLOWS WILL BE DIRECTD INTO PAVED RAOD AND FINALLY INTO EAGLE ROACK. A TOTAL OF 2.63 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE PONDS PROVIDED ON EACH LOT. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 304 CUBIC-FEET.

Н	FI YDROGRAPH	ROM ID	TO ID	AREA	PEAK DISCHARGE	RUNOFF VOLUME	RUNOFF	TIME TO PEAK		E = 1
		NO.	NO.	(SQ MI)	(CFS)	(AC-FT)		OURS)	ACRE NOTATION	NC
START RAINFALL TYPE= 1									TIME= RAIN6=	.00 2.600
COMPUTE NM HYD COMPUTE NM HYD	101.00 103.00	_	1 1	.00017 .00114	.30 1.93	.008 .056	.92230 .92024	1.526 1.526	2.731 PER IMP= 2.646 PER IMP=	
START	100.00		•	.00111	1.00	.000	.02021	1.020	TIME=	.00
RAINFALL TYPE= 1 COMPUTE NM HYD	111.00	_	1	.00017	.13	.003	.35547	1.533	RAIN6= 1.209 PER IMP=	1.730 .00
COMPUTE NM HYD	113.00	_	1	.0017	1.43	.037	.60463	1.500	1.209 PER IMP=	.00
START									TIME=	.00
RAINFALL TYPE= 1 COMPUTE NM HYD	103.10	_	1	.00114	3.18	.117	1.93606	1.500	RAIN6= 4.368 PER IMP=	2.600 68.00
START RAINFALL TYPE= 1									TIME= RAIN6=	.00 1.730

1.15661

1.500

2.739 PER IMP= 68.00

REQUIRED FIRST FLUSH PONDING CALCULATIONS

COMPUTE NM HYD

FINISH

LOT 1-P1, IMPERVIOUS AREA = 5,430 CF PONDING VOLUME REQUIRED = $5,430 \times 0.34/12 = 153.85 \text{ CF}$

LOT 2-P1, IMPERVIOUS AREA = 5,770 CF PONDING VOLUME REQUIRED = $5,770 \times 0.34/12 = 163.48 \text{ CF}$ LOT 3-P1, IMPERVIOUS AREA = 4,547.50 CF

PONDING VOLUME REQUIRED = $4,547.50 \times 0.34/12 = 153.85 \text{ CF}$ LOT 4-P1, IMPERVIOUS AREA = 5,142.50 CF PONDING VOLUME REQUIRED = $5,142.50 \times 0.34/12 = 145.70 \text{ CF}$

PROPOSED FIRST FLUSH PONDING VOLUME CALCULATIONS LOT 1-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'

PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF LOT 2-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25' PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF LOT 3-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25' PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 4-P1, TOP AREA=312 SF, BOTTOM AREA=120 SF, DEPTH= 1.0' PONDING VOLUME PROVIDED = (312 + 120)/2 * 1 = 216.00 CF

RAIN DELAY=3.10 IN DT=0.00512 HR * OFF-STIE BASIN A COMPUTE NM HYD ID=1 HYD NO=101.0 AREA=0.000169 SQ MI

PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00 TP=0.1333 HR MASS RAINFALL=-1 * ON-SITE COMPUTE NM HYD ID=1 HYD NO=103.0 AREA=0.001137 SQ MI PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00

TP=0.1333 HR MASS RAINFALL=-1

PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00

TP=0.1333 HR MASS RAINFALL=-1 10-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS) *********

TIME=0.0TYPE=1 RAIN QUARTER=0.0 IN RAINFALL RAIN ONE=1.43 IN RAIN SIX=1.73 IN RAIN DAY=2.07 IN DT=0.03333 HR * OFF-STIE BASIN A COMPUTE NM HYD ID=1 HYD NO=111.0 AREA=0.000169 SQ MI

* ON-SITE COMPUTE NM HYD ID=1 HYD NO=113.0 AREA=0.001137 SQ MI PER A=0.00 PER B=0.00 PER C=100.00 PER D=0.00 TP=0.1333 HR MASS RAINFALL=-1 **************************************

100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS) START TIME=0.0

RAIN DELAY=3.10 IN DT=0.03333 HR * ON-SITE COMPUTE NM HYD ID=1 HYD NO=103.1 AREA=0.001137 SQ MI PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00 TP=0.1333 HR MASS RAINFALL=-1

TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=2.14 IN RAIN SIX=2.60 IN

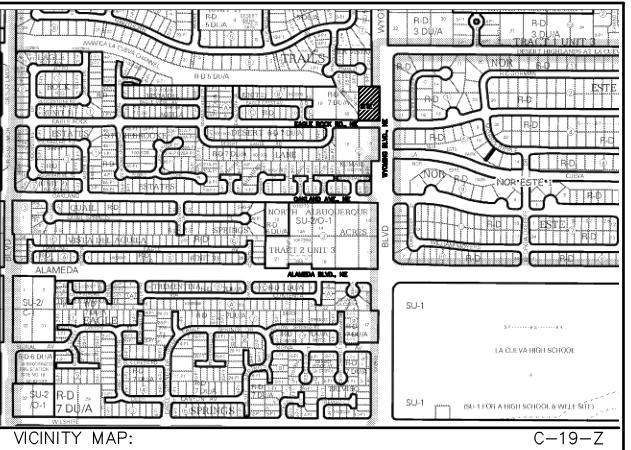
10-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS) ************************** START

TYPE=1 RAIN QUARTER=0.0 IN RAINFALL RAIN ONE=1.43 IN RAIN SIX=1.73 IN RAIN DAY=2.07 IN DT=0.03333 HR

* ON-SITE COMPUTE NM HYD ID=1 HYD NO=113.1 AREA=0.001137 SQ MI PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00 TP=0.1333 HR MASS RAINFALL=-1

FINISH

RAINFALL



LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA, TRACT 2, UNIT 3, CONTAINING 0.7277 ACRE

GENERAL NOTES:

1: CONTOUR INTERVAL IS HALF (1.00) FOOT.

2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 9_D15, HAVING AN ELEVATION OF 4988.802 FEET ABOVE SEA LEVEL 3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHE INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-

- : THIS IS <u>NOT</u> A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONL' 5: SLOPES ARE AT 3:1 MAXIMUM.
- IF THE DRIVEWAY LOCATIONS CONFLICTS WITH THE PROPOSED LOCATION OF A FIRST FLUSH PONDS, CONTRACTOR MUST RELOCATE THE PONDS WITH THE SAME VOLUME ELSEWHERE ON THE LOT, EXCEPT IN THE REAR LOT

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.

ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.

4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE. 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

LEGEND

_____5100_____ EXISTING CONTOUR (MAJOR) EXISTING CONTOUR (MINOR) **BOUNDARY LINE** PROPOSED SPOT ELEVATION

EXISTING GRADE

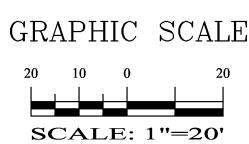
PROPOSED RET. WALL



REZA AFAGHPOUR

P.E. #11814

LAST REVISION: 06-10-1



SBS CONSTRUCTION AND ENGINEERING, LLC

(505)804-5013

10209 SNOWFLAKE CT., NW ALBUQUERQUE, NEW MEXICO 87114

LOTS 1 THRU 4, ROHAN SUBDIVISION GRADING AND DRAINAGE PLAN DRAWING: DRAWN BY: DATE: SHEET# SH-B 201605-GR.DWG 03-22-2016

Rael, Rudy E.

From:

Rael, Rudy E.

Sent:

Tuesday, June 14, 2016 3:02 PM

To: Cc: Subject: 'aecllc@aol.com' Abiel X. Carrillo

Rohan Subdivision

Mr. Biazar,

This email is being sent in lieu of an attached comment letter in order to expedite our response to previous comments. Response to comments should continue to be included in the resubmittal. A reply to these comments via email will not be considered a resubmittal.

Based upon the information provided in your resubmittal received 6/14/16, the above referenced Grading and Drainage Report and plan cannot be approved for Preliminary Plat, Grading Permit or Building Permit until the following comments are addressed:

 Provide a drainage easement through lot 3-PI for the acceptance of flows from Basin A, or make Basin A retain the flows with a sedimentation pond and then outfall into Wyoming Blvd. via a sidewalk culvert.

Rudy E. Rael, CE, CFM
Engineer Associate, Hydrology
Planning Department
600 2nd St. NW Suite 201
Albuquerque NM 87102
(505) 924-3977